

# Interpreting Survey Results and Action Planning

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Office of Rural Health

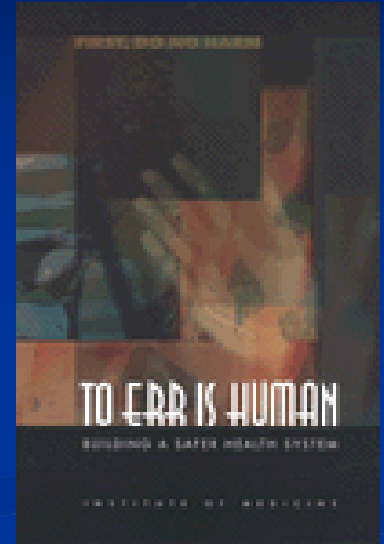
# Objectives

- Use a working definition of 'culture of patient safety' in an analysis of HSOPS results
- Identify four components of a culture of patient safety
- Identify variation in safety culture by work area and job title in an analysis of HSOPS results
- Compare beliefs and behaviors within HSOPS dimensions to identify practices needed to support a culture of safety
- Consider three types of organizational culture when interpreting HSOPS results
- Conduct HSOPS to meet Joint Commission Leadership Standards

# The Problem and Challenge...

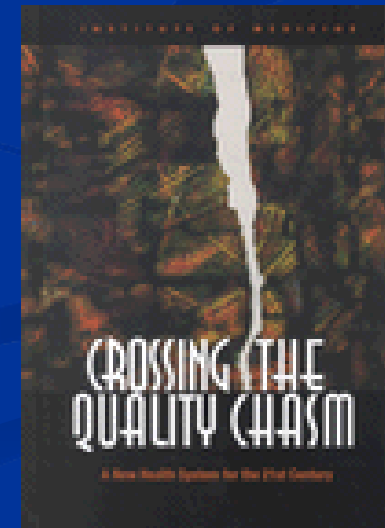
“The problem is not bad people; **the problem is that the system needs to be made safer . . .**”

*IOM (2000). To Err is Human: Building a Safer Health System*

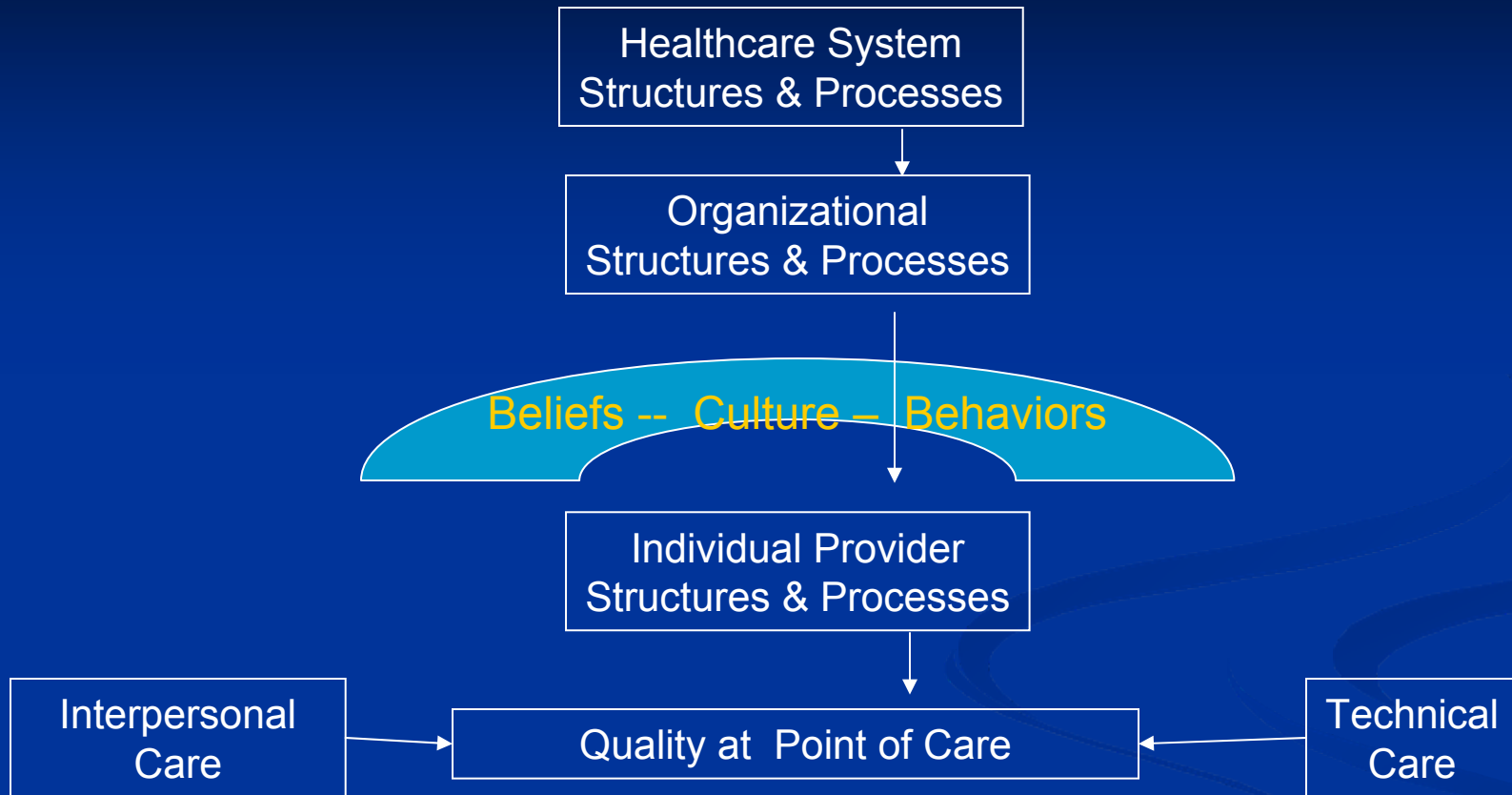


“The biggest **challenge** to moving toward a safer health system is **changing the culture** from one of blaming individuals for errors to one in which errors are treated not as personal failures, but as opportunities to improve the system and prevent harm.”

*IOM (2001). Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century, p. 79*



# Chain of Impact at the Point of Care



The quality, safety and value of care can be no better than the structures and processes used by providers in direct contact with the patient. Culture is a lens through which organizations support providers at the point of care.

Nelson et al. (2002) Joint Commission Journal on Quality Improvement, 28, 472-493.

Swuste P. (2008). Human Factors and Ergonomics in Manufacturing, 18, 438-453.

# Definition of Safety Culture

- Enduring, shared beliefs and behaviors that reflect an organization's willingness to learn from errors\*
- Four beliefs present in a safe, informed culture\*\*
  - Our processes are designed to prevent failure
  - We are committed to detect and learn from error
  - We have a just culture that disciplines based on risk
  - People who work in teams make fewer errors

\*Wiegmann. A synthesis of safety culture and safety climate research; 2002.

<http://www.humanfactors.uiuc.edu/Reports&PapersPDFs/TechReport/02-03.pdf>

\*\*Institute of Medicine. Patient safety: Achieving a new standard of care.

Washington, DC: The National Academies Press; 2004.

