PS202: Achieving Total Systems Safety
Facilitator Guide
January 12, 2023

AGENDA:
3:00 Building a Culture of Safety: streaming on Blackboard
4:00 Begin small group discussion on Zoom. Please start session by reviewing the "Reporting Patient Safety at BCM Affiliated Institutions" which can be found here:
https://bcm.box.com/s/yunzt73wfomydtpf0uuwhxah9saa4a1o
4:30 Students dismissed

OBJECTIVES:
1. Identify ways you can foster a culture of safety in your day-to-day work.
2. Illustrate the importance of speaking up about safety concerns and comment on why this is difficult.
3. Describe the elements of a culture of safety.
4. Define Integrity and how it applies to patient safety
5. Give examples of ways in which a culture of safety can help improve the care you provide.
6. Construct ways you can foster a culture of safety in your day-to-day work.

II. Discussion-4:00-4:30 pm

Gathering: Check in to see how the students are doing with accessing IHI. Although IHI Modules are not due until the end of the course, emphasize the importance of students reviewing them prior to small group discussions.
Housekeeping-Facilitator
- Introduce yourself and ask students to do same.
- Consider an 'icebreaker' activity or a quick question to help with introductions. Remind students that they must attend small group and attendance will be taken.
- All absences must be approved by medical school leadership per the attendance policy (the Deans). That is then communicated to Drs Andrabi and Khattab by the deans.

III. Open Discussion-
1. Ask students to share thoughts/comments/questions about Drs. Horstman and Brass' Lecture.
2. Have students pull up the "Reporting Patient Safety at BCM Affiliated Institutions" sheet on Blackboard and review. We encourage you to share from your own experiences of reporting safety events at your various institutions. It is a great opportunity to share examples of what types of events to report, including near misses.
3. Encourage discussion and then proceed to the case.
4. Introduction to the activity and establishing a safe simulation learning environment.
5. Acknowledge that sometimes simulation activities may bring negative feelings, but it provides the opportunity to prepare, in a safe learning environment, for things that may not go well with real patients' interactions. This simulation activity is intended to model healthcare in a clinical setting, which includes a multidisciplinary team and diverse roles and responsibilities (physicians, nurses, administration, etc)

6. Students choose a number (from 1-10 depending on the class size), assume the role of the corresponding character, and assign a name to the character.
7. All team members receive the below case
8. Team role assignment. If there are less than 10 students in your small group, please make sure at least one student fulfills each of the roles of the healthcare team and at least two students partake in the role of the quality and safety council..
    a. -Student 1 and 2 (so that they can discuss the questions together as this case is tough): Dr. Jack Thomas, the resident
9. Student 3, 4: The bedside nurse (give her a name)
10. Student 4, 5: Dr. O'Riordan, the attending physician
11. Student 6, 7: The second resident (give him/her a name)
12. Student 8, 9,10: The Quality and safety council investigating the incident and interviewing the participants:
    a. Student 8 & 10 go through the interview with the scenario participants
    b. Student 9 scribe the responses from the group to complete the fishbone diagram and Discuss the Apply Marx's "just culture" to the incident above (provide him/her with the prompts)

Begin Case:
Ask students to log onto Blackboard and ask someone to read the case:

Case Description:

A real case that happened in the UK in 2011. Some parts have been edited for this course

In 2011, Jack Adcock — a six-year-old boy with Down's syndrome, and a congenital heart disease and heart failure — was admitted to Leicester Royal Infirmary in the United Kingdom. He had been sick overnight with diarrhea and vomiting. His breathing was shallow and he looked unwell.

Dr. Jane Thomas was the resident on duty in the Pediatrics ward that day. She was also covering for another pediatric resident, she had already covered various wards of the hospital, took calls from outside physicians, and dealt with emergencies. It was her first day back from a 14 month maternity leave and she was unfamiliar with the hospital. Dr. Stephen O'Riordan, the attending physician was out of town (teaching in another town) that morning.

It was mid-morning when Dr. Thomas first saw Jack Adcock, she ordered intravenous fluids, blood tests and a chest X-ray.

One blood test showed his blood was too acidic — a sign of severe illness — but that improved after fluids.

Two hours later chest X-ray was done. One hour later Dr. Thomas reviewed it and diagnosed Jack with pneumonia.

