TeamSTEPPS™
Strategies and Tools to Enhance Performance and Patient Safety

Evolving The Culture of Safety Through Teamwork

New York State Dept of Health
Patient Safety Conference
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Heidi King, MS, CHE
Deputy Director, DoD Patient Safety Program
Program Director, Healthcare Team Coordination Program
Objectives

- Relate the science of team performance and team training
- State outcomes of improved teamwork
- Describe what TeamSTEPPS is and how it can be used as an actionable improvement strategy for your organization
- Summarize how to evolve the culture of safety through a teamwork initiative
TeamSTEPPS

Patient Safety Program

Transparency, Trust, and Teamwork
TeamSTEPPS

DoD Healthcare Team Coordination Program

Mission: Promote integration of teamwork principles through optimal use of training, education, research and collaborative efforts to enhance care and safety of our patients

Goals:
- Reduce clinical errors
- Improve patient outcomes
- Improve process outcomes
- Increase patient satisfaction
- Increase staff satisfaction
- Reduce malpractice claims

...Ultimately change the culture

Advancing care and safety through teamwork
TeamSTEPPS

Teamwork Is All Around Us
TeamSTEPPS

Teamwork Targets Root Causes

Root Causes of Sentinel Events
(All categories; 1995-2005)

- Communication
- Orientation/training
- Patient assessment
- Staffing
- Availability of info
- Competency/credentialing
- Procedural compliance
- Environ. safety / security
- Leadership
- Continuum of care
- Care planning
- Organization culture

Percent of 3548 events

Targets for Teamwork
Accreditation Council for Graduate Medical Education and the Association for American Medical Colleges include aspects of communication, coordination, and collaboration in physician competencies.


JCAHO has increasingly included elements of teamwork in their National Patient Safety Goals (JCAHO, 2005, 2006).
Research Grounded

- 20+ years of team training research in other High Reliability Organizations (HROs) shows:
  - Team training can produce effective teamwork behaviors in the work environment
  - Training success is dependent on program design, methodologies, and instructional strategies and tools
- Preliminary research on the effectiveness of team training in healthcare settings is encouraging
Evidence-Based

Growing body of scientific literature indicates that medical teamwork can improve:

- Quality of clinical processes
- Adherence to clinical guidelines/standards of care
- Patient safety and error-avoidance
- Patient outcomes in variety of clinical settings with diverse patient populations
- Cost-effectiveness of healthcare delivery
Studies to Date: Settings & Populations

**Settings**
- Surgical Services
- Medical Inpatient Wards
- Intensive Care Units
- Labor and Delivery
- Emergency Department
- Ambulatory Care
- Nursing Homes
- Community-based

**Patients**
- Surgical
- Medical
- Critically ill
- Neonates
- Obstetric
- Acutely ill
- Chronically ill
- Frail geriatric
- Healthy geriatric
Evolution of TeamSTEPPS™
AHRQ/DoD Collaboration

- DoD conducting medical team training since late 90’s
- Collaboration activities began in 2002
- Expert Panel
- Comprehensive Literature Review
- Case Study Analysis (AIR)
- Journals/Articles
- Presentations
- Clinical Measures of Teamness (RAND)
- Medical Team Training Curriculum (TeamSTEPPS™)
- Edited Handbook
Collaborating with the Experts

Evolution of TeamSTEPPS

Curriculum Contributors

- Department of Defense
- Agency for Healthcare Research and Quality
- Research Organizations
- Universities
- Medical and Business Schools
- Hospitals—Military and Civilian, Teaching and Community-Based
- Healthcare Foundations
- Private Companies
- Subject Matter Experts in Teamwork, Human Factors, and Crew Resource Management (CRM), HROs
DoD/AHRQ Collaboration

 Relevant Evidence: Teamwork in Healthcare
 AHRQ Publication

 Teamwork and Simulation
 Quality & Safety in Healthcare

 Teamwork in Professional Education
 Joint Commission
Teams that perform well...

