



Interprofessional education and transitions of care: a simulated curriculum from preoperative to community care

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Abstract

Interprofessional education (IPE) provides an opportunity for healthcare professional learners to appreciate values and ethics, understand roles and responsibilities of other health professions, communicate with different groups, and work within teams. Poor exchange of information among care settings may lead to adverse events, high hospital readmission rates, and lower satisfaction of care. A transition of care IPE curriculum delivered throughout the semester was designed by interprofessional faculty members and delivered to eight health profession programs. Student learners participated in four events: preoperative care, acute care, home care, and one year later follow-up. Outcomes were measured from learners via two surveys. Faculty outcomes were collected via a one-hour focus group. Of the 80 learners from the eight health professions completing the curriculum, 67% responded to the survey. The majority of students strongly agreed that each of the curriculum events contributed to their learning of other professions. The event that received the highest satisfaction (84%) was the fourth or “wrap-up” event. Themes from student and faculty responses were consistently complementary to the program. Learners completing this curriculum focused on transitions of care agreed that the experience improved their knowledge of the aspects of the core competency domains from the Interprofessional Education Collaborative. The study appeared to demonstrate the importance of teamwork within and between care settings.

Keywords Interprofessional education · Student education · Transitions of care · Simulation

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Introduction

Health professionals must work collaboratively within the healthcare landscape to deliver safe and effective patient-centered care (Miller 2016). Interprofessional education (IPE) is defined as at least two health professions working together and learning from one another and, as such, has been suggested as a critical strategy for improving healthcare outcomes (WHO 2010; Aston et al. 2012). The four key areas are often focused on within IPE curricula include values and ethics; roles and responsibilities; interprofessional education; and teams and teamwork (IPEC 2016). Poor exchange of information among care settings (transitions of care) may lead to adverse events, high hospital readmission rates, and lower satisfaction of care (Man-sukhani et al. 2015).

The curricular design of IPE can be a demanding task with barriers to the successful implementation of IPE at multiple levels (Barnsteiner et al. 2007). A number of challenges include course scheduling; matching course content; faculty interest and expertise in IPE; a culture of valuing shared learning among faculty and students; and institutional policies for course credit (Mitchell et al. 2006; Buring et al. 2009). Conversely, a number of factors to support the successful integration of IPE programs include dedicated support and budgetary resources; balanced faculty workload; development of an IPE committee; dedicated time within the academic calendar; and sufficient physical space (Aston et al. 2012).

Simulation education can aid in collaborative learning since it requires individuals to incorporate knowing, being, and doing into action (Angelini 2011, Baker et al. 2008, Bolesta et al. 2014, Buelow et al. 2008, Naylor et al. 2008, Sykes et al. 2017, Vogler et al. 2017, Bland et al. 2020). Medical students, residents, and nursing students together found simulation-based learning for cardiac resuscitation provided them with experiences relevant to prepare them for the collaborative models of healthcare delivery (Baker et al. 2008). There are a number of examples in the literature of implementation of interprofessional education.

Bolesta and Chmil created an interprofessional laboratory experience for pharmacy and nursing students in a patient care scenario of acute exacerbation of heart failure utilizing a high-fidelity patient simulator (Bolesta et al. 2014). Student attitudes and readiness to participate in interprofessional education improved with the greatest benefit from the experience in their communication skills. The authors concluded that further evaluation of the impact of interprofessional education on student learning outcomes and changes in practice is warranted.

In a study by Buelow, the researchers developed a simulation-based workshop to educate over 200 allied health students with faculty about health professions through shared learning and collaboration (Buelow et al. 2008). The students participated in live, clinical case simulations of elderly clients who interacted with the students in interdisciplinary healthcare teams. The post-workshop questionnaires revealed challenges to implementation including a tendency for team members to focus on their own discipline, diagnoses, and recommendations without regard to the values and opinions of others. Faculty, however, reported improved awareness of and

collegiality with faculty from other disciplines consistent with the concept of inter-professional collaboration.

Naylor and Keating note that there are a wide range of services and environments involved across care settings and that poor exchange of information leads to adverse events, high re-hospitalization rates, and lower satisfaction of care (Naylor et al. 2008). In reviewing transitional care models, the authors found that quality care, specifically for chronically ill older adults, includes improving transitions from environments within hospital settings, to and from acute care hospitals, and increases access to transitional care services.

