Lessons Learned from a Three Year Competency Based Medical Simulation Interprofessional Experience

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Objectives

Provide teams of medical, pharmacy, and nursing students a safe simulated clinical environment to:

1. Gain an understanding of the value of interprofessional education.
2. More fully understand interprofessional teamwork.
3. Recognize the roles/responsibilities, value and expertise of other health professions
4. Listen actively and encourage ideas and opinions of other team members.
5. Respond respectfully, as a team member, to feedback from others and/or provide instructive feedback to others about their performance on the team.

Background

Interprofessional education (IPE), where members of different professions learn with, from, and about each other in being integrated into a health care professional colleagues, has become increasingly popular. It is now understood that this interprofessional education has tremendous value in fostering like and transferable skills. West Virginia School of Osteopathic Medicine (WVSOM) is a free standing Osteopathic medical school located in Livingston, WV and the University of Charleston School of Pharmacy (UCSP) is a school of pharmacy located in Charleston, WV. WVSOM and UCSP initiated an interprofessional education program in 2012 through the CEC (Center for Education and Clinical Training) at WVSOM. The program was designed to expand collaborative and interprofessional experiences and to expose students to a true representation of the health care team in the clinical setting. The CEC promotes an environment that fosters active learning and professional development.

Methods

For each IPE medical simulation event 3 to 5 explanatory planning meetings take place, one of which is a face to face meeting. At these meetings, discussion and eventual consensus amongst all programs relating, global objectives, profession specific objectives, topics of cases, content of cases, case development, pre and post evaluation tool content, faculty/staff assignments, faculty development needs and a detailed logistical map of the overall IPE program is completed. An in person dry run is concluded for any new cases or substantial case content changes from the previous year.

Prior to each event all student participants receive an electronic pre-evaluation questionnaire containing questions regarding general objectives and profession specific objectives where appropriate and pre-lecture review of necessary content, faculty/staff assignments, faculty development needs and a detailed logistical map of the overall IPE program is completed. An in person dry run is concluded for any new cases or substantial case content changes from the previous year.

We encountered common obstacles such as coordinating scheduling across 2 to 4 programs, integrating new curriculum into existing classroom curricula, case preparation for new cases, and ensuring proper case content for the students. The pilot program in March of 2012 was voluntary for both pharmacy and medical students and involved nine students from each program. For the first year of the program these students participated in randomized case scenarios. In November 2014 the participants included 20 medical students, 29 pharmacy students and 32 nursing students who participated in a full day of structured standardized patient encounters. We have continued to expand our program to include another college (West Virginia Wesleyan College) in 2014, adding in the UC BSN Nursing program in 2014 and the UC PA program in 2015. This has allowed for an increase in the number of students and even out the proportions of groups.

Lessons Learned from Year 1

• Students felt:
  - "It was a great experience for me and I learned a lot"
  - "I enjoyed the simulation and I learned a lot"
  - "It gave me some specific ideas".

• Group felt their group dynamic was better with more hands-on participation.

• Pre-work might be beneficial for all participants so that they feel more prepared for the simulations.

Results

Year 1 (1st Event)  Year 3 (6th Event)

<table>
<thead>
<tr>
<th>Participants</th>
<th>U0 Pharmacy Students</th>
<th>U0 Medical Students</th>
<th>U0 Pharmacy Students</th>
<th>U0 Medical Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>12/13 Standardized Team with group of medical students and 12 case participants</td>
<td>5/6/2014 Standardized Team with 20 case participants</td>
<td>1/2/2014 Standardized Team with 20 case participants</td>
<td>1/2/2014 Standardized Team with 20 case participants</td>
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</tbody>
</table>

Scenarios:

Structured Standardized Patient encounters are conducted in small groups with designated doctors and nurses. The participants have a check off list of critical actions they are to identify during the encounter. The students are provided cases and team learning activities to participate in structured observation activities and facilitated debriefing exercises. These structured activities provide students opportunities to learn from one another at a deeper level in a controlled, safe environment.

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Post-Event Survey November 2014

<table>
<thead>
<tr>
<th>Questions</th>
<th>Good Specific Questions Related to Chosen Competencies</th>
<th>Poor Specific Questions Related to Chosen Competencies</th>
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Conclusion

Since UC and WVSOM first IPE in 2012, our interprofessional events have grown in both number and scope. Each Fall and Spring the campus team from UCSP and Pharmacy, Nursing and Physical Assistant students from UC partake in a medical simulation event. We have continued to expand our program to include another college (West Virginia Wesleyan College) in 2014, adding in the UC BSN Nursing program in 2014 and the UC PA program in 2015. This has allowed for an increase in the number of students and even out the proportions of groups.

Lessons Learned from Year 3

• Students felt:
  - "I had the opportunity to see the roles of the professionals and collaborating as peers rather than the hierarchy it is in the hospital setting."
  - "I was able to see how it all worked together as a team."
  - "It gave me some specific ideas".

• Groups need to be smaller to allow for more hands on participation for each participant.

• Pre-work might be beneficial for all participants so that they feel more prepared for the simulations.

References


Going Forward . . .

• Inclusion of additional professions: Nurse Practitioner and Physician Assistant Students and Faculty.

• Groups made smaller than the mannequin simulation cases by doubling the number of stations.

• Partnering with an additional college (West Virginia Wesleyan College) to increase the number of students and even out the proportions of groups.

Acknowledgments

West Virginia Wesleyan College of Nursing