Using Actors as Simulated Patients for Interprofessional Education

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Abstract

Interprofessional education (IPE) in health profession training is recognized as a key to improving patient care in practice settings. Though recognized as extremely important, implementation of IPE remains a challenge for many health profession programs. Despite challenges, the seven health profession (HP) programs at D'Youville College initiated IPE using healthcare simulation with professional actors serving as simulated patients. Faculty from chiropractic, dietetics, nursing, occupational therapy, pharmacy, physical therapy and physician assistant programs collaborated in this year-long implementation process. This manuscript provides a description of the planning, delivery and assessment of this innovative interprofessional simulation and the creation of the campus *Interprofessional Clinical Advancement Center*. Students reported enhanced understanding and respect of professional roles and responsibilities and ability to communicate effectively. Faculty reported an ability to encourage interaction and collaboration among HP students. Suggestions for curricular improvements and program sustainability included professional development and compensation. This manuscript should assist other health professional programs seeking guidance to implement and evaluate interprofessional education in academic institutions.

Introduction

Health profession students must be prepared to work collaboratively to achieve patient-centered care that is safe and effective.¹ Research has shown that interprofessional collaboration in practice improves patient care and outcomes, reduces medical errors, and enhances job satisfaction and retention.² The goal of providing interprofessional education (IPE) in health profession (HP) training is to prepare different HP students to work together cohesively and collaboratively. The World Health Organization and Institute of Medicine recommend interprofessional training and education as necessary to prepare future health care workers.^{1,3}

IPE can be facilitated when learners from different health professions work collaboratively in a simulated clinical experience.⁴ Simulation of reallife clinical events can provide students with an

Corresponding author: Karen J. Panzarella, PT, PhD, CHSE Physical Therapy Department, D'Youville College, 320 Porter Ave, Buffalo, NY 14201 USA; Tel: +1-716-829-7835; Email: panzarek@dyc.edu opportunity to actively learn and provide exposure to uncommon problems that cannot be guaranteed in fieldwork experiences.⁴ Simulation has been effectively used in medical and nursing education as a valuable teaching and assessment tool to prepare students for clinical practice.⁵ In nursing education, simulation has been shown to be equally as effective as clinical practice.⁷

Simulation must be incorporated into curricula in a thoughtful manner meeting students' needs while preserving patient safety and reducing risks for students.^{6,7} Students can be challenged during simulation without repercussions or consequences if their actions are either incorrect, or not implemented in a timely manner.⁷ Mistakes, in fact, may be used as a teaching tool.⁷

Simulation can provide an opportunity for HP students to practice working together, communicate effectively, and explore professional roles and responsibilities.⁸

There are a variety of simulation activities that can be utilized for IPE, such as high fidelity manikins, standardized patients, simulated patients, roleplaying exercises with peers, and skills-based evaluations.⁸ High-fidelity manikins are most useful for active learning involving medical procedures that cannot be safely replicated with an actual person. Standardized patients are lay people trained to represent a given diagnosis or a problem in a standardized way with no variation from student to student.9 Standardized patient clinical encounters are based on student outcome expectation and are used most often for student assessment of curriculum content to prepare them for licensing examinations.¹⁰ Simulated patients can be lay or professional actors who are trained to depict a patient case which allows for improvisation in response to the learners while still driving specific learning objectives.10

Materials/Methods

In February 2012, D'Youville College formed an Interprofessional Education Collaborative (IPEC) steering committee to respond to accreditation requirements and to promote teaching in a collaborative and innovative setting. Two faculty representatives from each of the seven HP programs (chiropractic, dietetics, nursing, occupational therapy, pharmacy, physical therapy, and physician assistant) were recruited by deans or chairs to participate on the committee. The steering committee met four times during the spring semester to prepare a five member interdisciplinary team to attend the 2012 Interprofessional Education Collaborative Institute, per the institute requirements. During the three-day conference, the five member team established the plan to initiate IPE on campus, realizing this first effort must be robust to capture faculty and student support. Conference leaders indicated that decisions about curriculum and instructional methods that cross disciplines or programs can be sensitive topics. Therefore, it was important that desired learning outcomes of HP students were addressed and by HP faculty. The development of this interprofessional curriculum was guided by Stephen Covey's Seven Habits of Highly Effective People where one begins with the end in mind.11 The five-member team asked the question, "how do we want our health professional students to practice within a healthcare team when they leave our academic institution"? Based upon faculty expertise, workshops presented at the institute, and the desire to have HP students "actively" learning together it was decided to utilize simulation as a primary teaching method to implement IPE. Since our student learning objectives targeted interprofessional communication and collaboration rather than specific skills-based assessment, the team decided to use simulated patients for the clinical scenarios to allow more flexibility in actual role-play.