# Beliefs Assessed with HSOPS

- Our processes are designed to prevent failure
  - “Our procedures and systems are good at preventing errors from happening.”— avg 69% positive\*
- We are committed to detect and learn from error
  - “When a mistake is made, but is caught and corrected before affecting the patient, how often is this reported?”— avg 51% positive\*
  - “Mistakes have led to positive changes here.”— avg 62% positive\*
- We have a just culture that disciplines based on risk
  - “Staff worry that mistakes they make are kept in their personnel file.”— avg 36% positive\*
- People who work in teams make fewer errors
  - “When one area in this department gets really busy, others help out.”— avg 68% positive\*

\*Sorra et al. 2008 HSOPS Comparative Database Report <http://www.ahrq.gov/qual/hospsurvey08/>

# Components of Safety Culture

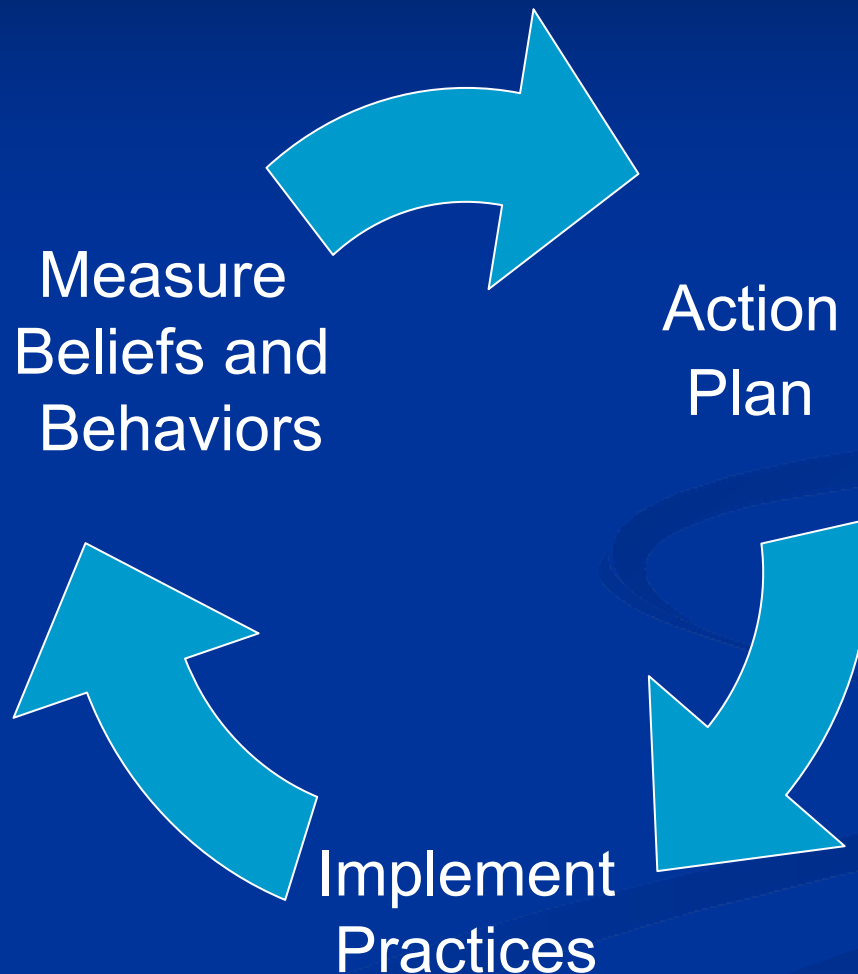
A culture of safety is informed. It never forgets to be afraid...

Reason, J. (1997). *Managing the Risks of Organizational Accidents*. Hampshire, England: Ashgate Publishing Limited.

Battles et al. (2006). Sensemaking of patient safety risks and hazards. *HSR*, 41(4 Pt 2), 1555-1575.



# How to Become an HRO: Engage in Continuous Improvement





# Measure Beliefs and Behaviors with HSOPS

- Developed by AHRQ to provide healthcare organizations with a valid tool to assess safety culture  
<http://www.ahrq.gov/qual/hospculture/>
- 42 items categorized in 12 dimensions
  - 2 dimensions are outcome measures at dept/unit level
  - 7 dimensions measure culture at dept/unit level
  - 3 dimensions measure culture at hospital level
- 2 additional items are outcome measures at dept/unit level

Reason's Components	HSOPS Dimensions or Outcome Measures
<p><b>Reporting Culture</b> - a safe organization is dependent on the willingness of front-line workers to report their errors and near-misses</p>	<ul style="list-style-type: none"> <li>•Frequency of Events Reported (O)</li> <li>•Number of Events Reported (O)</li> </ul>
<p><b>Just Culture</b> - management will support and reward reporting; discipline occurs based on risk-taking</p>	<ul style="list-style-type: none"> <li>•Nonpunitive Response to Error (U)</li> </ul>

O = Outcome measure

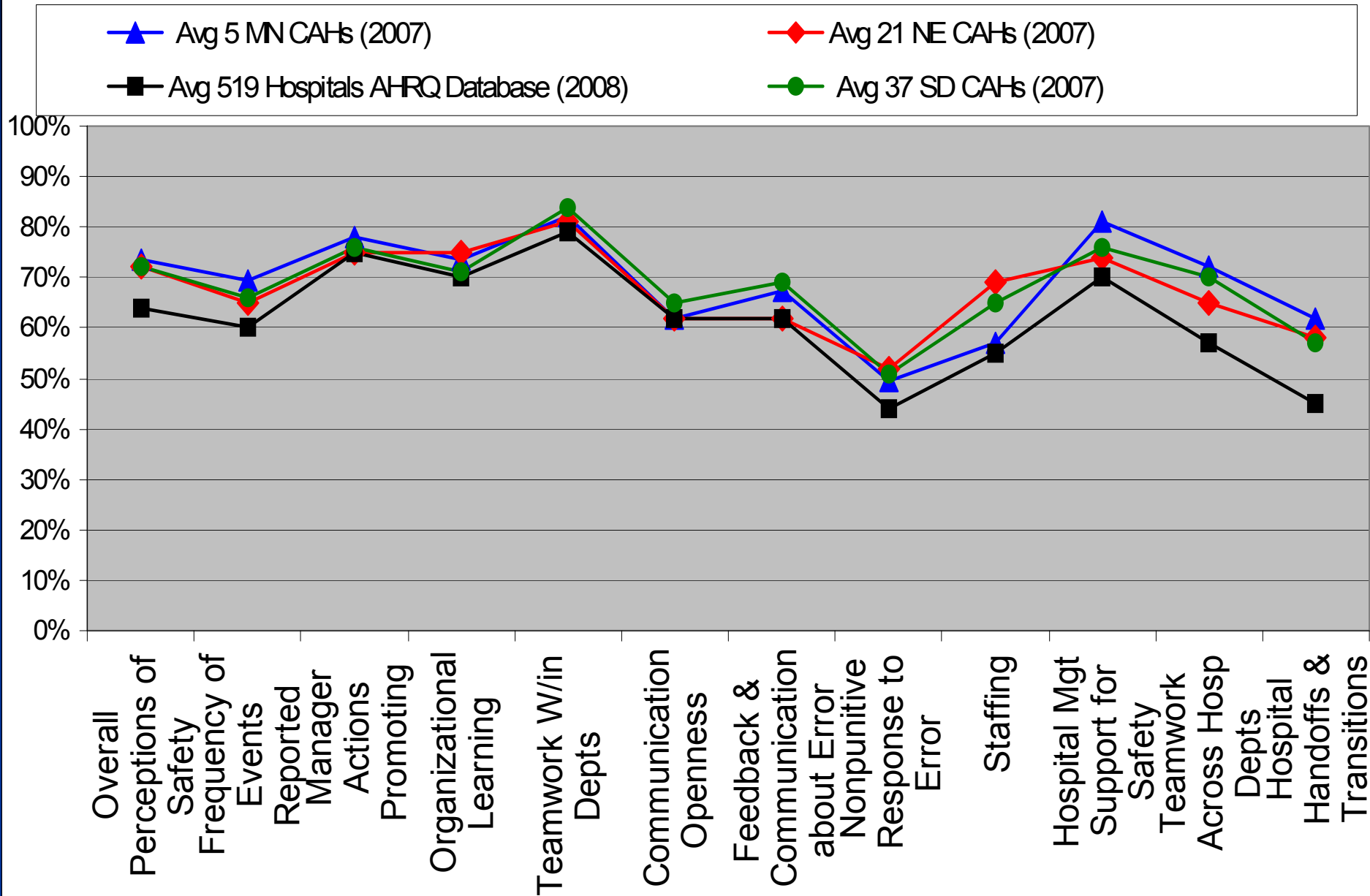
U = Measured at level of unit/department

H = Measured at level of hospital

Reason's Components	HSOPS Dimensions or Outcome Measures
<p><b>Flexible Culture</b> - authority patterns relax when safety information is exchanged because those with authority respect the knowledge of front-line workers</p>	<ul style="list-style-type: none"> <li>•Teamwork w/in Units (U)</li> <li>•Staffing (U)</li> <li>•Communication Openness (U)</li> <li>•Teamwork ax Units (H)</li> <li>•Hospital Handoffs (H)</li> </ul>
<p><b>Learning Culture</b> - organization will analyze reported information and then implement appropriate change</p>	<ul style="list-style-type: none"> <li>•Hospital Mgt Support (H)</li> <li>•Manager Actions (U)</li> <li>•Feedback &amp; Communication (U)</li> <li>•Organizational Learning (U)</li> <li>•Overall Perceptions (O)</li> <li>•Patient Safety Grade (O)</li> </ul>