The nurse in charge of Jack was busy with many patients, she was late to get scheduled vital signs on Jack (e.g. temperature, respiratory rate, etc). Jack went into septic shock. Dr. Thomas did not realize this, and neither did anyone else. Jack was having trouble maintaining enough cardiac output to stay alive.

Dr. Thomas prescribed antibiotics for Jack's pneumonia, which took 1 hour to be administered. Around this time, the attending physician, Dr. O'Riordan, returned to the hospital. He saw Jack's blood test results but didn't see the child.

Prior to admission, Jack was on a drug called enalapril for his heart condition. This drug is an anti-hypertensive which lowers blood pressure and should be avoided when someone is in septic shock. Dr. Thomas knew this, and deliberately didn't order the drug and discontinued it from Jack's active medication list. This was not communicated with the patient or his mother, who gave Jack the home medication enalapril causing him to go into cardiac arrest.

When Dr. Thomas arrived at the resuscitation, she mistook Jack for another child in the ward who had a 'do-not-resuscitate' order (DNR) on his notes and called off the resuscitation.

Another resident present corrected the misunderstanding and efforts were resumed a minute later but Jack passed away less than 12 hours after being admitted to the hospital.

1. Ask if any student has any question

Expected Interventions of the Participants:

Action required by participants –

- Student 3, 4: The bedside nurse (give her a name)
- Student 4, 5: Dr. O'Riordan, the attending physician
- Student 6, 7: The second resident (give him/her a name)
- Student 8, 9,10: The Quality and safety council investigating the incident and interviewing the participants:
    - Student 8 & 10 go through the interview with the scenario participants
    - Student 9 scribe the responses from the group to complete the fishbone diagram and Discuss the Apply Marx's "just culture" to the incident above (provide him/her with the prompts)

<u>Questions:</u> We only have 30 min for this small group session so please use these questions as a guide, however if the students are engaged and there is great discussion regarding the lecture and/or the case please feel free to go with that.

Targeted questions to the – Resident, Attending and Nurse roles. What were the gaps and opportunities for improvement as you reflect on the case in your role. Have eachroe answer the question.

1. For Quality and safety council: Create a fishbone diagram based upon the case above using the following categories: Patient, Processes, Materials, Personnel, and Policies. You can ask someone to share screen and scribe the responses for everyone to see via zoom.
Think about the 'Swiss cheese' model and how layers of system weaknesses led to Jack's death. **these are some suggestions but do not include all possible answers
Patient- pediatric, complex medical history, improved labs after IVF
Processes- poor communication with family, attending physician did not see patient, residents covering many patients with little supervision
Materials- mother had and gave home medication, delayed CXR, delayed antibiotics
Personnel- busy nurse, no supervising physician in house, resident covering many floors and recently back from leave, first day on rotation
Policies- parents allowed to give home medications, no in-house supervision of residents, resident allowed to call of resuscitation based upon mistaken DNR status

2. For the resident: Apply Marx's "just culture" to the incident above. Which of the behaviors (human error, at-risk behavior or reckless behavior) did the resident demonstrate? Defend your answer. Now assess accountability of the resident using the Fairness Algorithm below.

Resident Fairness Algorithm

- Did the individuals intend to cause harm? No
- Did they come to work drunk or impaired? No
- Did they do something they knew was unsafe? No
- Could two or three peers have made the same mistake in similar circumstances? Yes
- Do these individuals have a history of involvement in similar events? Unknown, but from reports it appears no

3. To the entire group: Based upon your fishbone diagram, brainstorm system changes that could be made to prevent an event like this from occurring again.

If you get to this question, allow group to brainstorm. Remind them that education alone and policies are very ineffective ways to create safer systems.

Ask students one-by-one to answer the following prompts

a. Use 1-2 words to describe how the case made them feel as participant (important to release emotions before ending the session). Examples include "frustrated" "surprised" "eye-opening" "confused".
b. Share one thing that they learned from going through this case and how they will apply it if they get into similar situation.

IV. Close session by reminding students that the next session will be on January 19, 2023 and to meet in the small groups at 3 pm.

Please also remind them that their clinic rotations have excused them to attend this course. It is their responsibility to speak up to leave in time to attend this course if their preceptors forget.