

Improving Health Care Collaboration and Communication: Integration of Inter-professional Education Opportunities for Undergraduate Students

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It is estimated that five million patients are harmed annually due to preventable errors. Without proper communication among health care professionals these patients can be seriously injured (IOM, 2015). One approach to increasing communication, maximizing collaboration, and decreasing the risk of medical errors is to introduce Interprofessional Education (IPE) to students in health care related programs. IPE and collaboration occurs when “two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes” (World Health Organization [WHO], 2010). In 2014, University of Cincinnati (UC) Blue Ash College faculty members from six undergraduate programs created a steering committee looking at opportunities to complement students’ educational experience. The faculty members from Emergency Medical Services, Medical Assisting, Nursing, Pre-Health Education, Radiologic Technology, and Social Work investigated opportunities on how to bring together students to explore communication, collaboration, teamwork, and critical thinking skills in an interactive, hands-on approach. The committee offered a simulation-based, hands-on, day-long experience. In addition to developing an IPE simulation day for students, the committee developed an elective College course to explore philosophical and theoretical foundations of various health professions. Interprofessional learning experiences will assist with the preparation of competent and collaborative future health care professionals and encourage team-based care of patients that will ultimately result in improved patient outcomes.

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Background and Importance of Interprofessional Education

It is estimated that five million patients are harmed annually due to preventable errors. Examples of those errors include medication errors, incorrect patient identification, falls, and wrong procedures (Institute of Medicine [IOM], 2015). In the course of a four-day hospital stay, it is estimated that a patient interacts with nearly 50 different health care professionals participating in some aspect of their care. When patient care is fragmented, the risk of errors increases leading to sentinel events (Sheets, 2014). Without proper communication among each of these individuals, patients can be seriously injured (IOM, 2015). One approach to contribute to increased communication, maximizing collaboration, and decreasing the risk of medical errors is introducing Interprofessional Education (IPE) to students in health care related programs. IPE and collaboration occurs when “two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes” (World Health Organization [WHO], 2010). Interprofessional collaboration among health care providers has far-reaching positive effects such as improved patient outcomes, quality care, and ultimately reducing costs (Naylor, 2011).

In 2014, University of Cincinnati (UC) Blue Ash College faculty members from six undergraduate programs created a steering committee looking at opportunities to complement students’ educational experience. Educators have a responsibility to provide students with opportunities to engage in interactive activities with other health care programs. The faculty members from Emergency Medical Services, Medical Assisting, Nursing, Pre-Health Education, Radiologic Technology, and Social Work investigated opportunities on how to bring together students to explore communication, collaboration, teamwork, and critical thinking skills in an interactive, hands-on approach. One recommended approach was utilizing interprofessional simulation experiences in developing student skills in communication, responsibility, accountability, mutual respect, and trust (Bridges, Davidson, Odegard, Maki, & Tomkowiak, 2011). Sheets (2014) stresses the importance of introducing IPE early in the curriculum along with integrating core competencies. Integrating IPE into the undergraduate curriculum provides students with the opportunity to develop knowledge and an understanding of each other’s professional contributions as a member of the health care team. According to Bridges et al. (2011), students who participate in IPE are more likely to become collaborative, interprofessional health care professionals.

The main objective of IPE at UC Blue Ash College was to teach students a skill set that increases patient safety, reduces errors, and improves the quality of health care. When students are exposed to IPE, it allows them to practice teamwork skills and learn about sharing responsibilities in order to provide the best patient care. It is expected that students will gain appreciation of each member’s roles and responsibilities as part of the health care team (Barwell, Arnold and Berry, 2013). The Department of Health and Human Services (2014) notes, “Health care delivered by well-functioning coordinated teams leads to better patient and family outcomes, more efficient health care services, and higher levels of satisfaction among health care providers.” Enhancing students’ curriculum and

learning opportunities with IPE will help produce these well-rounded health care professionals who are able to function competently in a fast-paced health care environment.

A Multidisciplinary Steering Committee

The collaboration between disciplines in the “real” world is essential in promoting continuity of care and reduction of medical errors in health care. To foster this goal, the faculty at UC Blue Ash College believed that developing a multidisciplinary steering committee was crucial to the implementation of IPE. An IPE event raises awareness and incorporates fundamental foundations of disciplines, while integrating cognitive and psychomotor skills. Additionally, the committee believed that exposing the students to unfamiliar areas of teamwork would allow for a scope of practice exploration among the six participating programs. Student exposure to these unfamiliar areas could help cross barriers of stereotyping and provide challenges in communication and critical thinking skills.