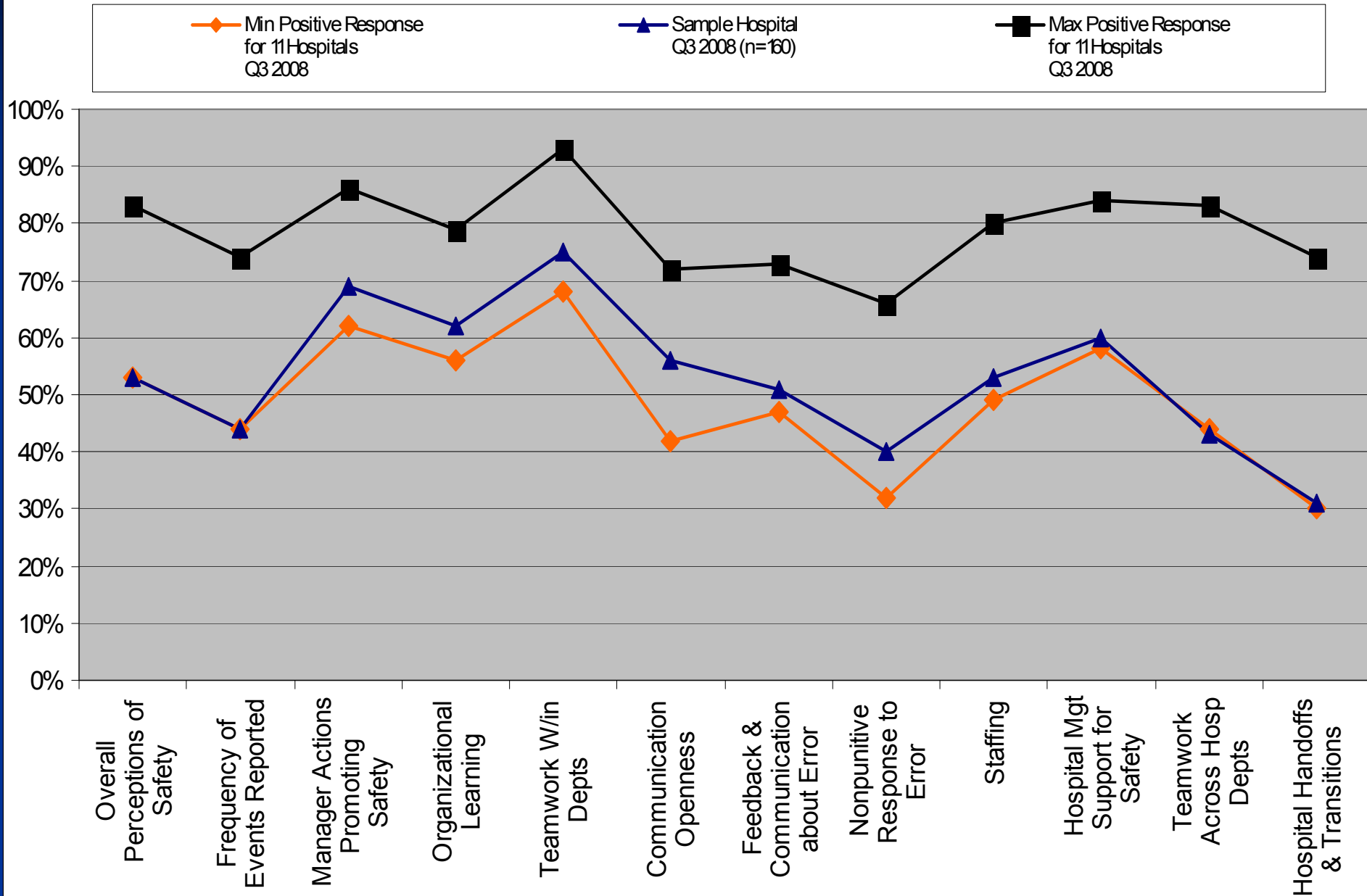
# Safety Culture Survey Composite

## Aggregate Responses from MN, NE, SD and AHRQ Comparative Database



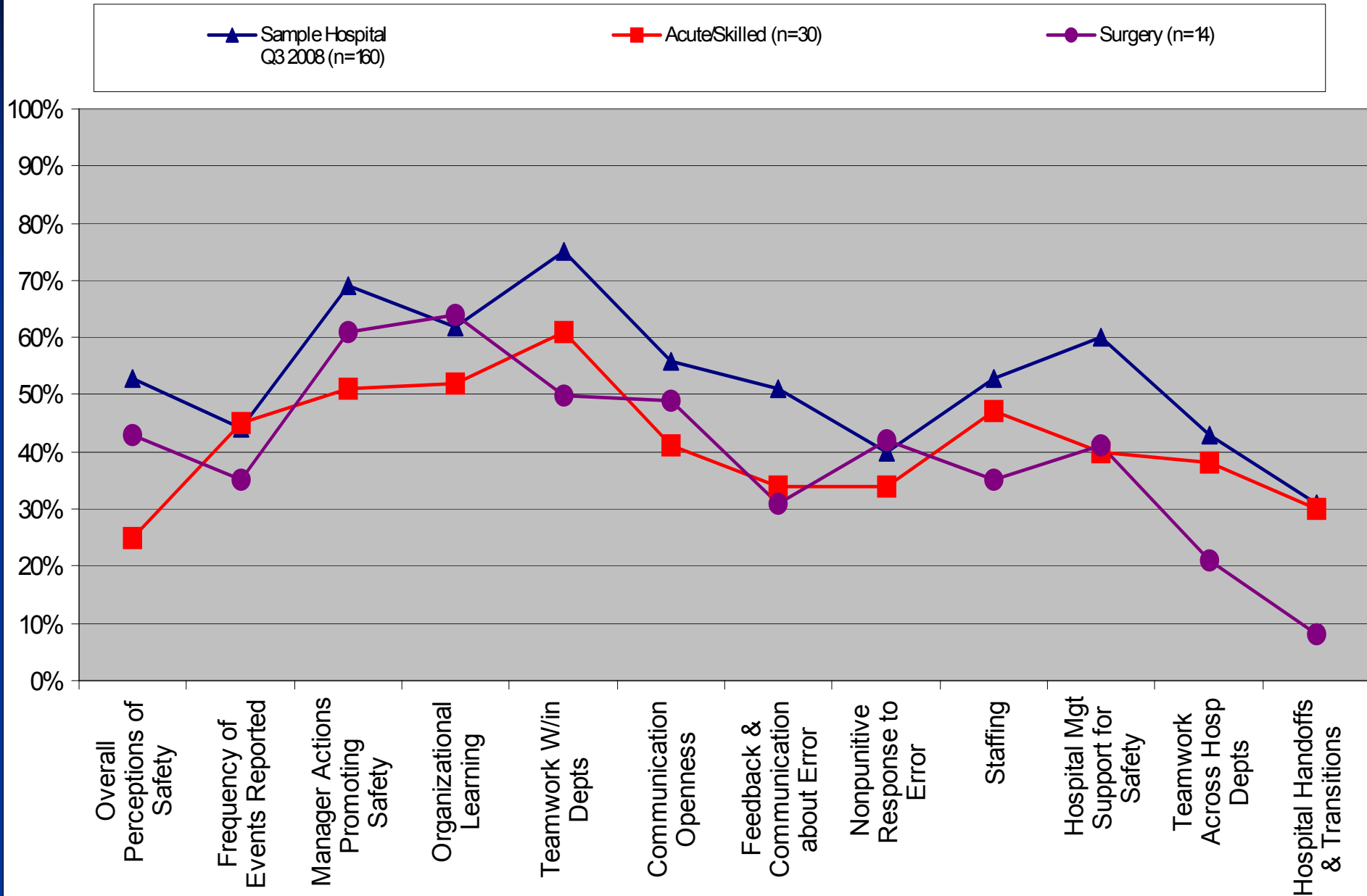
# Safety Culture Survey Composite

## Minimum and Maximum Positive Responses for 11 Rural Hospitals