IPEC®
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2022 VIRTUAL POSTER FAIR

NOVEMBER 29, 2022 | 4:00-5:00 P.M. ET

POSTER PRESENTATIONS

Engaging Faculty in Interprofessional Education at the Nation's Largest Urban Public University System

Patricia Simino Boyce, Victoria Fischer, Gwendolyn Lancaster, Marge Reilly, Lesley Rennis, Susan Riekert, Nicole Saint-Louis, Mara Steinberg Lowe

Background: Variable faculty engagement in IPE especially during COVID; lack of representation from all health and human service (HHS) programs and campuses at CUNY

Objective: engage and develop faculty to successfully integrate interprofessional practice, education and research at all levels of health-related professions programs across CUNY

Approach

- *IPE Learning Trajectory*
- *Multi-campus partnerships*
- *Coherent curriculum*
- *Training & certification of IPE instructors*
- *A health equity lens in all IPE cases*
- *Micro-badges for students and faculty*

Model Design

ENVELOPE leadership commitment

BURNER IPE Fellows

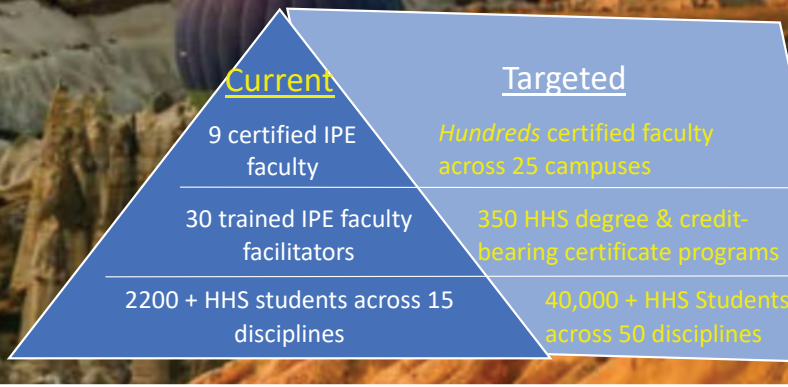
GONDOLA IPE Toolkit

Educational Strategies
Faculty facilitated simulated IPE sessions using faculty designed scenarios;
Single- and multi-campus IPE events;
tele-simulations;
annual IPE summit

Evaluation Methods

- *Students: Online student survey of IPE core competencies*
- *IPE Facilitators: Interprofessional Facilitato Assessment Scale*
- *IPE Toolkit: utilization of IPER website*
- *IPE integration: Pre- and Post Interprofessional Education Assessment an Planning Instrument*

Results



SCALING UP IPE FACILITATOR DEVELOPMENT: THE IMPACT OF A CROSS-INSTITUTIONAL CERTIFICATE TRAINING

TEXAS INTERPROFESSIONAL EDUCATION CONSORTIUM

AUTHORS

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AFFILIATION: Texas Interprofessional Education Consortium

For information about the Texas IPE Consortium

BACKGROUND

The Texas IPE Consortium designed a Virtual IPE Facilitator Certificate Course and launched it in April, 2022.

65 participants | 18 facilitators | 20 disciplines | 31 institutions

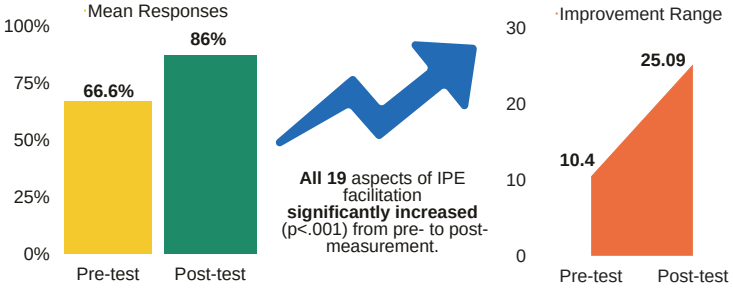
LEARNER ASSESSMENT TOOL

Assessment measured self-confidence in 19 aspects of IPE facilitation using a retrospective pre-post survey instrument adapted from the Interprofessional Facilitation Scale (Seargeant et al., 2010).

Examples of statements:

- Use appropriate facilitator skills to keep discussion topics on track
- Use effective communication skills to clarify and resolve misunderstanding and conflict
- Discuss issues related to hidden power structures, hierarchies, and stereotypes

LEARNER ASSESSMENT RESULTS



Top 2 with Greatest Improvement

- Use learning and facilitation methods that encourage participants from different professions to learn with, from, and about each other. (**25.09**)
- Create a learning environment in which the principles of interprofessional education were demonstrated or clearly explained. (**23.61**)

OBJECTIVES

- Provide tools for faculty needed to adjust teaching strategies for interprofessional learning groups
- Support faculty in role modeling interprofessional leadership and the IPEC Core Competencies
- Share solutions to the intrinsic challenges of interprofessional facilitation
- Provide a 12-hour IPE certificate for participants' portfolios
- Train faculty for inter-institutional IPE activities and shared clinical learning environments across Texas

THE TRAINING

The training included relevant, innovative, active learning techniques.

PRE-WORK | VIRTUAL TRAINING | HYBRID

Topics include:

- Establishing psychological safety
- Power of learning in teams
- IPE facilitation techniques and challenges
- Promoting diversity, equity, and inclusion through IPE
- Learner assessment
- Expert panel discussion
- Application of lessons learned conducted using **improv techniques**

COURSE EVALUATION

Over 85% of participants indicated:

- The training will enable me to improve IPE at my institution (**96%**)
- The training is applicable to a wide variety of healthcare contexts and disciplines (**95%**)
- I would recommend the training to colleagues (**92%**)

85%

- This training provided me the opportunity to network with colleagues from other institutions (**90%**)
- This training will enable me to improve community and/or clinical practice (**85%**)

IMPACT

Development and implementation of a **virtual, cross-institutional** IPE facilitator training is **effective, cost-saving, and leverages expertise** across the state and beyond.

Reference Interprofessional Facilitation Scale: Sargeant, J., T. Hill, and L. Breau, Development and testing of a scale to assess interprofessional education (IPE) facilitation skills. J Contin Educ Health Prof, 2010. 30(2): p. 126-31.

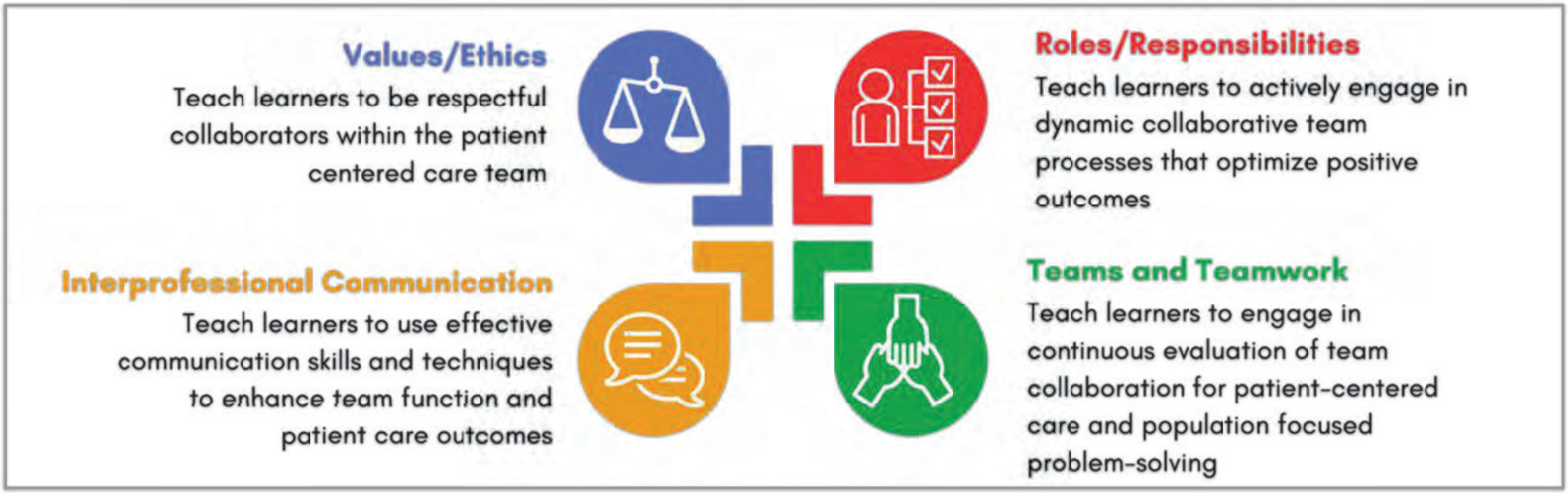
Framing IPE Facilitation within the Stanford Clinical Education Training to Enhance IPE Teaching Behaviors

Lauretta Cathers, PhD ● Dana Burns, DNP, FNP-BC ● Laura Morgan Frankart, PharmD, MEd, BCPS ● Laura Padilla, PhD ● Sharon Lanning, DDS

Introduction

We created a module focused on **IPE facilitation** using the existing **Stanford Clinical Education Training Framework**. The module compliments the series by adding another session enhancing the quality of clinical education, specifically IPE.