Sykes and colleagues designed an interprofessional course with mixed-modality simulations in hospital and community-simulated environments (Sykes et al. 2017). The authors noted that the integrated care models for care transitions for older people from hospital to home are important in educational training. Participants from healthcare and social settings engaged and felt the simulation was a successful strategy. The authors concluded that the interprofessional course developed integrated care skills and transitions for older people with complex needs moving from the hospital to the home setting for different professionals.

Vogler and colleagues noted that the transition from hospital to home is prone to clinical errors and adverse drug events (Vogler et al. 2017). They created an inter-professional education experience for medical and pharmacy students performing transitions of care. Both types of professional students noted higher levels of confidence following the experiences. Medical students showed some change from baseline in terms of attitudes towards interprofessional care and pharmacy students showed improved attitudes in several areas. The authors concluded that this study showed a potential area for future study and that the experience resulted in positive implications for an interprofessional approach in transitions of care.

Bland and co-authors believe interprofessional education is a necessary shared experience that allows several health professions to learn from (Bland et al. 2020). They designed a three-phase experience in which students from five health professions (medicine, nursing, occupational therapy, pharmacy, and physical therapy) completed online virtual cases followed by small and large group discussions, and then worked through a simulated patient discharge. Students completing the pilot agreed that the experience improved their awareness of their role in and barriers to successful transitions of care.

A review of literature finds that health professionals should develop an awareness of barriers that patients face in achieving optimal health outcomes during care transitions. However, the majority of studies on care transitions remain discipline specific. Healthcare simulation experiences serve as an alternative to real patient interactions. Scenario-based training allows learners the opportunity to learn skills such as teamwork, interpersonal communication, decision-making, and the ability to prioritize tasks under stress (Al-Elq 2010)]. To best train health professionals to function within a collaborative healthcare environment, with an emphasis on transitions of care, this study expands upon a previous IPE simulation curriculum (Panzarella et al. 2013).

In this study, the research team developed a semester-long interprofessional simulation curriculum for health professional student learners following two patients throughout the transition of care.

Materials and methods

This study followed a cross-sectional study design and received full approval from the D'Youville College Institutional Review Board. Interprofessional faculty participated in a retreat where they created two fictitious patients, "Martha Tamarack" and "Tom Holiday." The transitions of care curriculum consisted of four events (phases) which occurred over one semester and allowed the same team of health professional learners the opportunity to work with one another multiple times in a safe learning environment. The phases included preoperative, acute care, home care, and one year later post-surgical follow-up.

The curriculum was designed for achievement of the following interprofessional competencies proposed by the 2016 update of the Interprofessional Education Collaborative (IPEC 2016):

- Work with individuals of other professions to maintain a climate of mutual respect and shared values. (Values/Ethics for Interprofessional Practice)
- Use the knowledge of one's own role and those of other professions to appropriately assess and address the healthcare needs of patients and to promote and advance the health of populations. (Roles/Responsibilities)
- Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease. (Interprofessional Communication)
- Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable. (Teams and Teamwork)

During the study, ten interdisciplinary faculty were recruited to serve as leads (facilitators/debriefers) for learners from eight health professional programs (chiropractic, dietetics, nurse practitioner, nursing, occupational therapy, pharmacy, physical therapy, physician assistant). Learners with little or no previous clinical experience or within their first two years of their professional programs were included.

The first event occurred early in the semester with all faculty and student learners. Learners sat with their own discipline for an ice breaker exercise to address skills and attributes of their profession, practice settings of their profession, and types of patients they would most likely encounter. Learners were then organized by the faculty leads into interprofessional groups. Each interprofessional group consisted of approximately eight health profession learners. The interprofessional groups remained as a cohort for the remainder of the transitions of care curriculum and were led by the same one to two interprofessional faculty facilitators. For the last ice

breaker, the interprofessional groups discussed preferred practice settings, various health professions they would collaborate with during practice, and discussed misconceptions associated with their profession.