- Hold shared mental models
- Have clear roles and responsibilities
- Have a clear, valued, and shared vision
- Optimize resources
- Have strong team leadership
- Engage in a cycle of feedback
- Develop a strong sense of ‘collective’--trust, teamness and confidence
- Create mechanisms to cooperate and coordinate (interaction)
- Manage and optimize performance outcomes

Salas, funded by Army Research Institute 2004
## TeamSTEPPS

### Transition to Team-Driven Care

<table>
<thead>
<tr>
<th>From (INDIVIDUAL)</th>
<th>To (TEAM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>↓Single focus (clinical skills)</td>
<td>↑Dual focus (clinical and team skills)</td>
</tr>
<tr>
<td>↓Individual performance</td>
<td>↑Team performance</td>
</tr>
<tr>
<td>↓Under-informed decision-making</td>
<td>↑Informed decision-making</td>
</tr>
<tr>
<td>↓Loose concept of teamwork</td>
<td>↑Clear understanding of teamwork</td>
</tr>
<tr>
<td>↓Unbalanced workload</td>
<td>↑Managed workload</td>
</tr>
<tr>
<td>↓Having information</td>
<td>↑Sharing information</td>
</tr>
<tr>
<td>↓Self-advocacy</td>
<td>↑Mutual support</td>
</tr>
<tr>
<td>↓Self-improvement</td>
<td>↑Team improvement &amp; efficiency</td>
</tr>
<tr>
<td>↓Individual efficiency</td>
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</tbody>
</table>
What Comprises Team Performance?

- **Knowledge**
  - Cognitions
  - “Think”

- **Skills**
  - Behaviors
  - “Do”

- **Attitudes**
  - Affect
  - “Feel”

...without teamwork...consequence of error is greater...
Outcomes of Team Performance

- **Knowledge**
  - Shared Mental Model

- **Attitudes**
  - Mutual Trust
  - Team Orientation

- **Performance**
  - Adaptability
  - Accuracy
  - Productivity
  - Efficiency
  - Safety
# Team Effectiveness

## BARRIERS
- Inconsistency in Team Membership
- Lack of Time
- Lack of Information Sharing
- Hierarchy
- Defensiveness
- Conventional Thinking
- Complacency
- Varying Communication Styles
- Conflict
- Lack of Coordination and Follow-Up with Co-Workers
- Distractions
- Fatigue
- Workload
- Misinterpretation of Cues
- Lack of Role Clarity

## TOOLS and STRATEGIES
- Brief
- Huddle
- Debrief
- STEP
- Cross Monitoring
- Feedback
- Advocacy and Assertion
- Two-Challenge Rule
- CUS
- DESC Script
- Collaboration
- SBAR
- Call-Out
- Check-Back
- Handoff

## OUTCOMES
- Shared Mental Model
- Adaptability
- Team Orientation
- Mutual Trust
- Team Performance
- Patient Safety!!
TeamSTEPPS™ Learning Strategies

- **Information**
  - Evidence-based knowledge creates awareness
- **Demonstration**
  - Video vignettes and case studies
- **Practice**
  - Role-play, Tools, Problem Solving, Team Planning
- **Feedback**
  - Debrief, Networking, Measures
- **Remediation**
  - Coaching, Continuous Improvement
TeamSTEPPS™ Roll-Out

Pre-training

2 months later training sessions

Ongoing coaching, monitor, re-assess 9 months post

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**TeamSTEPPS**

**Set the Stage ★ Decide What to Do ★ Make it Happen ★ Make it Stick**
Phase I (Assessment)

Developing the Vision: Setting the Stage and Deciding What to Do

- Leadership buy-in and direct involvement
- Create a change team
- Evaluation: Pre-training evaluation establishes the basis of determining improvement. The suite of measures comprising baseline evaluation is:
  - AHRQ Patient Safety Culture Survey
  - Patient and Staff Satisfaction Survey
  - Team Assessment Questionnaire
  - Critical incident reports, specific process and outcome measures
Team Improvement Action Plan

- Identify Change Team
- Define the Problem
- State Aims
- Plan for Testing
- Implementation Plan
- Monitoring the Plan
- Communicating the Plan
- Timeline
- Resources required

**Problem:** Communication of Patient Daily Plan

**Aim:** Within 8 weeks of intervention, 100% providers will know goals and tasks of daily patient plans for all ICU patients.

