Creating a Large-Scale Interprofessional Student TeamSTEPPS® Curriculum with Simulation

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Introductions
Agenda

9:45-10:45am

• Background & Curriculum Overview
• TeamSTEPPS® didactic
• Simulation
• Debrief
• Q&A
Today’s Learning Objectives

• Identify the benefits and challenges of implementing TeamSTEPPS® on a large scale with multiple student professions

• Describe methods for implementing effective interprofessional student TeamSTEPPS® training curricula

• Explain the value of role play/simulation in helping students apply TeamSTEPPS® skills
Background

- Volunteer interprofessional pilots (2013 & 2014)
- Small interprofessional workshops as part of required Health Mentors Program (2014-15 & 2015-16)
  - 65 2nd year medicine, nursing, OT, pharmacy, PT, other students
  - 99% agreed they have a better sense of the roles of others
  - 100% agreed they are equipped with tools to help better communicate about patients’ safety & support team members in delivering patient-centered care
- Large-scale workshops with medical students (spring 2016)
  - 256 2nd year students
  - 9 student co-facilitators
  - 80% recommended the workshop be offered to next year’s class
  - 18% noted it would be stronger if interprofessional (unsolicited)
Introductory Workshops
- Basic cases
- Train-the-trainer
- Participants: Medicine (2nd year), Nursing (1 year accelerated & 2nd year), Occupational Therapy (2nd year), Pharmacy (3rd year), Radiologic Sciences

Co-Facilitation
- Previously trained students of any profession
- Facilitator training
- For credit or voluntary

Advanced Workshops
- Clinical complexity
- Participants: Medicine (4th year), Nursing (graduate), Pharmacy (4th year)
Introductory Workshop Outline

- Online pre-work & pre-test
- Whole group Jeopardy
- Small group simulations (three cases)
- Small group debriefings
- Post-test & evaluation
Leadership: **Brief**

- Short planning session at beginning of the day/shift to:
  - Form the team
  - Designate roles and responsibilities
  - Establish climate and goals
  - Engage team in short- and long-term planning
Debrief

Leadership:

• Informal information exchange and feedback session *after* an event or shift to:
  • Improve team performance and outcomes
    • Review key events
    • Discuss what worked or did not work and why
    • Recognize and reinforce positive behaviors
    • Revise plan to incorporate lessons learned
• Good leaders encourage their staff/peers to “speak up,” especially when:
  • There is an issue
  • There is a concern
  • There is a patient safety concern

• Acknowledge team members for speaking up
"I am Concerned. I am Uncomfortable. This is a Safety Issue."

- Stop the line
- I’m scared
- Signal to all team members of the magnitude of the issue
Mutual Support:

Two-Challenge

• Empowers all team members to “stop the line” if they sense or discover an essential safety breach

• When an initial assertive statement is ignored:
  • It is your **responsibility** to assertively voice your concern at least **two times** to ensure it is heard
  • The team member being challenged must acknowledge that concern has been heard
  • If the safety issue still hasn’t been addressed, take a stronger course of action or utilize supervisor or chain of command
Two-Challenge Demo
SBAR

- Framework for team members to effectively communicate information to one another:
  
  - **Situation**—What is going on with the patient?
  - **Background**—What is the clinical background or context?
  - **Assessment**—What do I think the problem is?
  - **Recommendation/Request**—What would I recommend? What do I need from you?
SBAR Demo
Simulation Activity
Training Video
Training Video
Workshop Materials

Simulation Student Guidelines
- Overarching scenario
- Rules of engagement
- Guide to team brief
- Case description
- Supplies
- Guide to huddle
- Medical background

Simulated Patient Scripts
- How do I act?
- What do I say?
- How do I respond to treatment?
Simulated Patient Guidelines

Fall and injury

How do I act? You are escorted to the lab for an INR test (to check for blood clotting tendency) where you trip and fall onto the floor. You break the fall with your hands, injuring your wrist and hitting your head (gently) before rolling onto your back. Complain of wrist pain. Note: you have atrial fibrillation on Coumadin (blood thinner).

