

Front-line Perspective on Advancing the Culture of Safety: Battlefield to Bedside

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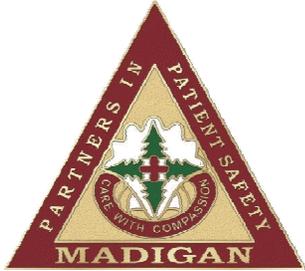


Madigan Army Medical Center

Objectives

- **MAMC Patient Safety Initiatives**
 - Special Emphasis 2009
- **TeamSTEPPS™**
 - Describing the Madigan Experience
- **TEAM-UP – Patient directed Team Training**
 - Describing a new Pilot program
- **SIMULATION TRAINING**
 - Its Role in Safety drills and Team Training
- **IRAQ WAR – TeamSTEPPS**
 - Goes Down range making a difference





1. Reduce Harm from Patient Falls
2. Transfusion Safety
3. Patient Controlled Analgesia Dose Safety

Patient Controlled Analgesia Dose Safety

Why:

Most common medication administration error at MAMC – dose errors

What:

Chose high risk process to examine dose errors as 2009 FMEA

Actions:

- FMEA Process revealed need for more user-friendly PCA pump
- Product evaluations for new pump
- Dose concentrations standardized by Pharmacy (less chance of error by physician specific choices)
 - decreased number of syringe changes needed
 - decreased opportunity for dose errors in pump settings
- Developed standard order sets - specific orders for each PCA drug
- Improved PCA documentation
- Developed new patient education pamphlet
 - distributed in surgical services center
 - available as MAMC publication
- Updating PCA patient care procedure (policy)



- Team training has been identified as a key strategy for reducing medical errors and building a culture of safety in healthcare.
- Communication and coordination skills can serve as barriers to potential errors.

1991

Emergency Medicine Residency:

William Hurley, MD Program Director

- Seeks a program to improve Nurse – resident communication
- Program based on Crew Resource Management



1996-2009

DoD MedTeams Project:

COL Matthew Rice – Leads the way

- MedTeams deployed throughout Emergency Department
- After implementation program maintained – Residents only



2002-2004

Labor & Delivery MedTeams Study:

- 100% trained
- Core Group Instructors trained
- Culture change 9-12 months later
- Reached a Zenith in “Efficiency”
- 2004 The long wait, Training drops <50%
- Sentinel Event occurs



2005–2009

Took Ownership:

- Curriculum transitioned (MedTeams to TeamSTEPPTS™)
- Re-trained to 100%
- Expanded the empire...

Inpatient/Outpatient units:

Wards: Labor and Delivery, Neonatal ICU, Mother-Baby, Pediatrics, Emergency
Clinics: GI, Internal Medicine, McCord medical, OB-GYN, Wounded Warrior BTN

Departments Units Trained:

Anesthesia, Emergency Medicine, Family Medicine, OB-GYN and Pediatrics

Other Services Trained:

- Clerical
- JAG/Risk Management
- Social Services

Coach / Instructor:

60 active Coaches/Instructors

Annual Training:

- 1,066 people trained locally February 2005 – May 2009
- 4 major training sessions a year
- Fundamental, Instructor, Refresher courses





TeamSTEPPS
Achieving a Team-driven
Culture of Safety

Madigan Army Medical Center
Western Regional Medical Command Deployment Plan



AMERICA'S MOST TRUSTED HEALTHCARE SYSTEM



THE BEST IS IN THE WEST!

1. Fundamentals course for Executive Steering Committee
2. Executive Brief with All Department Chairs and Section Chiefs
 - Brief 1hr overview of TS, the overall approach in the hospital, and what they need to do now
3. Establish TS Director's Job Description, TS admin assistant and coordinate funding, Hiring
4. Have All Department/Sections identify their Champions and potential outcomes to track
5. Radiology Department and Pulmonary Clinic first selected for Training for January 2010
6. Executive Steering Committee meeting to delineate 4 phase implementation in year one.

Madigan Army Medical Center's Deployment Plan

1. Each Department or Section to select a Champion team (Nurse, NCO and Physician).
2. Each Department or Section to identify outcome measures
3. Report these to Madigan's Patient Safety Office and Director of TeamSTEPPS training.