The anticipated year-long production required several overlapping activities in order to 1) create the IPE curriculum; 2) build the simulation learning environment: Interprofessional Clinical Advancement Center (ICAC); 3) recruit and train faculty to serve as facilitators/debriefers; 4) recruit and train simulated patients; 5) develop outcome measurement tools for program evaluation and assessment of student learning: and 6) plan and deliver the curriculum to 285 HP students in spring semester 2013 (Figure 1).

Creating the IPE Curriculum

At the May 2012 IPEC Institute, the five member team began to create the fictitious patient, "Chris Dulles." In an effort to give students a holistic view of the variety of HP disciplines that may interact with a person, the team chose to have the cases reflect a year in one patient's life. The five member team reported back to the 14 member IPEC and subcommittees were formed to seek funding, create scenarios, define further needs and plan for program implementation for spring 2013. The steering committee chose four student learning objectives identified as Core Competencies for Interprofessional Collaborative Practice.¹ One learning objective was identified from each of the four areas: values/ethics, roles/responsibilities, interprofessional communication and specific team and teamwork competencies (VE4, RR1, CC2, TT3).

In July 2012, a two-day faculty retreat was held at a local resort with nine interdisciplinary faculty members for the purpose of case development and preparing a course of action for further faculty recruitment for facilitating and debriefing scenarios. Four cases were designed and interconnected, creating opportunities for student learners from each discipline to collaborate in patient care. The cases were designed to challenge students to organize and communicate information with patients, families, and healthcare team members in an understandable manner, provide opportunities understanding professional roles for and responsibilities, engage in shared patient-centered problem solving and to reach the overarching goal of graduating health professionals that are competent in practice (Table 1, see Appendix).

Development of the Interprofessional Clinical Advancement Center (ICAC)

Grant funding was secured through the Community Foundation for Greater Buffalo, Perry Memorial Fund for equipment, simulation software, space renovations, and program initiation to develop the center. The goal was to create learning modules where up to 14 students (two from each HP program) could alternate as small teams to enter a treatment space and provide care to a patient. The remaining learners would be able to observe the scenario via live feed in a small classroom. After each scenario, all students would debrief with two faculty debriefer/facilitators.

Existing teaching space on campus was already configured with a large teaching classroom with seven individual treatment rooms around the periphery. Grant funding allowed for creation of two rooms to serve as treatment settings: an acute care hospital room and an outpatient treatment room. Dimensions for the treatment rooms and the media requirements (cameras and software) were preinvestigated by interviewing the developers of a manikin simulation room. Cameras were installed and connected to the classroom media system for display and recording in the classroom. Various medical equipment and props were purchased to create realistic practice settings for the simulations.

Recruiting and training faculty as facilitators/debriefers

The IPEC steering committee estimated that a minimum of 30 sessions would be needed in order to accommodate 285 students in at least one 4-hour simulation experience therefore recruitment of additional faculty members to serve as facilitators/debriefers was necessary.

At the opening college assembly in August 2012, IPEC presented the concept to recruit additional faculty for simulation. A paper survey was distributed to faculty in attendance to determine willingness to become involved in IPE and attend a training session. The presentation recruited additional faculty from a variety of programs.

A daylong workshop was held in November of 2012 which focused on facilitating and debriefing simulation scenarios. The workshop was attended by 36 faculty members and was presented by professionals from a successful university simulation center.

In order to ensure faculty members were prepared for the launch of the ICAC, one month prior to the spring 2013 semester, facilitator/debriefers were invited to several pilot training sessions involving the trained simulated patients.

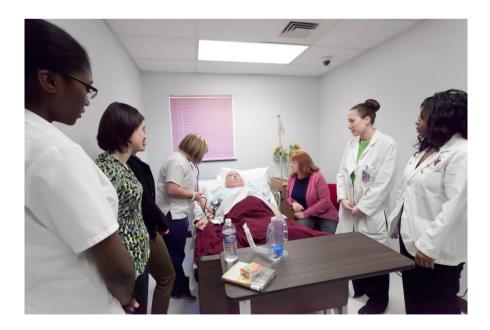


Figure 1: Simulation



Figure 2: Debriefing

Recruiting and Training Simulated Patients

The simulated patients were professional actors recruited by the director of the Kavinoky Theatre which is located on the D'Youville College campus. Four actors (2 male, 2 female) were trained as the simulated patients. The simulated patient, Chris Dulles, could be played by a male or female with a spouse/partner who could be of the opposite or same gender. The actor and actress group reviewed and rehearsed the embedded patient and caregiver behaviors and expected student responses. Each case scenario was portraved similarly within the learning objectives, however was not held to a stringent script. This strategy allowed the actors to respond to the behaviors and cues they received from the student learners as the scenario unfolded in real time.