**Intervention:** Briefing and Use of Daily Goals Form during ICU rounds

**Outcome Variables:**
- % ICU residents and RNs who understood the goals of ICU pts
- ICU Length of Stay

Pronovost et al. (2003) Journal of Critical Care
Results Using Daily Goals/Brief in ICU

From 10% to 95% understood goals of plan of care for ICU patients

TEAMWORK
- Know the Plan
- Share the Plan
- Review the Risks

50% reduction in ICU LOS

DAILY GOALS IN THE ICU

Week 1 2 3 4 5 6 7 8
0 10 20 30 40 50 60 70 80 90 100

From 10% to 95% understood goals of plan of care for ICU patients
TeamSTEPPS

Phase II (Planning, Training, and Implementation)

- Develop an Action Plan
- Conduct Training:
  - Train-the-trainer
  - Train-the-participant
    - Fundamentals vs. Essentials
- Implementing and Testing Intervention
- Track Aims
- Communicate Updates

Finalize Action Plan and Making it Happen
How do I Customize A Training Plan for My Organization?

- Curriculum is evidence-based and modular
- Curriculum is comprised of three major training products:
  - Train-the-Trainer
  - Train-the-Staff
    - Fundamentals for direct-care givers
    - Essentials for ancillary and support staff
    - Coaching segment for unit champions
  - Action Plan
    - Customize to particular work unit
    - Integrate into existing initiatives
TeamSTEPPS™ Resources

Instructor Guide
- Presentation Materials (modular)
- Evidence-based summaries, exercises, mini-case study specialty scenarios

Course Management Guide

Implementation & Action Planning

Evaluation Tools

CD/DVD (9 videos & 6 testimonials)

Pocket Guide

Posters

TeamSTEPPS™ Guide to Action
TeamSTEPPS

What Tools are Available to Measure Outcomes?

- Team Assessment Questionnaire
- AHRQ Patient Safety Culture Survey
- Team Performance Observation Tool
- TeamSTEPPS™ Learning Benchmarks
- Patient and Staff Satisfaction Survey

...Check website for latest evaluation tools
Phase III (Sustainment)

- Coach & Integrate
  - Team role models
  - In-unit coaching of team skills
  - Integration of team tools/processes
- Monitoring the Plan
  - Executive Walk Rounds™
  - Team performance observations
- Continuous Improvement
  - Feedback loop for future training opportunities
- Training timelines
  - Initial, newcomers’ and refresher training
Success Factors for Implementing and Sustaining a Culture of Safety

✓ Strong communication campaign

✓ Visible support Leadership (Executive Sponsor and Physician Champion)

✓ Institution of metrics both baseline and ongoing to showcase improvement over time

✓ Publicize, celebrate, and cultivate successes and short-term wins

✓ Integrate team improvement intervention into existing processes for long-term sustainment

✓ Must partner with the patient and family!
Resources Available

Order materials at:
- www.ahrq.gov/qual/teamstepps/

To preview materials and check for updates:
- www.usuhs.mil/cerps/index.teamstepps.html
Initial Dissemination through AHRQ shall include:

- NPSF Stand Up for Patient Safety Members
- Patient Safety Improvement Corps (PSIC)
  - Consists of State Departments of Health and their selected partners (i.e., healthcare delivery systems, hospitals, Quality Improvement Organizations, and hospital associations)
- High Reliability Organization (HRO) Network
  - Includes 19 healthcare delivery systems
- AHRQ/CMS/DoD Collaboration in discussion
- Direct-mail to hospitals, professional organizations, and medical and nursing schools
Rapid Response System Module

AHRQ:
- Developing a rapid response system module for the TeamSTEPPS™ curriculum

Module will:
- Incorporate core teamwork principles with rapid response system specific scenarios, skills and tools
- Bridge a major gap between rapid response training and general teamwork skill development
Coming Soon…

AHRQ Plans:

