



**AHA/HRET HEN
Improvement Leader Fellowship, Wave 2:
Chicago**

The Use of TeamSTEPPS to
Prevent High Priority Harms

Tuesday, August 14, 2012



**American Hospital
Association®**

HRET

HEALTH RESEARCH &
EDUCATIONAL TRUST
In Partnership with AHA



Welcome and Introductions

- Bruce Spurlock, MD
 - Physician Advisor, Cynosure Health
- Steve Hines, PhD
 - Vice President, Research, HRET
- Karyn Baum, MD, MEd
 - Associate Professor, Medicine, University of Minnesota; General Internal Medicine Practitioner
- Mary Salisbury, MSN
 - President, The Cedar Institute, Inc.; Subcontractor, Department of Defense Patient Safety Program
- Robert Welsh, MD, FACS
 - Vice Chief, Surgical Services - Quality, Patient Safety & Outcomes, Beaumont Hospital, Royal Oak; Section Head, Thoracic Surgery, Beaumont Hospital, Royal Oak and Troy



Agenda

- Recap of the Preconference webinar (July 26)
- Team exercise
- Review TeamSTEPPS, as an application for PFP goals
 - Discuss why teamwork matters
 - Highlight TeamSTEPPS, and how TeamSTEPPS' concepts and tools can help:
 - Increase team improvement capacity
 - Reduce harm
- Connect the dots . . . between project PDSA cycles and TeamSTEPPS, for sustainability and spread (Wave 3)



Key Elements of the Preconference Webinar

- During the Preconference webinar, we:
 - Recapped the Partnership for Patients (PfP) goals
 - Reviewed the Fellowship timeline (where Fellows lie in their Improvement Capacity journey)
 - Previewed Wave 2
 - Previewed TeamSTEPPS, as an application for PFP goals



Polling Results

- During the Preconference webinar, we also polled attendees per the following two questions:
 - 1) Our current (quality improvement) teamwork is:
 - A. Very good – 20%
 - B. Good – 53.3%**
 - C. Fair – 24%
 - D. Poor – 2.7%
 - E. Very poor – 0%



Polling Results

2) What is your experience-level with TeamSTEPPS?

- A. Experienced (Master Trainer) – 6.9%
- B. Knowledgeable (not a Master Trainer, but familiar with modules, tools, etc.) – 19.5%
- C. New to TeamSTEPPS (not familiar with modules, tools, etc.) – 73.6%**



Homework: TeamSTEPPS Tools

In addition, we assigned you a task: to think about the tool(s) that you wanted to discuss / use per your (1) general teamwork and communication issues; and/or (2) for your focused areas(s) of harm.

Using your polling devices, please choose one of the following tools:

- | | |
|-------------------------------|--------------------|
| 1. Brief/ Huddle/Debrief | 6. SBAR |
| 2. STEP | 7. Call-Out |
| 3. Situation/Cross Monitoring | 8. Check-Back |
| 4. Two-challenge Rule | 9. Handoff |
| 5. CUS | 10. Mutual Support |

Team Exercise





Why Does Teamwork Matter

- Teamwork matters, as highlighted below, and we want to ensure that we equip Fellows with effective tools to allow your teams to function at their highest level. Key reasons why teamwork matters, include:
 - Poor communication and teamwork is the most common root cause of patient harms
 - Poor teamwork is source of job dissatisfaction, burnout and employee turnover
 - Teamwork is not the focus of most clinical education efforts, so few staff are well equipped to work as teams
 - Teamwork is linked to outcomes that hospitals focus on most, such as lower:
 - HCAHPS scores
 - Safety culture scores

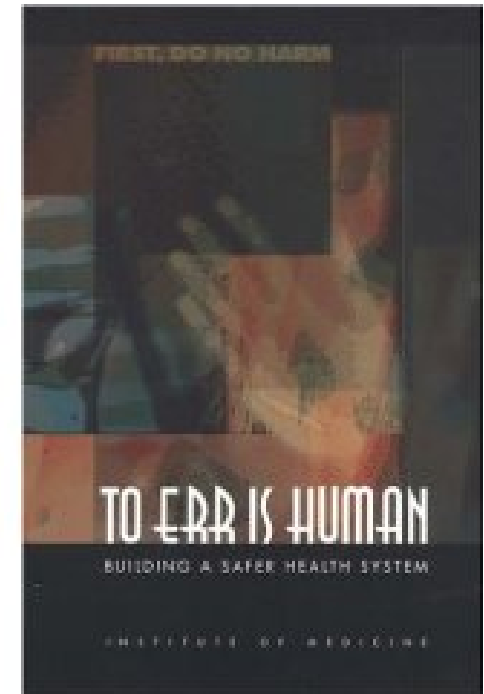


Institute of Medicine (IOM) Report

... and all of us in this room are keenly aware of the IOM Report in relation to communication errors:

November, 1999

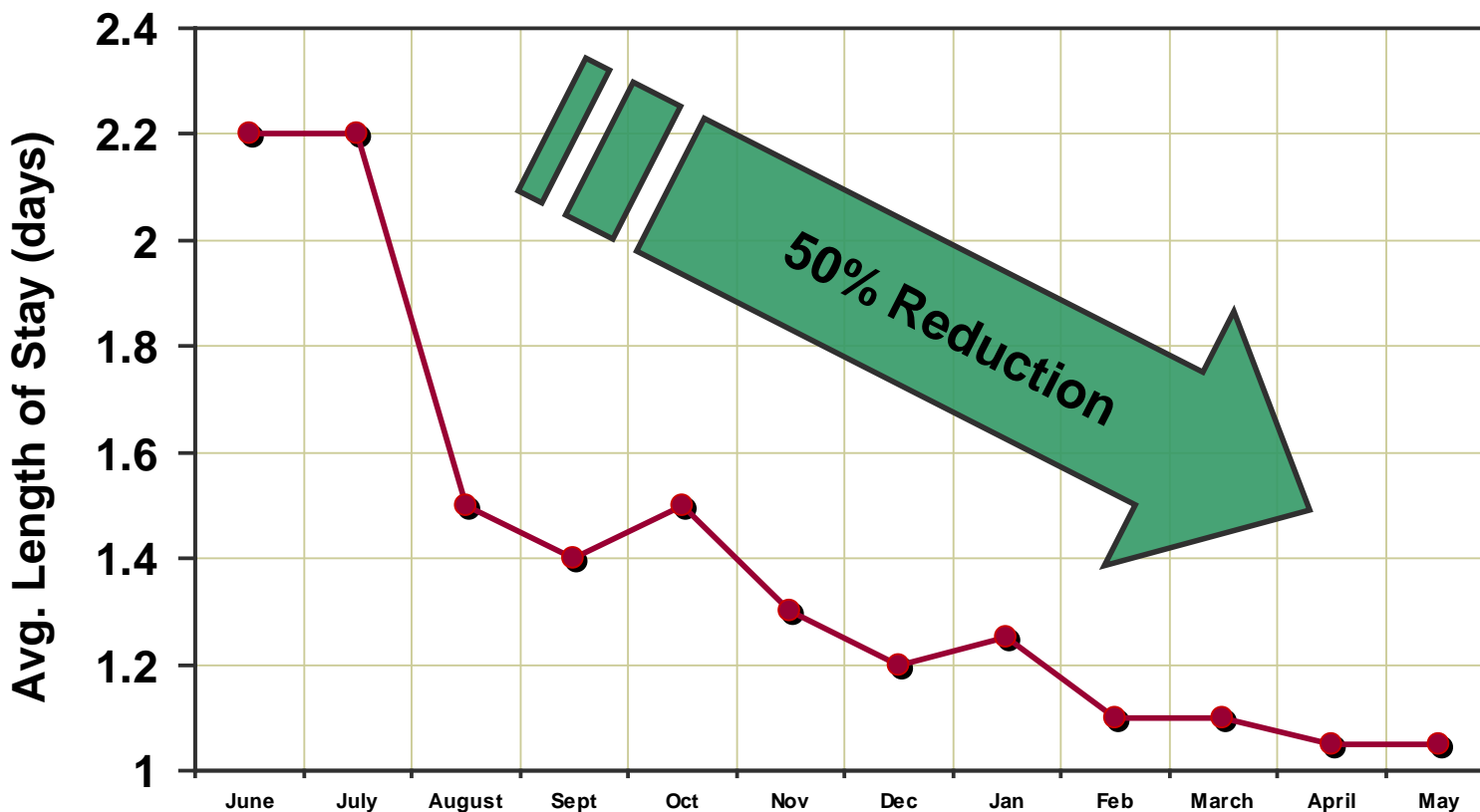
“...approximately 100,000 patients die in the hospital each year from medical Errors, and 72 % resulted from communication errors...”



