

Title: Preparing Healthcare Professional Students for Interdisciplinary Collaboration

Authors: Renee Courtney DNP, APRN, FNP-BC, CTN-B; Nadine Wodwaski DNP, MSN-ed, ACNS, RN; Kelli Frost MS, PA-C

Background:

Health care professionals working collaboratively on interprofessional teams are essential to optimize patient-centered care to meet the needs of patients and work within a dynamic healthcare delivery system. Collaboration and teamwork can be best achieved if interprofessional education (IPE) starts early for health profession students from different professions engaging in interactive learning.

The **purpose** of our IPE activity was to have students from undergraduate nursing, graduate nursing & the physician assistant program collaboratively engage in an unfolding case study on a virtual meeting space. By providing students with an informal interprofessional collaborative learning opportunity, they will have the ability to communicate and interact across the professional groups. The multi-professional unfolding case study offers a place for student engagement within a safe learning environment by:

- Providing an opportunity for students to learn about caring for a patient during a hospital stay
- Allowing the student to identify how team collaboration can promote patient-centered care by emphasizing teamwork, innovative thinking and equal partnership
- Encouraging students to recognize their role on the multidisciplinary team, how to collaborate, and learn to adapt, and to communicate clearly with empathy
- Guiding students to identify and discuss their role and responsibilities when formulating an end of life holistic plan of care

The **goal** of the IPE unfolding case study is for the students to develop & enhance their communication skills, recognizing roles and responsibilities, and enhancing the value of different perspectives and expertise with caring for cancer patients at the end of life. This improves mutual respect and leads to stronger working relationships throughout their healthcare careers. By learning how to function within an interprofessional team during their academic schooling, they will have the ability to carry this knowledge, skill, and value into their future care practice, thus increasing interprofessional competencies.

Methods:

Development: The Institute of Medicine has identified three focus areas that determine the success of interprofessional collaboration: 1) roles and responsibilities; 2) respect, trust, and communication; and 3) hierarchy and education. By simulating an unfolding cancer end of life case study, the students involved on an interprofessional team will develop skills necessary on how to work collaboratively and develop shared goals for a unique patient while providing empathetic and holistic care.

This project utilizes a simulated unfolding cancer case study method to implement interprofessional collaborative practice. This learning approach was chosen to strengthen skills and experiences that evoke or replicate a substantial aspect of healthcare professional daily work in a fully interactive manner in a virtual collaborative space. Designing an unfolding case study within different college of health professions departments was necessary so that all participants practice within their scope.

To develop a case study that is appropriate for the different college of health professions students, faculty wanted to initiate the cancer case study with IPE education, and reinforce interprofessional collaboration & this process takes time. The development of the case study was developed by all faculty researchers and was based on a patient with pancreatic cancer, with incorporation of palliative care and end of life decisions. Refinement was necessary so that all levels of students functioned within their scope of practice. Secondly, the case study question scripts were written to depict the health professionals (i.e., new nurses, family nurse practitioner's & physician assistants) collaborating to treat the pancreatic patient. Third, the case study emphasized the following questions: 1) Who is the team? 2) How does the team go about their work? 3) What does the team achieve? 4) What are the patient outcomes? 5) What is the level of patient satisfaction with the team's practice?

Four competency domains for IPE as outlined by the Interprofessional Education Collaborative (IPEC) were applied:

1. Domain 1: Values and Ethics for Interprofessional Practice;
2. Domain 2: Roles and Responsibilities;
3. Domain 3: Interprofessional Communication; and
4. Domain 4: Teams and Teamwork

Similarly, the protocol used to develop, present, and discuss the unfolding IPE case studies was based on the standards of simulation disseminated by the International Nursing Association for Clinical Simulation and Learning (INACSL). The themes emphasized in the unfolding case study consisted of case preparation, student role enactment, debriefing, and faculty/student review. The seven standards of clinical simulation that we adapted from INACSL to inform our protocol are the following:

1. Standard I: Terminology—Provide Consistency
2. Standard II: Professional Integrity of Participant
3. Standard III: Participant Objectives—Clear and Measurable
4. Standard IV: Facilitation—Multiple Methods
5. Standard V: Facilitator—Proficiency
6. Standard VI: Debriefing Process—Improve Practice through Reflection
7. Standard VII: Participant Assessment and Evaluation

These standards underscore the unfolding case study as a technique—not a technology—to amplify experiences that evoke or replicate substantial aspects of the real world clinical experience in a fully interactive manner. Here is an abbreviated Case Study Synopsis.

- MJS is a 48-year-old male presented to primary care office
 - PMHx: Hyperlipidemia, normal weight, nonsmoker, no alcohol intake
- Office assessment findings:
 - Painless jaundice
 - Complains of severe pruritis (itching)
 - Complains of fatty stool, liquid consistency
 - Weight loss of 40 pounds in 6 weeks
- Upon evaluation in the office, patient was referred to ED for additional workup
- ED assessment findings:
 - Total bilirubin 9.8
 - Elevated AST, ALT, amylase, lipase
- The team of students is assembled & work through the case study as a team within the hospital setting.

Plan: The co-investigators explained the research study during their academic class periods, asking for volunteers to participate in this unique learning opportunity. Once participants from all three cohorts volunteered, the researchers administered an informed consent form during the first few minutes of the unfolding case study rollout. Once students consented to participate, each completed an anonymous survey regarding their attitudes toward interprofessional teams and the team approach to care.

Participants: Participants included 10 students each from their academic program. Each interprofessional team consisted of at least one student from each professional program.

Design: In this survey-style observation study, the investigators devised appropriate administration protocols to prevent student coercion and maintain the investigative rigor of the study. The study is a pre- post- survey design. Student participants received a pre and post survey that assessed attitudes towards interprofessional teams & team based practices, role/responsibilities for collaboration & lastly, patient outcomes from collaboration.

Results:

After the pre & post surveys were submitted anonymously, the data results from both surveys were analyzed and compared to initial attitudes towards interprofessional teams & team approach to care. Data demonstrates achievement of the goals of the activity. Reflections revealed students felt the case study improved teamwork by recognizing the roles and responsibilities of each team member, increase effective communication, while providing patients with empathetic holistic care. This activity was a cost-effective, low fidelity, role-play case study to achieve interprofessional education and competency.

Lessons Learned:

Participation was lower than anticipated because participation was voluntary and not a required part of a course. The unfolding case study can be executed in a virtual space,

though it may have hindered some of the collaborative dialogue between students. Working in a virtual space takes time and some collaborative groups took longer working through the case study scripted questions, than expected.

Future Applications and Next Steps:

There is a need to recruit more volunteers from each professional program to participate. Perhaps consider making participation a required part of a course and complete the unfolding case study in a live, in-person environment.