The second event, called the Round Robin, focused on collaboration between learners to gain respect and knowledge of another's profession. Two to three learners participated in an interdisciplinary preoperative patient interview with "Tom" and "Martha" portrayed by trained actors. "Tom" a 63-year-old male who is a Vietnam Veteran with Post Traumatic Stress Disorder and has chronic pain is scheduled for back surgery for spondylolisthesis with herniated discs and radiculopathy at L4-S1. "Martha" is a 75 -year-old retired nurse who is home-bound and sedentary. She has degenerative joint disease in her right hip for 8 years and has finally agreed to a total hip replacement (THR). When not involved in the interview, learners participated in a skills demonstration, to showcase and explain specific skills associated with their profession to their peers from another health discipline. A final debriefing with all learners occurs to discuss similarities and differences in history taking techniques among professionals. Table 1 outlines the activities in the Round Robin event of the curriculum.

The third event was a four-hour simulation session that utilized the SimMan® 3G manikin and actors, "Tom" and "Martha," in realistic clinical settings of the acute care/intensive care unit (ICU) hospital and home care. Continuum across the curriculum was ensured by building upon the complaint and historical information gathered from the Round Robin event. Four scenarios were designed with a focus on professional tasks, embedded challenges, and opportunities to collaborate as outlined in Table 2. In addition, actors portrayed family caregivers in several of the scenarios. Of the four scenarios, two scenarios involved "Martha" who was post-op day one THR on the medical/surgical floor (embedded challenge of patient demanding medication change) and post-op day five in her apartment for a home care visit (embedded challenge of environmental safety, mobility, and nutrition needs). The two scenarios for "Tom" included status post lumbar surgery post-op day two (embedded challenge of a medication error) and post-op day three (embedded challenge of alcohol withdrawal/detox) both within the ICU.

The fourth and final event of the semester was a 'wrap-up' in which all learners, faculty, as well as "Tom" and "Martha" (simulated patients actors) came together one year later following the patient surgeries. "Tom" and "Martha" described to all health profession students their life events that have transpired over the past year since their discharge. They shared perspectives related to their transitions to home and their challenges in the months following surgery. Both actors described the impact of their illness on their family members who were suffering from varying degrees of caregiver strain. Each of these patients required additional community support and resources that extended beyond the reach of the hospital and home care. Representatives from two community partners: Silver Sneakers and the Veteran's Affairs provided materials and a presentation about their ability to bridge the gap in care that often occurs beyond discharge. Learners had the opportunity to ask the simulated patients questions about their experiences and factors that contributed to their current status, realizing the impact each profession played in patient outcomes from the vantage point of the patient.

Table 1 Round robin event outline

Station Number	Station Outline (Time)	Activity
1	Patient Interview in interprofessional pair (15 min)	History taking preoperative interview of total hip replacement patient, "Martha Tamarack"
2	Patient Interview in interprofessional pair (15 min)	History taking preoperative interview of lumbar surgery patient, "Tom Holiday"
3	Patient chart review in interprofessional pair (15 min)	Review fictitious patient chart for "Martha Tamarack" and "Tom Holiday"
4	Skill demonstration in interprofessional pair (15 min)	<p>Perform the following skills on your interprofessional partner and discuss why it is important to your profession:</p> <p>Chiropractic:</p> <ol style="list-style-type: none"> 1.Measure cervical active-passive range of motion 2.Perform 3 orthopedic tests for cervical spine <p>Dietitian:</p> <ol style="list-style-type: none"> 1.Calculate height and weight 2.Conduct a 24-h diet recall <p>Nursing:</p> <ol style="list-style-type: none"> 1.Obtain Temperature, pulse, respiration, and blood pressure 2.Demonstrate IV bolus <p>Nurse Practitioner:</p> <ol style="list-style-type: none"> 1.Perform a Head, eyes, ears, nose, and throat exam 2.Perform a cardiac exam with vitals <p>Occupational Therapy:</p> <ol style="list-style-type: none"> 1.Perform a visual screen 2.Measure active-passive range of motion of the wrist or elbow (flexion & extension) and assess for spasticity in that same joint <p>Physical Therapy:</p> <ol style="list-style-type: none"> 1.Assess lower extremity muscle strength 2.Measure active-passive range of motion of bilateral knees <p>Physician Assistant:</p> <ol style="list-style-type: none"> 1.Perform head, eyes, ears, nose, and throat exam 2.Perform a cardiac exam with vitals <p>Pharmacy:</p> <p>Demonstrate counseling of the medication, hydrocodone/acetaminophen for "Martha Tamarack"</p> <p>Obtain a blood pressure</p>