What do I say? Initially you are sociable with the person who escorts you to the lab. After the fall: “My wrist hurts.” If neck is moved, “My neck hurts.”

How do I respond to treatment?
If moved without having neck immobilized, complain of (c/o) neck pain
   Ideal prescription: x-ray for the wrist and cervical spine with cervical collar applied beforehand c/o collar uncomfortable. “Can you take it off?”

TeamSTEPPS Student Guidelines

Overarching scenario for all simulations: In this scenario, you will roleplay being a student of the profession you are currently studying. You and your teammates are on rotation at a long-term care facility. Several staff members were just called to work at another location. The administrator asked you and your student teammates to staff the facility for emergencies until their substitutes arrive. The student initially alone with the patient should locate their student team members for support. The on-call provider is available and must be notified about any patients that you see at the facility before intervening with any treatment. He/she will expect any communication in SBAR format, as will any student team members.

Rules of engagement:
1. A member of the team must call the provider
2. No medications or treatment can be administered before calling the provider
3. The caller and student initially alone with the patient must relay information using SBAR
4. If vital signs are taken, please refer to the facilitator for results
5. The team must debrief the situation in their roles
6. All team members must rotate roles throughout the scenarios

Guide to Team Brief:
Before the scenario begins, the student team should conduct a brief to do the following
1. Introduce yourselves to other members of team (name, profession)
2. Review the case description, medical background, and supplies
3. Determine simulation roles, such as team leader, patient escort, phone caller, medication administrator, history taker, physical examiner, etc.

Case description: The patient is scheduled for an international normalized ratio (INR) check in the facility to determine his/her blood clotting tendency. One student brings the patient in for the INR test, where another student is waiting. The patient trips and falls, breaking the fall with outstretched hands and injuring his/her wrist and lightly hitting his/her head. The patient has atrial fibrillation on Coumadin (blood thinner).

Supplies: cervical collar, volar splint with ace bandage

Medical background:
- When someone falls, check their ABCs: Airway, breathing, circulation
- Did they hit their head, hurt their neck?
  o Elderly people can fall and break their neck
  o Protect the neck
- Immobilize possible broken bones
- Are they on medications?
  o Blood thinners can lead to bleeding in the brain
Planning & Development

- Buy-in
- Logistics
  - Scheduling
  - Workflow
  - Rules of engagement
- Content development
  - Pre-work
  - Cases
  - Guidelines & scripts
  - Overarching scenario
- Facilitator recruitment & training
  - Student co-facilitators
## TeamSTEPPS Room Assignments, Schedule & Workflow

### Starting Room & Rotation Flow

*facilitators rotate through rooms

<table>
<thead>
<tr>
<th>Starting Room</th>
<th>Case</th>
<th>Facilitator</th>
<th>Your Initial Student Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curtis 213</td>
<td>Hypoglycemia</td>
<td>Facilitator #1</td>
<td>A1</td>
</tr>
<tr>
<td>Curtis 217</td>
<td>Fall</td>
<td>Facilitator #2</td>
<td>A2</td>
</tr>
<tr>
<td>Curtis 218</td>
<td>Asthma</td>
<td>Facilitator #3</td>
<td>A3</td>
</tr>
<tr>
<td>Hamilton 217</td>
<td>Hypoglycemia</td>
<td>Co-Facilitator #1</td>
<td>B1</td>
</tr>
<tr>
<td>Hamilton 218</td>
<td>Fall</td>
<td>Facilitator #5</td>
<td>B2</td>
</tr>
<tr>
<td>Hamilton 220</td>
<td>Asthma</td>
<td>Facilitator #6</td>
<td>B3</td>
</tr>
<tr>
<td>Hamilton 508</td>
<td>Hypoglycemia</td>
<td>Co-Facilitator #2</td>
<td>C1</td>
</tr>
<tr>
<td>Hamilton 509</td>
<td>Fall</td>
<td>Facilitator #7</td>
<td>C2</td>
</tr>
<tr>
<td>Hamilton 512</td>
<td>Asthma</td>
<td>Facilitator #8</td>
<td>C3</td>
</tr>
<tr>
<td>Hamilton 514</td>
<td>Stroke</td>
<td>Facilitator #9</td>
<td>C4</td>
</tr>
</tbody>
</table>