For references and further information scan QR code



Implementation

- ★ We **identified and summarized IPE Competencies and literature** on core facilitation behaviors
- ★ Stanford trainers and IPE educators **reviewed summary for content validity**.
- ★ We defined **four key components** (listed in figure above) and used these to **create an IPE facilitation module** following Stanford Clinical Teaching model with teaching behaviors
- ★ Next step: **Roll out and evaluate IPE facilitation module** for VCU Health faculty

Evaluation Plan

- ★ Analyze content review validity
- ★ Track number of workshop participants, their areas of expertise and previous IPE experience.
- ★ Conduct focus groups to understand participant experience
- ★ Administer participant surveys at baseline, training completion, 3 months, 6 months.

Strange Bedfellows & Unlikely Allies: Creating a Supportive Environment for Interprofessional Education

Tilmon, M, Tomchuk, D, Garner, L, Gerard, J.
Southeast Missouri State University, College of Health, Education, and Human Studies, Cape Girardeau, MO

Be an EDvolutionary

Project Overview

- IPE committee created an inclusive structure for healthcare and non-healthcare academic programs
- Committee developed and implemented a collaborative structure using the 4C's of Future Ready Learning and the IPEC Competencies to provide a framework and guidance for academic programs

Project Needs Assessment

- College of Education, Health, and Human Studies (CEHHS) established an IPE committee to facilitate and encourage collaboration among all college disciplines
- IPE committee created guidelines for disparate fields within CEHHS
- Committee's goal was to identify current ways faculty collaborate, develop outlets for interprofessional research, and promote cross-disciplinary learning experiences
- Committee comprised of one faculty representative from each department and a staff member who operates the CEHHS education technology center as the college-wide representative

Project Goals

- IPE committee investigated barriers to IPE
- Sought to minimize or eliminate barriers while creating an operational framework
- IPE was already a component of many healthcare programs within the college
- Minimal interaction between programs regularly outside of limited simulations
- No non-healthcare programs, faculty, or students are included in these simulations
- Educator preparatory programs were an area where natural integration was not apparent from the perspective of healthcare IPE

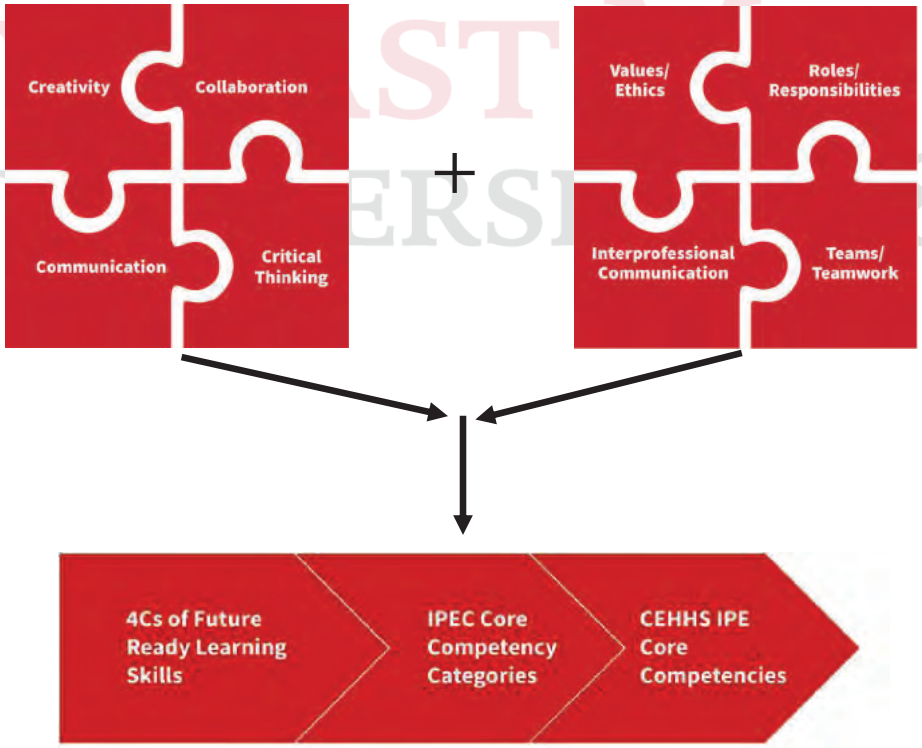
Keywords and References

https://bit.ly/SEMOipec

Project Education Strategies/Intervention

- IPE committee reviewed accredited program standards for the college's academic programs
- Healthcare accreditors embedded curricular IPE experiences to interact and learn from other healthcare providers
- Education preparation accreditation bodies did not require traditional healthcare-specific IPE experiences
- Council for Accreditation of Educator Preparation (CAEP) standards described collaboration requirements
- Non-healthcare programs did not use healthcare-related IPE language but still facilitated and encouraged collaboration among colleagues and stakeholders
- IPE committee investigated conceptual frameworks to promote cross-disciplinary teams and collaboration toward common goals to create positive outcomes
- Developed a college-specific IPE collaboration framework that included healthcare and non-healthcare programs by mapping the IPEC Core Competencies with the 4Cs of Future Ready Learning

Conceptual Framework Mapping



Project Evaluation

- Survey data and qualitative feedback used in a continuous improvement cycle, which influences plans for future events
- Following each event (e.g., Research Think Tanks, resource exchanges, symposiums), committee members communicate with departments to determine future needs
- Committee developed awards and grants to facilitate IPE initiatives in the college
- Monthly reports are provided to college and university leadership and committee members
- Increased faculty positivity toward IPE
- Participation in IPE events has also increased

Lessons Learned

- Assemble the right mix of stakeholders
- Leverage already existing interprofessional relationships
- Establish achievable and measurable short- and long-term outcomes that include both formative and summative evaluation
- Stagger the length of membership rotations to promote the coach/peer support model
- Offer rewards in the form of recognition and financial support to encourage IPE collaboration

Keys to Sustainability

- Appoint a neutral permanent member to provide continuity and communication
- Mentor incoming members
- College administrator support must be ongoing
- Encourage IPE members to see their work as an investment in their program's future instead of a means to academic promotion
- Stay focused on results and outcomes

Next Steps

- Engage additional faculty members to identify new opportunities to collaborate across departments
- Involve students and community stakeholders in the identification of collaboration opportunities
- Evaluate new and innovative IPE projects
- Expand sponsorship of activities that showcase IPE outcomes

The Training and Utilization of Student Facilitators for Interprofessional Education: Enhancing Quality and Outcomes

Kris Thompson and Deb Doherty. School of Health Sciences. Oakland University. Rochester, MI

Purpose of Presentation

To describe a program to develop student facilitators for interprofessional education (IPE).

Objectives for the Presentation

Participants will be able to:

1) describe methods for selecting, training & utilizing student facilitators
2) discuss how student facilitators enhance IPE quality and outcomes.

Background/significance

Evidence demonstrates that the quality & outcomes of IPE require effective & trained faculty facilitators.[1,2] Trained student facilitators can also play a role in promoting communication & teamwork.

Methodology

Student volunteers (n=30) from programs in medicine, nursing, public health & physical therapy were trained to facilitate health care professional students participating in a face-to-face IPE workshop on opioid abuse & pain management. Student facilitators paired with faculty facilitators, were assigned to a table of 8 – 10 workshop participants.

After the workshop, a survey to evaluate the student facilitator experience was sent to student & faculty facilitators.

Student Facilitator Training

Training was developed & presented by two physical therapy faculty. On-line training via WebEX included discussion of student facilitator roles, responsibilities, & potential icebreaker activities.

Student Facilitator Workshop Responsibilities

- Welcome participants to the table
- Provide nametag, lunch ticket, materials
- Initiate introductions at the table
- Facilitate icebreaker activity

Results

Student Facilitator Responses n=18	
I was prepared for my role. I was able to manage my role.	100% Agree
Student facilitators contributed to the IPE experience.	75% Agree 25% Neutral
The icebreaker was an engaging activity.	70% Agree 30% Neutral

Faculty Facilitator Responses n=25	
Student facilitators contributed to the IPE experience.	80% Agree 12% Neutral 8% Disagree

Discussion

Students overwhelmingly agreed they were prepared for & able to manage their role. Majority of facilitators agreed that student facilitators enhanced the IPE workshop. Benefits of student facilitators were increased collaboration & discussion among the participants at the table.

Student comments: “it allowed me to step out of my comfort zone & be a leader”; “I think I helped bridge the gap between fields to increase collaboration & discussion” & “[the training] was effective & well-designed”.

Faculty facilitator comments: “The student facilitators were very helpful and took some of the "pressure" off of the faculty facilitators. Great idea!” & “The student facilitator was eager to help & did well to add to the discussion at the table.”

Conclusion

Trained student facilitators can contribute to the quality & outcomes of IPE experiences by enhancing communication & collaboration.

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EVALUATING LEARNING OF IPEC SUB-COMPETENCIES THROUGH WRITTEN REFLECTIONS

Tina P. Gunaldo, PhD, DPT, MHS Colette D. Baudoin, PhD(c), MSN, RN, OCN, CNE Scott Edwards, PhD Mina J. Hogan, MS

NEEDS ASSESSMENT

- Measured IPE attitudes over 5 years
- Improvement from Year 1 to Year 2 for same student cohort, and across all cohorts
- Other opportunities exist

STRATEGIES/INTERVENTIONS

- 19 sub-competencies identified
- Student reflections graded using a rubric
- Representative selection evaluated
  - Understand how students respond, not theme saturation

"Collaborate as a leader and member of an interprofessional health team."

PROJECT GOALS

- Align IPEC sub-competencies for assessment within the curriculum
- Evaluate sub-competency learning by all students and by academic program. 7 objectives were established.