Q3 2008



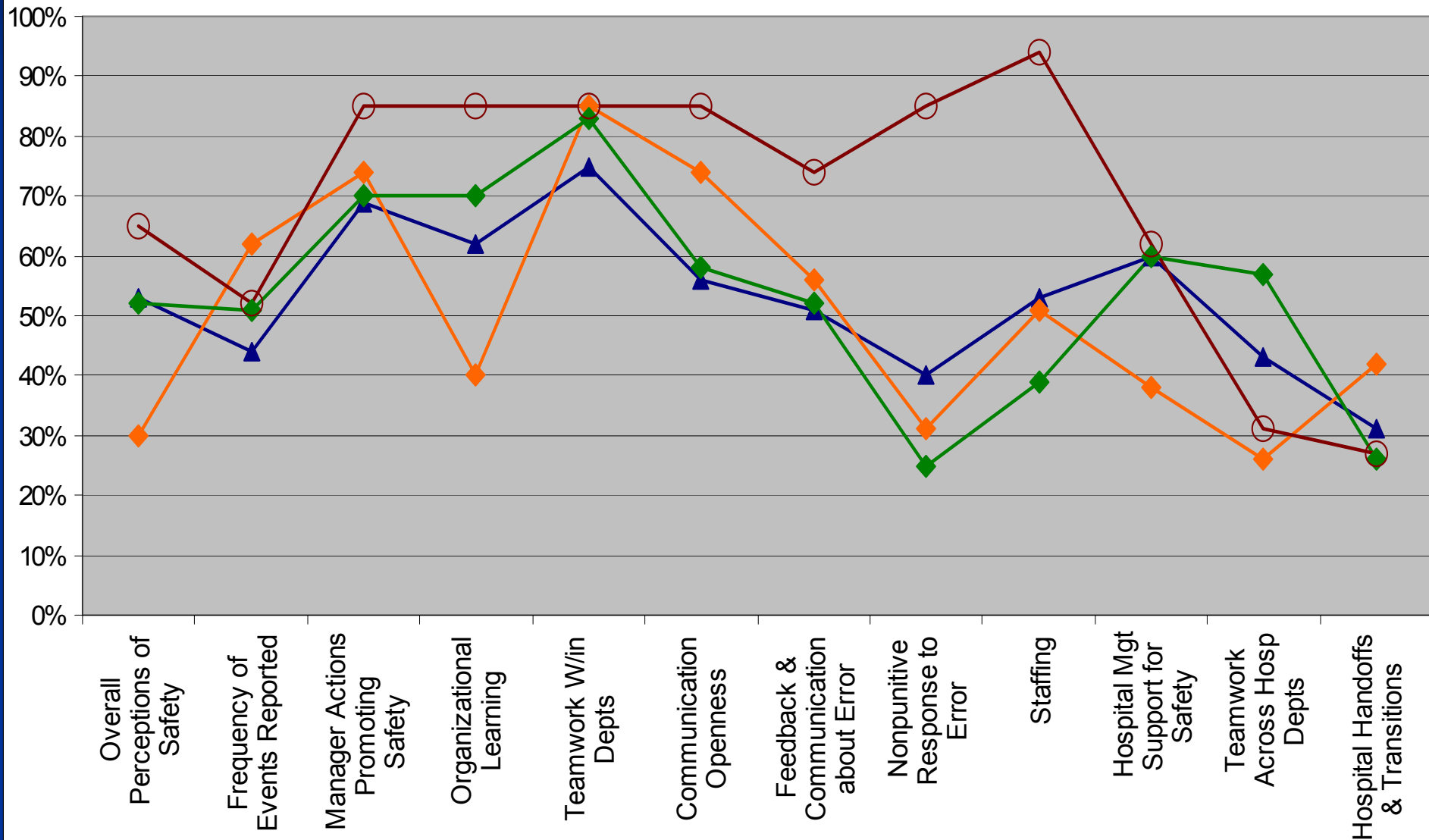
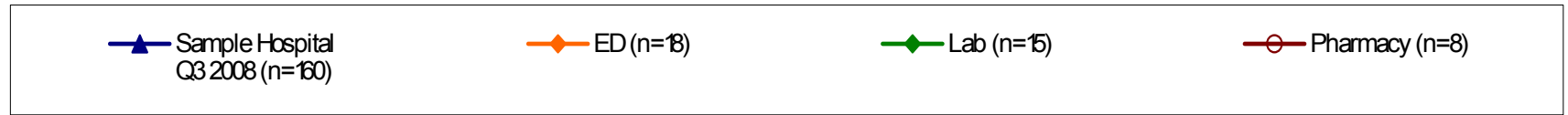
# Safety Culture Survey Composite Positive Responses

## Sample Hospital by Work Area Q3 2008



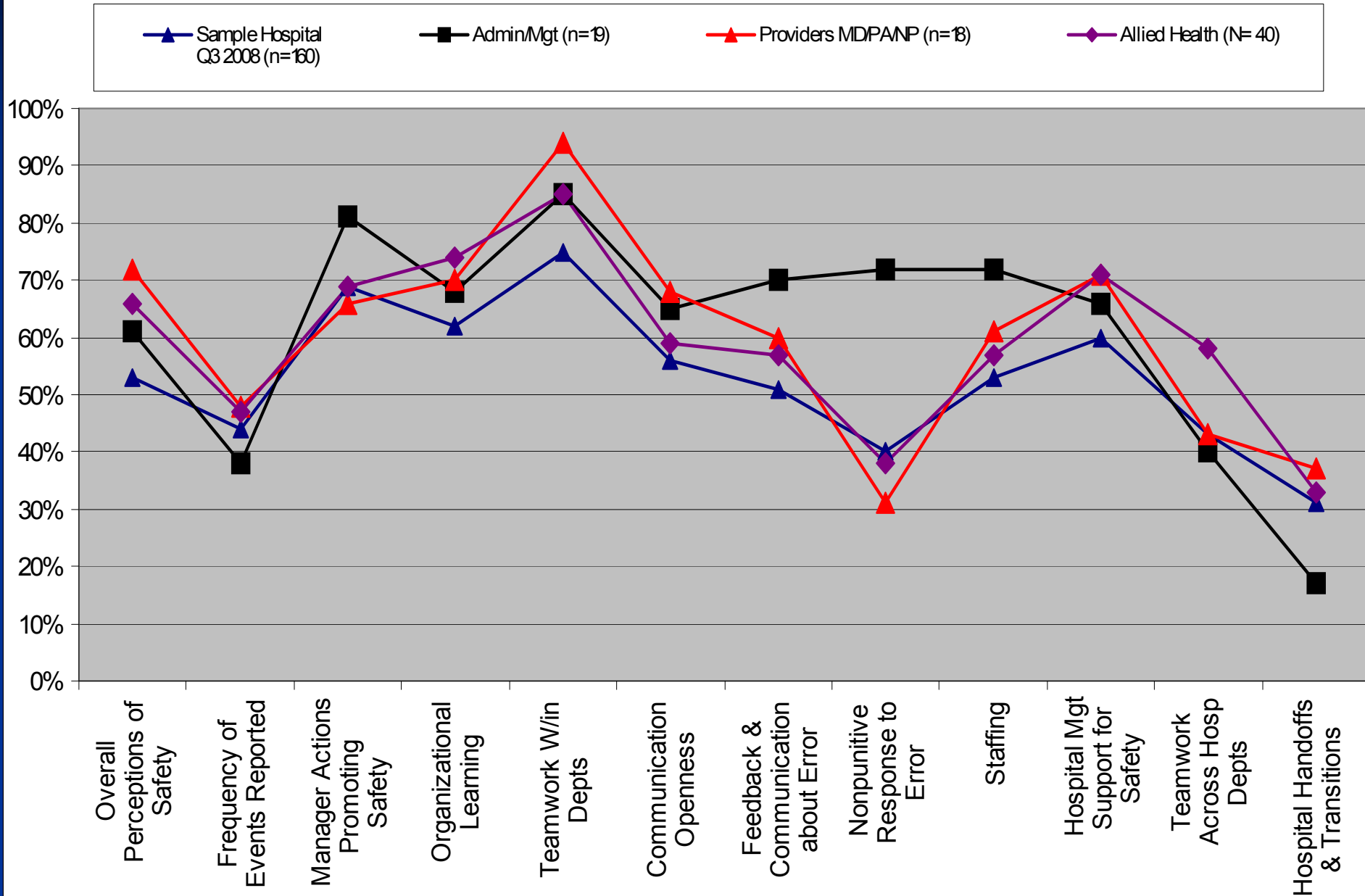
# Safety Culture Survey Composite Positive Responses

