Creating a Culture of Teamwork Through the use of TeamSTEPPS Strategies within Women’s and Infants Service Line

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Objectives

In this session, participants will:

1. Describe the TeamSTEPPS process that is aimed at creating and sustaining a culture of safety.

2. Identify how TeamSTEPPS model was implemented in the Women and Infant’s department.

3. Discuss TeamSTEPPS initiatives and how they impact nursing practice.
Team STEPPS

Team Strategies & Tools to Enhance Performance & Patient Safety

“Initiative based on evidence derived from team performance...leveraging more than 25 years of research in military, aviation, nuclear power, business and industry...to acquire team competencies”
Importance of Communication

- Communication failure has been identified as the leading root cause of sentinel events over the past 10 years (Joint Commission)

- Communication failure is a primary contributing factor in almost 80% of more than 6000 root cause analyses of adverse events and close calls (VA Center for Patient Safety)
Background/Project Choice

• Development of a patient safety culture
• High risk/low occurrence events in L&D
• Multiple teams have to communicate and coordinate
• Near misses; anecdotal comments of lack of coordination and communication; delays in scheduled cases being completed
TeamSTEPPS Implementation

Training

- First step: Master Trainers
- Second step: Leadership Team
- Third Step: Women’s and Infants Staff
- Fourth step: Debrief Facilitators

Strategies

- First strategy: Snapshot
- Second strategy: Hard Stop Safety Phrase: I Need Clarification
- Third strategy: Debrief after Acute Obstetric Events
Harris Health System

• The largest network of public primary care clinics in Texas
  • Three Hospitals
  • 16 Community Health Centers
  • One free-standing dental center
  • A Dialysis Center
  • 5 Mobile health units
  • 7 school based clinics
Harris Health System – FY 2012

• **Volume Statistics**
  • Hospital admissions: 35,343
  • Births: 6,643
  • Emergency visits: 173,263
  • Outpatient Clinic Visits: 1,054,770

• **Patient Payor Mix**
  • Self Pay: 62.6%
  • Medicaid and CHIP: 23.4%
  • Medicare: 8.6%
  • Other Funding: 3.6%
  • Commercial Ins: 1.8%
Ben Taub General Hospital

- 586 licensed beds
- Level I trauma center
- Area’s busiest emergency center, housing the only psychiatric emergency center in Houston
- Staffed by physicians from Baylor College of Medicine – with a residency training program
Obstetrics – FY 2012

- 312 deliveries/month; 3744 annually (2012)
- VBAC rate 77.4%
- Baylor resident program (OB, FP)
- Certified Nurse Midwifery
- Family Practice
- Level I, II, and III Neonatal Nurseries
Beginning State

All teams began their shifts independently:
Training: First Step

• Master Training Course

• Interdisciplinary Team
  • ADON of Women’s and Infant’s Services
  • DON of Neonatology
  • OB Faculty : Director of Quality at BTGH
  • Anesthesia Faculty
• Training: Second Step
• July 2012: Ben Taub Women & Infants Training
  • TeamSTEPPS Fundamentals Course
    • 4 hour didactic training on TeamSTEPPS concepts and tools/strategies
• Attended by:
  • OB/Anesthesia/Neonatal Faculty
  • DONs of L&D, MBU and Neo
  • NCMs and Charge Nurses from L&D and Neo
TeamSTEPPS:

Team Assessment Questionnaire

- Survey leadership team Pre/Post TeamSTEPPS training and implementation
- Measures: Impressions of Team Behavior in the Current Work Setting
- 55 Question electronic survey
- Distributed - June 2012 & December 2013
TeamSTEPPS: Team Assessment Questionnaire

• Constructs:
  • Team Foundation
  • Team Functioning
  • Team Performance
  • Team Skills
  • Team Leadership
  • Team Climate and Atmosphere
  • Team Identity

• 5 point- Likert Scale: Strongly Agree to Strongly Disagree
TeamSTEPPS: Strategy 1
“Snapshot”
July 2012
Strategy #1 – L&D Brief Snapshot