Delivering the IPE Curriculum: Chris Dulles: A year in the life

Following receipt of approval for the project from the Institutional Review Board (IRB) at D'Youville College, a total of 285 students from seven HP programs participated in one of 30 four-hour simulation sessions. Each session had 9 to 15 student-learners, led by 2 to 3 faculty debriefers and lasted four hours.

Each session began with a student orientation followed by four scenarios. For each scenario, students were chosen to be active in the patient interaction. Two to five student learners would enter the patient room when prompted while the remaining students observed the interaction on a live-feed monitor outside the simulation room. The four scenarios allowed for at least one active involvement from every student present. Following the active scenario all students participated in the debriefing. Each scenario ran approximately 10-17 minutes and each debriefing approximately 30-45 minutes. The simulation experience closed with written student feedback and open-ended dialogue for program improvement. A total of 31 faculty members from the seven HP programs participated in facilitating/debriefing between one and five sessions.

Debriefing

Debriefing is a teaching strategy which fosters reflective learning and is recognized as a crucial component to clarify lessons from simulations.¹²⁻¹⁴ A safe and supportive atmosphere where students feel "valued, respected and free to learn in a dignified environment" must be provided by the facilitator of the debriefing.¹⁵

During the debriefing facilitators purposefully positioned students near students from a different HP program around a horseshoe shaped table (figure 2). Approximately double to triple the time of the scenario was given for each debriefing to allow for students and viewers time to comment and reflect. During the debriefing process, faculty facilitators and learners examined the simulation experiences which assisted students in developing skills in reflection, self-assessment and clinical reasoning.¹² Facilitators asked questions such as: "What do you think went well? What would you change or do differently? How did you feel interacting with the patient ... with the family member? What was most difficult for you? What did you learn?"

Students were encouraged to share what they believed went well, what was difficult for them, and what they would change in a similar situation. After the final scenario, the actors met with the learners to provide their perspective and answer questions.

Outcomes Assessment: Program Evaluation and Student Learning

Program evaluation involved seeking feedback from student learners and faculty facilitator/debriefers. A brief, open-ended survey, called the one-minute evaluation was completed by the student learners immediately following the simulation experience. Students were asked to identify up to three core ideas that emerged from the sessions. They were also asked to identify questions that surfaced during the simulation experience and whether their questions were answered during the four-hour experience. In addition, student feedback was performance. sought faculty on Faculty facilitator/debriefers received this written feedback within a few days following the session. This feedback was coded and analyzed using a qualitative approach of grounded theory.

Faculty feedback was collected via a forty-four question online survey using Qualtrix survey software at the conclusion of the spring semester of survey simulation offerings. The included demographics of the faculty facilitators, Likert scale questions for levels of agreement and/or understanding and open-ended questions. Quantitative data was analyzed with descriptive statistics. Qualitative analysis using grounded theory explored faculty perceptions of student learning, preparedness for facilitating and debriefing, understanding and learning with respect health professional's roles to each and responsibilities, and challenges or anticipated future needs for program sustainability.

Results

Evaluation of student learning on three of the four IPEC learning objectives and overall program evaluation is reported based upon the one-minute evaluation. The fourth objective, engagement of other health professionals appropriate to the specific care situation in shared, patient-centered problem solving, is not captured in the one-minute evaluation and will be assessed in the future from recorded videotapes of student performance during the scenarios. Evaluation of faculty involvement in this project related to all four IPEC objectives is reported from the online Faculty Survey.

One-minute Evaluation

Immediately following the 4-hour simulation experience, the one- minute evaluation was completed by 274 out of 285 students. Consistent themes were identified for each category during the coding process and discussed to establish inter-rater reliability. The themes were related to three of the original learning objectives.

Objective #1(VE4): Respect the unique cultures, values, roles/responsibilities, and expertise of other health professions.