This report lays out a comprehensive strategy by which government, health care providers, the industry and consumers can reduce preventable medical errors. The reports goes on to say that there should be a minimum goal a 50 percent reduction in errors over the next five years, concluding that the know-how already exists to prevent many of these mistakes.

Where is the Evidence?

Length of ICU Stay After Team Training



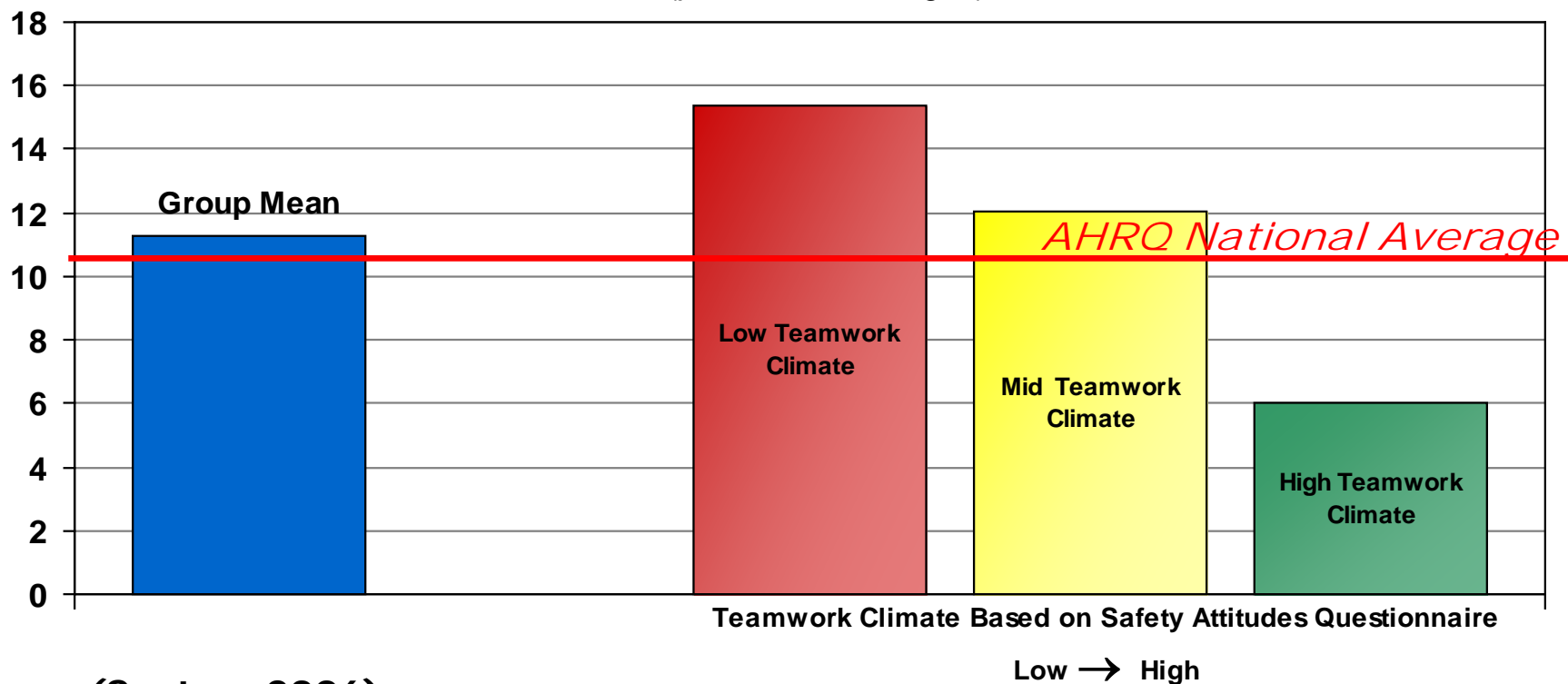
(Pronovost, 2003)

Johns Hopkins

Journal of Critical Care Medicine

Where is the Evidence?

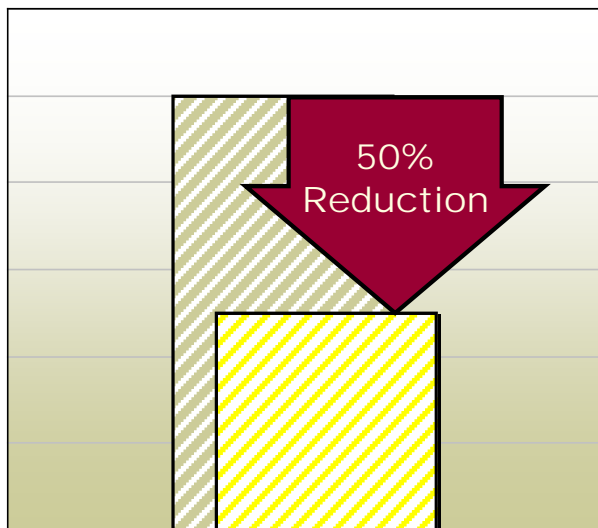
OR Teamwork Climate and Postoperative Sepsis Rates
(per 1000 discharges)



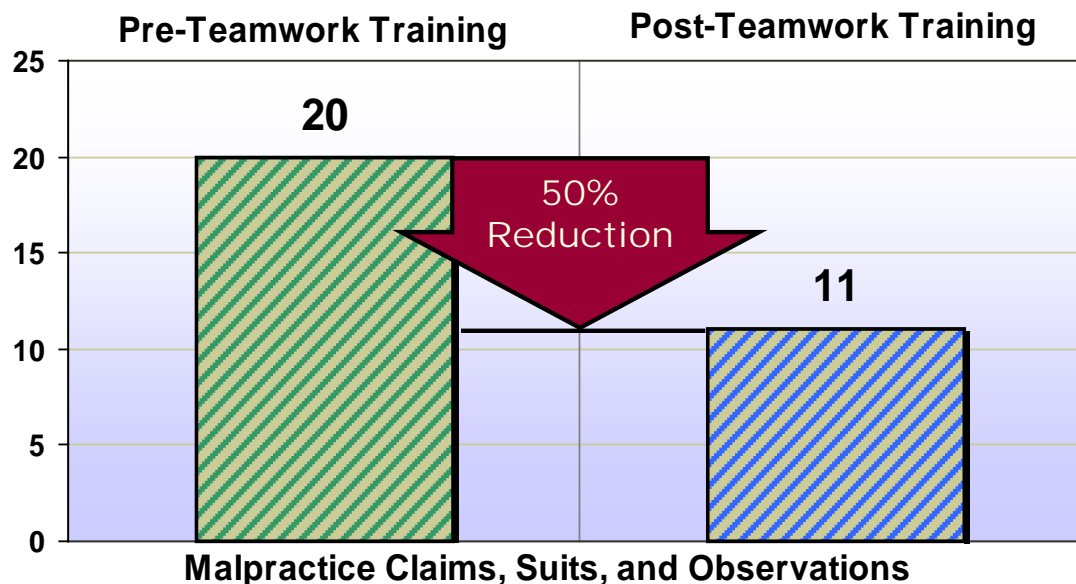
(Sexton, 2006)
Johns Hopkins

Where is the Evidence?