PROJECT EVALUATION

- Formative evaluation
- First goal met
- Second goal - ongoing
  - Quantitative rubric score, and identification of responses in written reflections

TEAM UP™
COMPASSION, COMMUNICATION, COLLABORATION

LSU Health NEW ORLEANS
Center for Interprofessional Education and Collaborative Practice

Communication and Collaboration Among Registered Nurses and Unlicensed Assistive Personnel

Gwendolyn Lancaster, EdD, MSN, RN, CCRN-alumnus

Brenda Hernandez-Acevedo, PhD, MSN, RN

School of Health Sciences, Human Services, and Nursing, Lehman College City University of New York, Bronx, New York

Introduction

The Covid-19 pandemic highlights the well documented importance of effective communication and collaboration among healthcare providers in providing quality patient-centered care.

Background

Roles and responsibilities of healthcare team members, particularly nurses, have changed and adapted to meet patients' increasingly complex needs. Registered nurses' (RNs) increasing responsibilities often decrease the meaningful time that RNs spend with patients. Consequently, RNs must delegate many patient-care tasks to unlicensed assistive personnel (UAPs). As a result, UAPs spend a significant amount of time with patients.

Problem

Poor communication, tension, and strained relationships among registered nurses (RNs) and unlicensed assistive personnel (UAPs) that may negatively impact collaboration and create a toxic work environment predate the pandemic. Patients may share information with UAPs during routine care that they may not share with RNs or any other healthcare professional.

Yet, meaningful discussions related to patient care rarely include UAPs.

Purpose

The purpose of this mixed method longitudinal study is to examine RN and UAP perceptions of communication, collaboration/teamwork, team structure, leadership, mutual support, and situation monitoring.

The study also aims to identify and mitigate barriers to performing effectively as a cohesive RN/UAP team.

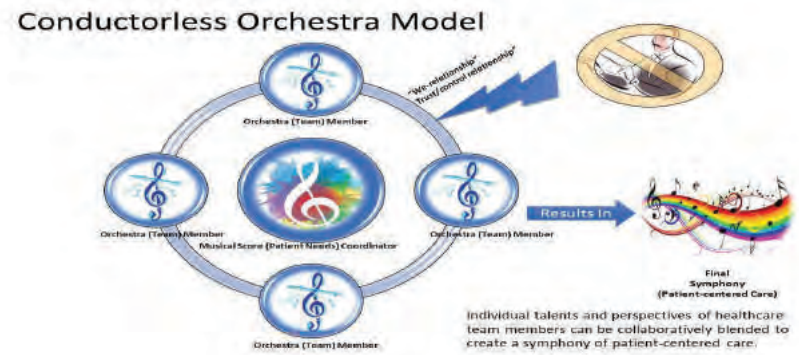
Research Questions

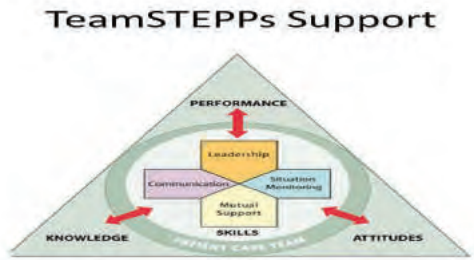
Does the implementation of a series of interactive interdisciplinary discussion/workshops based on the Conductorless Orchestra Model combined with Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) improve communication and collaboration among registered nurses and unlicensed assistive personnel in a medical surgical unit of a metropolitan hospital?

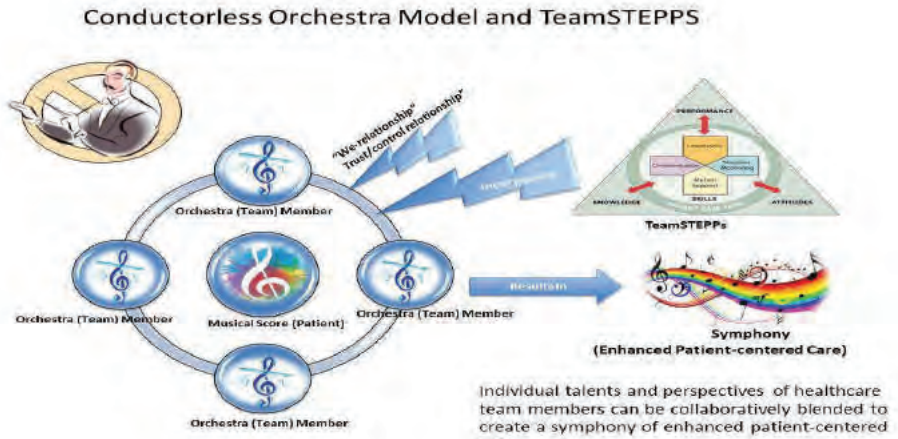
Method

Participants will complete the Agency for Healthcare Research and Quality Teamwork Perceptions Questionnaire (T-TPQ) prior to the implementation of the first of three, monthly joint RN-UAP interactive discussion/workshops entitled, *Meeting of the Minds*; immediately following the first workshop; and after the third discussion/workshop.

Model







Theoretical Foundation

This mixed-method, longitudinal study applies the *motivation-oriented* Conductorless Orchestra Model and the *skills-oriented* Team Strategies and Tools to Enhance Performance and Patient Safety (Team STEPPS) to create and implement an interactive workshop, *Meeting of the Minds*.

The Conductorless Orchestra Model (2015) incorporates the concepts of the *we-relationship and trust-control* to inspire individual group members (musicians) to become a cohesive team (orchestra) that provides quality patient-centered care (the final symphony).

TeamSTEPPS provides evidence-based communication and collaboration strategies.

Literature Review

Research indicates that interprofessional/interdisciplinary education may be effective in improving communication and collaboration. There is limited information on communication among RNs and UAPs in the hospital setting.

Implications

Understanding how RN and UAP perceptions of communication and collaboration affect their ability to function as a cohesive team may support healthcare leaders' and educators' efforts to develop innovative strategies and programs that may increase RN/UAP acceptance of collaboration as an integral part of their clinical practice. Standardized collaboration may, in turn, facilitate quality patient-centered care.

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A Matter of Trust: Pharmacy and Medical Students Assess Each Other on Entrustable Professional Activities

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[1]University of Louisiana Monroe College of Pharmacy, [2]LSU Health Shreveport

BACKGROUND/OBJECTIVE

- Medicine and Pharmacy programs require that students are *entrusted* by clinicians to perform certain skills, Entrustable Professional Activities (EPAs), at a given level upon graduation.[1,2]
- In addition, Interprofessional Education and Practice (IPE/P) are required components of accreditation for pharmacy and medicine.[3,4] These programs share competencies developed by the Interprofessional Education Collaborative (IPEC).[5]
- Since *trust* is integral in interprofessional collaboration, the question then arises if each of these student disciplines *trust each other* on selected EPAs and to what degree.
- The classroom setting is the perfect environment for aligning competencies with future EPAs of experiential and clinical learning where true *entrustment* decisions can be made.[6]

METHODS

- Third-year pharmacy students (n = 78) and fourth-year medical students (n = 35) collaborated (pharmacy:medicine ratios of 1:1 to 3:1) in a transitions of care case during an IPE activity in Spring 2021.
- Post activity, pharmacy students were asked to evaluate medical students on selected medicine EPAs related to the activity.
- Conversely, medical students were asked to evaluate pharmacy students on selected pharmacy EPAs related to the activity.
- A 4-point entrustability scale was used for peer evaluations of EPAs.
- Students also assessed each other on professionalism, reliability, efficiency, trustworthiness, respect, and collaboration using a 5-point Likert scale.
- Both disciplines were assessed on attainment of selected IPEC sub-competencies using the Interprofessional Collaborative Competencies Attainment Survey.
- All students were asked open ended questions about what knowledge, skills, attitudes and/or behaviors of students from the opposite profession could be improved.
- This research was approved by the ULM and LSU Institutional Review Boards.

Peer Evaluation 4-Point Entrustability Scale:

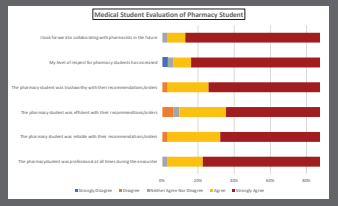
1 = I would not trust the student to perform this activity
2 = I would trust the student to perform this activity, but only if they were directly supervised
3 = I would trust the student to perform this activity with limited direction
4 = I would trust the student to completely and accurately perform this activity

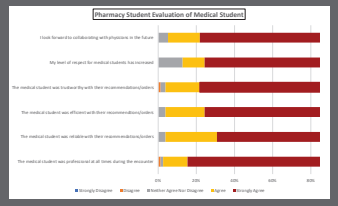
Medical Student Evaluation of Pharmacy Students (n = 31; 88.6% response rate)

Pharmacy EPA	Level 1	Level 2	Level 3	Level 4
Analyze information to determine the effects of medication therapy, identify medication-related problems, and prioritize health-related needs	3.23% 1	6.45% 2	38.71% 12	51.61% 16
Establish patient-centered goals and create a care plan for a patient in collaboration with the patient, caregivers, and other health professionals that is evidence-based and cost effective	3.23% 1	9.68% 3	32.26% 10	54.84% 17
Implement a care plan in collaboration with the patient, caregivers, and other health professionals	6.45% 2	3.23% 1	29.03% 9	61.29% 19
Follow-up and monitor a care plan	3.23% 1	6.45% 2	38.71% 12	51.61% 16
Collaborate as a member of an interprofessional team	3.23% 1	3.23% 1	22.58% 7	70.97% 22
Use evidence-based information to advance patient care	6.45% 2	0.00% 0	29.03% 9	64.52% 20