Table 1 (continued)

Station Number	Station Outline (Time)	Activity
5	Debriefing All learners (30 min)	<p>Sample debriefing questions</p> <p>What went well? What could have gone better? How prepared did you feel to complete the skill set and patient interview? Concerns/issues that may arise with “Tom” and “Martha” post-surgery? Other health professionals that “Tom” and “Martha” may need to be referred to either before/after surgery and why?</p> <p>What skill did your student learner share and why is that skill(s) important to their profession? What skills among health professionals are similar/different?</p>

Students work in interprofessional pairs and rotate to different activities including interviewing the standardized patient, review of the fictitious patient chart, and a skills demonstration. The Round Robin event concluded with a debriefing session with all student learners

Outcomes were measured from learners via two surveys. After completing the four-hour simulation, learners completed a “one-minute simulation evaluation,” on paper where they identified core ideas that emerged, new information gained about other professions, and feedback for improvements to the experience. Learners were emailed an electronic curriculum survey following the conclusion of all events. The curriculum survey utilized 5-point Likert scale and open-ended questions to assess knowledge of other professions, perception of contribution to the education of others regarding individual professions, and ranking of the four events of the curriculum. Quantitative data from the surveys were analyzed utilizing descriptive statistics, and qualitative data were analyzed for themes aligning with the core competencies of IPE. Faculty outcomes were collected via a one-hour focus group facilitated by a non-participating health profession faculty and were analyzed for themes and reflections.

Results

The study included 80 learners from eight health professions. Ten interdisciplinary faculty leads participated in the focus group with a non-participating faculty member serving as the facilitator. All learners completed the One-Minute Simulation Evaluation at the conclusion of the third event. The curriculum survey garnered a 67% response rate. All ten faculty participated in the focus group (100%).

One-minute simulation evaluation

Core ideas emerged on the “one-minute simulation evaluation” regarding the experience and themes of respect, teamwork, and communication were described. Learners described enjoying the ability to collaborate, “appreciated the importance of other professions,” and that all of the represented professions were important in patient care. Learners consistently commented on other professions’ unique skill sets. “Everyone has something they are more skilled/trained in [and] there is always room to learn from other professions” was noted by one, while others said they were able to “listen to others to gain information,” and that the sessions allowed “the ability to see what others do and respect what they do.”

Communication between the professions was identified as key to patient care. Learners recognized the importance of teamwork between disciplines, the notion that they are never alone, that disciplines perform better when they work together, and to never be afraid to get help were described. While working together, each of the eight health professions identified learning about similarities between occupational and physical therapists, the significance of dietitians in patient care, and the importance of nurse practitioners and physician assistants during critical situations.

Learners from all participating professions identified the benefit of having real-life simulation environments, with one reporting “books can’t teach you real life experiences.” Learners mentioned the need to act quickly and stay focused, while commenting that it was a safe place to make and learn from mistakes. Having a

Table 2 Simulation event outline

Simulation scenario	Scenario description	Participating learners	Embedded challenge
Scene 1: "Martha" acute care	"Martha" (SimMan® 3G manikin) post-op day one total hip replacement; daughter (actor) present in patient room	Chiropractic Nurse Practitioner Nursing Occupational Therapy Pharmacy	Patient-centered care (changing medication therapy based on patient request)
Scene 2: "Martha" home care	"Martha" (actor) at home following discharge from hospital post-op day 3 following total hip replacement	Nursing Occupational Therapy Physical Therapy Physicians Assistant	Patient safety (home safety assessment)
Scene 3: "Tom" post-op day one in intensive care unit	"Tom" (SimMan® 3G manikin) post-op day one following an Anterior Lumbar Interbody Fusion/Posterior Lumbar Interbody Fusion (ALIF/PLIF); wife (actor) present in patient room	Chiropractic Nursing Pharmacy Physical Therapy Physicians Assistant	Medication error (patient receiving two of the same blood pressure medications)
Scene 4: "Tom" post-op day two in intensive care unit	"Tom" (SimMan® 3G manikin) post-op day two following ALIF/PLIF; wife (actor) present in patient room	Nursing Nurse Practitioner Pharmacy	Acute event (patient requiring acute treatment for alcohol withdrawal)

During each of the four scenes, specific student learners are assigned to participate in the scene while the remaining student learners watch a live video feed of the scene. Each scene also had an embedded challenge that the learners worked to address with the patient and healthcare team. Following each scene, a debrief would occur with all student learners

variety of patient care settings was beneficial as a student learner noted “I loved that this included a variety of health settings, and not just acute care.” Learners commented on the benefit of learning in a variety of patient care settings. They described how different the home care setting was as compared to acute care; others enjoyed the differences between the preoperative and postoperative settings.