Shift Change Reporting

Team Assembles at L&D Grease Board 0800/2000

Team includes: OB Attending; Anesthesia Attending; L&D Charge Nurse; OR Nurse; 3AB Charge Nurse; Neo Fellow/ Resident; Neo Charge Nurse; CNM/Family Med Attending

Briefing of L&D Board and what is expected activity for that shift. Each team member to ask questions, voice concerns that arise during the brief
*Slide holder:* Video: Dr. Davidson leading “Snapshot”
Training: Third Step

• October 2012: Mandatory training – all Women’s and Infants staff on TeamSTEPPS tools and strategies
• 26 -Two hour workshops
  • Basic TeamSTEPPS concepts
TeamSTEPPS: Strategy 2
Safety Phrase
“I Need Clarification”
October 2012
Strategy #2 – Two Challenge/Safety Phrase

Any staff members identifies a procedure/activity taking place or about to take place that can have a significant impact on patient or staff safety

Yes

Staff member respectfully challenges the provider

No response or inadequate response

Staff member respectfully repeats challenge

Still no response or inadequate response

Staff member uses Safety Phrase:

I Need Clarification

All Staff and Providers must Acknowledge the phrase as a “Hard Stop” Provider must step out and discuss the perceived safety issue with staff member.
Patient Safety is Our Priority!

If you need to **STOP THE LINE**, i.e.: a procedure or activity that could potentially cause an unsafe situation for a **patient or a staff member**

**USE OUR**

**Safety Phrase:**

“I Need Clarification”

Teamwork makes it Happen!
*Slide holder:* Video: Simulation, “I need clarification.”
## Results: Team Assessment Questionnaire

<table>
<thead>
<tr>
<th>Construct</th>
<th>Pre-test Mean</th>
<th>Post-test Mean</th>
<th>p-value</th>
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<tbody>
<tr>
<td></td>
<td>( n = 23 )</td>
<td>( n = 18 )</td>
<td></td>
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<tr>
<td>Team Foundation</td>
<td>3.71</td>
<td>4.48</td>
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<tr>
<td>Team Functioning</td>
<td>3.64</td>
<td>4.33</td>
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<tr>
<td>Team Performance</td>
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<tr>
<td>Team Leadership</td>
<td>4.09</td>
<td>4.44</td>
<td>.11</td>
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<tr>
<td>Team Climate and Atmosphere</td>
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<td>4.30</td>
<td>.00</td>
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<tr>
<td>Team Identity</td>
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<td>4.61</td>
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<tr>
<td><strong>Overall Mean Score</strong></td>
<td>3.82</td>
<td>4.42</td>
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</table>
**TeamSTEPPS Constructs**

**Mean Scores**

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<tr>
<th>Team Functioning*</th>
<th>Team Performance*</th>
<th>Team Skills*</th>
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<td>3.64</td>
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</table>

*Statistically significant improvement from Pre- to Post-test*
TeamSTEPPS Constructs

Mean Scores

- Team Leadership: Pre-test 4.09, Post-test 4.44
- Team Climate and Atmosphere: Pre-test 3.72, Post-test 4.3
- Team Identity*: Pre-test 4.22, Post-test 4.61
- Overall Mean Score*: Pre-test 3.82, Post-test 4.42

*Statistically significant improvement from Pre- to Post-test
TeamSTEPPS: Strategy 3
Debriefing after Acute Obstetrical Emergencies
November 2013
Debrief - Acute Obstetrical Emergencies

• Root causes analyses link poor organizational culture and communication to poor obstetrical outcomes such as perinatal death and injury (Birnbach & Salas, 2008).

• Debriefing after acute clinical events is a highly regarded tool used for team building that has a positive impact on teamwork (Provonost & Sexton, 2005).