Pharmacy Student Evaluation of Medical Students (n = 78; 100% response rate)

Medicine EPA	Level 1	Level 2	Level 3	Level 4
Recommend and interpret common diagnostic and screening tests	0.00% 0	5.13% 4	23.08% 18	71.79% 56
Enter and discuss orders and prescriptions	0.00% 0	3.85% 3	34.62% 27	61.54% 48
Give or receive a patient handover to transition care responsibility	0.00% 0	7.69% 6	19.23% 15	73.08% 57
Collaborate as a member of an interprofessional team	0.00% 0	3.85% 3	10.26% 8	85.90% 67





Selected questions from the Interprofessional Collaborative Competency Attainment Scale (Revised)

All students were asked to rate their ability for each of the statements below using the following scale: 1=Poor; 2=Fair; 3=Good; 4=Very good; 5=Excellent.	Average BEFORE	Average AFTER
Identify and describe my abilities and contributions to the IP team	3.02	3.87
Recognize how others' skills and knowledge complement and overlap with my own	3.27	4.1
Promote effective communication among members of an interprofessional team	3.42	4.01
Actively listen to IP team members' ideas and concerns	3.78	4.25
Express my ideas and concerns without being judgmental	3.51	4.05
Provide constructive feedback to IP team members	3.28	3.85
Express my ideas and concerns in a clear, concise manner	3.28	3.91
Actively listen to the perspectives of IP team members	3.75	4.15
Seek out IP team members to address issues	3.28	3.9
Work effectively with IP team members to enhance care	3.42	4.08
Take into account the ideas of IP team members	3.67	4.16
Develop an effective care plan with IP team members	3.35	4.07

Paired t tests were used to compare retrospective pre- and post-activity averages for each item. All items achieved statistical differences and improved from pre- to post-activity (p<.001)

From a pharmacy standpoint, what knowledge, skills, attitudes and/or behaviors of medical students could be improved, if any, based upon this encounter?
The medical student I worked with was very knowledgeable. She did mention having no idea how to assess TPNs, which is an area in their curriculum that could be improved. Her attitude towards us was very respectful.
The medical student was very knowledgeable and had a great attitude working with us to determine an effective plan for the patient.
Maybe a better basis of how to dose opioids
I thought my med student was very helpful and informative but also listened to us pharmacy students and let us give recommendations
Communicating their reasoning and being open to other options after the initial problem is addressed
(Need more) familiarity with PA (prior authorization) requests

From a medicine standpoint, what knowledge, skills, attitudes and/or behaviors of pharmacy students could be improved, if any, based upon this encounter?
I thought both members of my pharmacy team were great collaborators and look forward to more encounters like this one in the "real world"
They didn't really communicate with me at all and seemed self oriented in the activity as opposed to group oriented.
None I can think of-the pharmacy students displayed great knowledge, skills, and overall understanding
No improvements! Great students and I look forward to working with pharmacy in the future. Very trustworthy.
The pharmacy students did not have a lot of knowledge regarding TPN - we seemed to have a similar understanding of what is necessary in this case, where I would expect them to have deeper knowledge than me
Knowledge of the limitations of the medical students learning (i.e. knowing that they learn more about calculations of TPN, dosage, etc. than we do and that we appreciate their input)

RESULTS

- Overall, pharmacy and medical students entrusted each other to perform selected EPAs with limited or no direction.
- One shared EPA, "Collaborate as a Member of an Interprofessional Team" resulted in the highest percentage of Level 4 entrustability for both disciplines.
- Of the four medicine EPAs, there were none in which pharmacy students did not trust medical students.
- Medical students agreed (22.58%) or strongly agreed (74.19%) that pharmacy students were trustworthy in their recommendations.
- Pharmacy students agreed (17.95%) or strongly agreed (78.21%) that medical students were trustworthy in their recommendations.
- Student-reported abilities in all IPEC sub-competencies increased significantly ($p<.001$).

CONCLUSION

- Peer assessment of EPAs provides additional data and could be used as a part of a program's longitudinal EPA competency assessment.

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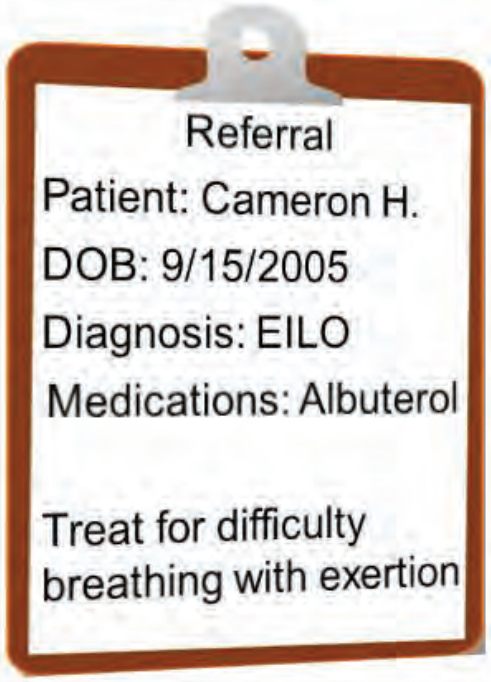
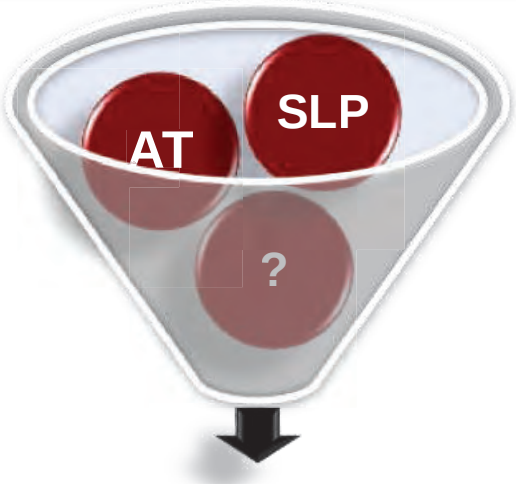
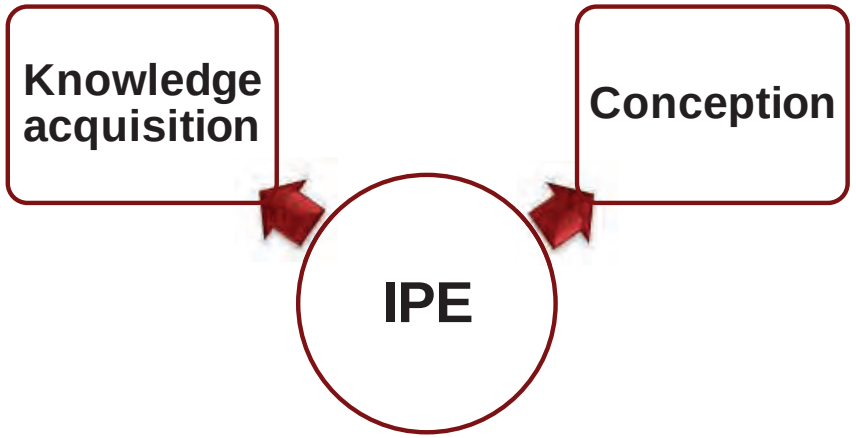
SLP and AT Students: Exploring Roles to Improve Equitable Services for Adolescents with EILO

Bonnie K. Slavych, Ph.D., CCC-SLP, ACUE & Greg Williams, Ph.D., ATC, CSCS





Equitable Services



Missouri State

UCM
LEARNING TO A GREATER DEGREE

Interprofessional Skills Development in Public Health and Veterinary Medical Education

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Introduction

As the world has become more narrowly focused, one of the lessons from studies of interprofessional practice (IPP) has been how vital multisystem thinking & action are in various applications (1). In 2016, the Interprofessional Education Collaborative (IPEC) released guidelines to serve as a basis for the implementation and evaluation of interprofessional education (IPE) in health professions (2). Combining multidisciplinary & transdisciplinary practices of IPP establishes a One Health informed public health workforce.

Learning Objectives

- To identify educational opportunities to promote One Health efforts at the undergraduate, graduate, and professional levels through IPP training.
- To evaluate the effectiveness of online IPP training in promoting advanced cross-sectoral collaboration in the veterinary public health workforce.

Acknowledgements

We would like to thank those who participated in the data collection process. We also thank Ms. Shalin Hai-Jew for her assistance with NVivo.

Methods

Data Collection: With approval from the Kansas State University IRB #10234, the voluntary sample population was randomly selected through online distribution channels.

Data Analysis: Using NVivo software, survey answers were reviewed by authors, & codes were assigned for analysis of thematic content with themes related to the IPP competencies created by the IPEC (2). IPP attitudes were measured using percentage of agreement with the given statements. Data was collected from participating students at KSU by an online survey.

Pre-training: Participants were asked to quantify agreement with IPP statements on a Likert scale from "strongly agree" to "strongly disagree" & provide their understanding of IPP.

Scenario: Participants were assigned a role-playing scenario to develop a care plan for a client with complex needs.

Post-training: Participants identified challenges to implementing care plans & characteristics necessary to successfully care for their client. Participants also repeated the pre-training questionnaire.

Results

Of the twenty-eight (42%) participants who indicated no understanding of IPP initially, only four (14%) repeated this lack of knowledge by the end of the survey.