When students were asked to provide two or three core ideas in order of importance, themes that emerged related to this outcome were: the roles of other health care professionals; respect for other professionals; health care and teamwork/collaboration with other health care professionals to optimize patient care. With respect to the first theme, students consistently reported that they were better able to "understand the roles of other occupations" and "rely on and understand each other better". Several students listed specific examples: learning the "difference between PT [physical therapy] and chiro [chiropractic]", "PA's [physician assistant's] role" and "how dietetics works".

Many of the student participants also emphasized the second theme, "respect for other professionals and what they do", when providing their feedback. In addition to this direct statement, indirect statements such as "different professions are valuable", "professions should recognize and promote the usefulness of other professions", "confidence in other professionals", and "have trust in others doing their job".

The words "collaboration" and "teamwork" appeared repeatedly throughout the student feedback. "Collaboration with other health professions". importance "the of health collaboration when improving health outcomes", "understanding [my] role on the team", and "all disciplines must work well together and know roles" were statements made by students following the interprofessional simulation experience.

Objective #2 (RR1): Communicate one's roles and responsibilities clearly to patients, families, and other professionals.

Core ideas that emerged in students' comments related to this theme included, "understanding the roles of all professionals on the team" and "each profession's responsibility" and "seeing first-hand what other professions do."

Through understanding of "what other professions do", students were able to gain a more holistic view of the health care process, as evidenced by additional comments such as the importance of "knowing my place on the team" and recognizing "all disciplines must work together and know their roles". Students' recognized patient care was enhanced by "taking advantage of other professions specialties" and "understanding what each profession does [for referrals]".

Objective #3 (CC2): Organize and communicate information with patients, families, and healthcare team members in a form that is understandable, avoiding discipline-specific terminology when possible.

Several students commented on a core idea to "provide information at a level of understanding that is specific to the patient" and the need to "lose the medical jargon" to aid patient understanding. The importance of actively "listening", "extending courtesy and respect to the patient", and the need to "provide information at a level of understanding that is specific to the patient" was also reported by students. In addition, there were a number of student responses noting the need to "understand the patient".

During the scenario modules, the actors and actresses playing the role of the spouse or partner realistically displayed behaviors that students interpreted as "overbearing". Several students recognized the need to have the "family involved", but wanted to be sure to incorporate the "patient first, then family members" along with the need to "acknowledge family members, but make sure you are speaking directly to the patient as well".

The majority of students commented that the simulation experiences were positive and "very realistic". Several commented that the actors portraying the patient and caregiver were "amazing", and "the key to the students getting a lot out of the experience."

Results of Faculty Survey

The faculty online survey was completed by 23 of the 31 faculty participants (74%). Eighty-three percent of the faculty who participated in the survey stated their motivation to participate was due to their commitment to IPE. Sixty-three percent of the faculty hoped to learn new skills that they can apply to their teaching. Prior to facilitating the simulation over one-half of the faculty stated they had not utilized simulation scenarios involving manikins or actors, facilitated a simulation experience, or developed interprofessional simulation and/or simulation scenarios for their courses.

Faculty reported that as facilitators they were able to encourage interaction and collaboration among the health professions, listen actively, remain professionally neutral during the debriefing sessions and provide encouragement and support.

Faculty ranked their understanding of the roles and responsibilities of the seven professions following their experience with the simulation. The results identified that the understanding of roles of the various professions ranged from 3.17 to 3.71 on a 1-4 understanding, scale (1=no 2=limited understanding, 3=some understanding, 4=extensive understanding), indicating that most faculty have "some understanding" to "extensive understanding" of each profession following their simulation experience. Faculty indicated that their strongest understanding was of the nursing (3.71) and physical therapy (3.58) professions. The area that faculty could benefit from an improved understanding of roles was chiropractic (3.17) followed by dietetics (3.25). Comments from the faculty included needing "further exposure to chiropractic students/faculty", "would be helpful to shadow a chiropractor to see what takes place in the clinical setting" and an "overview of the curriculum". Additionally, the majority of the faculty commented that their understanding of the roles/responsibilities of the programs/professions positively changed based on their experience. Some comments included, "the experience enhanced my understanding" and "seeing students working together made me more aware of how each fit into the health care model".

Faculty were surveyed regarding their perceptions of the achievement of the four intended student learning objectives from the national IPEC Expert Panel (IPEC, 2011). There was strong consensus amongst the faculty regarding students' mastery of the objective concerning respect of the unique cultures, values, roles/ responsibilities, and expertise of other health professions with a mean reported observational score of 3.26 out of 4. The faculty observed similar levels of student mastery involving communication of one's roles and responsibilities, at 3.13 out of 4. Faculty reported that student learning in the areas of the ability to organize and communicate information with patients and family avoiding discipline specific terminology and engaging other health professionals in patient centered problem solving was the weakest at 2.83 and 2.78 out of 4 respectively.