Adverse Outcomes



Indemnity Experience



(Mann, 2006)
 Beth Israel Deaconess Medical Center
 Contemporary OB/GYN



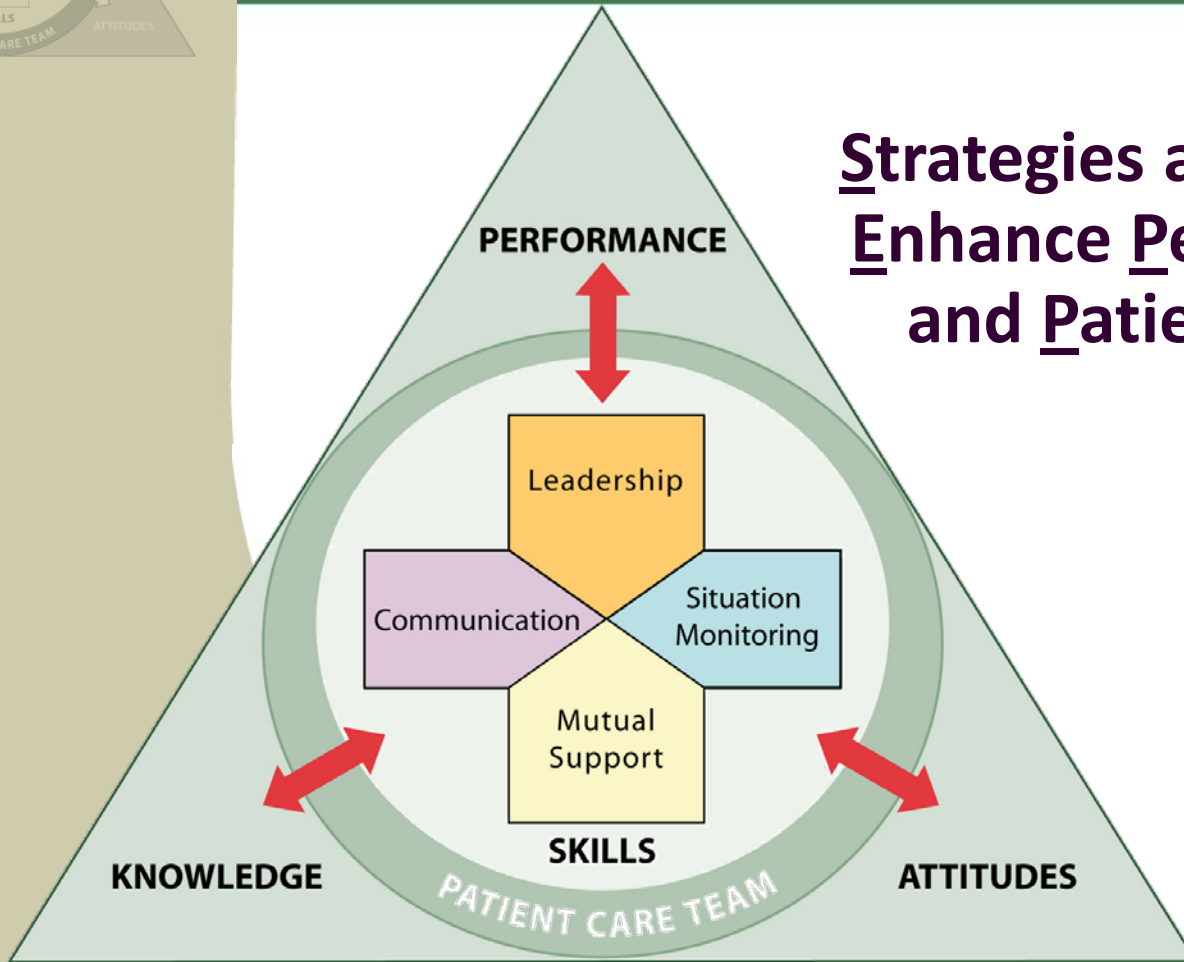
Evidence

- 2010 JAMA article
 - 74 facilities in the VA system with a formalized team training had an 18 percent reduction in annual mortality, verses a 7 percent reduction in those without training (N=34)
 - Nearly 120,000 cases reviewed

Association Between Implementation of a Medical Team Training Program and Surgical Mortality. J Neily, et al October, 2010 JAMA

TeamSTEPPS

Strategies and Tools to
Enhance Performance
and Patient Safety



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care • www.ahrq.gov

PATIENT
SAFETY





What is TeamSTEPPS, and How Can it be Applied to HEN?

- Free, public use application of principles of crew resource management optimized for health care teams
 - Developed by Department of Defense's (DoD's) Patient Safety Program, in collaboration with Agency for Healthcare Research & Quality (AHRQ)
 - Supported by 20 years of research on the impact of teamwork on broad range of quality and safety outcomes, including safety culture, staff and patient satisfaction
- Modular materials that include:
 - Resources for a variety of care settings and faculty
 - Tools to address teamwork challenges relevant to ten clinical topics HENs are targeting



TeamSTEPPS Resources

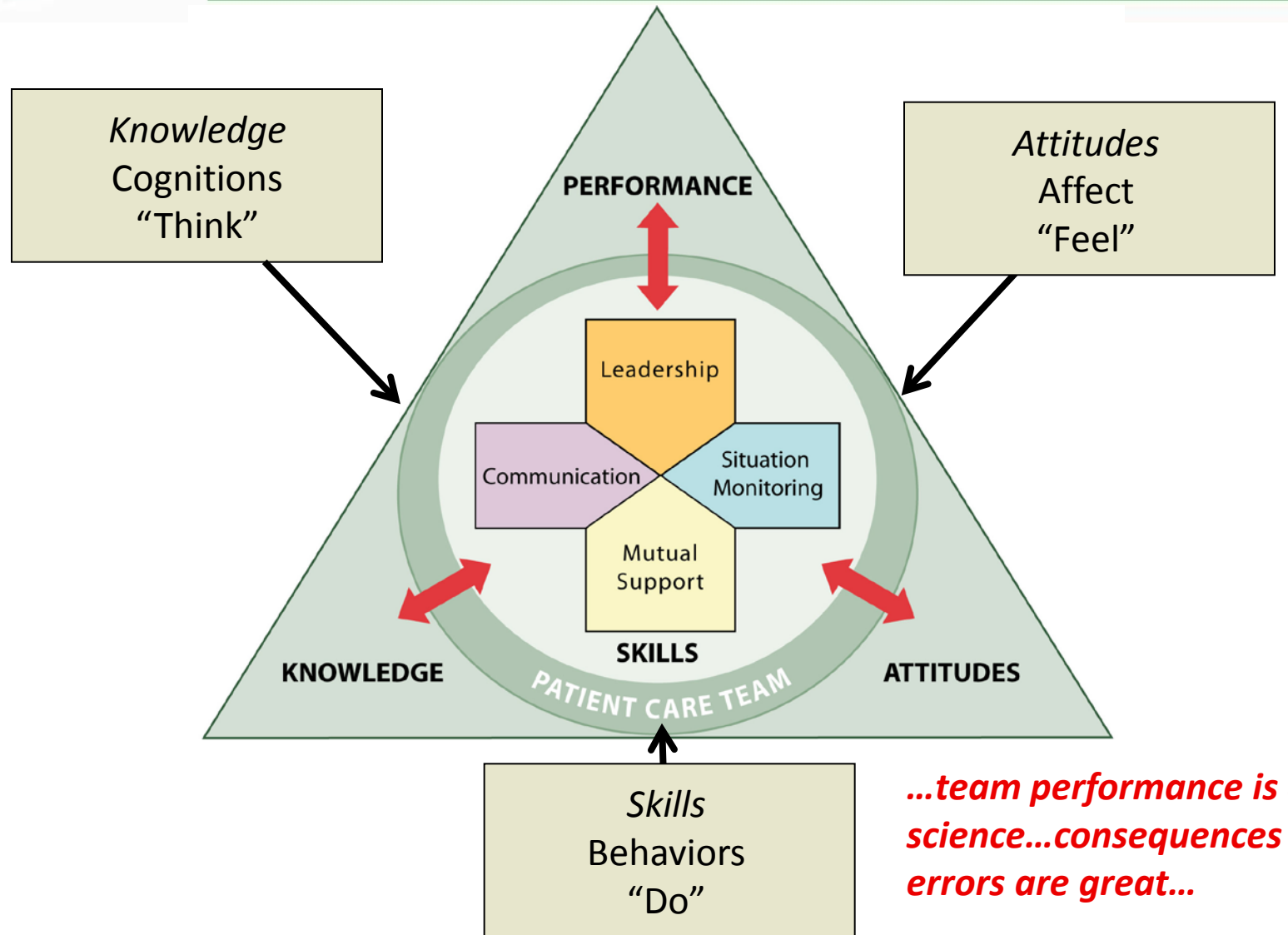
- <http://teamstepps.ahrq.gov/>
 - Complete user guides
 - Downloadable video vignettes
 - Newly developed modules
- HRET, and partners Booz Allen Hamilton and IMPAQ providing implementation support:
 - TeamSTEPPS 2.0
 - Master Training:
<http://register.rcsreg.com/r2/hret2012/ga/top.html>
 - TeamSTEPPS User Portal:
<http://teamsteppsportal.com/>
 - User Support Network



