


Engineering Safety Through Teamwork

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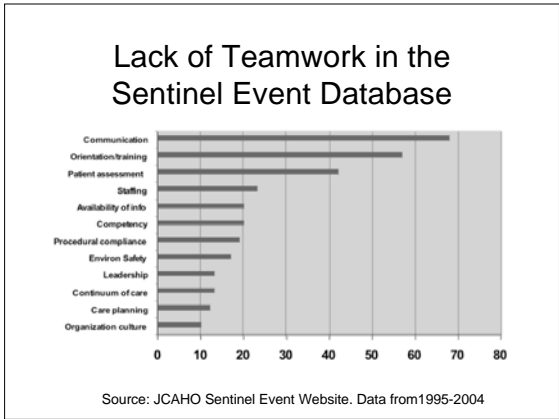


Think about your hospitals' last rapid response or code...

If we know when a single medical provider is inadequate and when a team of caregivers is needed we are only halfway there.

Delivering an expert team completes the experience and impacts the patient outcome.

Your good results can get better by training your team.



Common Pattern in Sentinel Events and Malpractice Claims

CONCERN was expressed

PROBLEM was stated but often not clearly or disregarded by others

A DECISION was not reached

Teamwork in the Literature

Baggs, et al. Crit Care Med 1999;27: 1991-1998
 > Nurses reports of collaboration were positively associated with patient outcomes (ICU readmission or death)

Shortell, et al. Med Care 1994; 32:508-525
 > Lower risk-adjusted mortality, ICU LOS, and nurse turnover

Baggs, et al Heart Lung 1992; 21: 18-24
 > Correlation between amount of collaboration reported by nurses and residents about the same decisions was low

Hamric, et al. Crit Care Med 2007;35:422-429
 > Collaboration was inversely related to moral distress
 > 75% of nurses expressed frustration with physician communication, no physician heard nurses express that frustration

Teamwork in the Medical Literature

Error reduction and performance improvement in the emergency department through formal teamwork training: evaluation results of the MedTeams project.

Merrix JC, Siman B, Jax GD, Weiss EL, Sallabury M, Oakes KA, Berns SD.
 Crew Performance Group, Dynamics Research Corporation, Andover, MA 01810, USA.

OBJECTIVE: To evaluate the effectiveness of training and institutionalizing teamwork behaviors, drawn from aviation crew resource management (CRM) programs, on emergency department (ED) staff organized into caregiver teams. **STUDY SETTING:** Triage teaching and community hospital EDs. **STUDY DESIGN:** A prospective multicenter evaluation using a quasi-experimental, untreated control group design with one pretest and two posttests of the Emergency Team Coordination Course (ETCC). The experimental group comprised of 644 physicians, nurses, and technicians, received the ETCC and implemented formal teamwork structures and processes. Assessments occurred prior to training, and at intervals of four and eight months after training. Three outcome constructs were evaluated: team behavior, ED performance, and attitudes and opinions. Trained observers rated ED staff team behaviors and made observations of clinical errors, a measure of ED performance. Staff and patients in the EDs completed surveys measuring attitudes and opinions. **DATA COLLECTION:** Hospital EDs were the units of analysis for the seven outcome measures. Prior to aggregating data at the hospital level, scale properties of surveys and extended observations were evaluated at the respondent or case level. **RESULTS:** FINDINGS: A statistically significant improvement in quality of team behaviors was shown between the experimental and control groups following training ($p = .012$). Subjective workload was not affected by the intervention ($p = .668$). The clinical error rate significantly decreased from 30.9 percent to 4.4 percent in the experimental group ($p = .039$). In the experimental group, the ED staff's attitudes toward teamwork increased ($p = .047$) and staff assessments of institutional support showed a significant increase ($p = .040$). **CONCLUSION:** Our findings point to the effectiveness of formal teamwork training for improving team behaviors, reducing errors, and improving staff attitudes among the ETCC-trained hospitals.

What Teamwork Is

Teamwork is a set of related behaviors, knowledge, and attitudes that combine to facilitate coordinated, adaptive performance¹

Teams consist of two or more individuals who:

- Have specific roles
- Perform interdependent tasks
- Are adaptable, particularly under times of stress
- Share a common goal

¹Salas, et al. Risk Management Foundation. Harvard Medical Institutions

What Teamwork Is Not

Not an automatic consequence of putting people together

Does not require that you like or feel close to your team members

Does not require that you work with team members on a permanent basis

Teamwork is not task work

Why is Teamwork So Tough for Healthcare?

- Medical teams seldom maintain permanent memberships.
- Many of us have prior "team" experiences where the opposite is true.
- Professional accountability and autonomy are learned and modeled behaviors for many physicians and nurses.
- Medicine has responded to complexity with specialization which is inherently non team oriented. Specialization without coordination leads to failure.
- Settings where teamwork in healthcare is key are inherently stressful and time-pressured.
- Disconnect in perceptions of how we are doing between doctors and nurses

Believe that decisions of the "leader" should not be questioned



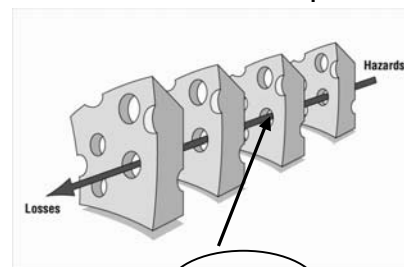
Sexton, et al. BMJ, 2000

Teamwork Level Felt to be "High"



Sexton, et al. BMJ, 2000

Effective Teams Trap Errors



Reason, J. BMJ 2000;320:768-770

Will your team stop the error?



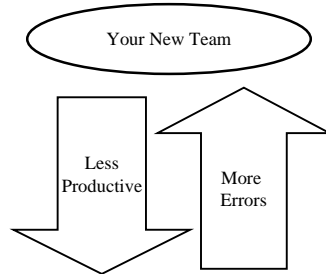
Making Medical Teamwork a Reality

- Create an infrastructure at the leadership and patient care level
- Provide teamwork training
- Use of specific structured communication tools
- Adopt behaviors that promote mutual respect
 - Know and use the names of people often
 - Share your plan
 - Solicit input and then respond
 - Praise good work and success
 - Be willing to pitch in
 - Debrief after events

Anticipate the Barriers

Interdisciplinary differences in the value of teamwork and perceptions of what teamwork is may be the largest barrier

Are Great Teams Less Productive?



Edmondson. Harvard Bus Rev. 2007

Rapid Response Teams: An Ideal Starting Point for Teamwork

Highly visible and interdisciplinary

A team where there once was none...

An opportunity to de-brief and adopt ideal team behaviors

Highlight the success of existing teams (RRT or others) to illustrate the goal.

Summary

Effective teams prevent errors

Knowledge, skills, and attitudes can be learned

Anticipate barriers to teamwork

Tolerate early inefficiencies of new teams

Teamwork can improve patient safety.
In fact, patient safety depends on it.