There is substantive consensus measured by a majority of the comments being positive regarding the program and improving interprofessional awareness for all participants including faculty and students. Suggestions for enhanced learning included "development of a curriculum that builds progressively toward masterv of some interprofessional outcomes with defensible measures that insure that our students master the skills and knowledge needed to participate in interprofessional practice".

The majority of faculty (68% of respondents) noted "time" as a barrier. Other common challenges faculty were related reported bv to: facilitation/debriefing (>1/3 of respondents noted this as a challenging task/skill), and knowledge of roles/responsibilities (scope of practice) of other health care professionals (19% named this as a challenge). Other less frequent responses noted technology, lack of monetary compensation, and set- up of materials for the simulation sessions as challenges encountered.

Faculty identified areas of "future need" which included: training/expertise in six related parts of simulation including (but not limited to): designing, developing, using, facilitating, and evaluating student performance related to simulation. Comments demonstrated strong faculty support of interprofessional simulations as an effective method to enhance health care provider communication and collaboration i.e. "Care cannot be truly collaborative until understanding of the other professions occurs" and "...students, actors and faculty all had positive feedback". Faculty identified four kev recommendations on how to sustain enthusiasm and interest in simulation among the faculty: 1) Faculty Compensation; 2) Scholarship/ Marketing; 3) Faculty Professional Development: and 4) Program/Curriculum enhancements.

Discussion

The feedback from the one-minute evaluation indicated that the simulation experience was worthwhile and successful with respect to objective #1 (VE4). Students indicated an enhanced understanding of professional roles and responsibilities and areas of expertise. The comments provided evidence that the students gained respect for other professions during the experience.

In their individual educational programs, students are immersed in their profession, but have not practiced clearly articulating their roles and responsibilities to others in a clinical environment. To meet objective #2, the simulation experience required students to be able to articulate their role and responsibilities as a member of the health care team. The feedback from the one-minute evaluation indicated students gained a better understanding of professional scope of practice and determined the best course of action for the patient. This occurred by students clearly defining and demonstrating their role on the team to the patient and spouse. The students developed an understanding of the roles of other health care professionals by "seeing first-hand what other professions do." The comments indicated students were emerging from the mindset of their individual scopes of practice and beginning to think more globally.

Students recognized the importance of effective communication with the patient. Students suggested that the caregivers were often challenging and dominated conversations intended to involve only the providers and patient. The simulations provided an opportunity for students to practice and discuss how to communicate with a difficult family member, attempting to manage the situation with "confidence" and by "staying calm", while providing care that is "patient-centered".

The faculty survey assessed faculty motivation for participation, individual understanding of roles and responsibilities of each health discipline and a selfassessment as a facilitator in the simulation. Faculty members also evaluated how well students mastered the intended learning objectives. Challenges encountered by faculty during the simulation were discussed with future needs identified to sustain enthusiasm and interest in simulation.

Overall the participation from faculty in the simulated scenarios enhanced their knowledge and experience with other professions. Although the faculty experience in simulation was limited, most of the faculty that participated had experience in working with or teaching health professionals outside of their discipline.

Many faculty reported feeling overloaded with full teaching schedules, extra time needed to get to the off campus simulation site, and lack of time in their schedules to adequately prepare for the simulation session.

Faculty desire more professional development in the area of simulation education. Faculty expressed feelings of being anxious about facilitation due to having too many complex steps to follow and challenges when students were giving wrong clinical information, not engaging, and/or dominating the discussion. Many faculty requested more facilitator training sessions to enhance their comfort level with debriefing and technology requirements. Areas where faculty skills could be improved include: using language to motivate, encourage, and support interprofessional dialogue and to foster the knowledge and skills necessary for successful interprofessional team work, such as mutual respect and flexibility.

Faculty compensation was the topic most frequently cited in the comments in order to sustain enthusiasm and interest. Suggestions for faculty compensation ranged from decreased teaching load or release time to paid credit hours or a flat fee/stipend for all facilitators. Respondents clearly felt that faculty compensation for facilitation and scholarly activity was necessary for longevity of the IPE program.