What are the Components of TeamSTEPPS?

... But more important – how can the concepts help improve our work in HEN?

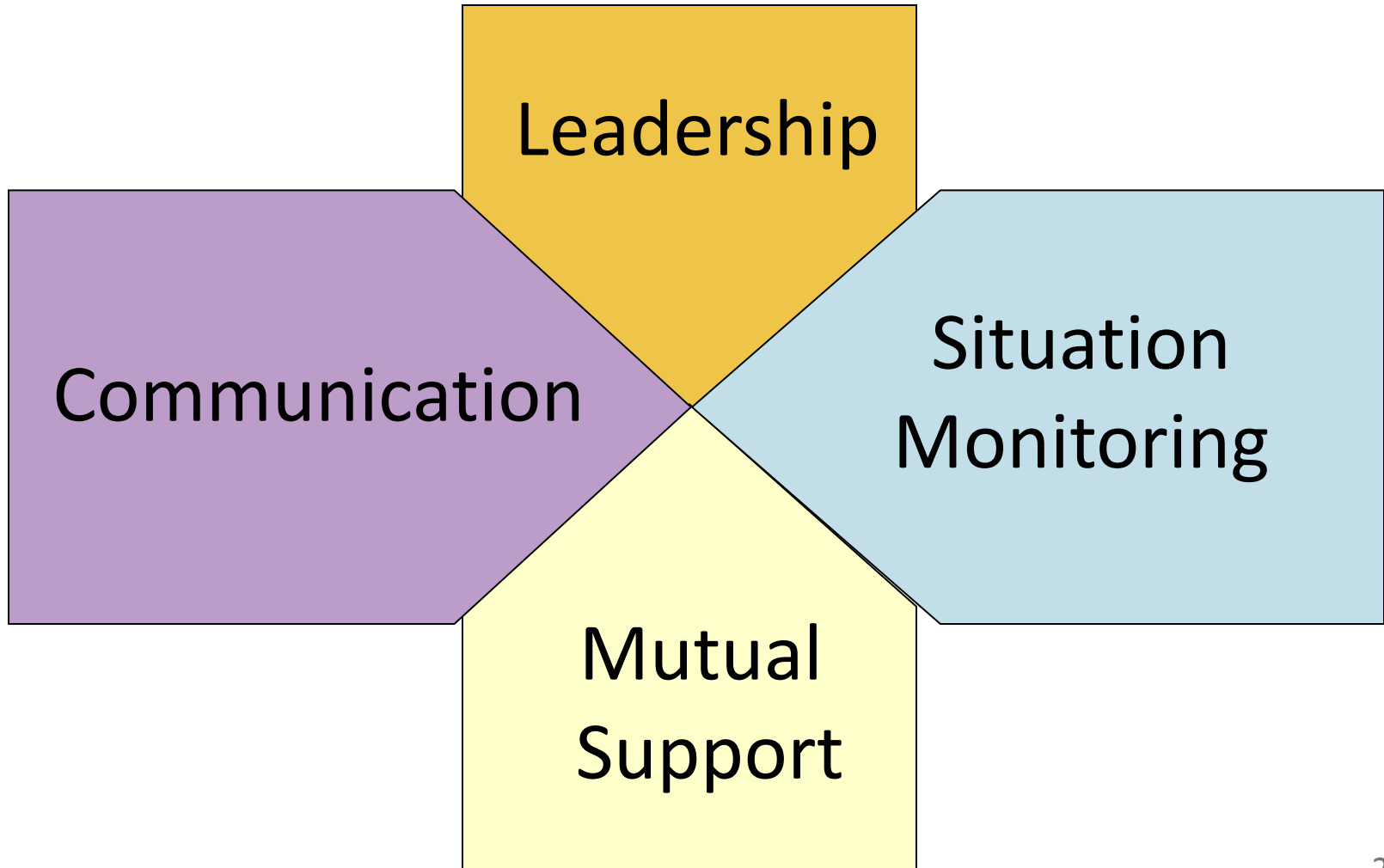
Components of Team Performance



...team performance is a science...consequences of errors are great...



Core Competencies of Highly Performing Teams





Leadership

Communication



Situation Monitoring

Mutual Support



Leadership

**SHARED
MENTAL
MODEL**

Communication

Situation
Monitoring

Mutual
Support



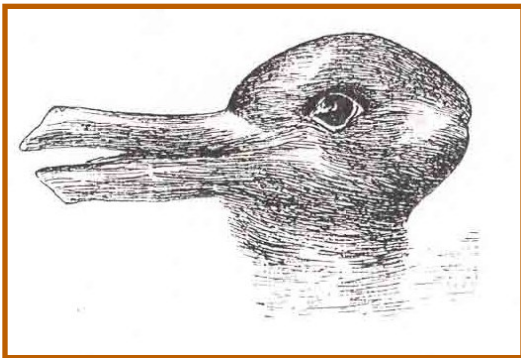
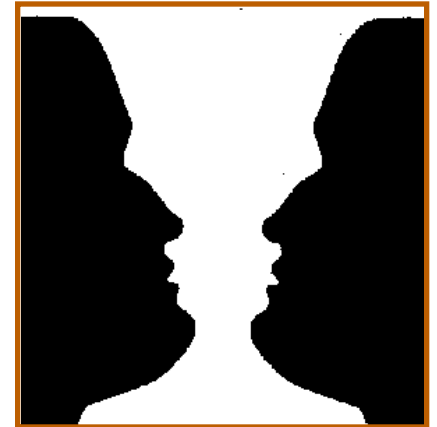
Shared Mental Model

A shared knowledge and understanding, e.g. a shared mental model about a patient or patient plan amongst a healthcare team.