Madigan Army Medical Center's Deployment Plan

Units Specific Roll out

- Pre-training site assessment followed by Brief of findings with Department Head/Section Chief and champion team
- Dr Meyers from Outcomes to meet with this out brief to assess desired outcome measure
- Cadre selection by Champions
- Train-the-Trainer training to follow for Cadre
- Develop the Action Plan, obtain pre-training provider/employee surveys
- Launch program (Full training for all at once or Dosing model)
- Cadre Post training meetings (q-2 weeks x3 months, q-4 weeks for 3 months)
- @9-12 months repeat Surveys
- follow up with Outcomes reports to Command

TeamUP – Patient Engagement

- Joint Commission 2007 National Patient Safety Goal #13:

“ENCOURAGE PATIENTS' ACTIVE INVOLVEMENT IN THEIR OWN CARE AS A PATIENT SAFETY STRATEGY”

Requirement: Define and Communicate the means for patients and their families to report concerns about safety, and encourage them to do so

Rationale: Communication with patients and families about all aspects of their care is an important characteristic of a culture of safety...

Patients can be an important source of information about potential adverse events and hazardous conditions

Objective

***TeamUP* – Admission Brief**

- GOALS:
 - Introduce TeamSTEPPS Initiative to Patient and Family
 - Encourage involvement of Patient & Family in their care and decision making; along with issues related to patient safety
- METHOD:
 - Physician, Midwife, Nurse, Patient & Family meet together on admission and teach Patient & Family how to be “active” team members using common language within TeamSTEPPS

TeamUP Study Design

MAMC IRB approved Study:

- Intervention – TeamUP Admission brief on admission to L&D introduced Jan-March 2008
- Survey consisted 23 questions regarding the patient & family's perception of care and involvement as a team member
- Questions were rated on a 5-pt Likert scale
- Participants: All women discharged from the Mother-baby Unit Oct-Dec 2007 (pre) and Apr-Sep 2008 (Post) n=100 for each offered to complete survey

TeamUP Study Design

- Questions were reviewed by expert panel at DoD Patient Safety Program
- Responses were collected anonymously via internet survey
- One-tailed independent samples t-tests were conducted to examine changes in the mean levels of satisfaction reported during the baseline period (2007) to mean levels after the TeamUP initiative was launched (2008).

TeamUP Study Design

TeamUP – Admission Brief

- **INTRO to the TEAM**
- **SHARE the PLAN** (Shared Mental Model)
- How the patient & family can participate:
 - **ASK QUESTIONS, REPEAT** if you don't get it (Two-challenge rule)
 - **HUDDLE** – if you still don't understand, call a huddle (Huddles)
 - **NAME & BIRTH DATE** are your identifiers
 - **MEDICATIONS** – patient reads the labels on all IV meds (Check backs)
 - **WASH YOUR HANDS** when returning to your room (Situation awareness)
 - **POINT OUT CONCERNS** – encourage family input (Situational monitoring)
- **PATIENT REPEAT THE PLAN** (Shared mental model)

Sample *TeamUP* brochure







Your TEAM UP Checklist

- **Team Together**
 - Choose to be an active member of your care team.
 - Invite persons close to you to be members.
 - Follow the TEAM UP steps.
- **Educate Yourself**
 - Ask members of your care team to repeat their names and explain their roles.
 - Know the plan for treatment and your role in it.
 - Write it all down.
- **Ask Questions**
 - Situation: What is going on with my care now?
 - Background: What information do I need to understand the situation?
 - Assessment: What are the options to consider?
 - Recommendations: What is going to be done?
- **Manage your Medications**
 - Provide a list of medications (*prescriptions, over-the-counter, and herbal remedies*).
 - Write down what medications are prescribed and why.
 - Read each medication's label carefully.
 - Alert the care team if a medication label does not match what was prescribed.
- **Understand Changes in the Game Plan**
 - Listen to how the game plan has changed.
 - Ask questions.
 - Repeat the new game plan back to the care team.
- **Provide your Perspective**
 - Share all your feelings with your care team.
 - Raise concerns immediately.
 - Repeat the concern and include:
 - the Concern; why it makes you Uncomfortable;
 - how it may be a Safety issue.

For more information about how you can actively participate in your health care, talk to your care team today or check online at <http://www.abrhc.gov/path/beactive.htm>.

TEAM UP is a patient engagement initiative funded by the Department of Defense Patient Safety Program's Health Care Team Coordination Program as part of its TeamSTEPSSM initiative.

The goal of TeamSTEPSSM is to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for their patients. For more information, please visit <http://ddspatient.safeyourhs.mil>.