Curriculum survey

The results of the curriculum survey are reported in Table 3 and separated by the four events of the curriculum. Respondents included representatives from all eight health professions. The majority of learners strongly agreed that each of the curriculum events contributed to their learning of other professions and that they were able to share about their profession. Learners reported that the Round Robin, manikin, and actor simulation contributed most to their learning. The interview with simulated patients provided the best opportunity for interprofessional education viewed by over 1/3 of the learners as a realistic portrayal. The activity that received the highest satisfaction (84%) occurred in the wrap-up event where a current student Veteran explained their life challenges that paralleled those of “Tom.” Review of the patient’s chart in and the community services of Silver Sneakers for the patient “Martha” received the lowest ratings (55% in strong agreement).

Open-ended questions at the end of the survey found that learners’ responses highly favored the simulation event, with the Round Robin event the second most popular and lastly the ‘wrap-up’ event. Comments that supported the simulation as the most valuable included “simulation provided learning about how each profession overlaps yet still has a distinct skill set when dealing with the patient, interesting to see how different disciplines have the same patient goals in mind but have different ways of handling the interventions to get there.” The Round Robin event was the second most beneficial event and learners shared comments such as, “I had never interviewed a patient before so it was helpful to be partnered with someone from another profession so we could bounce ideas or questions off each other.” Event four, the ‘wrap up’ session, while receiving the highest rating for its presentation from the Veterans Affairs Office, was viewed as the third beneficial event of learning. Learners shared, “the wrap up was the most beneficial, in (real) clinical care we only see patients once, maybe twice, it’s nice to see what happened one year later.” The introduction to the curriculum was noted as being the least beneficial to the learners. Several noted that they simply “did not learn as much as the other events,” as it was more of a “meet and greet” and “getting into groups.” Several themes emerged from the comments regarding the learners’ lack of confidence due to the lack of clinical experience and exposure. Students noted limited knowledge about their own profession as a barrier, and being unsure of how to approach situations that had not yet been covered in their program curriculum.

Faculty focus group

The results of the faculty focus group bifurcated into two main lines of conversation; the first related to the ways in which the curriculum met the learning objectives and

the second on improvements to programming with an emphasis on future planning. Themes emerged around roles and responsibilities, communication, teamwork, and the continuum of care (see Fig. 1 for themes).

Faculty leads agreed that the rewards of the program are evident in the positive responses from the student learners. In addition, collaborative behavior and teamwork were demonstrated by participants as they were forced to think collectively throughout the curriculum. Faculty reflected they were bouncing ideas off of one another, listening to what the other person had to say and then adding additional questions, finding out about the patient together as opposed to separate in their own discipline.

As facilitators throughout the curriculum, faculty observed learners demonstrating their roles and responsibilities to each other throughout the curriculum. Faculty reported on numerous occasions, learners demonstrating teamwork. Communication between healthcare learners and patients/caregiver(s) were observed within the scenarios, however, faculty did not discuss this as often. Evidence of the value of following the transition of care was also identified by the faculty.

Ideas for future improvement include; ways to address the overwhelmed or emotional student, changes to the cohort of learners, changes to the simulation scenario cases, and additional training for faculty leads. Following a patient through the continuum of care and having an opportunity to interview the patient beforehand made the subsequent scenarios “richer” in the opinion of the faculty focus group. Faculty reported a number of ideas for future directions including, actor-led student debriefing, marketing of the IPE program, and gaining access to additional simulation space.

Discussion

This semester-long simulation-based curriculum focused upon interprofessional collaboration during transitions of care and allowed health profession student learners to witness their patient in practice settings before or long after they have direct contact with them. The IPE curriculum resulted in the participants becoming more effective team members with appreciation for the roles and responsibilities of various members of the healthcare team while focusing on patient-centered care. The group debriefing at the end of the Round Robin highlighted the similarities in history taking techniques and questions that are common in the health professions. This activity promoted team efforts to extricate information from the patient in a collaborative learning environment as was evidenced by student responses during the survey and “one-minute simulation evaluation.”