- Provides common understanding of the situation, task responsibilities and information requirements
- Allows team members to anticipate one another's needs so they can work synchronously

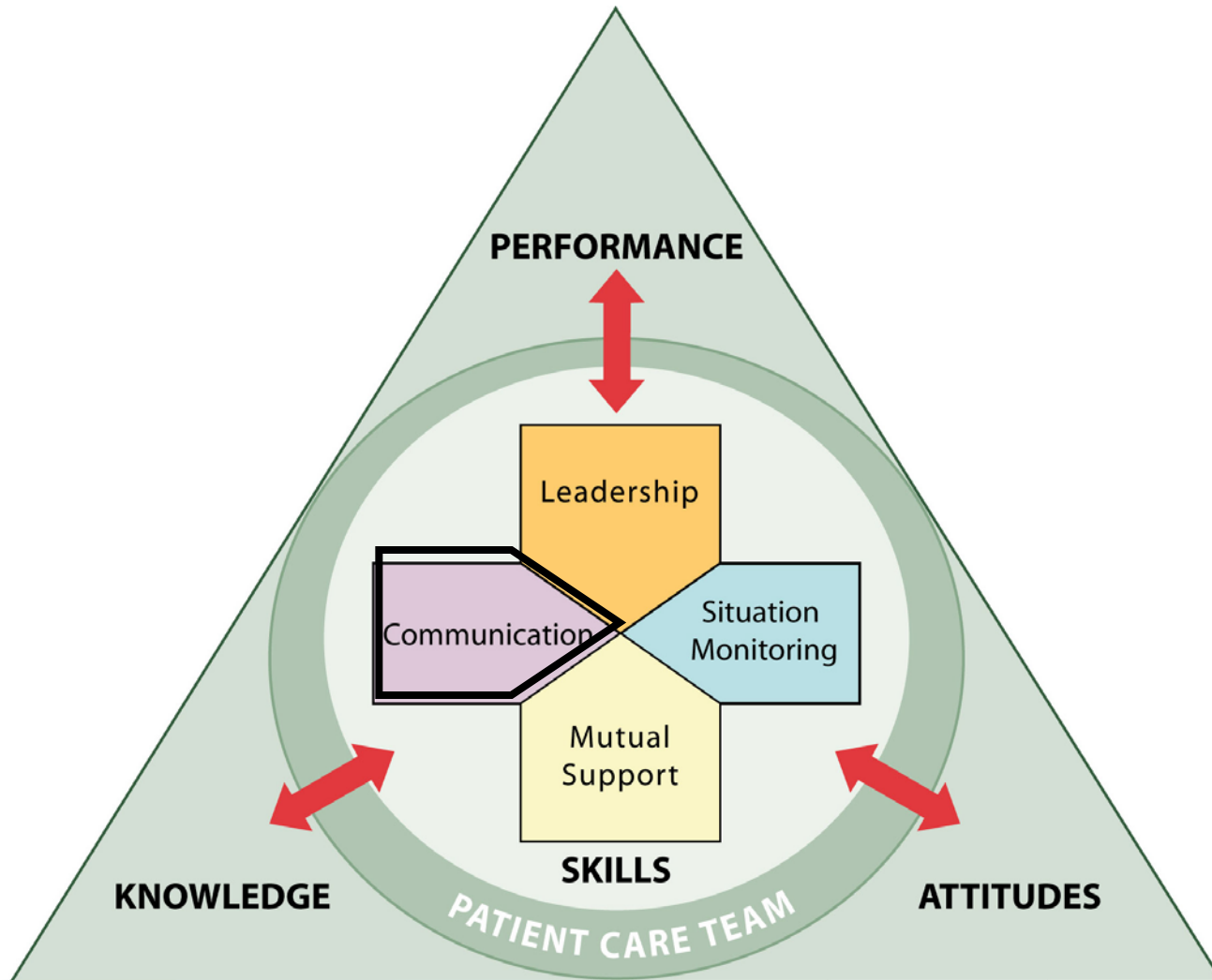
... for the benefit of the patient!!

What is a Shared Mental Model?

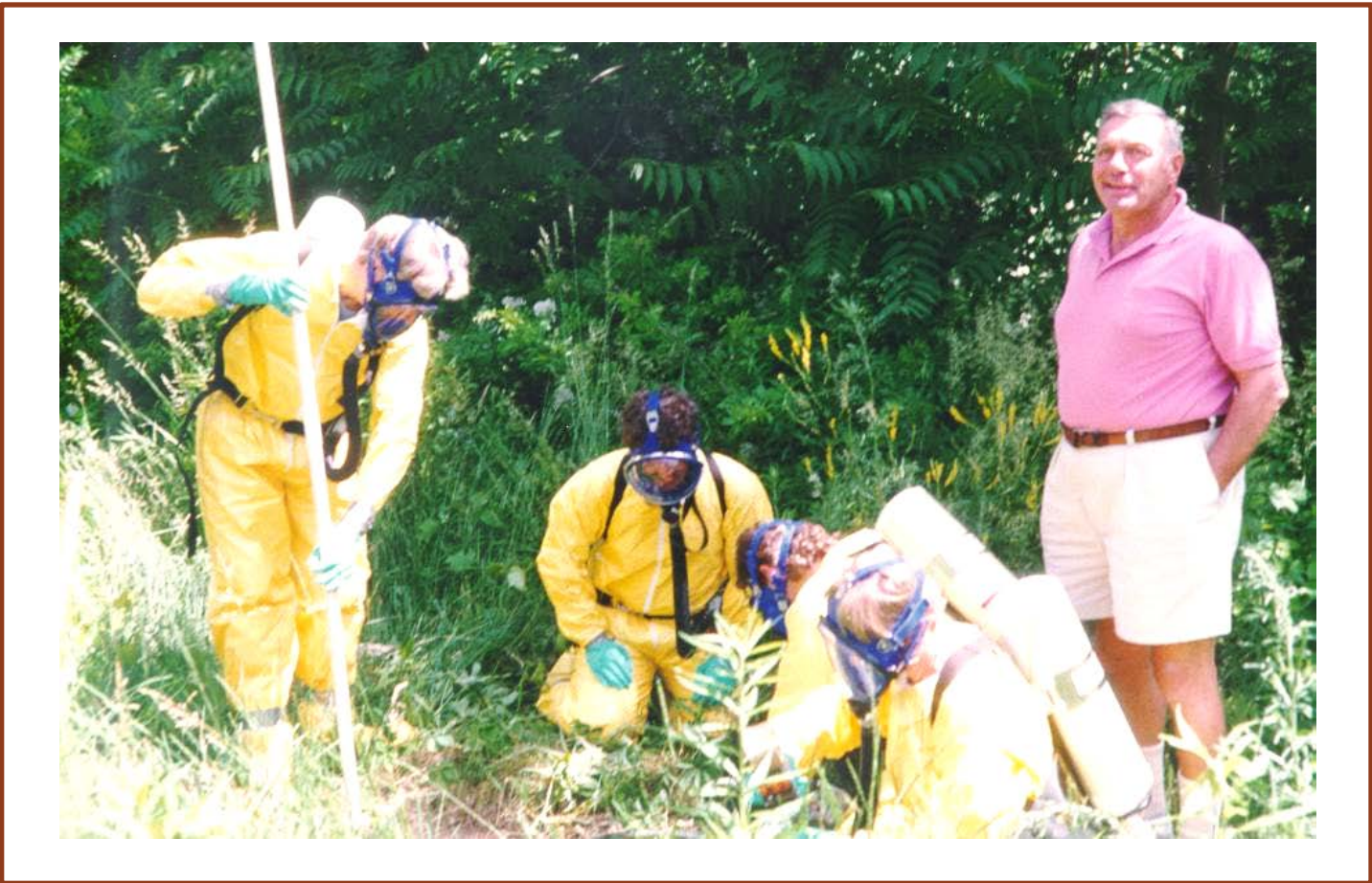


Communication

Process by which information is clearly and accurately exchanged among the team members.



Shared Mental Model???