## Sample Hospital by Work Area Q3 2008



# Safety Culture Survey Composite Positive Responses

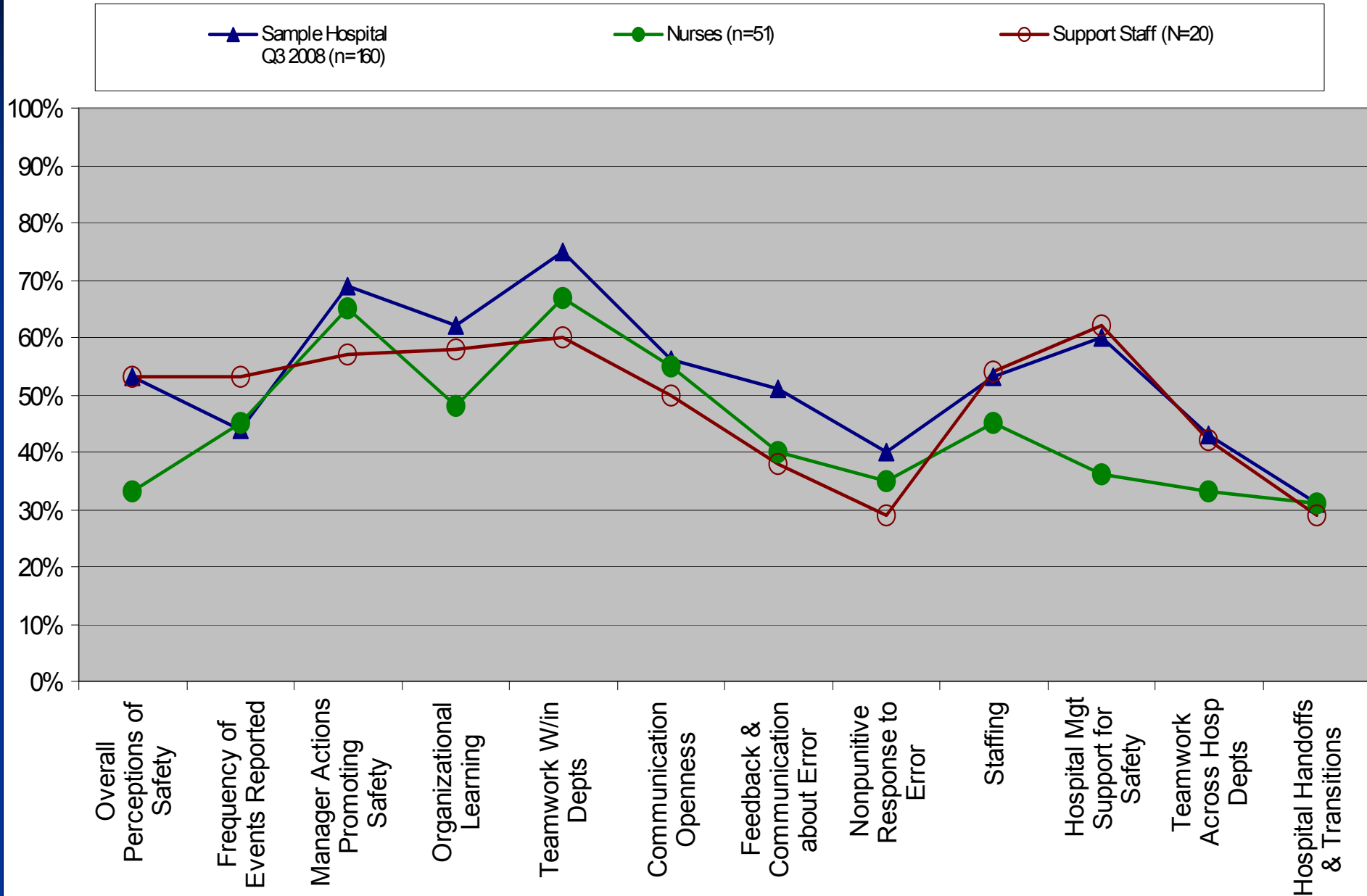
## Sample Hospital by Job Title Q3 2008





# Safety Culture Survey Composite Positive Responses

## Sample Hospital by Job Title Q3 2008



# Gaps Between Beliefs & Behaviors

## Communication Openness

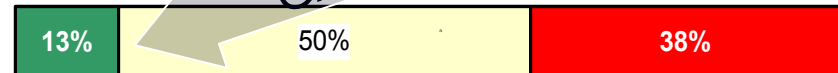
**Nurse 05**

Positive Neutral Negative

1. Staff will freely speak up if they see something that may negatively affect patient care. (C2)



2. Staff feel free to question the decisions or actions of those with more authority. (C4)



R3. Staff are afraid to ask questions when something does not seem right. (C6)



## Teamwork Within Units

**Nurse 05**

Positive Neutral Negative

1. People support one another in this unit. (A1)



2. When a lot of work needs to be done quickly, we work together as a team to get the work done. (A3)



3. In this unit, people treat each other with respect. (A4)



4. When one area in this unit gets really busy, others help out. (A11)



# Gaps Between Beliefs & Behaviors

## Teamwork Within Units

### Nurse 05

■ Positive
 ■ Neutral
 ■ Negative

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2. When a lot of work needs to be done quickly, we work together as a team to get the work done. (A3)



3. In this unit, people treat each other with respect. (A4)



4. When one area in this unit gets really busy, others help out. (A11)



## Staffing

### Nurse 05

■ Positive
 ■ Neutral
 ■ Negative

1. We have enough staff to handle the workload. (A2)



R2. Staff in this unit work longer hours than is best for patient care. (A5)



R3. We use more agency/temporary staff than is best for patient care. (A7)



R4. We work in “crisis mode” trying to do too much, too quickly. (A14)



GAP

# Interpreting Results to Develop an Action Plan

- Anchor plan in history, mission, strategic goals
- Understand response rate (> 60% best)...are results generalizable?
- Wrap your mind around reverse worded questions
- Identify organization-wide areas in need of improvement
- Identify microcultures by work area/job title
  - Identify gaps between beliefs/behaviors within 4 components

# Interpreting Results to Develop an Action Plan

- Identify practices in place that support 4 components within departments
- Relate open-ended comments to quantitative results
- Consider how management uses information
  - reporting > feedback > learning > reporting
  - Generative, Bureaucratic, Pathologic
- Explicit plan to strengthen 4 components within depts by implementing specific practices

# Sample Action Plan & Aims

We need to improve our communication within depts because just 18% of acute/skilled care personnel feel free to question the decisions/actions of those with more authority.

We will strengthen our communication skills and make it psychologically safe to advocate for the patient.

We will do this by using SBAR for communication between all who exchange patient information, and by teaching all staff to use CUS.

We will start with acute care: Nurses and support staff will effectively use SBAR and CUS by March 1, 2009.

# Sample Action Plan & Aims

We need to improve our nonpunitive response to error and perception of a just culture because 60% of nurses feel like they are being reported rather than the event.

We will do this by being transparent with all staff about how the decision is made whether or not to hold an individual accountable for an event.

We will teach all managers to use the Unsafe Acts Algorithm as a guide to deciding individual vs. system culpability.

