

Interprofessional Telehealth Case Studies: An Innovative Way to Assess Clinical Knowledge and Interprofessional Collaboration

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Objective

To develop and implement telehealth case activities using interprofessional teams comprised of pharmacy students, physician assistant students, and standardized patients.

Methods

- An Office of Academic Excellence and Assessment grant was secured to provide funding for project (e.g. payment for standardized patients and assessment of interprofessional interactions).
- Pharmacy faculty met with faculty from a neighboring physician assistant school to determine if a partnership was feasible.
- Faculty from both schools compared curricula and developed patient cases conducive to each level of health profession learner (hypertension, diabetes, chronic obstructive pulmonary disease, acute coronary syndrome, and venous thromboembolism).
- Faculty met with the theater department actors to go over each case, what to expect, what points to emphasize, and how to use the videoconferencing system.
- Training videos for faculty were created to demonstrate how to grade each case and how to assess interprofessional exchanges with the Creighton Interprofessional Collaborative Evaluation (C-ICE) instrument
- Fourteen virtual rooms were set up to host case studies. Faculty served as moderators in each room. Pairs of pharmacy and physician assistant students and their patient entered their assigned room at their assigned time.

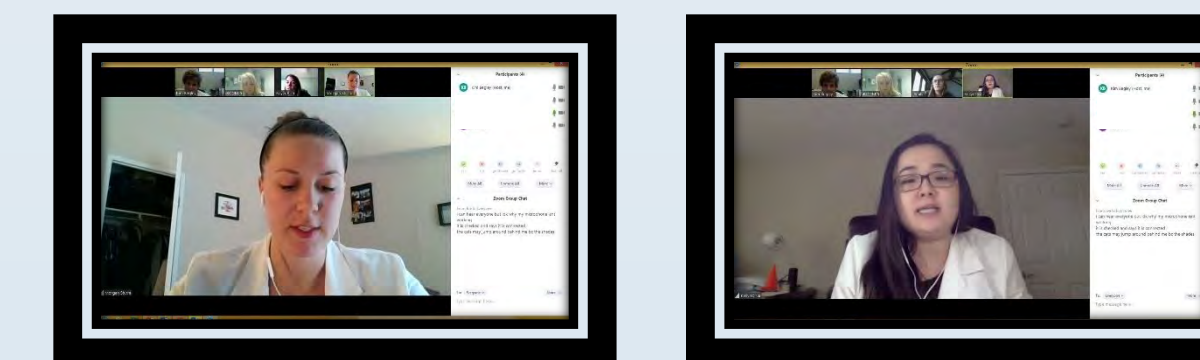
Methods

- Health profession teams interviewed their patient and collaboratively determined a diagnosis and treatment.
- One hundred forty pharmacy students, twenty eight physician assistant students, and fourteen actors participated in therapeutic case studies.
- Faculty assessed health profession teams based on their clinical knowledge, using faculty-developed rubrics, and on their interprofessional collaboration using the C-ICE instrument.
- Faculty debriefed their teams and reviewed correct diagnosis and appropriate treatment.

Schedule

Room #	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6	Room 7	Room 8	Room 9	Room 10	Room 11	Room 12	Room 13	Room 14
Faculty	Kimberley Begley	Amy Pick	Katie Packard	Ann Ryan Haddad	Kimberley Begley	Amy Pick	Katie Packard	Ann Ryan Haddad	Kimberley Begley	Amy Pick	Katie Packard	Ann Ryan Haddad	Kimberley Begley	Amy Pick
Standardized Patient	John Doe	Jane Smith	Bob Johnson	Alice Brown	John Doe	Jane Smith	Bob Johnson	Alice Brown	John Doe	Jane Smith	Bob Johnson	Alice Brown	John Doe	Jane Smith

Virtual Room



Results

- Each case had a faculty-developed rubric with specific point values assigned. The class average for all five cases was 92%.

	0 Points	1 to 4 Points	5 Points	IX Score	PA Score	Team Score (Highest Points Achieved)
Patient Assessment	Cannot form a problem list for patient	Identifies some (not all) therapeutic problems	Identifies all therapeutic problems without including unnecessary information			
Plan Development	Cannot formulate (or provides an incorrect) therapeutic plan	Develops an acceptable therapeutic plan that includes a change in therapy (addition, deletion, or modification of therapy)	Develops an acceptable therapeutic plan that includes a change in therapy (addition, deletion, or modification of therapy) that includes appropriate dose modification of drug administration			
Monitoring/Outcomes/Goals	Does not provide adequate monitoring parameters for the therapy and/or disease state. Cannot determine desired therapeutic outcomes/goals for drug therapy recommendations	Provides adequate monitoring parameters for some of the therapy and/or disease state. Determines some desired therapeutic outcomes/goals for therapy recommendations	Provides adequate monitoring parameters for all of the therapy and/or disease state. Determines all desired therapeutic outcomes/goals for therapy recommendations			
Total Score						

	Student Team Score (Average)
Hypertension	14/15 (93%)
Diabetes Mellitus	14/15 (93%)
COPD	14/15 (93%)
Acute Coronary Syndrome	14/15 (93%)
Venous Thromboembolism	13/15 (87%)

Results

The C-ICE instrument allows faculty to efficiently and effectively assess interprofessional performance during a team activity. It is linked to the IPEC core competencies (values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork).

Each case had a “patient-centered” twist such that the students must recognize the patient’s perspective - a critical component of IPE grading on the C-ICE rubric. The C-ICE was set at 80% to pass. One team did not meet the 80% minimum. The class average was 93%.

Qualitative data were collected from Creighton student reflections and theme analysis was conducted by a group of pharmacy faculty members with expertise in interprofessional education.

- The most prominent theme was satisfaction from interacting with other health care professionals.
- Pharmacy students also repeatedly stated that these case activities increased their confidence in their clinical decision making.
- A final recurring theme was the affirmation that IPE telehealth cases should be included in each year of the curriculum.

Conclusion

With new accreditation requirements, schools of pharmacy may find it challenging to develop efficient and effective ways to incorporate meaningful IPE experiences into their curricula.

This telehealth IPE case activity was easily integrated into an existing course and uses an innovative platform that provides students with interprofessional opportunities to practice patient-centered, team-based care.