Patient Safety

Be an active member of your health care team




Department of Defense Patient Safety Program's Health Care Team Coordination Program

Understand Changes in the Game Plan

Make sure you're fully aware of how the plan has changed, why it has changed, and what your role is now.

Here's how ...

- Listen to your care team's explanations of how the game plan has changed and why.
- Ask questions about the new game plan and your role in it.
- Repeat the new game plan back to the care team to make sure you didn't misunderstand. Your care team should confirm that your understanding is correct.

Provide your Perspective

When something doesn't feel right, you should tell the members of your care team. The more they know, the more they can help.

Keep them informed ...

- Share all information, even things that seem incidental, with your care team.
- Raise concerns immediately.
- Repeat the concern again at least once, and include: the Concern; why it makes you Uncomfortable; how it may be a Safety issue.

Overall, how satisfied were you with the care you received during your labor and right after your baby was delivered?

$p = .0003$

I was satisfied with the answer(s) given by my caregivers when I asked he/she question(s).

$p = .003$

Was the amount of time the PHYSICIANS and MIDWIVES spent with you adequate to take care of my physical and emotional needs?

$p = .006$

Please rate your level of comfort when sharing your opinions and concerns with your caregivers?

$p = .003$

Conclusions

- After implementing MAMC TeamUP Brief there was a statistically significant improvement in overall satisfaction in care
- Limitations:
 - TeamUP brief was not mandatory
 - No confirmation that those surveyed actually received TeamUP brief.
 - Baseline Likert scores were very high 4.5+ out 5
- Post hoc power analysis was performed and we determined we need approximately 310 patients in each arm.
- A randomized control study is being performed to confirm these findings. Currently submitted for IRB approval.

Anderson Simulation Center

Simulation Training and TeamSTEPPS

Development of Simulation Training in Medicine applied to Clinical Scenarios



Shad Deering, MD LTC, MC, USA

Anderson Simulation Center

Simulation Training & TeamSTEPPS

Development of Simulation Training in Medicine applied to Clinical Scenario's

Use mobile simulation models to train for acute clinical scenarios

Utilize scenario-based exercises incorporating TeamSTEPPS; to include “Best practices checklist”, Debrief and audience response tool



Simulation Training and TeamSTEPPS Development of Simulation Training in
Medicine applied to Clinical Scenarios

Battle Drills in Emergency Department

Mobile Trauma Simulator - Use scenario-based exercises

Emergency Medicine – General Surgery Residency Training

Nursing and Medics included in training

TeamSTEPPS used to evaluate interaction between services; to include “Best practices checklist”, Debrief and audience response tool

Filmed for feedback and evaluation



TeamSTEPPS

***TeamSTEPPS™* in Iraq and
Afghanistan**



INTRODUCTION of TeamSTEPPS ITO

1. 86th Combat Support Hospital deploys fall 2007
2. Sentinel Event – Transfusion Error
3. MAMC personnel deploy to 86th TF-Baghdad 2008
4. 86th CSH Command – open/willing to give it a try
5. 62nd MED BGD – COL Sargeant (Aviator) mandates the spread ITO
6. NOW WHAT?

How did we start?

1. Identified Champions - Change Team
2. Train up Cadre Coaches through out the CSH
3. Introduce TeamSTEPPS concepts twice a week at Command Morning report with DCCS Open support
4. Start Fundamentals Classes
5. Email Good Catches and Chocolate
6. Spread TeamSTEPPS throughout organization (Patient Safety mtg, Command meetings)

Team Strategies and Tools to Enhance Performance and Patient Safety

TeamSTEPPS Deployment in Operation Iraqi Freedom
Task Force 62nd Medical Brigade

DISSEMINATION PLAN Level III and IIA Echelons of Care

7. Section heads ensure all go through training
8. CME, CEU, and Hours training certificates for promotion points - enlisted
9. Ibn Sina for training
 - Fundamentals course
 - Instructor/Coach & Culture change training
 - First hand observation
 - Develop Individualized site plans
10. Train a Cadre - Disseminate the program
11. Constant Reinforcement & Sustainment
12. Weekly ITO teleconferences for support