# ***Action Planning: A Reporting culture is engineered by implementing practices***

## ■ Successful reporting systems (Leape, 2002)

- Nonpunitive
- Confidential
- Independent
- Expert analysis
- Timely
- Systems-oriented
- Responsive

## ■ Practices/Tools

- Reporting Form
- Near miss log
- Chart audit
- Secret Shopper
- Safety Briefings
- Leadership WalkRounds™
- Bulletin board/ suggestion box/telephone hotline

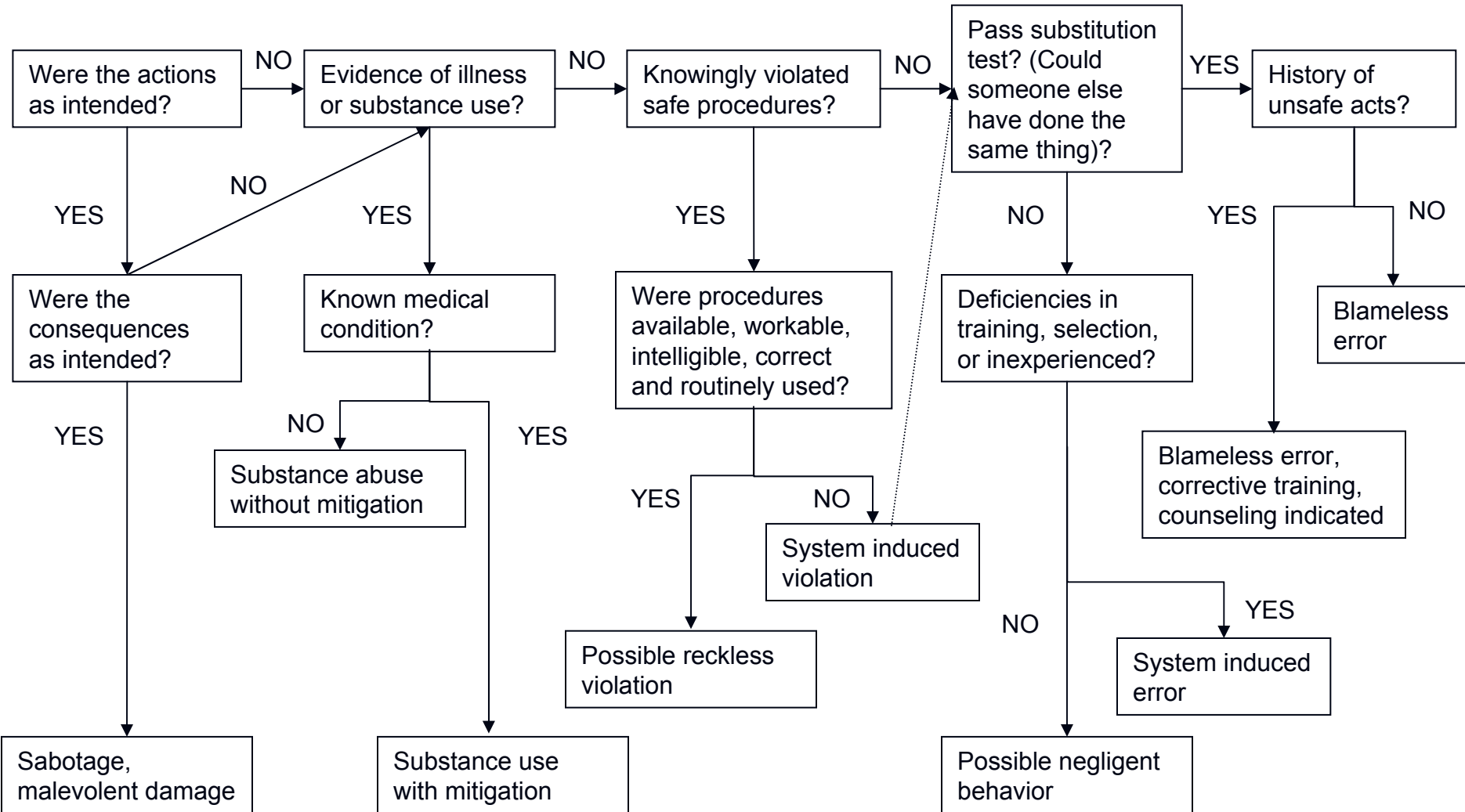


# ***Action Planning: A Just culture is engineered by implementing practices***

## **Practices/Tools**

- Understanding human error (Reason 2003, 2006)
  - Active errors (sharp end)
  - Latent errors
- Just Culture and behavior (Marx, 2001)
  - Conduct: human error, negligence, reckless, intentional rule violation
  - Disciplinary decision-making: outcome-based, rule-based, risk-based
- Unsafe Acts Algorithm
- Disruptive Behavior Policy/Standards

# Execute Just Culture . . . UNSAFE ACTS ALGORITHM



**Culpable**

**Gray Area**

**Blameless**

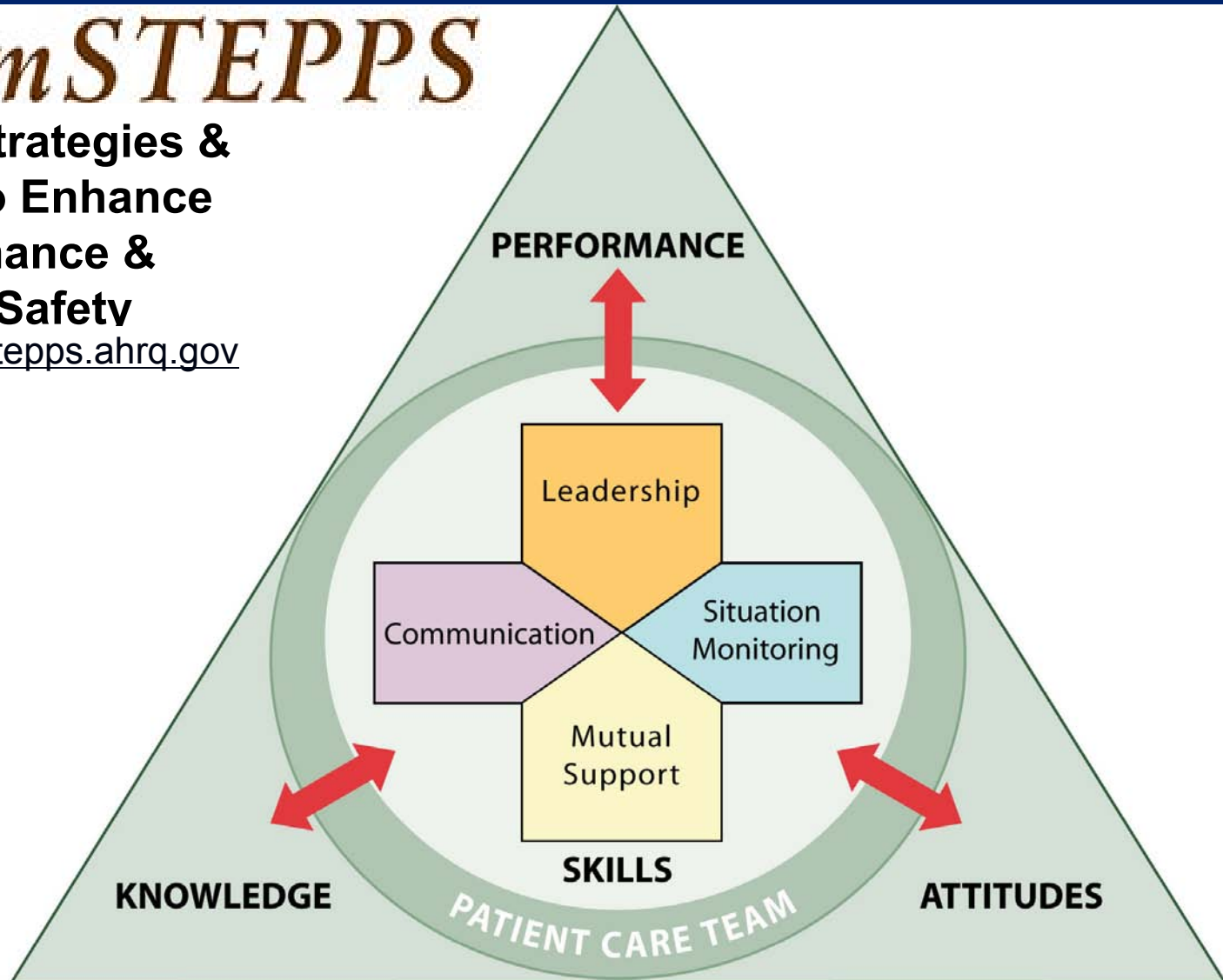
Adapted from James Reason. (1997). *Managing the Risks of Organizational Accidents*.

# ***Action Planning A Flexible culture is engineered by implementing practices***

## ***TeamSTEPPS***

**Team Strategies &  
Tools to Enhance  
Performance &  
Patient Safety**

<http://teamstepps.ahrq.gov>



# ***Action Planning: Reporting, Just, and Flexible practices support Learning***

Ultimately, the willingness of workers to report depends on their belief that the organization will analyze reported information and then implement appropriate change—organizational practices support a *learning culture*.