Good Clinical Care Requires Team Work

Team Work

Good Communication is the Skill



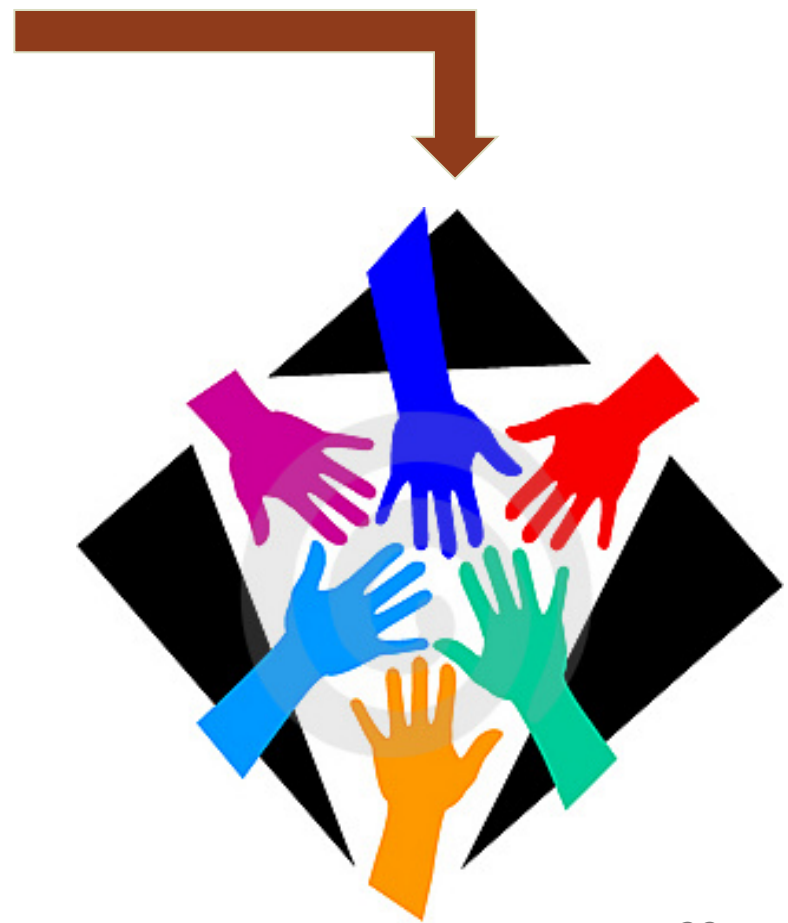
Otherwise Patient Care and Patient Safety Will Be De-Railed



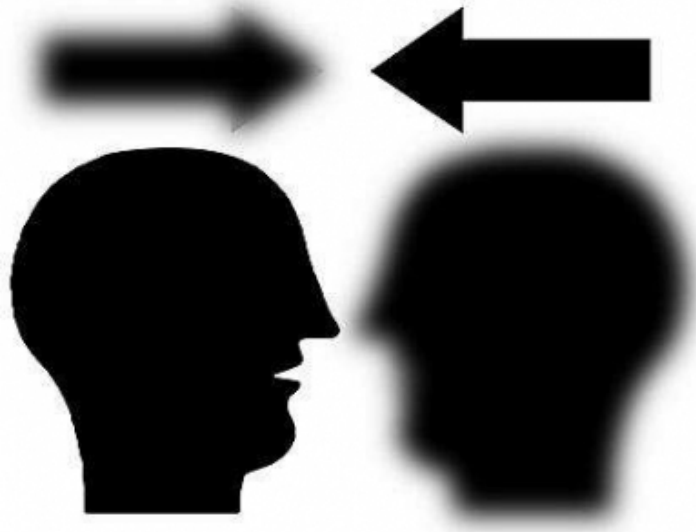
INTRA-TEAM COMMUNICATION



INTER-TEAM COMMUNICATION



Effective Communication



Must be:

- Complete: relevant information avoiding unnecessary detail
- Clear: standard terminology, minimize an acronyms
- Brief: be concise
- Timely: avoid delays, verify, validate or acknowledge



Information Exchange Strategies

- SBAR
- Call-Out
- Cross-Check
- Check-Back



SBAR provides...

A standardized framework for team members to effectively communicate information to one another.

- Communicate the following information:
 - **Situation** (what is going on with the patient)
 - **Background** (what is the clinical background/context)
 - **Assessment** (what is the problem)
 - **Recommendation** (what is the recommendation)

Remember to introduce yourself...



SBAR report to physician about a critical situation

S

Situation

I am calling about <patient name and location>.

The patient's code status is <code status>

The problem I am calling about is _____.

I am afraid the patient is going to arrest.

I have just assessed the patient personally:

Vital signs are: Blood pressure ____/____, Pulse _____, Respiration____ and temperature _____

I am concerned about the:

Blood pressure because it is over 200 or less than 100 or 30 mmHg below usual

Pulse because it is over 140 or less than 50

Respiration because it is less than 5 or over 40.

Temperature because it is less than 96 or over 104.

B

Background

The patient's mental status is:

Alert and oriented to person place and time.

Confused and cooperative or non-cooperative

Agitated or combative

Lethargic but conversant and able to swallow

Stuporous and not talking clearly and possibly not able to swallow

Comatose. Eyes closed. Not responding to stimulation.

The skin is:

Warm and dry

Pale

Mottled

Diaphoretic

Extremities are cold

Extremities are warm

The patient is not or is on oxygen.

The patient has been on _____ (l/min) or (%) oxygen for _____ minutes (hours)

The oximeter is reading _____%

The oximeter does not detect a good pulse and is giving erratic readings.

A

Assessment

This is what I think the problem is: <say what you think is the problem>

The problem seems to be cardiac infection neurologic respiratory _____

I am not sure what the problem is but the patient is deteriorating.

The patient seems to be unstable and may get worse, we need to do something.

R

Recommendation

I suggest or request that you <say what you would like to see done>.

transfer the patient to critical care

come to see the patient at this time.

Talk to the patient or family about code status.

Ask the on-call family practice resident to see the patient now.

Ask for a consultant to see the patient now.

Are any tests needed:

Do you need any tests like CXR, ABG, EKG, CBC, or BMP?

Others?

If a change in treatment is ordered then ask:

How often do you want vital signs?

How long to you expect this problem will last?

If the patient does not get better when would you want us to call again?

Call-Out



Tactic used to communicate or share information with the whole team; may be directed at a specific individual (often the team leader).

Two common situations:

1. Team member offering **unrequested** data/information
 - RN: *“Latest BP is 80/50.”*
 - Anesthesia provider arrival on scene: *“Anesthesia is here.”*
2. Data/information provided in **response to a request**:
 - Leader: *“Airway status?”*
 - Team member: *“Airway clear.”*
 - Leader: *“Breath sounds?”*
 - Team member: *“Breath sounds decreased on right.”*



Cross-Check

Closed-loop communication strategy used to verify a request is received. Sender initiates request or message, receiver confirms he/she has received the request.

Bob, the Team Leader says:
“Joe, get me a blood gas.”

Joe, the Team Member **cross-checks**: *“Bob, I will get the blood gas.”*





Check-Back

A communication loop involving a sender initiating the message, and a receiver accepting the message and providing feedback that the task has been completed.

- Resident to nurse:

“ Bill, Call anesthesia.”