TeamSTEPPS Deployment in Operation Iraqi Freedom

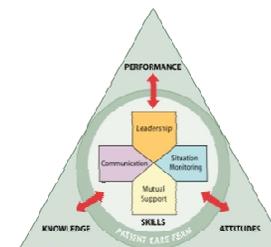


Surgeons and support staff from the 86th CSH Task-Force Baghdad. Pictured left to right, front to back: CPT Dena George, COL Peter Napolitano, MAJ Kevin Chung, MAJ Brian Themann; (2nd row) MAJ Jeffrey Henning, MAJ Dawn Elliott, LTC Booker King, MAJ Patrick Hickey, LTC Michael Meyer (blue scrubs); (3rd row) LTC Jon Stineman, MAJ Mark Aierstok, LTC Steven Svoboda, LTC Anthony Allen, LTC Michael Mulreany, MAJ Todd Baker (by sign), MAJ William Ralston, CPT Jason Cohen, COL Richard Stack (blue scrubs).

Critical Success Factors



- Supportive organizational culture and learning climate
- Shared vision... leadership to frontline
- Visible support
- Reinforcement, rewards, recognition, communicate good catches/successes
- Quickly move from training to putting skills into practice
- Weekly roll out of tools
- Ongoing focus
- Sustainment (integration) plan



Team Strategies and Tools to Enhance Performance and Patient Safety

TeamSTEPPS Deployment in Operation Iraqi Freedom
Task Force 62nd Medical Brigade

MANY SUCCESS STORIES

“I just wanted to make a point of giving notice to a well used "Call-Out" and "Check back/Echo.”

Yesterday in the EMT on a Bed 1 Trauma, MAJ L. jumped in to help CPT C. with his patient. HE immediately grabbed the Ultrasound machine and commenced the fast exam. While at the same time MAJ R., whom was the nurse charting during the trauma, was making sure the code red was administered properly and the doctors and medics were receiving the supplies they were calling out for. When MAJ L. finished the fast exam he sounded off with a solid, well-articulated "FAST EXAM NEGATIVE," and even while MAJ R. was constantly preoccupied she echoed back MAJ L's call-out. This stood out to me because even though MAJ R. was busy she was still constantly aware of her surroundings and the events taking place and MAJ L. was assured that the fast exam was going to be recorded so that it didn't have to be re-examined and waste time the patient so dearly needed.

SPC M.
86th CSH TF-Baghdad
Ibn Sina Hospital

Team Strategies and Tools to Enhance Performance and Patient Safety

TeamSTEPPS Deployment in Operation Iraqi Freedom

So How do we know if it made a difference?

1. Incident Reports were modified to “Patient Safety Report”
2. We encouraged these to be submitted
3. Identified as unusual occurrence or near miss/good catch
4. The four components of TS added to the form
 - Leadership,
 - Situational monitoring,
 - Mutual support
 - Communication
5. Debrief for each report required
6. Reports were reviewed acutely for immediate management and also collected for summary review

TeamSTEPPS Deployment in Operation Iraqi Freedom

So How do we know if it made a difference?

6. Monthly Patient Safety Meetings held and each were reviewed
7. Single Provider – responsible for collating and reviewing each and every report for the entire 15 month deployment.
8. LTC Shad Deering and the DCRRT team – under took evaluation
9. All reports from a period 7 months prior and 6 months after were compared.

TeamSTEPPS Deployment in Operation Iraqi Freedom

2008-09 Summary of Training to date

- *First time Team Training in an “Active Theater of War”*
- *2,500 medical personnel*
- *Establishment of Train the Trainer site in Iraq*
- *Ten separate Combat Support hospitals and FST’s*
- *18 different Task sites*
- *First time to train a unit’s Cadre before deployment*

TeamSTEPPS Deployment in Operation Iraqi Freedom

Preliminary Results (Pre & Post training Patient safety report)

- **38% ↓ Patient Safety reports**
- **67% ↓ Communications Errors $p < 0.001$**
- **70% ↓ Needle Sticks $p < 0.001$**
- **83% ↓ Medication Errors $p < 0.001$**

TeamSTEPPS Deployment in Operation Iraqi Freedom

ACKNOWLEDGMENTS

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MAJ Amber Pocrnich

MAJ Sarah Thompson

Ms. Heidi King,

Deputy Director for DoD Patient Safety

Leading Change

“Don’t let up...press harder and faster after the first success. Be relentless with initiating change until the vision is a reality.”

Dr. John Kotter

TeamSTEPPS Deployment in Operation Iraqi Freedom





TeamSTEPPS Deployment in Operation Iraqi Freedom



Madigan Army Medical Center

The Western Regional Medical Command Leading the way!