Faculty consensus was to integrate the IPE simulations into the clinical curricula of all of the HP programs and to make student participation a mandatory requirement, versus an optional experience, in order to emphasize the importance of collaboration and reduce non-attendance. Faculty suggested that dedicated time to develop a variety of scenarios, in a wide range of settings, is another method to maintain enthusiasm and interest. Other suggestions were to move the simulation center to the main campus and provide a full time program coordinator, administrative assistant, a technology position, and increase the number of facilitators to spread the work load and provide consistent expert resources.

Conclusion

Collaboration amongst the seven HP programs was imperative for success of IPE implementation. Securing funds via grant writing and curriculum creation initiated the IPE process. College administration support of the project was also a significant factor particularly to explore IPE and attend the IPEC conference. The conference provided the team with the ideas, skills and competencies to plan, create and evaluate the IPE simulation curriculum.

The small size of the college and geographic proximity eased the implementation process. This allowed participation from seven HP programs and also stimulated interest among other departments.

Faculty professional development was also a major strategy. Faculty received guidance from professionals from other successful simulation centers and also shadowed a well-trained member of the team prior to facilitating.

Collection of student and faculty feedback was necessary to assess outcomes and determine future directions of the project. This was consistent with "beginning with the end in mind". The student evaluation of the simulation experience revealed students believed thev improved their interprofessional communication skills and had a better understanding of health professional roles and responsibilities. Faculty feedback indicated a continued commitment to IPE however additional training and development was identified as an area of need.

The feedback from students, faculty, and the simulated patients involved in IPE was positive. The level of participation from programs that typically function in segregation was groundbreaking.

The IPEC steering committee consider this semester-long simulation program, "A Year in the Life of Chris Dulles," to be phase 1 of IPE at D'Youville College. This curriculum will continue each spring semester as an assignment within a credit bearing course in all seven programs for student cohorts who have had some clinical experience.

Phase 2 of IPE has been secured through a second grant from the J. Warren Perry and Charles Donald Perry Memorial Fund to support the renovation of additional space to add a home setting to the continuum of care and an inpatient rehabilitation clinic. New curricula will be developed to offer simulation IPE to students earlier in their training as well as ongoing faculty development in simulation curricular development and facilitation/debriefing skills.

The year-long production was summarized member. eloquently bv а faculty "This interprofessional experience was phenomenal! There was tremendous learning that occurred and affected all students, faculty and actors. In addition, these simulation opportunities offer a richness of learning that can benefit all the participants but most importantly -future patients."

Keywords

Interprofessional, simulation, curriculum, education

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Appendix

Case Scenario/ Learning Objective	Learners	Main Focus	Embedded Challenges	Short Synopsis
Chris Dulles 1 VE4 RR1	Chiropractic Physical Therapy	Learners explain their respective professions to a patient	Learners are challenged to reveal the similarities, differences, and limitations from their respective disciplines	An outpatient clinic setting; patient who has experienced an exacerbation in his condition of neck and low back injury resulting from a motor vehicle accident, following an attempt to play golf
Chris Dulles 2 CC2	Nurse Physician Assistant/Nurse Practitioner	Learners are expected to rapidly respond to an emergency and assess the patient and execute the appropriate action steps consistent with the hospital stroke protocol	PA/NP and RN learner are challenged to acknowledge and address Chris' medical needs and concerns, as well as those of his spouse, during this emergency	Inpatient hospital setting six months later; Chris is admitted to CCU/ICU post heart attack and experiences neurologic status changes that call for stroke protocol emergency
Chris Dulles 3 VE4 RR1 TT3	Physical Therapy Occupational Therapy Pharmacy	Learners assess the patient and perform a PT, OT and Pharmacy consultation after his stroke	Chris and spouse challenge the learners by requesting them to explain their respective roles and responsibilities and articulate the recovery process from a stroke	24 hours after Chris has been treated and stabilized, patient needs to be evaluated for rehabilitation and counseled on anticoagulation medication
Chris Dulles 4 VE4 RR1 CC2 TT3	Nurse Physician Assistant/Nurse Practitioner Registered Dietician Pharmacy Occupational Therapy	Learners prepare to discharge Chris	RN initiates the discharge and notices that Chris and spouse are having difficulty following prescribed diet, medications and assisted devices. The PA/NP learner addresses this by consulting pharmacy and dietetics. OT offers assisted device information.	Chris had been transferred from the ICU to a medical floor. Discharge process and education needs are addressed regarding medication, diet, and home assisted devices

Table 1: A Year in the Life of Chris Dulles; Case Scenarios