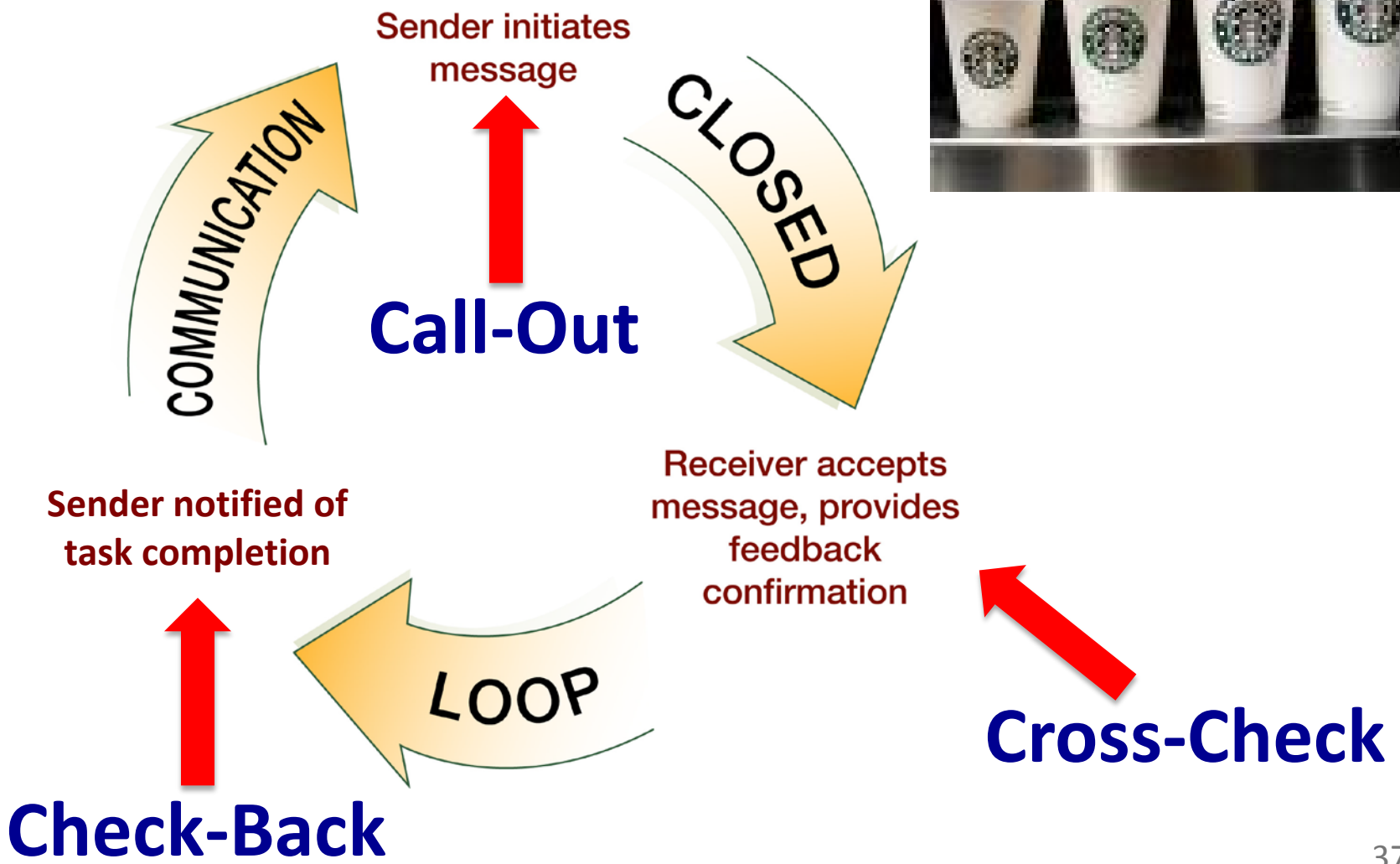
- Nurse confirms by saying:

“Calling for Anesthesia.”

- Nurse **checks back**:

“I have contacted Anesthesia” or

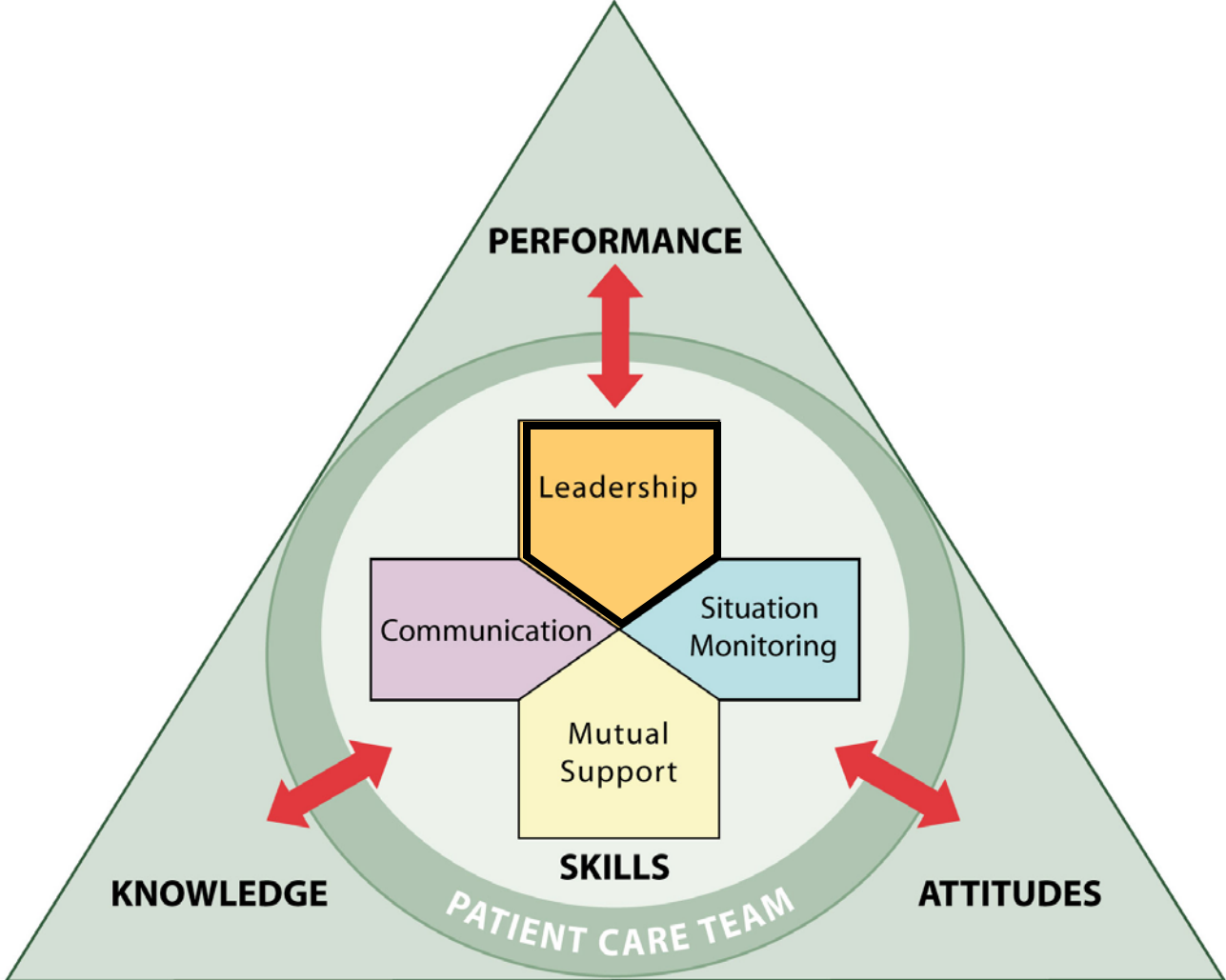
“I have not been able to reach Anesthesia”





Leadership

Ability to coordinate the activities of team members by ensuring team actions are understood, changes in information are shared and that team members have the necessary resources.