As further evidence of the benefits and core themes, the faculty focus group discussion highlighted that the program met the objectives of the curriculum through student demonstrations and discussion of roles and responsibilities of each health professional such as through skills demonstration in the Round Robin event. Additionally, interprofessional interactions with the simulated patient encouraged communication, teamwork, and patient-centered care among the health professional

Table 3 Curricular survey results

	Strongly Agree n (%)	Agree n (%)	Disagree n (%)	Strongly Disagree n (%)
PHASE 1: Introduction				
I learned something new about a health profession other than my own	38 (60.32%)	23 (36.51%)	0 (0%)	2 (3.17%)
I contributed to the education of another learner by sharing something about my profession	38 (60.32%)	22 (34.92%)	2 (3.17%)	1 (1.59%)
PHASE 2: Round Robin				
I learned something new about a health profession other than my own	44 (69.84%)	16 (25.40%)	2 (3.17%)	1 (1.59%)
I contributed to the education of another learner by sharing something about my profession	42 (66.67%)	16 (25.40%)	3 (4.76%)	2 (3.17%)
Taking the patient's history with another healthcare professional was a valuable learning experience	42 (66.67%)	17 (26.98%)	3 (4.76%)	1 (1.59%)
Taking the history with a trained actors as patients portrayed real-life situations (was realistic)	48 (76.19%)	11 (17.46%)	2 (3.17%)	2 (3.17%)
Review of the patient's chart was helpful to my interprofessional learning	35 (55.56%)	20 (31.75%)	6 (9.52%)	2 (3.17%)
The skills assessment activity was an effective way to educate another learner about my profession	36 (57.14%)	22 (34.92%)	5 (7.94%)	0 (0%)
Explaining my skill set to another learner reinforced my understanding of my own contribution to the healthcare team	43 (68.25%)	17 (26.98%)	2 (3.17%)	1 (1.59%)
The debriefing with the entire group (after all activities were completed) was helpful to my learning and understanding of teamwork	40 (63.49%)	21 (33.33%)	1 (1.59%)	1 (1.59%)
PHASE 3: Simulation				
I learned something new about a health profession other than my own	44 (69.84%)	17 (26.98%)	1 (1.59%)	1 (1.59%)
I contributed to the education of another learner by sharing something about my profession	44 (69.84%)	16 (25.40%)	1 (1.59%)	2 (3.17%)
PHASE 4: One Year Later (Wrap Up)				
The final phase of meeting the patients one year after their surgery contributed to my interprofessional learning	34 (53.97%)	23 (36.51%)	5 (7.94%)	1 (1.59%)
I found the presentation for the Veteran's Affairs Office about services for Veterans, like Tom, to be helpful to my learning	53 (84.13%)	8 (12.70%)	0 (0%)	2 (3.17%)
I found the information about community services for patients like Martha to be helpful to my learning	35 (55.56%)	25 (39.68%)	1 (1.59%)	2 (3.17%)

Outlines the curricular survey results of the interprofessional learner responses completed after the four curricular events

student learners. Faculty also identified new information and understanding of other health professional roles and responsibilities, similar to student learners.

When considering opportunities for improvement of the curriculum, the first event could be replaced by a meeting that included each faculty lead meeting with their assigned interprofessional group as opposed to the event with all student learners and faculty leads. Additionally, although the target cohort for the pilot program was preclinical students, several learners indicated that they had some clinical experience and were distracted during the events by students who had no clinical experience. While most students who commented gave recommendations for improving the study for future participants, several students used this open space to thank the faculty for the experience. On the summary survey enthusiasm of one such learner was immediately conveyed through the comment:

“I am so fortunate to have been a part of this study and I learned so much about other professions I never knew about before. It definitely opened my eyes up to the other valuable healthcare professions and when they may be helpful to step