Participants had a relatively high positive attitude toward IPP throughout the survey.

Following the intervention, participants commonly identified several complex IPP themes & characteristics.

Table 1. IPP Characteristics

Characteristics	Explanation	Number of Respondents
Empathy	Creating personal connections with, & being compassionate to, the client/patient.	20
Communication	Coordinating with those necessary in order to provide quality client/patient care.	19
Knowledge	Having the skills and education necessary to properly care for the client/patient.	14
Leadership	Organizing & leading strategic client/patient care plans.	12
Adaptability	Making necessary adjustments to problem-solve & meet the needs of colleagues & the client/patient.	11

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CEPH ACCREDITED BACHELOR'S MASTER'S

BUILDING AN INTERPROFESSIONAL HEALTH CARE MODEL FOR TREATING DISORDERED EATING IN ATHLETIC PATIENTS

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Interprofessional Education Collaborative (IPEC) 2nd annual Virtual Poster - November 29, 2022

INTRODUCTION

Recommendations are intended to provide certified athletic trainers and others participating in the health maintenance and performance enhancement of athletes with specific knowledge and problem-solving skills to better prevent, detect, and manage disordered eating (DE) The individual biological, psychological, sociocultural, and familial factors for each athlete with DE results in widely different responses to intervention strategies, challenging the best that athletics programs have to offer in terms of resources and expertise.

The complexity, time intensiveness, and expense of managing DE necessitate an interdisciplinary approach representing medicine, nutrition, mental health, athletic training, and athletics administration in order to facilitate early detection and treatment, make it easier for symptomatic athletes to ask for help, enhance the potential for full recovery, and satisfy medicolegal requirements. Of equal importance is establishing educational initiatives for preventing DE.

OBJECTIVE

TO PRESENT RECOMMENDATIONS FOR THE PREVENTION, DETECTION, AND COMPREHENSIVE MANAGEMENT OF DISORDERED EATING (DE) IN ATHLETES.

RELATED LITERATURE

Bonci, C., Bonci, L., Granger, L., Johnson, C., Malina, R., Milne, L., Ryan, R., & Vanderbunt, E. (2008). National Athletic Trainers' Association Position Statement: Preventing, detecting, and managing disordered eating in athletes. *Journal of Athletic Training, 43*(1), 80-108.

Alqtaibi, R., Osman, N., Abdullah M. A., & Nesrin, R. (2022). The relationship between high-risk disordered eating and social networks for females during the COVID pandemic. *Frontiers in Public Health, 6(1),* sec. Public Mental Health.

Himmerich, H. & Treasure, J. (2018). Psychopharmacological advances in eating disorders. *Expert Review of Clinical Pharmacology, 11*(1), 95-108.

METHODOLOGY

- 54 students from interprofessional disciplines of nursing, social work, nutrition, pharmacy, psychology, and athletic training took part in a health showcase hosted by faculty from each discipline.
- Background information regarding DE was provided by faculty of common ED's, statistics, and risk factors.
- Large group discussion around which health professionals should be involved occurred first.
- Two case presentations (one male and one female) of athletic patients with complex DE were presented.
- Breakout sessions of 30 min. followed by debrief at each IP table.

Each student was instructed to identify the following:

1. Needs or concerns of each case
2. How would professionals in respective disciplines approach each case?
3. Are there pieces of information that are helpful or necessary in order to effectively treat each case?
4. What attitudes/dispositions of involved parties might be challenging?

- A post-event survey was given to each participant with a Likert type scale addressing IPEC core competencies.

CONCLUSION

Key takeaways from participants and faculty were that the management of an eating disorder in an athletic patient often requires a number of professionals. Treatment should address the physical, psychological, behavioral, social, and cultural dimensions of the patient. An interprofessional team is required to identify and help an athlete in the recovery process, including but not limited to nursing, social work, pharmacy, sport psychology, nutrition or dietetics, and athletic training.

ANALYSIS

The post-event survey of the 54 participants from each discipline delineated robust feedback about the presentation and workshop format. Participants were given options to discuss content knowledge gained, understanding of patient populations with disordered eating, roles and responsibilities of health providers, communication strategies seen, learning outcomes, interactions, interprofessional collaboration, application, and engagement in patient care of disordered eating. Qualitative responses were given and themes emerged in the treatment and management of the male and female athletic cases, the need for collaboration, and solution-based learning.

	Agree	Strongly Agree
Knowledge	X	
Patient Population	X	
Role/Responsibilities		X
Interprofessional Communications	X	
Healthcare Collaborations		X
Interprofessional Practice Application		X
Engaged		X

Fig. 1 N=54; returned post-workshop surveys (average scores reported)

Integration of self and peer-evaluations for collaborative case-based, nicotine cessation events for pharmacy and physician assistant students

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Introduction

Interprofessional education (IPE) is an important component in health professions programs. IPE allows students to learn the skills of teamwork, collaboration and communication. According to the Interprofessional Education Collaborative (IPEC), the goal of interprofessional learning is for improved team-based care and population health outcomes.[1] The four core competencies of IPEC include values/ethics, roles/responsibilities, interprofessional communication and teams/teamwork.[1] Evaluation and assessment of the competencies at various stages of an IPE activity is important to evaluate their effectiveness.

An interprofessional, case-based nicotine cessation activity was developed between pharmacy, physician assistant (PA) and dental schools. Students from these programs participated in collaborative activities over three academic years. Within the first two academic years, self-evaluation was utilized as the means to assess this activity.

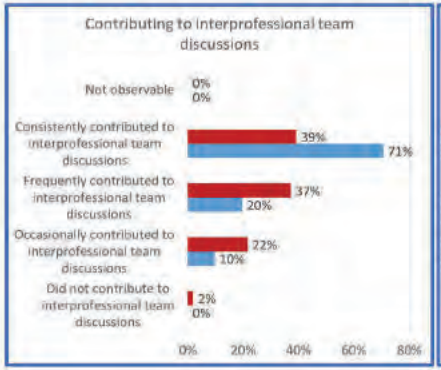
The aim of this study was to expand beyond self-evaluation and compare student self-evaluation to peer evaluators. This update occurred in year three of the ongoing collaboration. The hypothesis was self-evaluation would be reported with higher competency than peer-evaluation.

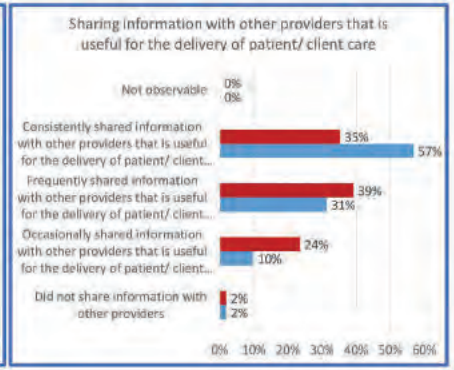
Methods

- In the 2021-2022 academic year, pharmacy and PA students piloted self- and peer-evaluation tool utilizing an abridged Interprofessional Collaborator Assessment Rubric (ICAR). The ICAR was used to assess attainment of the four core competencies through pre- and post-event surveys to gauge learning outcomes related to interprofessional education.
- Participants were randomly assigned to participate in 1 of 6 nicotine cessation interdisciplinary events. Roles/ responsibilities, teams/ teamwork, patient care planning, and motivational interviewing were objectives for the interprofessional events.
- Breakout teams with dental, pharmacy, and physician assistant students were small (n=5-7 students/ group). There were larger debriefing sessions for all small breakout groups to participate in throughout each session.
- Within 24 hours of the conclusion of the event, an abridged ICAR instrument was disseminated to participants via the Qualtrics® platform. The survey included the learner's discipline, event date, and four self- and peer-evaluation questions related to teams/ teamwork and role/responsibilities.[2] An option to opt out of responses being used for scholarly purposes was offered to all. Students were requested to complete the survey within 72 hours of receiving the instrument.
- Data was aggregated over 6 nicotine cessation interdisciplinary events.
- Each ICAR behavioral response related to self and peer evaluation could be evaluated as not observable (0), did not occur (1), occasionally occurs (2), frequently occurs (3), or consistently occurs (4).
- Mean and standard deviation was summarized in the aggregate.

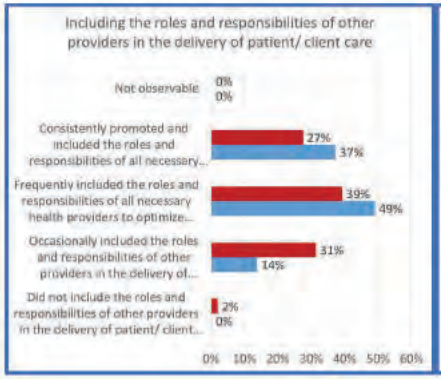
Results

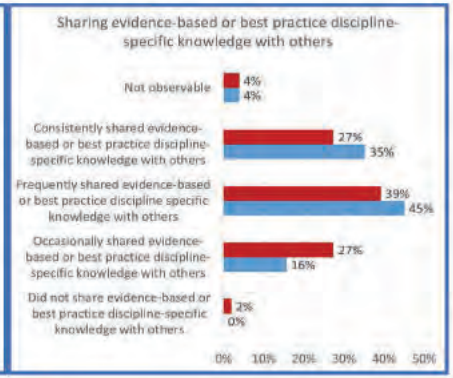
Team/ Teamwork:



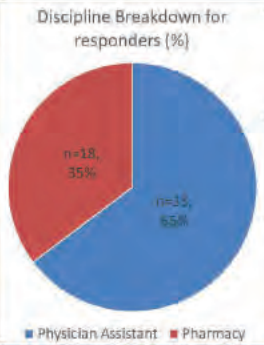


Roles/ Responsibility:





Results



- Eighty-six students completed the survey, with 51 (59%) allowing results to be used for scholarly purposes in a de-identified manner.
- In all four evaluated areas, self-evaluation was consistently higher (mean 3.27 – 3.61, SD 0.66-0.77) than peer evaluation (mean 2.92 – 3.14, SD 0.81-0.88).
- The most significant difference when comparing peer- to self-evaluation was identifying contributions to interprofessional team discussions (team/ teamwork competency).