• Physician Partners support and participation: Anesthesia, OB, MFM and Neonatology/Pedi
Debrief after Acute Obstetrical Events

- Shoulder dystocia
- Hemorrhage
- Cord prolapse
- Acute placenta abruptio
- Emergent (stat) cesarean section
- Breech vaginal delivery

- C/Hyst
- Ecclamptic seizure
- Maternal respiratory/circulatory collapse
- Neonatal code
- As needed and upon request from a team member
Debrief Process

**Acute Obstetrical Event**

Labor nurse identifies Acute Obstetric Event Occurs and notifies Team Leader; Team leader identifies debriefing facilitator

**Gather the Team**

Location of Debriefings

Non-patient care areas

**Conduct Debrief**

Complete checklist, return binder
Debrief Checklist (example)

Identify what went well (Check if yes, describe)
- Communication went well
- Teamwork went well
- Leadership went well
- Decision-making went well
- Assessing the situation went well
- Other

Briefly Describe:

Identify opportunities for improvement: “human factors” (Check if yes, describe)
- Communication needed improvement
- Teamwork needed improvement
- Leadership needed improvement
- Decision-making needed improvement
- Assessing needed improvement
- Other

Briefly Describe:

Identify opportunities for improvement: “non-human factors” (Check if yes, describe)
- Equipment issues
- Supply issues
- Medications issues
- Inadequate support (with in-unit or other areas of the hospital)
- Delay in blood products availability
- Delays in transporting the patient
- Other

Briefly Describe:
Training: Fourth Step - Debrief Facilitators

Labor and Delivery Nurse Leadership team

• ADON, DON, Clinical Nurse Educator, 5 Clinical Nurse Managers
• 5 Charge Nurses/Nurse Clinician Leaders
  • 13 total debrief facilitators
• Debrief Training
  • One hour face-to-face training
    • Shoulder Dystocia Simulation (x2)
    • Post Partum Hemorrhage Simulation
Research study

**Purpose:** Examine the effects of debriefing after acute obstetrical events on the safety attitude of health care workers.

**Setting:** Ben Taub Labor & Delivery Unit

**Sample:** Staff that work in Ben Taub Labor & Delivery
- Registered nurses, unlicensed staff, respiratory therapists, OB/GYN faculty and residents, Maternal Fetal Medicine faculty and fellows, Anesthesia faculty and residents and Neonatology/Pediatric faculty and residents.

**Inclusion/Exclusion criteria:** Work in L&D for at least one month; No exclusion criteria based on age, race, ethnicity or gender
Instrument

• The Safety Attitudes Questionnaire – Labor and Delivery (SAQ – L&D) version (Sexton, Helmreich, Neilands, et al, 2006).

• Six constructs measured:
  • Teamwork climate, safety climate, job satisfaction, perceptions of management, stress recognition and working conditions.

• Reliability:
  • SAQ: $p = .0.90$ (Sexton, et al, 2006).
  • SAQ – L&D: $p = 0.78$ (Sexton, Holzmueller, Pronovost, et al., 2006).
Data Collection

• Electronic Survey (Survey Monkey)
  ▪ Statement of consent is agreed upon prior to commencing the survey

• Distribute: 11/1/13, 5/15/14, 11/15/14
  ▪ Introductory e-mail; survey available for 2 weeks; reminder e-mails sent at day 7, 10 and 13
  ▪ Response rate – first distribution: 19%; $n = 48$ (distributed to 258)
Debrief: Go Live November 15, 2013

- Emergent /Stat Cesarean Delivery
  - Hemorrhage
  - Shoulder Dystocia
  - Acute Placenta Abruptio

- Neonatal Code
  - Cord Prolapse
  - C/Hyst or PostPartum Hysterectomy
  - Vaginal Breech Delivery

- Maternal Code
  - Ecclamptic Seizure
  - As needed/upon request
Early Outcomes: Debriefing

• Blood Bank processes
  • Massive Transfusion Protocol
  • Training of all staff, re: MTP Process for L&D
• Emergency Medications in OR pyxis
• Opportunity for Improvement:
  • Communication to team of emergent event

• Debrief rate: 60%
  • Stat cesarean delivery & postpartum hemorrhage most frequent fall-outs
  • Sufficient numbers of facilitators
TeamSTEPPS: Implications for Nursing Practice

• Knowledge development: values and behaviors that support communication and collaboration

• Clear processes established that contribute to the safety culture
  • Active participation in multidisciplinary snapshot
  • Safety phrase “I need clarification”
  • Request and contribute to Debriefs
Thank you!

References available upon request