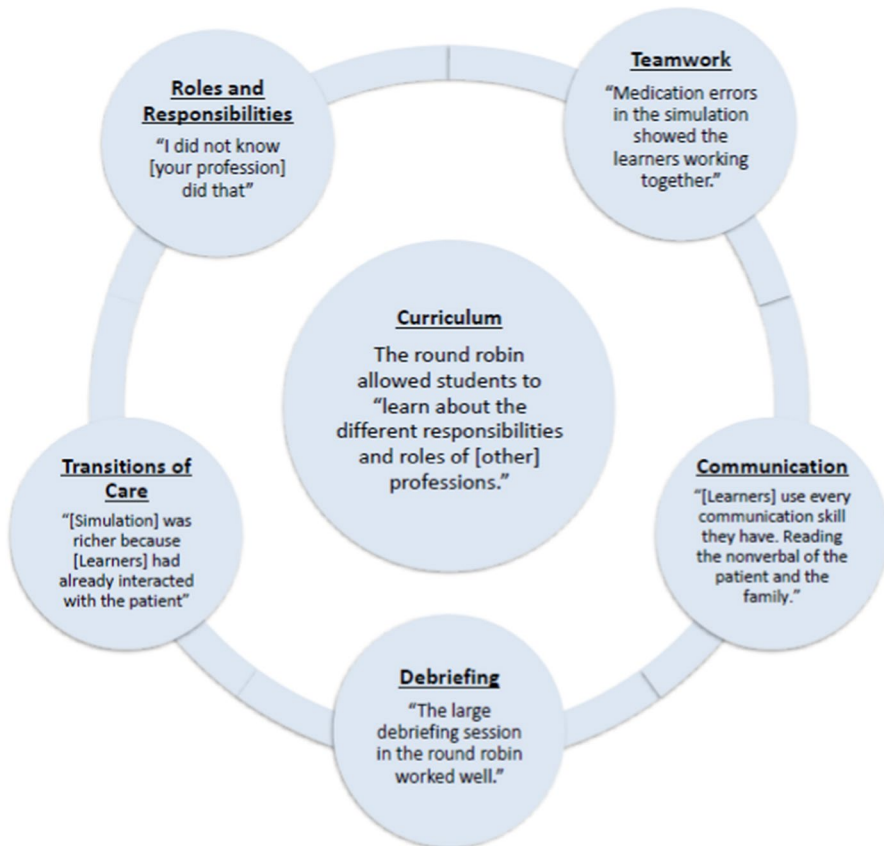


Fig. 1 Themes of Interprofessional Curriculum. Common themes identified by the faculty during the faculty focus group debriefing session

in a situation I am not sure how to handle. I would definitely recommend doing this to other students!”

Such words reinforce the goals of interprofessional education and the need for continuing such valuable and interactive methods of learning for health profession students. Although the cross-sectional study design employed allowed the authors to study the relationship between the intervention and outcomes, there are limitations that exist to this study design. Most notably, recall bias was present as the surveys were dispersed at the end of the curriculum. To address this moving forward, administering the survey immediately following each session would improve recall per each session. An inherent limitation to the study design includes inability to demonstrate causality. Limitations that are specific to the curriculum delivery include that the students volunteered to participate and enrolled students were also not from the same level between interprofessional programs and therefore had varying levels of clinical experience. The curriculum survey also did not directly assess outcomes related to transitions of care. Future iterations of the course could include these additional survey items.

As this curriculum continues to evolve, further data collection in the area of interprofessional collaboration can be analyzed through in situ IPE simulation-based activities during transitions of care and follow-up to home care. Although IPE is valued around the world as an important part of learning in the health professions, the impact of IPE on patient, population, and health system outcomes needs to be determined (Committee 2015). The Institute of Medicine brief report highlighted the need to align the education and healthcare delivery systems and to effectively link IPE with changes in collaborative practice, bridging education to practice will help to assess the impact on delivery systems.

Conclusion

Learners completing this curriculum focused on transitions of care agreed that the experience improved their knowledge of the aspects of the core competency domains from the Interprofessional Education Collaborative. The study appeared to demonstrate the importance of teamwork within and between care settings.

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Data availability The datasets generated during and/or analyzed during the study are available from the corresponding author on reasonable request.

Code availability Not applicable.

Declarations

Conflict of interest There are no conflicts of interest to disclose associated with this publication.

Ethical approval This study received full approval from the D'Youville College Institutional Review Board.

Informed consent Informed consent was obtained from all individual participants included in the study.

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