Impact of Teamwork and Communication Interventions on Patient Safety

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Triad for Optimal Patient Safety (TOPS)

School of Nursing

School of Medicine

School of Pharmacy

...a pilot project funded by the Gordon & Betty Moore Foundation
Multidisciplinary Structure

Core Project Team
Brian Alldredge: Pharm Co-Director
Susan Gearhart: RN Co-Director
Niraj Sehgal: MD Co-Director
Terrie Evans: Project Coordinator/Analyst
Karen Mah-Hing: Finances & Contracts

PIs: Mary Blegen, Mary Anne Koda-Kimble, Bob Wachter
TOPS Project Aims

- Improve unit-based safety culture
- Foster interdisciplinary care coordination, teamwork, and communication
- Collaboration across disciplines and across institutions
- Develop a model for dissemination
TOPS Snapshot

**Phase I**
- 4-hr Training

**Phase II**
- TrUST (Unit Safety Team)
- Educational Activities

**Phase III**
- Patient Engagement
- Goals of Care

**Timeline:**

- July ’05
- Spring ’06
- Summer ’06
- Fall ’06
- March ’07

**Interventions**
- AHRQ Patient Safety Culture Surveys
- Patient Recruitment on Model Units (continuous data collection)
- Medication Safety Tools
- Unit-based Administrative Data (e.g., readmission rates, LOS)

**Research & Evaluation**
TOPS Phase I: 4hr Training

- Multidisciplinary Curriculum Working Group
  - Needs Assessments to guide content development
  - “Train the trainers” session for all three sites

- Training Agenda for 4 hours:
  - Laying the Foundation
  - *First, Do No Harm* Video Presentation & Discussion
  - Healthcare Team Behaviors & Communication Skills
  - Small-group facilitated ‘scenarios' to teach and practice
    SBAR, CUS words, team behaviors
TOPS Phase I: 4hr Training

Overview

- 22 Initial Training Sessions
- Location varied by site
- 454 people ‘TOPS Trained’
TOPS Phase I: 4hr Training

Success Stories

- Power of “getting everyone in the same room”
- Degree of engagement across disciplines
- Set the stage for more TOPS activities...
TOPS Phase I: 4hr Training

Challenges

- Logistics drive the training—time, place, and scheduling of participants who work different shifts, days, and hours into the same ‘educational space’

- Support from leadership of all disciplines to ‘mandate’ training--- issues different at each site
  - Private Community Hospital
  - HMO Hospital
  - Academic Health Center

- Need to create further opportunities for skills training and conferences as this can’t be a “one and done” training session
TOPS Phase II: Building a TrUST & More Educational Activities

TrUST: Triad Unit Safety Team

“...a multidisciplinary unit-based team that serves as the focal point for safety efforts on a unit”

- Building a “UNIT-BASED” safety infrastructure
- Multidisciplinary team of ‘local experts’ to focus on safety
- Develop a group of leaders and change agents
- Create processes for sustainability beyond TOPS
TOPS Phase II: TrUST
How did we build it and what do we do?

**TrUST Members**
- TOPS Champions
- Nurse Managers / CNSs
- Interested Physicians
- Unit pharmacists
- Therapists and other unit staff

**Capturing safety issues**

**TrUST Meetings**
(Discuss issues)

**TrUST feeds issue into an educational activity/conference**

*TOPS Educational Activity

**TrUST takes action with a plan for issue resolution**

*Debrief an event
*Organize a project
*Devise a solution

**TrUST facilitates bringing issue to appropriate group**

*Hospital Committee
TOPS Phase II
Successes & Challenges

Successes:
- Building an infrastructure for safety (unit-based expertise)
- Breaking down traditional educational silos and creating new interdisciplinary forums to discuss safety issues

Challenges:
- Taking on appropriate safety issues
- Potential overlap with other methods for reporting and handling safety issues
- Logistics, logistics, logistics…
- Different educational methods for each discipline and trying to make one conference that ‘fits all’
Each morning unit staff nurse talked with patient about their goal for the day.

The goals were shared with the provider team by posting on white board in the patient’s room.
Today’s Goal: get stronger
I can take better care of myself so I can go home

Please give this card to your nurse.