Student professions in attendance today: Nursing, Medicine, Occupational Therapy, Pharmacy, Radiologic Science

### Overall Timeline

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
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<tbody>
<tr>
<td>3:30-3:55pm</td>
<td>Didactic Review &amp; Jeopardy</td>
<td>Auditorium</td>
</tr>
<tr>
<td>4:00-4:25pm</td>
<td>First Case&lt;br&gt;-8 minutes prepping volunteers&lt;br&gt;-5 minutes role playing (observers fill out observation tool)&lt;br&gt;-3 minutes student-led debrief&lt;br&gt;-9 minute whole group debrief (medical &amp; teamwork concepts)</td>
<td>See starting room above</td>
</tr>
<tr>
<td>4:30-4:55pm</td>
<td>Second Case (same format as First Case)</td>
<td>See rotation flow above</td>
</tr>
<tr>
<td>5:00-5:25pm</td>
<td>Third Case (same format as First Case)</td>
<td>See rotation flow above</td>
</tr>
<tr>
<td>5:25-5:30pm</td>
<td>Wrap Up &amp; Evaluation</td>
<td>Third case room (administer evaluation)</td>
</tr>
</tbody>
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Facilitator Guidelines

- Overarching scenario
- Instructions for prepping student participants
- Case description
- Vital signs
- Supplies
- Medical background
- Instructions for before, during and after phone call
- Guidelines for debriefing
During phone call after student gives SBAR: If no recommendation is given through SBAR, the provider should ask for one. The provider then says it sounds like the patient has a head, neck and wrist injury and orders an x-ray. When ordering the x-ray, the provider tells the phone caller to tell the radiologic science student (or whoever is doing the x-ray) to position the neck fully extended when taking the x-ray. Students should use CUS and/or 2-Challenge techniques to suggest different treatment; facilitator insists. The provider eventually agrees (with appropriate application of CUS/2-Challenge), and then orders aspirin (ASA) for the pain while the students wait for the x-ray results. Students should use CUS and/or 2-Challenge techniques to suggest different treatment; facilitator insists.

In the end, the students should put a cervical collar on the patient prior to x-raying the wrist and cervical spine. They should not give ASA and not extend the neck.

After treating the patient: Ask the students to debrief while staying in their roles. The team leader should lead a discussion about what went well and what needed improvement during the simulated team scenario.

After the scenario: The facilitator leads a debrief around Teamwork (roles, mutual support, speaking up) and medical condition
- What went well?
- What could you have done better?
- What will you do differently next time?

Consider addressing the following:
- How did the student playing the patient feel about the team care?
- How did the student team members feel? Did this vary by profession?
- Did the brief help prepare student team members for their roles? How could they have improved it if not?
- What did the observers notice? What might they have done differently?
- Which TeamSTEPPS skills were used?
  - Don’t forget Call-Out, Check-Back, 2-Challenge, others in the glossary
  - Were there any missed opportunities to use TeamSTEPPS skills?
  - Point out students can use CUS/2-Challenge in lieu of each other, huddle to determine how to proceed/what recommendation to make, etc.
- Can the students see how this would apply in real life? Provide examples from your own (or students’) experience
- What are the medical implications of the case?
- Do the student team members or observers have any questions?
- Have each student give a takeaway from the simulation
Lessons Learned

- Workshops are stronger if interprofessional
- Simulation is a valuable tool for learning to apply TeamSTEPPS® skills - and for engaging students!
- Facilitator training is key to success
- Challenges → many of the common barriers to IPE:
  - Scheduling
  - Space
  - Equal representation of professions
  - Alignment of training
  - Facilitator recruitment
Questions?

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