



## A Telehealth Interprofessional Education Experience Geared Towards Mental Health

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### BACKGROUND

Management of mental health disorders requires an interprofessional approach for the appropriate management of disease symptoms and adverse drug reactions.

At the University of the Pacific and University of Missouri-Kansas City, faculty noted a need for more robust interprofessional education (IPE) focused on the management of complex psychiatric disorders and associated comorbidities.

#### Objectives:

- To develop a telehealth IPE designed to facilitate collaboration between nurse practitioner (NP) students and pharmacy students in order to optimize provision of mental health care.
- To build effective and sustainable relationships with partners across state borders, in order to improve interprofessional education.

### METHODS

#### Study Population (n=234)

- 28 psychiatric mental health NP students
- 206 pharmacy students

#### Intervention

- Students from the 2 disciplines were divided into teams of 1 NP and 1 or 2 pharmacy students.
- A total of 140 teams were created. Each NP student was a member of 5 teams and each PharmD student was only on 1 team.
- Cases were developed and housed in NEEHR Perfect<sup>®</sup> which is an educational electronic health records (EHR) platform.
- One Pharmacy student was assigned as the team leader and responsible for contacting their team members.
- Two mandatory synchronous video-conferences were required for each team. Students could use any platform of their choice.
- First Email Interaction:**
  - Team leader was responsible for making team introductions and for scheduling the two video-conferencing encounters.
- First Video-Conference:**
  - Roles and responsibilities of each health professional
  - Discussion of individual curricula
  - Discussion of where each professional is likely to encounter a patient with a psychiatric condition
  - Discussion of differential diagnosis and assessment of the assigned patient case
- Second Video-Conference:**
  - SBAR (situation, background, assessment and recommendation) communication strategy employed by the pharmacy students to relay their recommendations to the NP.
  - Followed by team discussion of the NP student's plan versus the pharmacy students' plan

### METHODS

#### Evaluation Tools Used:

- Pre/post SPICE-R2 survey (validated)<sup>1</sup>
- Student attitudes regarding the IPE
- Peer assessment of team members

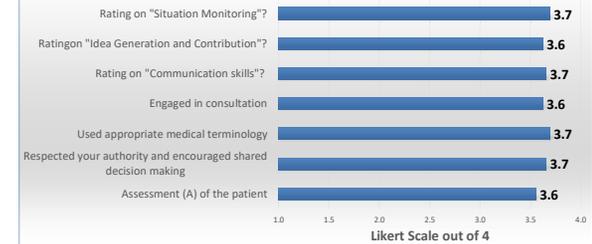
#### Statistical Methods

- Paired T-test was used to compare changes in pre/post SPICE-R2 survey
- General descriptive statistics were used to determine student attitudes about the IPE and for the peer assessments

### CASE COMPONENTS

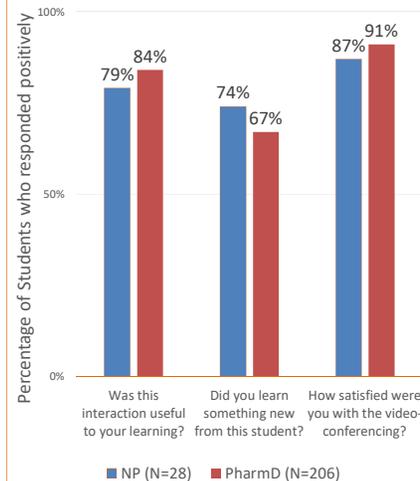
Case #	Components
Case 1	Schizophrenia, drug escalation and adverse drug reaction management
Case 2	Geriatric depression and resistant hypertension
Case 3	Anxiety disorder with panic attacks
Case 4	Alzheimer's disease and comorbid chronic diseases
Case 5	Rapidly progressing dementia

### PEER ASSESSMENT OF PHARMACY STUDENT BY NURSE PRACTITIONER STUDENT (206 RESPONSES)



### RESULTS

#### Student Attitudes Regarding the IPE

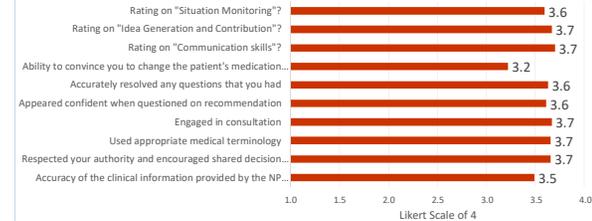


#### RESULTS FROM SPICE-R2 SURVEY (N= 181)

Statement (Likert scale 1-5 ; 5=Strongly agree and 1= Strongly Disagree)	Pre: Mean Likert Response	Post: Mean Likert Response	P values
Working with students from different disciplines enhances my education	3.85	4.01	<.01
My role within an interprofessional team is clearly defined	3.81	4.07	<.01
Patient/client satisfaction is improved when care is delivered by an interprofessional team	4.27	4.41	<.01
Participating in educational experiences with students from different disciplines enhances my ability to work on an interprofessional team	3.87	4.03	<.01
I have an understanding of the courses taken by, and training requirements of, other health professionals*	3.30	3.71	<.01
Healthcare costs are reduced when patients/clients are treated by an interprofessional team	3.63	4.08	<.01
Health professional students from different disciplines should be educated to establish collaborative relationships with one another	4.13	4.29	<.01
I understand the roles of other health professionals within an interprofessional team	3.78	4.04	<.01
Patient/client-centeredness increases when care is delivered by an interprofessional team	4.09	4.38	<.01
During their education, health professional students should be involved in teamwork with students from different disciplines in order to understand their respective roles	4.03	4.18	.01

\* The only statistically significant improvement in the NP students' perceptions in a discipline specific analysis

### PEER ASSESSMENT OF NURSE PRACTITIONER STUDENT BY PHARMACY STUDENT (140 RESPONSES)



### DISCUSSION

#### Strengths

- Majority of students learned something new from their team member(s).
- Statistically significant movement in student attitudes on the SPICE-R2 survey was encouraging however from a discipline specific analysis, the lack of statistically significant movement by NP students was concerning. One explanation could be already positive perceptions even at the beginning of the IPE.
- Creative scheduling allowed faculty to manage vastly different numbers of students from each profession
- Students from different states (Missouri and California) were able to collaborate through the use of videoconference technology.
- Student self-scheduling allowed for flexibility even with differing time zones and curricula.

#### Limitations

- More objective data on the nature and quality of the interactions were not obtained.
- Objective, performance-based evaluations of the solution of the cases is the subject of future research.

#### Acknowledgments:

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#### References:

- Lockeman KS et al (2017) Outcomes of Introducing Early Learners to Interprofessional Competencies in a Classroom Setting, Teaching and Learning in Medicine, 29:4, 433-443