Conclusions

- Accreditors in many healthcare programs require interprofessional competency development. This includes accreditors for physician assistant and pharmacy programs.
- Relying on self-evaluation does not generally meet accreditation requirements. Integrating peer- and facilitator assessment tools is needed.
- This data shows inflation occurring when relying solely on self-evaluation for interprofessional competency.
- One future area for improvement is also including facilitator evaluation.
- Expanding to include all student disciplines participating in this nicotine cessation case-based event is another area to further develop.
- A limitation to this data includes 41% of survey responders opting out of their information being used for scholarly purposes.

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Evolution of an IPE Case: An Interprofessional Approach for Large Student Cohorts

Radhika Aravamudhan, Ph.D; Chad Duncan, PhD; Michelle Fischer, MMS; James F. Konopack, PhD; Cara Orr, MMS; Kelly Salmon, SLPD; Robert Serianni, MS; Andrew Tyszka, OTD; Melissa Vitek, OD

GOAL

Successful early exposure to IPE competencies for health professions students, across six disciplines, enrolled in the Interprofessional Evidence Based Practice course.

PROJECT

The development of cases is instrumental to interprofessional education (IPE) courses. In this poster, we focus on how our case evolved to incorporate a set of conditions to prepare future professionals participating in the IPE experience in collaborative practices.

These cases not only focus on specific diagnosis or management in one profession, but integrate the IPE competencies over several professions.

Each facilitated class session began with a large group review of IPE competencies and a reminder of the small group objectives for the day. By incorporating multiple health problems and functional deficits into a single patient presentation, this activity integrates the IPE competencies over several professions.

Students were then broken out into small interprofessional groups to work on their case study project, under the guidance of their faculty advisors.

IPE CASE

Case " Mary" first was developed in 2012 and evolved by incorporating additional presenting symptoms to include participation of all the health professions students. Iterations also included description of symptoms like "suffering" to "experienced"

PROFESSIONS

Optometry, Audiology, Physician Assistant, Speech-Language Pathology, Occupational Therapy, and Orthotics & Prosthetics

CURRENT CASE

Mary Smith is a 72-year-old female. She is married, a retired schoolteacher, with two children and four grandchildren. She has recently experienced a stroke that has left her with vision loss, aphasia, hearing loss, her foot and toes not clearing the floor, and other challenges with mobility. Collectively, this makes it difficult for Mary to be successful in her activities of daily living.

CASE-BASED APPROACH

- With large student cohorts, it's important to have an appropriate case, that aligns with IPEC competencies.
- Participants need to identify their professional roles and responsibilities and work within a collaborative framework.
- This course provides first-year graduate students with an early exposure to IPE, developing their openness to collaborative practice.
- Students' early exposure also means limited knowledge of their professions.
- A case-based approach with small-group facilitation helps students understand their profession and teaches them essential skills for collaborative practice.

FACILITATION

- The large group of 300+ students were divided into small groups of eight to ten students.
- Each group consisted of students representing four or more professions.
- Each group was facilitated by a faculty advisor.

IPE COMPETENCIES

The following IPEC competencies were addressed in this course:

- Describe the four core IPE competency domains as defined by The Interprofessional Education Collaborative (IPEC).
- Define teamness and the expectations for membership of an IPE team.
- Identify the roles of relevant healthcare professionals in the care of a particular patient.

SMALL GROUP WORK

- Formulate a clinically relevant question using PICO that is derived from the case scenario
- Participate as an effective team member in an interprofessional environment
- Identify a specific study design
- Effectively search for evidence supporting the clinical question
- Critically appraise an article utilizing the appropriate validity criteria as per the study design
- Apply the results of an article to a clinical scenario
- Participate in a peer review process

ASSESSMENT

- Goals were measured using a retrospective pre-post survey on perceptions, attitudes, and competencies using modified versions of the following questionnaires:
  - The Interprofessional Collaborative Competency Attainment Scale (Revised)
- Incorporated both formal and informal student feedback on the course, teamness in the process of educating the students in collaborative practice, their perceptions of IPE, and facilitator debriefs to evaluate and enhance the course.

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Interprofessional Case Studies: A Cross-Disciplinary Approach to Developing Counselor Identity

Alwin Wagener, PhD, *School of Psychology and Counseling*; Elliotte Harrington, PhD, *School of Psychology and Counseling*; Julie E. Phelan, PhD; Dongmi Kim, PharmD, *School of Pharmacy and Health Sciences*

Introduction/Overview

- Professional counselors are increasingly involved in interdisciplinary collaboration particularly with the growing jobs for counselors in integrated care.
- For the past four years, master-level student-interns from the university's Clinical Mental Health Counseling(CMHC) program have taken part in an annual Interprofessional Case Study (IPCS) with masters degree students from the university's school of pharmacy.

Hypothesis

Compared to pre-test ratings, pharmacy students would be more likely to rate psychosocial factors as important after the collaborative discussions and counseling students would be more likely to rate biobehavioral factors as important.

Method

- Students watched a video of a client intake (created using an actor) and reviewed a brief written description of the client.
- The intake was specific to the profession and students only saw their profession's intake.
- Students completed a pre-test questionnaire after watching the intake which assessed their perception of the importance of biological, behavioral, and psychosocial issues for treating the client.
- Students met in small groups with students from the other profession to generate a shared treatment plan
- Following the collaborative treatment plan meeting, students completed a post-test which again assessed the perceived importance of the biobehavioral and psychosocial factors
- We tested our hypotheses using 2 (program: pharmacy vs. counseling) x 2 (time: pre vs. post IPE) ANOVAs, and results aligned with expectations, and demonstrated a large effect of the IPE discussions on expanding students' considerations of important health related factors.

Participants

1. CMHC Masters Students: *n* = 40
2. School of Pharmacy Students: *n* = 59

Results

Interaction between Time and Program on Ratings of Importance

	Counseling		Pharmacy		Interaction	
	Pre IPE	Post IPE	Pre IPE	Post IPE	*F*	η_p^2
Biobehavioral						
Alcohol Use	93.4 (8.6)	95.1 (6.4)	97.4 (6.7)	97.3 (5.5)	1.24	.01
Cigarette Use	77.1 (22.3)	83.9 (15.7)	97.1 (6.2)	92.8 (12.0)	10.95**	.10
Family History	68.1 (21.3)	62.1 (23.9)	75.0 (23.8)	65.7 (29.2)	.38	.00
Gastric Ulcer	52.5_a (31.2)	71.8_b (20.0)	88.7 (17.8)	83.0 (21.2)	23.82***	.20
Medications (current)	37.7_a (20.8)	63.9_b (23.3)	75.5 (30.8)	75.1 (30.6)	14.71***	.14
Medications (past)	27.9_a (20.3)	49.9_b (24.0)	34.6_x (40.1)	58.2_y (37.9)	.03	.00
Peripheral Arterial Disorder	50.5_a (29.1)	69.1_b (24.4)	79.8 (22.9)	72.0 (24.5)	18.33***	.17
Combined Index	59.6_a (16.2)	70.1_b (13.4)	80.0 (12.6)	77.9 (14.1)	17.94***	.16
Psychosocial						
Career	74.2 (17.7)	77.3 (17.6)	56.7_x (22.7)	71.8_y (23.5)	6.18*	.06
Family Support	67.3 (21.1)	68.5 (22.2)	57.7_x (29.5)	77.0_y (23.0)	10.17**	.10
Mental Status	83.1 (13.4)	84.4 (17.9)	74.0_x (25.7)	86.5_y (18.1)	5.03*	.05
Social Support	73.8 (17.9)	76.4 (20.2)	62.8_x (25.1)	78.8_y (24.3)	6.38*	.06
Combined Index	74.8 (12.9)	76.6 (15.9)	63.0_x (17.4)	78.4_y (16.1)	15.11***	.14

***$p < .001$, **$p < .01$, *$p < .05$.

Note. Differing subscripts indicate significant within-program difference between pre-and post-test ratings at $p < .01$.

Conclusion

- The hypothesis was confirmed.
- IPE discussions between counseling and pharmacy students significantly changed their ratings of what was important
- Pharmacy students rated psychosocial factors as more important compared to pre-tests after the interprofessional meeting
- Counseling students rated biobehavioral factors as more important compared to pre-tests after the interprofessional meeting.