Furthermore, students would be exposed to real life preparation of not only patient care but also the dynamics of integrated medicine. Within a team-based approach, optimization of patient care can lead to attainment of optimal standards of care and patient outcomes (Bridges et al., 2011). Communication with the patient and family increases as the students become educated and familiar with expectations of a variety of disciplines’ needs and care.

A Shared Vision & Mission

During the formation of the IPE steering committee, it was apparent that the faculty involved in the initiative truly believed in the fundamentals, ideals, principals, and goals of IPE as well as the need to educate students within health care programs on the importance of working in health care teams versus health care silos. IPE is not a new concept, but a concept that has been employed throughout many higher learning institutions and health care facilities nationally and internationally (Bridges et al., 2011).

The process of developing and implementing an IPE curriculum at UC Blue Ash College proceeded smoothly. Even in the initial stages of the steering committee formation, the potential opportunities and possibilities that could be provided through the introduction of IPE to our students, college, and community partners was evident. The steering committee decided that developing a mission and vision statement as well as a set of interprofessional core values would help the committee to define and explain the purpose of IPE to UC Blue Ash students, faculty, and staff. The planning process began with an investigation of other university/college IPE program mission and vision statements and a brainstorming session by committee members. As a committee, the message that we wanted to

convey regarding IPE was that it carries both personal and professional benefits and has a proven impact for optimizing patient outcomes through team-based care and collaborative practice among all health care programs.

Routinely, patients are passed through many different health care specialties. The focus as a health care professional in the past was to provide a patient with the highest quality of care within a particular specialty, and in the process, segregating all other health care professionals. Although, health care programs are committed to providing student education on communicating professionally with other health care providers while caring for patients, until recently no emphasis has been placed on approaching the patient's care as a unified team.

After agreeing upon the mission and vision, the committee examined different frameworks of existing interprofessional education models, two of which are utilized at the UC College of Allied Health Sciences and UC Clermont College. Literature supports several best practice models for interprofessional education including didactic, community-based, and simulation-based experiences (Bridges et al., 2011). There are definite benefits and limitations to each approach. The steering committee had to decide, based on the programs offered at UC Blue Ash College and the resources available to us within a limited amount of time, which model would provide the best learning experience for students. The committee decided to proceed with a simulation-based, hands-on experience. At UC Blue Ash College, we were fortunate to have excellent health care program labs with up-to-date equipment available to the students to enhance learning experiences.

The committee felt that the students would benefit in several different ways from performing a patient-based scenario. First, students would be demonstrating their professional skills in a "real-life" scenario, as the patient was assessed and treated, as they would be in a health care facility. Second, it would showcase to the other health care students a different scope of practice with which they might be unfamiliar. Lastly, it would provide the faculty members knowledge of the areas and skills in which students might be deficient. As the committee worked on planning the IPE simulation event, subcommittees were formed to work on different tasks of the event, including scenario construction, pre and post survey design, funding, and event schedule creation. Then all programs were asked to share their discipline-specific scope of practice. Throughout the planning process, the steering committee members demonstrated the ability to work cohesively and were successful in demonstrating the core competencies of IPE to students. This

UC Blue Ash College IPE Steering Committee

Vision Statement:

The University of Cincinnati (UC) Blue Ash College Interprofessional Education Steering Committee is committed to interprofessional health education which prepares learners to partner in providing high quality, team-based care to optimize patient health.

Mission Statement:

To implement, support and evaluate interprofessional health education and practice programs at the UC Blue Ash College to transform patient care into collaborative practice models.

Core Values:

- Mutual trust and respect
- Open and responsive communication
- Collective responsibility in decision making
- Shared accountability
- Critical thinking and clinical judgment

incredible demonstration of team work led to the successful implementation of UC Blue Ash College's first annual IPE day.

The Event

Almost one year after the formation of the IPE steering committee, UC Blue Ash College successfully held the First Annual Interprofessional Education Day in March of 2015 (spring semester). The interdisciplinary steering committee hosted approximately 75 students, faculty, and staff from Emergency Medical Services, Medical Assisting, Nursing, Pre-Health Education, Radiologic Technology, and Social Work. The theme of the event was Communication and Patient Safety. The day started with introductions and group activities. Students participated in a faculty-led discussion about communication among professional health care providers. In addition, all student participants completed a survey before and after the event in order to assess their views regarding the importance of communication as it pertains to patient safety.