Staff Comment: 

An Important Reminder about Your Discharge:

When you leave the hospital, you will be given an updated list of your medications. It will tell you how and when to take them. Be sure to follow the instructions.
460+ “Tell Us” Cards have been completed across sites

“I want to find out about hospice at home with Dr. L. He said that he would come by after 3 PM.”

“To keep the pain away and rest. Take a walk around the floor this evening”.

“To have a better understanding of pain meds, how often to take and how to avoid reactions.”

“Go to nursing home soon, and to have a good day.”
### Assessment of White Boards

**Patient Goals Present on White Board?**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>16%</td>
<td>40%</td>
</tr>
<tr>
<td>3</td>
<td>73%</td>
<td>87%</td>
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TOPS Phase III: Patient Engagement

- **Successes**
  - Patients responded positively to the opportunity to share goals
  - Whiteboards were used better and were more often accurate

- **Challenges**
  - Nursing staff somewhat reluctant to take on another responsibility
  - Difficult to determine whether other disciplines used the posted goals in planning care
  - Patients unsure about expectations for goals
Evaluation Strategy

Teamwork & Communication

Safety Culture

Improved Patient Outcomes
Evaluation Plan

1. Staff Perceptions of Safety Culture

2. Patient Hospital Experience
Evaluation Plan

1. Staff Perceptions of Safety Culture

- AHRQ Safety Culture Survey

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Post Intervention</th>
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</thead>
<tbody>
<tr>
<td>Hosp 1</td>
<td>221</td>
<td>185</td>
</tr>
<tr>
<td>Hosp 2</td>
<td>114</td>
<td>79</td>
</tr>
<tr>
<td>Hosp 3</td>
<td>99</td>
<td>104</td>
</tr>
<tr>
<td>Total</td>
<td>434</td>
<td>368</td>
</tr>
</tbody>
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Staff Perceptions of Safety Culture
Scale: 1-5, 5=Strongly Agree

All TOPS Units : AHRQ Safety Culture
Overall Perceptions of Safety

1 = Strongly Disagree — 5 = Strongly Agree

Discipline Group:
- Nursing
- Nursing ancillary
- Medicine - attending
- Medicine in training
- Pharmacy
- Therapist/technician
- Admin/Mgmt
- Other
Evaluation Plan

2. Patient Hospital Experience

<table>
<thead>
<tr>
<th></th>
<th>In Hospital</th>
<th>Post Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period 1</td>
<td>220</td>
<td>144</td>
</tr>
<tr>
<td>Period 2</td>
<td>265</td>
<td>127</td>
</tr>
<tr>
<td>Period 3</td>
<td>202</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>687</strong></td>
<td><strong>358</strong></td>
</tr>
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</table>

- Interview during hospitalization and following discharge asked about provider teamwork, communication, and selected safety issues
The people caring for me worked as a team. I was well prepared for discharge. Your caregivers did everything they could to keep you safe. There was no confusion about my care between providers.
Patients responding Yes - I know who to ask about Medication and - Care Providers Discussed their work as a Team

<table>
<thead>
<tr>
<th>I know who to contact for med questions and problems</th>
<th>My care providers discussed how they worked as team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period 1: [0.800]</td>
<td>Period 2: [0.200]</td>
</tr>
<tr>
<td>Period 2: [0.900]</td>
<td>Period 3: [1.000]</td>
</tr>
</tbody>
</table>

% Change: 15.6% for I know who to contact for med questions and problems; 24.0% for My care providers discussed how they worked as a team.
Courtesy and respect - MD
Listen carefully to you - MD
Explain so you understand - MD
Courtesy and respect - RN
Listen carefully to you - RN
Explain so you understand - RN
Evaluation Plan Summary

- We improved safety culture on our units

- Patients experienced greater degrees of communication and teamwork among their providers
TOPS Lessons Learned

- Changing culture is hard
- Outsiders (e.g., aviation consultants) very helpful, but process must be locally owned and delivered
- Necessity of engaging members of each discipline in mixed groups to discuss communication and culture issues
- Initial 4hr training creates common language, understanding, but must f/u with unit- or service-based interdisciplinary structure for sustainability
References