Implications

- Interprofessional learning activities can be valuable for developing awareness important to client care
- Interprofessional learning activities can be integrated into counseling and pharmacy programs in support of students' professional development

Nutrition Focused Simulated Activity Promotes Team Skills for Athletic Training and Dietetic Students

Lead Investigators: Bernadette L. Olson, EdD, LAT, ATC and Amber Howells, PhD, RDN, LD

Acknowledgements: Special thanks to DT faculty: (Laura Bain, Erika Lindshield, Dr. Kevin Sauer) and AT faculty (Jenn Cook, Dr. Ryan Thiele, Dr. Phill Vardiman) for their expertise and commitment to delivering a great experience for students

Needs Assessment

- Athletic Training (AT) and Dietetics programs (DT) share same department at KSU; however, no IPE interaction.
- ATs and DTs are members of sports medicine teams who collaborate to support pts./clients RE: nutrition concerns.
- Relative Energy Deficiency in Sport (RED-S) and Diabetes are two common nutrition-based concerns treated through team-based care.
- ATs and DTs need knowledge of the conditions and patient circumstances, but also need a strong interdisciplinary skill set to support patients/client and improve outcomes.
- Needed IPE engagement to allow students a safe space to practice IPE skills.

Project Goals

Learning from, with and about each other…

Primary Goal:

- Allow teams of ATSs and DTIs to engage together as teams, develop intervention plans and deliver care in an interdisciplinary approach.

Secondary Goals:

- Learn about education/credentialing of each profession.
- Learn about scope of practice and how to make referrals.
- Accept input from and value contributions by members.
- Demonstrate positive attitudes towards patient-centered care and shared decision-making

Highlights of Results/Findings

****IPEC Competency Self Assessment Tool, v3 (2014)***

- ATSs and DTIs self-reported strong IPE skills prior to event; however, reported improvement in skills post:
  - **INTERACTION:** Pre: M=4.02(0.58), Post: M=4.38(0.53)
  - **VALUES:** Pre: M=4.54(0.50), Post: M=4.68(0.48)

****Readiness for Interprofessional Learning Scale (RIPLS)***

- Again, ATSs and DTIs self-reported strong beliefs pre and post, however, most improvement post include:
- Shared learning before graduation/better team member; improve ability to understand pt. problems; communicate…

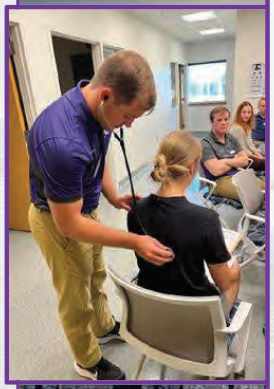
****Interprofessional Collaborator Assessment Rubric (ICAR)***

- Communication strongest (M=2.36<0.45); Collaboration needs most improvement (M=1.88<0.59>)

Project Design and Flow

PRE-EVENT ACTIVITES

- Students complete "pre-event student self-assessment (IPEC Comp. Self-Assessment Tool v3/July 2017 and RIPLS)
- Review IPEC competencies
- Complete IPE modules (Center for Advancing Interprofessional Practice, Education and Research, ASU)
- Additional discipline specific reading



CASE 1 " Jane who Runs"

- 18 yo high school female, strong students, participates in many activities and is looking for a scholarship to run at a prestigious university
- Presents with session of stress fracture and female triad/relative energy deficiency
- ATs and DTs work to evaluate, share findings and develop a plan of care

CASE 2 "Katie who plays basketball"

- 16 yo high school female recently diagnosed with Type I diabetes
- Received some patient education RE: CHO counting, etc. with hospital discharge
- DTs and ATs work to design a plan and educate for safe participation in sport and lifestyle

POST-EVENT ACTIVITIES

- Debriefing with students
- Faculty facilitators complete abbreviated ICAR
- Students complete "post-event student self assessment (IPEC Comp. Self Assessment Tool v3/July 2014 and RIPLS (2005)
- Data compiled
- Faculty debrief on experience to make improvements for next year

I Can't Believe it's Not In-Person: Transitioning from In-Person to Virtual Crisis Management for Interprofessional Students

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THE CHALLENGE

- **To transition our in-person, interprofessional crisis management activity to a virtual setting while maintaining an immersive and interactive environment that encourages real-time communication and collaboration.**

STEPS FOR IPE CURRICULAR DEVELOPMENT

Program Level

1. Needs assessment for program
   a. Assure institutional buy-in
   b. Discuss institutional policy changes (e.g., COVID restrictions)
   c. Review accreditation requirements, length of curriculum, and number of events needed

Interprofessional Level

1.Purposeful planning & needs assessment
   a. Convene leadership from all disciplines
   b. Review accreditation requirements for all disciplines
   c. Assess feedback from previous modalities
   d. Virtual platforms (Zoom, Teams, Google Meets, etc.)
   e. Document storage (Box, One Drive, etc.)
   f. Leadership planning meetings

2. Logistics
   a. One day event or longitudinal
   b. Determining date / time that works for all disciplines
   c. Equipment needed (e.g., camera, simulation equipment)
   d. Funding needed

3. Content development
   a. Determine topic area or disease state
   b. Identify roles for all disciplines involved
   c. Assessment methods and tools

4. Pilot(s) runs
   a. Revise IPE as needed

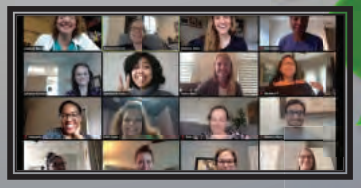
5. Delivery of full IPE

CURRICULAR DELIVERY

- **Medicine, nursing and pharmacy faculty develop script and prompts to address learning objectives**

- **Medicine, nursing and pharmacy faculty and students record scripted content**

- **Medicine, nursing and pharmacy students gather via Zoom to pre-brief, participate in learning activity, and de-brief**



- **Medicine, nursing and pharmacy students have rich discussion surrounding prompts integrated within video delivery**

QUANTITATIVE RESULTS

- **100%** Respected expertise, used effective communication, resolved conflict respectfully
- **97%** Demonstrated effective leadership practices
- **94%** Prepared them for real situations
- **89%** Well-designed and realistic

SELECTED QUOTATIONS

"I liked the pauses in the video; I appreciated attempts to pull in other disciplines to get their insight"

"Real-life simulation"
It "involve[ed] different healthcare members in patient care"
It helped learners "recogniz[e] other health professional roles and responsibilities"

"I had some connectivity issues during the activity"
"I think the cameras could have been off during the video playback"

NEXT STEPS

- Pilot -> Full implementation
- Faculty Assessment Tool

Interprofessional Education Involving Health and Social Work Students Focused Upon A Homeless Adult At Risk

Mary - Clare Davidson, M.A. in SW, FHEA; Lisa Ashworth MSc SPQDN FHEA, District Nursing; Dr Abhi Jones, MRCGP AFHEA
University of Central Lancashire

University of Central Lancashire
UCLan

Introduction

An online IPE event for health and social work students, focusing on a homeless adult. It aims to embed practice rooted from the outcomes of research from Preston-Shoot (2020) on data from Safeguarding Adult Reviews (SARs) under the Care Act (2014). 150 students from District Nursing, Medicine and Social work programmes worked together within Microsoft Teams, using an immersive image embedded with case information, to create shared risk assessments and goal-orientated management plans using person-centred tools.

Objectives

- To offer students a safe space to practice working with individuals of other professions to maintain a climate of mutual respect and shared values.
- To work in small multi-disciplinary groups, using the knowledge of one's own role and those of other professions to appropriately assess and address individual health and social care needs.
- For students to construct a shared MDT risk assessment with mitigation strategies.
- To recognise the issues in safeguarding adults.
- To recognise the experience of multiple exclusions in individuals who are homeless.
- To employ person-centred tools to create shared-management plans.

Innovative Use of Technology

Microsoft Teams
Used as a host platform for 150 student to take part simultaneously during the simulation, working in small groups with documentation to read and complete embedded within the platform.

Thinglink
Immersive imagery with embed case material used to create a realistic case study.

Shared Risk Assessment
Creation of a shared MDT online document.

IPEC Competencies

Competency 1
Work with individuals of other professions to maintain a climate of mutual respect and shared values. (Values/Ethics for Interprofessional Practice)

Competency 2
Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations. (Roles/Responsibilities)

Lessons Learned

- Inclusive but no safety nets, therefore mirroring professional practice.
- Online methods allowed for multiple professional attendance.
- Equal relationships are important in event creation to prevent hierarchal hidden curriculum being taught to students.
- However, online methods do take time to set up and requires heavy organisational skills with clear signposting for all.

Evaluation

A mixed method approach was used. A pre- and post-event questionnaire was developed to assess change in confidence base on IPEC competencies.

- Significant improvements were seen in confidence with:
  - Working with other professionals
  - Communicating their role
  - Understanding the roles and responsibilities of others
- Themes arising from free-text responses were:
  - Better understanding of roles and responsibilities of the other health professionals
  - Improved understanding of MDT care
  - Improved patient and holistic care
  - Using person centred approaches & relationship-based practice

Research Questions Emerged

- Can large-scale online MDT simulation improve Interprofessional Competencies?
- Can IPE simulation improve practice partnerships with homeless individuals?
- Does the improved confidence from IPE simulation translate into professional practice?

Interprofessional Public Health Simulations and Professional Identity Formation among First-Year Health Profession Students

Tim Brown, PharmD, BCACP, FASHP; Kay Brooks, BSPharm, MEd; and Mary Kate Steinbeck, MEd
University of Georgia College of Pharmacy, Athens, GA

Introduction

- Each year, University of Georgia (UGA) College of Pharmacy, UGA College of Public Health, and the Augusta University nursing school conduct an interprofessional education (IPE) event to introduce students to team-based care following a simulated local outbreak of Giardia.
- The Interprofessional Collaborative Competencies Attainment Survey (ICCAS 2018) is a validated instrument (Archibald et. al., 2016). Students self-assess their competency for 20 behaviors in 6 dimensions consistent with Professional Identity Formation (PIF) and team-based care (Janke et. al., 2021): communication, collaboration, roles and responsibilities, collaborative patient-centered approach, conflict management, and team functioning.