Next, the students and Osher Lifelong Learning Institute (OLLI) volunteers completed an intergenerational communication activity. The OLLI at the University of Cincinnati provides opportunities for lifetime learning and social interaction for the mature residents of Greater Cincinnati. Since the patient simulation scenario featured a 78 year-old patient, OLLI volunteers participated by interacting with the students to provide perspective and insight into personal health care experiences as well as dispel myths about senior adults. In preparation for the simulation, students from each program were divided into two groups. Each group completed the same simulation scenario, a patient who was experiencing chest pain. The students in each group had the opportunity to collaborate with students from other disciplines. As the scenario unfolded, faculty observed and assessed the skills and communication among the students from each discipline in order to lead the debriefing session.

The debriefing process enhances learning and heightens participant self-confidence. Debriefing also promotes understanding and supports transfer of knowledge, skills, and attitudes with a focus on best practices to promote safe, quality patient care. (Decker, Fey, Sideras, Caballero, Rockstraw, Boese et al., 2013). During these debriefing sessions, students were asked to reflect on the scenario, and to recognize how the behaviors, attitudes, and communication during the simulation could potentially relate to real life situations. The students were honest about their participation and feelings, and provided constructive feedback to fellow students. The role of the student in debriefing is expanded from the traditional passive role to one where the skills demanded of them are the ability to critically analyze their own performances retrospectively -- not just what went well but what went wrong and why it went that way -- and to contribute actively to the learning process (Fanning & Gaba, 2007).

Event Survey Results

Student responses to the IPE event were overwhelmingly positive. Student responses rated higher on all of the post-event survey questions as compared to the pre-event survey questions. According to the student pre-event survey results, 26.9% of students indicated teamwork was important to improve patient care. This percentage increased to 96% on the post- event survey. Students were also asked to identify the most important factor in patient safety. The pre-event survey indicated, the majority of students believed scope of practice responsibility was most

important to patient safety. On the post-event survey, students' most common answer to this question concerned communication between health care team members and patients. Student comments included:

- *“Great job!”*
- *“Do this more often.”*
- *“I think this practice activity ran very smoothly, and I gained a great deal of insight about my major.”*
- *“I like the idea of being thrown into the situation.”*
- *“I did not realize the importance of communication when handing off a patient to another health care worker.”*
- *“It was a wonderful learning experience!”*
- *“I felt like it was a wonderful learning experience for all of us and for the nursing students in particular.”*
- *“I woke this morning both excited and nervous. I wasn't sure what to expect, but I felt confident in what I've learned to do my best and do a good job.”*

Conclusion and Future Directions

Positive feedback from faculty, students, and staff reinforced the importance of IPE in undergraduate education at UC Blue Ash College. The IPE steering committee is currently developing the second annual IPE Event with the theme of Diversity.

In addition to developing an IPE simulation day for students, the committee chose to develop an elective College course to explore philosophical and theoretical foundations of various health professions, and to examine the increase in medical errors and sentinel events due to a lack of communication between health professionals. The class format will explore various IPE models from case studies, small group discussions, simulated lab experiences, and problem-solving sessions. This format will provide opportunities for students to develop an understanding of each profession's contributions as a member of the health care team. The faculty and college curriculum committee have approved the course.

The committee is also researching the creation of a student organization which would be closely involved in IPE at the college. The committee would participate in planning and implementing the IPE event and help to fund raise for the event, as well as promote UC Blue Ash College's health care programs.

It is vital for university and college faculty members in health care professions to become leaders in helping students transform the health care system so that all are prepared to offer responsible team based care on comprehensive curricula with deliberate, focused, collaborative clinical experiences. If we do not accomplish this goal, we will continue to perpetuate a fragmented health care system of professionals who do not respect each other's roles and who cannot provide the quality of care that patients require. We will continue to be frustrated with role inconsistencies. We will miss an important opportunity to take our places as true, equal members of a health care team that functions in a healthy system (Milstead, 2012). Interprofessional learning experiences will assist with the preparation of competent and collaborative future health care professionals and encourage team-based care of patients that will ultimately result in improved patient outcomes.

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The 2014 inaugural UC Blue Ash IPE Steering Committee comprised:

- Debra Frame, Behavioral Science, Psychology Dept.
- Carla Henderson, Chairperson, Nursing Dept.
- Loxie Kistler, Medical Assisting, Allied Health Dept.
- Brenda Maloney, Medical Assisting, Allied Health Dept.
- Heather Moore, Radiologic Technology, Allied Health Dept.
- Peter Obermark, Emergency Medical Services, Allied Health Dept.
- Tiffany Roman, Radiologic Technology, Allied Health Dept.
- Deborah Trotta, Simulation Coordinator, Nursing Dept.
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