Team Leader

Three types of leaders:

- **Designated:** The person assigned to lead and organize a designated core team, establish clear goals and facilitate open communication and teamwork among team members
- **Situational:** Any team member who has the skills to manage the situation-at-hand
- **Default:** *Tag – You’re it!!*

Team Leader Expectations

Make
Decisions

Organize &
Prioritize

LEADERS ARE NOT DOERS

Empower
Members to
Speak Up
and
Challenge

Articulate
Clear Goals



TeamSTEPPS Leadership Skills

- **Briefs** – planning
- **Huddles** – problem solving
- **Handoffs** – transfer of care
- **Debriefs** – process improvement

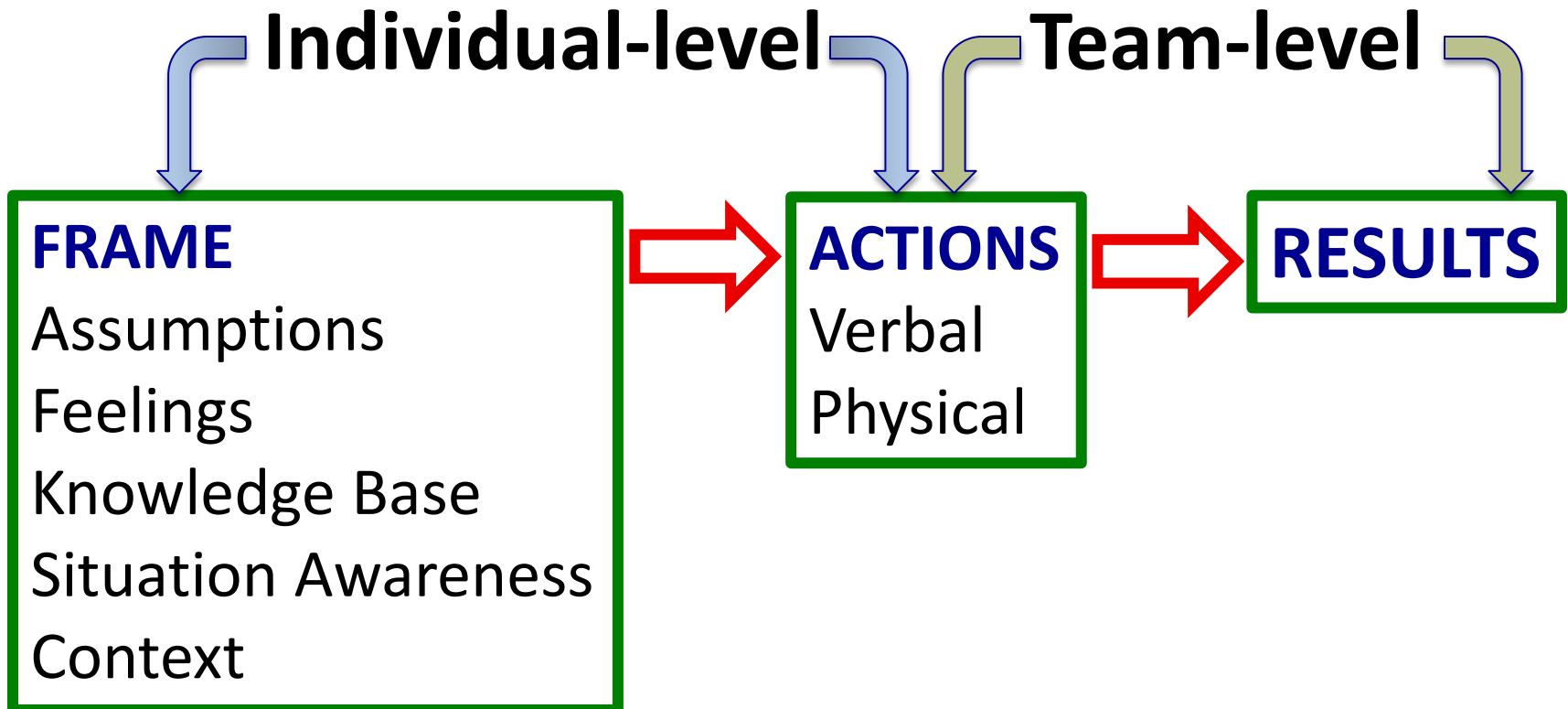
*Leaders are responsible to assemble the team
and facilitate team events but . . .*

anyone can request a brief, huddle or debrief

Team Exercise

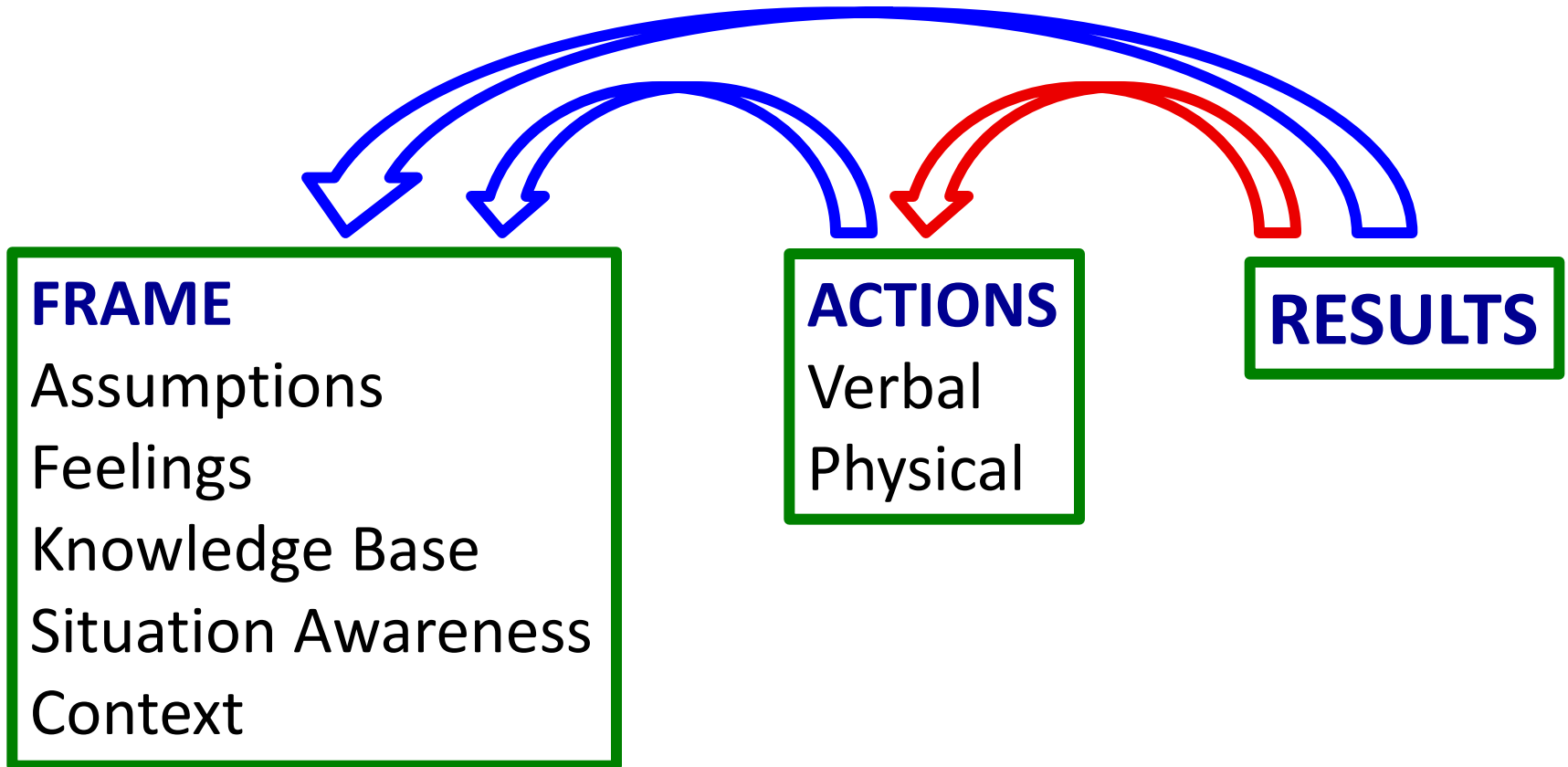


Debriefing 101





Debriefing 101





Debriefing 101

Goals:

1. All participants make sense of, learn from and apply experience to change frames and actions
2. Everyone feels empowered to provide accurate evaluative feedback
3. Atmosphere of psychological safety maintained throughout



Debriefing 101

1. Reactions phase

- Encourage initial “reactions spill”
- Don’t have to process immediately

2. Understanding Phase

- Exploring (advocacy + Inquiry)
- Leading/Coaching

3. Summary Phase

- Takeaways (what worked/what didn’t)
- Action items