Implementing TeamSTEPPS™ in the Operating Room

Briefs + Debriefs + Checklists = Glitch Capture, Good Catches & Patient Safety

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Principal, Managing Partner

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Objectives

• Assess the need for improved teamwork in the OR
• Define the outcomes of high performing teamwork
• Integrate TeamSTEPPS tools into the OR
• Develop a measurement plan for OR teamwork
• Analyze and report meaningful improvement
• Celebrate the “good catches” and fix the “glitches”
Why Teamwork?

Op/post-op Complications Reviewed by Year

Source: The Joint Commission
Why Teamwork?

• “If everyone just knew their jobs,…..”
• “The same ‘glitches’ happen every day…”
• “It’s hard to know all surgeon preferences…”
• “Staff is inexperienced, …always someone new”
• “Equipment issues are our #1 concern…”
• “Pre-op delays keep us from starting on time”
• “I don’t feel valued or respected by the Team”
• “Our patients suffer when we’re not coordinated”
TeamSTEPPS™ Outcomes

- **Knowledge**
  - Shared Mental Model

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

- **Performance**
  - Adaptability
  - Accuracy
  - Productivity
  - Efficiency
  - Safety

Source: AHRQ Team Strategies and Tools to Enhance Performance and Patient Safety
Model for Change

Source: AHRQ Team Strategies and Tools to Enhance Performance and Patient Safety
Develop a Measurement Plan

• Culture/Attitudes Surveys (AHRQ HSOPS)
• Team Satisfaction
• Direct Observations- “Surgical Disruptions”
• Efficiency Measures
  – First Case Start Time
  – Improved Equipment Utilization
  – Case length
• Good Catches/Glitch Capture
Multi-disciplinary Training Plan

- Change Team (Care Improvement Team)
- Trainers/Coaches (Promote & Model Teamwork)
- Providers and Staff (Knowledge-Practice-Experience)
- Newcomers (Orientation)
- Refresh & Reinforcement
Implementing Briefs and Debriefs

Brief Checklist

During the brief, the team should address the following questions:

☐ Who is on the team?

☐ All members understand and agree upon goals?

☐ Roles and responsibilities are understood?

☐ What is our plan of care?

☐ Staff and provider’s availability throughout the shift?

☐ Workload among team members?

☐ Availability of resources?

Leadership

Source: AHRQ Team Strategies and Tools to Enhance Performance and Patient Safety
Debriefs
Self-Learning, Reporting, Feedback, Coaching

### Team Debriefing

Please complete the debrief form with team input.

#### Level of team satisfaction with procedure.

<table>
<thead>
<tr>
<th>Role</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neutral</th>
<th>Needs Improvement</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgeon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anesthesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical Tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### What went well?

- Pre-case planning
- Effective Communication
- Task Assistance
- Shared Workload
- Effective Use of Resources
- Other (please specify)

#### Room for Improvement?

- Pre-Op
- Case Scheduling
- On-time Performance
- Team Communication
- Equipment and Supplies
- Reason for "glitch" (please specify)

#### Any good catches by team?


What’s in it for me/us/patients?

- “more coordinated”
- “less frustration”
- “on the same page”
- “better prepared”
- “have more information”
- “feel more valued”
- “easier to speak up”
- “more willing to ask questions”
- “patients see us as a team”
- “don’t repeat the same mistakes”

Debrief Checklist

The team should address the following questions during a debrief:

- Communication clear?
- Roles and responsibilities understood?
- Situation awareness maintained?
- Workload distribution equitable?
- Task assistance requested or offered?
- Were errors made or avoided? Availability of resources?
- What went well, what should change, what should improve?
Actual OR “Good Catches”

- “Case was scheduled as left arm which was incorrect. Surgery was right arm. Caught during brief.”
- “Wrong arm written on schedule.”
- “Discovered expired medication on back table through the check-back process.”
- “Nurse noted discolored limb during briefing.”
- “Cancelled case following brief due to contraindication.”
- “Case cancelled prior to intubation due to missing/required equipment.”
Lessons Learned

• Training alone does not change behaviors
• Customize/integrate with local processes
• Connect data collection to team behaviors
• Coach & practice behaviors regularly
• Include simulation if possible
• Build “just enough” consensus/buy-in to begin
• Repeat, reinforce and seek feedback
Questions/Comments/Feedback

Frequently Asked Questions
http://dodpatientsafety.usuhs.mil/index.php?
name=News&file=article&sid=43
Reduction of Communication Errors

Table 2. Number of Communication Failures With and Without at Least 1 Visible Consequence in the Preintervention and Postintervention Phases

<table>
<thead>
<tr>
<th></th>
<th>Preintervention</th>
<th>Postintervention</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failures with no visible consequence</td>
<td>133</td>
<td>38</td>
<td>171</td>
</tr>
<tr>
<td>Failures with at least 1 visible consequence</td>
<td>207</td>
<td>75</td>
<td>282</td>
</tr>
<tr>
<td>Total</td>
<td>340</td>
<td>113</td>
<td>453</td>
</tr>
</tbody>
</table>
Decrease in Surgical “Disruptions”

<table>
<thead>
<tr>
<th></th>
<th>Pre-Implementation Group</th>
<th>Post-Implementation Group</th>
<th>Percent (%) Decrease</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Surgical Disruptions per case</td>
<td>9.5</td>
<td>5</td>
<td>47</td>
<td>.0002</td>
</tr>
<tr>
<td>Procedural Knowledge Disruptions per case</td>
<td>4.1</td>
<td>2.17</td>
<td>46</td>
<td>.007</td>
</tr>
<tr>
<td>Miscommunication events per case</td>
<td>2.5</td>
<td>1.2</td>
<td>53</td>
<td>.03</td>
</tr>
</tbody>
</table>

Table 5: Per case average of total surgical disruptions, procedural knowledge disruptions, and miscommunication events for pre-implementation and post-implementation groups.

Mayo CT OR, Henrickson, et al., 2008
Circulator leaving the room…

<table>
<thead>
<tr>
<th></th>
<th>Pre-Implementation Group</th>
<th>Post-Implementation Group</th>
<th>Percent (%) Decrease</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trips to core (per case)</td>
<td>10</td>
<td>4.7</td>
<td>53</td>
<td>.008</td>
</tr>
<tr>
<td>Time spent in core per case (min)</td>
<td>6.6</td>
<td>2.9</td>
<td>56</td>
<td>.01</td>
</tr>
</tbody>
</table>

Table 4: Average number of trips to the core per surgical case by circulating nurse in pre-implementation vs. post-implementation group.
## Positive Attitudes toward Briefings

### Table 3. Number of Survey Respondents by Profession and Status Who Agreed With Selected Survey Items Relating to Safety, Education, Collaboration, and Overall Value of the Team Checklist Briefings

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>“Agree” Responses, No. (%)&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surgery Staff (n = 9)</td>
</tr>
<tr>
<td>The checklist gives me information about the patient and/or procedure that would otherwise not have been available to me.</td>
<td>4 (44)</td>
</tr>
<tr>
<td>The checklist provides an opportunity for the team to identify and resolve problems and ambiguities.</td>
<td>9 (100)</td>
</tr>
<tr>
<td>The checklist provides an educational opportunity for students and residents.</td>
<td>7 (78)</td>
</tr>
<tr>
<td>The checklist has the potential to guard against mistakes in the operating room.</td>
<td>7 (78)</td>
</tr>
<tr>
<td>The checklist strengthens the operating room team. Considering all of the positive and negative aspects of the checklist, are routine checklist discussions worthwhile?</td>
<td>6 (67)</td>
</tr>
</tbody>
</table>