## Practices/Tools

- Individual RCA
- Aggregate RCA
- FMEA
- Safety Briefings
- Leadership WalkRounds™
- Close the loop with reporting...feedback

# MODEL OF INFORMATION FLOW



Adapted from Westrum (2004) & Firth-Cozens, J. Cultures for improving patient safety through learning: the role of teamwork. *Quality and Safety in Health Care* 2001;10:26-31.

# Typology of Organizational Cultures

- Pathological—use of information to enhance personal power
  - Punitive environment
- Bureaucratic—use of information to adhere to rules, positions, and protect turf
  - Information collected but use of information for learning and change is limited
- Generative—use of information to achieve the mission
  - Practices interact to support 4 components

# Typology of Organizational Cultures

Pathological	Bureaucratic	Generative
Low cooperation	Rule oriented	Performance oriented
Messengers shot	Messengers neglected	Messengers encouraged
Responsibilities shirked	Responsibilities are narrow	Responsibilities are shared

Westrum, R. A typology of organizational cultures. *Quality and Safety in Healthcare* 2004;13:22-27.

# Typology of Organizational Cultures

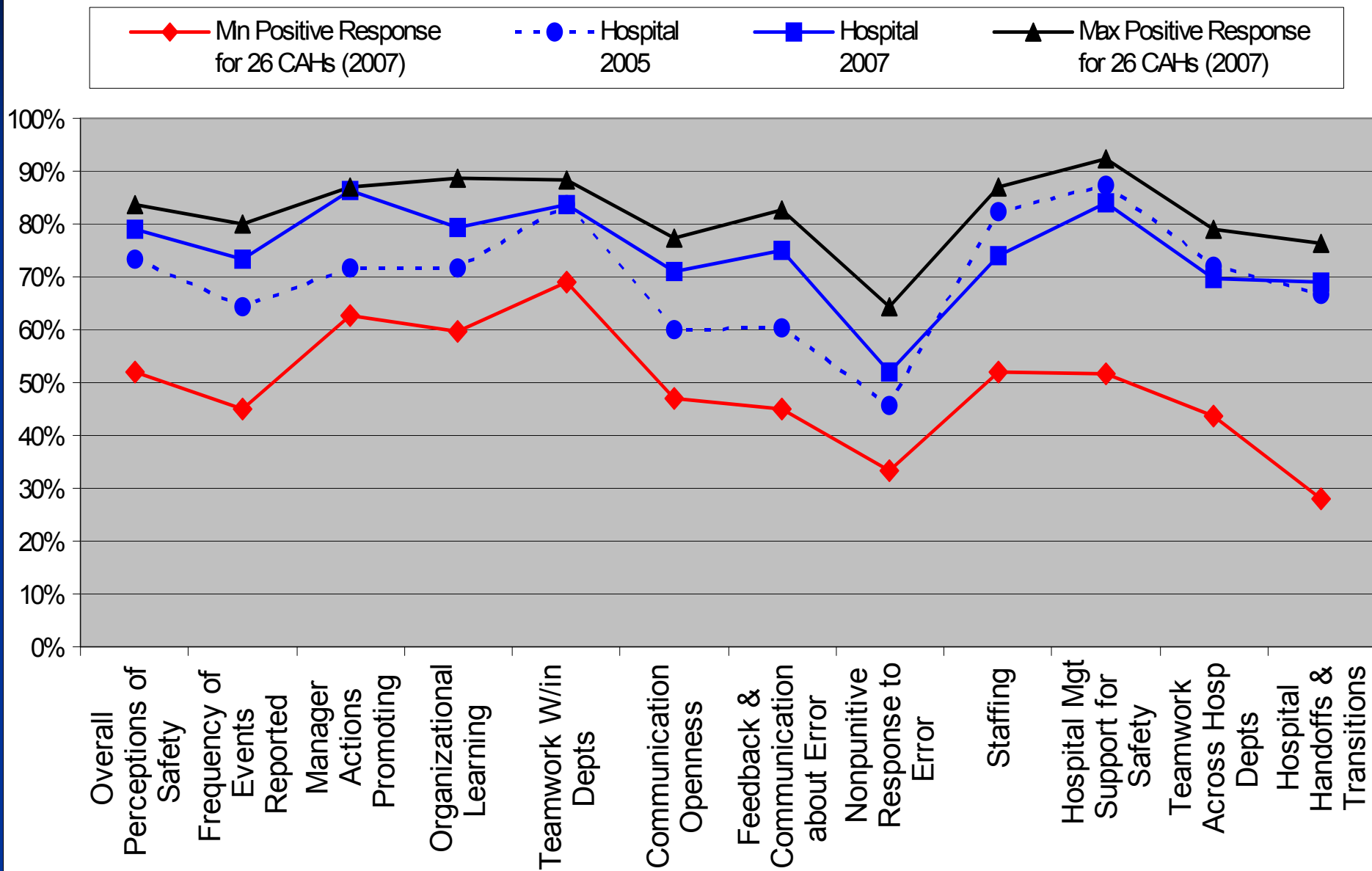
Pathological	Bureaucratic	Generative
Sharing info across depts discouraged	Sharing info across depts tolerated	Sharing info across depts encouraged
Failure → scapegoating	Failure → Justice	Failure → Inquiry
Change → crushed	Change → problem	Change → implemented

Westrum, R. A typology of organizational cultures. *Quality and Safety in Healthcare* 2004;13:2-27.