- Master Team Trainer Development for healthcare delivery systems
- User Support Network to share best practices and lessons learned through a collaborative
TeamSTEPPS™

- Grounded in team performance research
- Applies teamwork principles and strategies that are teachable and learnable
- Field tested
- Comprehensive
- Customizable
- Evaluation Tools
- Ready-to-use
- Available to your organization

…Recipient of 2007 Scott Myers Award for Applied Research in the Workplace (SIOP)…
5 Ways TeamSTEPPS™ Transforms Culture

- Establishes names for behaviors and a common language for talking about ‘communication failures’
- Bridges the professional divide and levels the hierarchy
- Provides ‘actions’ to practice
- Increasing mindfulness
- Engages the patient as a valued member of the team
“Why Can’t We Make This Work?”

- Opportunity to Perform
  - Practice, Implement, then Measure
- Front-line Support
- Climate of Learning
  - Progress Updates
  - Forum to Discuss
  - Train, Refresh, and Inform
- Team Coaches
Challenges of Change

- **Vision**
- **Skills**
- **Incentives**
- **Resources**
- **Action Plan**

- **Change**
- **Confusion**
- **Anxiety**
- **No Change**
- **Frustration**
- **False Starts**

Demystifying Six Sigma A. Larson 2003
TeamSTEPPS

TeamSTEPPS and Success

- Vision
- Skills
- Incentives
- Resources
- Action Plan

- Safety Culture
- Teamwork
- Morale
- People
- Team STEPPS

Change
Focus
High Reliability
Quality of Life
Engagement
Continuous Improvement

Team Strategies & Tools to Enhance Performance & Patient Safety
### TeamSTEPPS

#### Data Capture to Create TeamSTEPPS Story
...transformational change

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#### HCTCP Project Tracking

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<tr>
<th>PROJECT PRGTnnnn</th>
<th>Implementation</th>
<th>Compulsory</th>
<th>Firm</th>
<th>Opportunity</th>
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#### Effectiveness Measures

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<th>Date Contingency</th>
<th>Category</th>
<th>Value</th>
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#### Training Evaluation Feedback

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<th>Training Requests</th>
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#### Costs Detail

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<tr>
<th>Costs Type</th>
<th>Cost Element</th>
<th>Baseline</th>
<th>Actual</th>
<th>Forecast</th>
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#### Collaboration Progress Report

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<th>Project Documentation</th>
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*Culture Change 06.2 Page 40*
TRANSFORMATIONAL CHANGE FACTORS

**Org Level**
- Safety Culture
- Transparency/Trust
- Systems-Efficacy
- Learning Environment

**Leadership Level**
- Create a sense of urgency
- Pull together a guiding coalition
- Develop a change vision and strategy
- Communicate for understanding and buy-in
- Empower others to act
- Product short-term wins
- Don’t let up
- Create a new culture

**Individual Level**
- Pre-training Experience
- Training Objectives
- Competencies
  - Knowledge
  - Skills
  - Attitudes

**Pre-Training Measurement**
- Knowledge
- Skills
- Attitudes

**Post-Training Measurement**
- Knowledge
- Skills
- Attitudes

**Tools**
- Methods

**Intervention**
- Training Motivation
- Self Efficacy

**Training Transfer**

**Level I Evaluation**

**Level II Evaluation**

**Level III Evaluation**

**Level IV Evaluation**

**Sentinel Event**

**Improved Patient Outcomes**

**Improved Staff and Patient Satisfaction**

**Improved Processes**

**Staff Retention**

**Decrease claims $**

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(2) Kirkpatrick, D. Model for Summative Evaluation. 1976;

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Team Strategies & Tools to Enhance Performance & Patient Safety
Organizational Transformation

…Transformation is a journey rather than a destination, and every journey begins with a single step. The path and pace you choose will depend largely on your immediate needs and organizational readiness for change. Regardless of the starting point, developing an overall framework that seeks to align strategy, goals and performance will help to build a culture of excellence and sustained success…everything should add real value for our patients.

GE Healthcare
TeamSTEPPS

Suggestions and Questions?