# Safety Culture Survey Composite

## Case Study: Generative Culture (Effective leadership disseminates information)

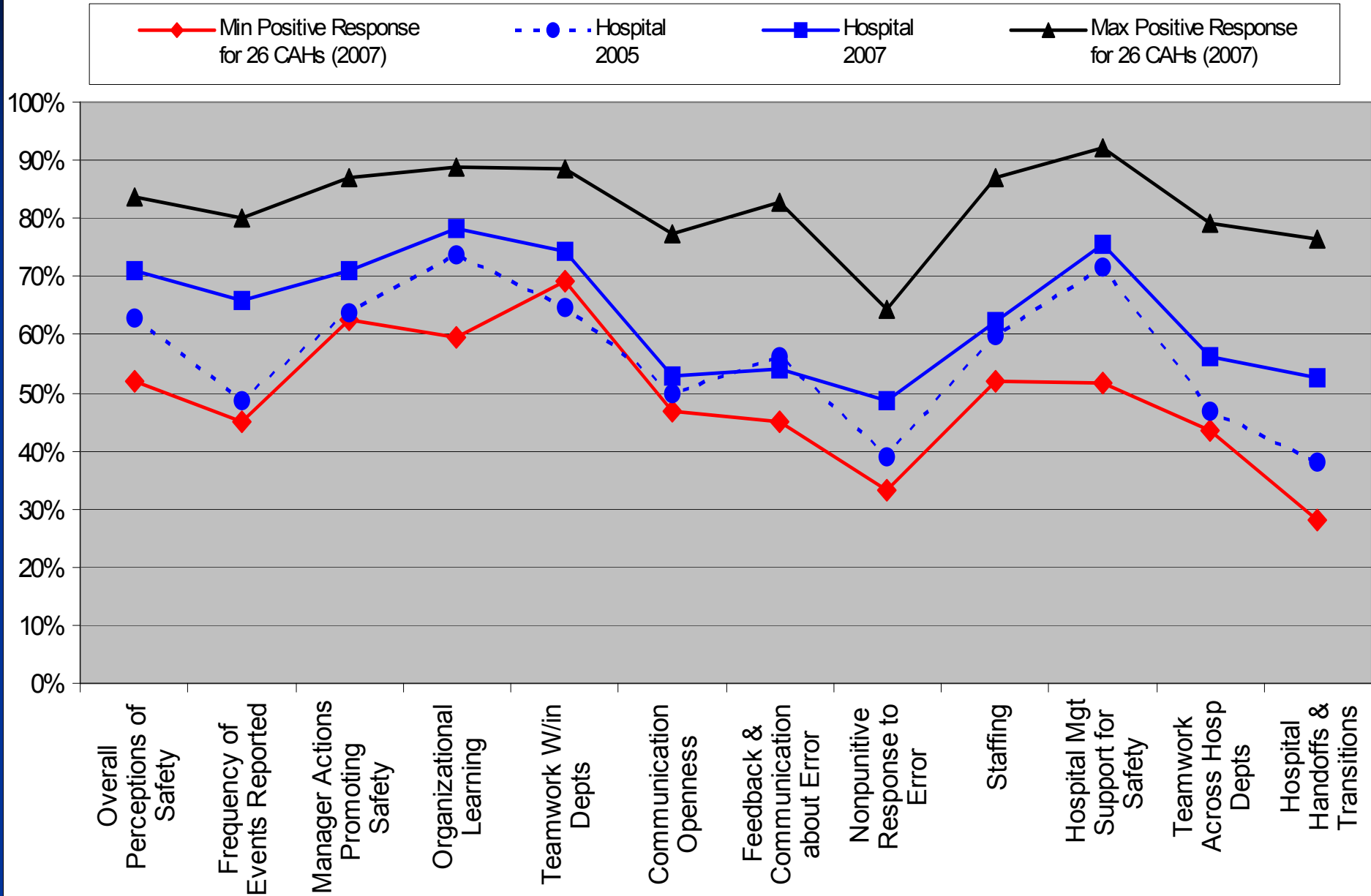


# Interactions Between Components

HSOPS Items: Nurses at Dundy County Hospital 2005 and 2007	%+ 05	%+ 07	Effective Practices
Outcome: Our procedures, systems are good at preventing errors. (+ Agree)	31%	83%	High Reliability Organization
Learning: We are given feedback about changes put into place based on event reports. (+ Most time, Always)	44%	72%	QI, RCA, Leadership Walkrounds™, Safety Briefings
Flexible: Staff feel free to question the decisions and actions of those with more authority. (+ Most time, Always)	13%	50%	Structured Communication skills: SBAR, CUS, DESC
Just: When an event is reported, it feels like the person is being reported and not the problem. (+ Disagree)	31%	50%	Education about human error, Unsafe Acts Algorithm
Reporting: When a mistake is made, but is caught and corrected before affecting the patient, how often is this reported. (+ Most time, Always)	25%	65%	Systematic reporting system using standard taxonomies

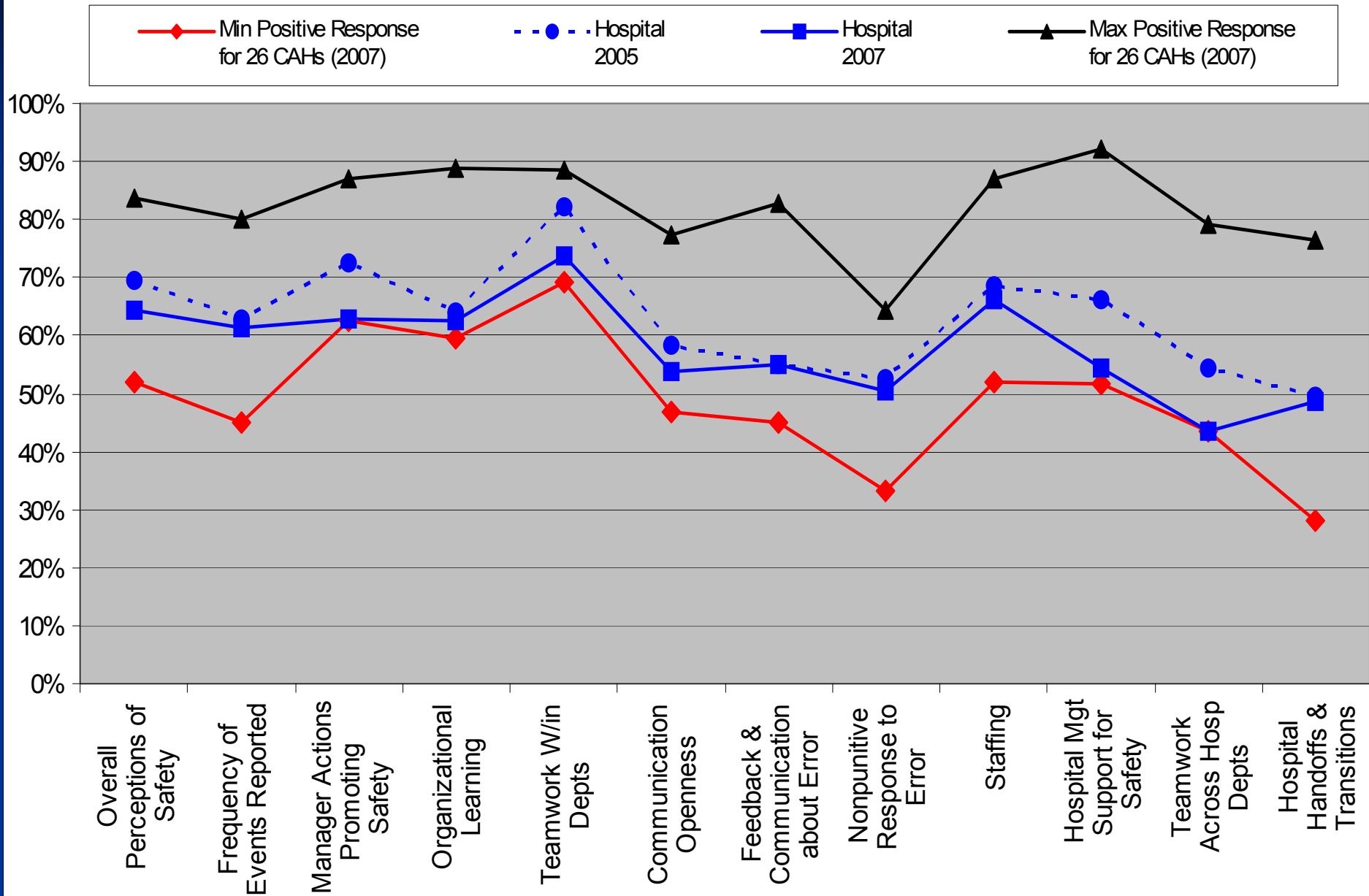
# Safety Culture Survey Composite

## Case Study: Pathologic to Bureaucratic Culture?



# Safety Culture Survey Composite

## Case Study: Lack of Leadership



# Summary: Role of HSOPS

- Measure beliefs and behaviors needed to support an informed, safe culture
- Raise awareness about role of culture
- Identify impairments in organizational learning
- Evaluate effectiveness of patient safety interventions over time within an organization
- Conduct internal & external benchmarking
- Meet regulatory requirements

Nieva, Sorra. (2003). Safety culture assessment: a tool for improving patient safety in healthcare organizations. *Qual Saf Health Care*, 12(Suppl II), ii17-ii23.

Jones, Skinner, Xu, Sun, Mueller. (2008). The AHRQ Hospital Survey on Patient Safety Culture: a tool to plan and evaluate patient safety programs. *Advances in Patient Safety: New Directions and Alternative Approaches*

# Regulatory Requirement

- Conduct HSOPS to meet Joint Commission Leadership Standards (Standard LD.03.01.01)

[http://www.jointcommission.org/NR/rdonlyres/D53206E8-D42B-416B-B887-491B6D5AA163/0/HAP\\_LD.pdf](http://www.jointcommission.org/NR/rdonlyres/D53206E8-D42B-416B-B887-491B6D5AA163/0/HAP_LD.pdf)

- Leaders regularly evaluate the culture of safety and quality using valid and reliable tools
- Leaders prioritize and implement changes identified by the evaluation

# Conclusion HSOPS Guides Implementation of an Infrastructure for Patient Safety

- Interaction between effective practices results in sensemaking within macro- and microsystems
- Sensemaking requires data, which is interpreted within the context of the lived experiences of those in direct contact with patients\*
- Sensemaking can not occur without data, trust and teamwork

\*Battles et al. (2006). Sensemaking of patient safety risks and hazards. HSR, 41(4 Pt 2), 1555-1575.



# The Responsibility of Leadership

“Our systems are too complex to expect merely extraordinary people to perform perfectly 100% of the time. **We as leaders have a responsibility to put in place systems to support safe practice.**”

James Conway,  
former VP and COO Dana Farber Cancer Institute



# URLs for Surveys

- Toolkit to interpret HSOPS results

<http://www.unmc.edu/rural/patient-safety>

Rural adapted version of HSOPS

Click on

[Hospital Survey on Patient Safety Culture Resources](#)

- Original AHRQ version of HSOPS

<http://www.ahrq.gov/qual/hospculture/>

Click on [Hospital Survey Toolkit](#)

# Contact Information

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Web site where tools are posted

[www.unmc.edu/rural/patient-safety](http://www.unmc.edu/rural/patient-safety)