Objective

To compare pre- and post- ICCAS scores and qualitative feedback to understand learner's evolution around professional identity related to team communication, functioning, and collaboration.

Consistent with professional identify formation, these ICCAS skills showed the most improvement:

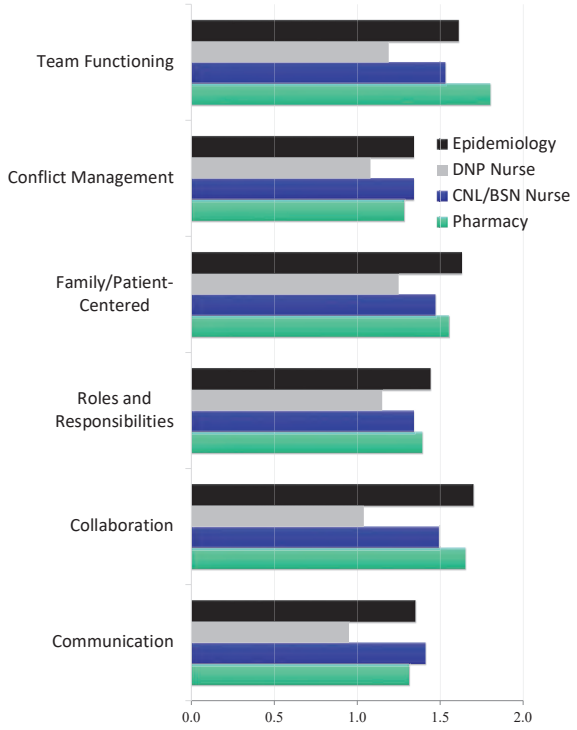
- Negotiating responsibilities with overlapping scopes of practice (Team Functioning)
- Assessing the health situation and providing whole person care (Family/Patient Centered Care), and
- Developing an effective care plan with IP team members (Team Functioning)

Methods

- First-year health professional students worked in teams of pharmacy, epidemiology, CNL nursing, and DNP nursing students to provide patient-centered care and explore concepts of professional identity such as negotiating their professional role on the team and navigating different approaches to providing patient-centered care.
- The mean change in pre- and post- ICCAS scores (Scale 0-5) for each student were tabulated.

Results

Change in Pre- and Post- Mean Scores by ICCAS Dimension



- 246 students completed the pre- and post- ICCAS survey
- The mean score increase ranged from 0.79 – 1.87 across all 20 ICCAS items.
- Pharmacy and epidemiology students reported the largest change in abilities for Collaboration, Family/Patient Centered Care, and Team Functioning dimensions.
- DNP nursing students reported the smallest change across all dimensions.

Discussion and Implications

- Professional identity formation is a process of internalizing and demonstrating how a professional thinks, feels, acts, and prioritizes care within their scope of practice.[1]
- Student self-assessment using the ICCAS provided a glimpse at individual student progress in interprofessional behaviors consistent with professional identity formation. Further analysis of the qualitative responses could be useful in future research.
- Intentionally designed IPEs can assist all health care professions to develop new insights on professional identity and recognize the benefits of team-based healthcare to optimize patient outcomes.

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Janke, K. K., Bloom, T. J., Boyce, E. G., Johnson, J. L., Kopacek, K., O'Sullivan, T. A., Petrelli, H. M. W., Steeb, D. R., & Ross, L. J. (2021). A Pathway to Professional Identity Formation: Report of the 2020-2021 AACP Student Affairs Standing Committee. *American Journal of Pharmaceutical Education, 85*(10), 1128–1142. https://doi.org/10.5688/ajpe8714

Interprofessional Simulation with Standardized Patients (SPs): Interviewing Strategies to Destigmatize Substance Use Disorders (SUDs)

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Texas Tech University Health Sciences Center
(a) Department of Clinical Counseling and Mental Health; (b) Office of Interprofessional Education

INTRODUCTION

- Substance use disorders (SUD) are associated with discrimination and social disapproval - more so than any other medical condition.
- Many patients with SUD, have a high likelihood of readmission.
- Left untreated, thousands of deaths occur every year.
- Every healthcare professional plays a role in patient safety, utility and satisfaction – every patient deserves respect and access.

>100,300 DRUG OVERDOSE DEATHS OCCURRED IN THE US IN 2021, THE HIGHEST NUMBER OF OVERDOSE DEATHS EVER RECORDED IN A 12-MONTH PERIOD
cdc.gov

BACKGROUND & PROJECT AIMS

- Most healthcare professionals get limited training and exposure to SUDs
- Healthcare professionals and teams are typically the first points of contact for persons with SUD, and should take the necessary steps to reduce the potential for stigma and negative bias.
- Empathy and congruence play a role in boosting patient safety, return rates, and treatment adherence.
- Overdose deaths in Texas, from Opioids, are 6th highest among all states.

- The purpose of this virtual interprofessional simulation with standardized patients (SPs) is to allow teams of learners to practice taking a substance use history and developing a plan of care focused on harm reduction and team-based care.
- Teams will have the opportunity to practice using destigmatizing language and demonstrate compassion for patients with SUDs from a wide variety of backgrounds.
- ***Shatter the Stigma: An Interprofessional Simulation with SPs*** occurs each summer.

STUDENT LEARNING OBJECTIVES

- Summarize recent trends in substance use and addiction, as related to patient care needs including communication methods that destigmatize substance use.
- Recognize and address potential barriers to communication including stereotypes/stigmas.
- Practice team-based patient interviewing skills that demonstrate empathy, respect for autonomy, and compassion for the patient's holistic needs.
- Discuss team-based referral and treatment options.

LEARNING AGENDA

- Keynote presentation on team-based care in SUDs including harm reduction strategies
- Introduction to strategies to destigmatize the substance use history and interview
- Interprofessional team simulation with 2-3 SP cases
- Large group debrief to discuss the simulation
- Expert panel discussion on team-based care
- Complete a team evaluation

LOGISTICS

- Develop, train, and support SPs
- Theatre and professional SPs
- Screening, selecting, and editing materials for team handouts and prework
- Identify speakers
- Technical training sessions
- Online meeting space – AirMeet
- Planning, training, orientation, executing
- Recruiting learners, student peer facilitators, and faculty facilitators

Scan the QR code to download the facilitator guide

IPEC CORE COMPETENCIES

- Values/Ethics for Interprofessional Practice
- Roles/Responsibilities
- Interprofessional Communication
- Teams and Teamwork

SIMULATION WITH SPs

Interprofessional teams of about 5 students with both a student and a faculty facilitator reviewed the case histories for SPs. Then they worked together to, individually, interview 2-3 SPs around the topic of SUD. Focus was placed on using destigmatizing language and evidence-based interview techniques. Then the team debriefed their team performance with their facilitator.

OUTCOMES

2021:
- 362 students from various health professions, nursing, pharmacy, and social work
- 36 facilitators and 50 SPs

2022:
- 332 students from various health professions, nursing, pharmacy, and social work
- 30 facilitators and 31 SPs

Outcome Data for 2021 Shatter the Stigma Interprofessional Teams

Team assessment using a 360-degree assessment tool	Students	Facilitators	SPs
Team members communicated effectively within the team.	97%	100%	95%
Team members were supportive and respectful to other team members.	99%	96%	96%
Team members conveyed information in a manner that was easy to understand.	96%	96%	93%
Team members acted ethically in providing for the needs and safety of the patient.	97%	100%	96%
Team members identified their respective health professions' roles and understood the roles and responsibilities of each profession.	94%	93%	92%
Team members worked collaboratively in the coordination of care.	94%	93%	91%
Team members supported the patient's decisions about the care they received.	96%	93%	93%
Team members collaborated and agreed on the patient care plan using effective problem-solving.	93%	89%	93%
Team members demonstrated leadership practices that led to effective teamwork.	93%	86%	93%
Team members' response to the simulated activity reflected those that would be encountered during an authentic clinical appointment.	94%	89%	98%

Outcome Data for 2022 Shatter the Stigma Interprofessional Teams

Team assessment using a 360-degree assessment tool	Students	Facilitators	SPs
Team members communicated effectively within the team.	97%	94%	84%
Team members were supportive and respectful to other team members.	98%	100%	91%
Team members conveyed information in a manner that was easy to understand.	99%	100%	94%
Team members acted ethically in providing for the needs and safety of the patient.	99%	94%	82%
Team members identified their respective health professions' roles and understood the roles and responsibilities of each profession.	92%	100%	83%
Team members worked collaboratively in the coordination of care.	98%	94%	80%
Team members supported the patient's decisions about the care they received.	96%	93%	79%
Team members collaborated and agreed on the patient care plan using effective problem-solving.	93%	90%	70%
Team members demonstrated leadership practices that led to effective teamwork.	95%	100%	87%
Team members' response to the simulated activity reflected those that would be encountered during an authentic clinical appointment.	99%	94%	81%

CONCLUSIONS

A 360- degree assessment tool was used to assess interprofessional team behaviors, including communication, collaboration, team functioning, roles/responsibilities, collaborative patient-family-centered approach, values/ethics, and conflict management. Assessment data indicated that team members; student and faculty facilitators; and SPs agreed that teams demonstrated skill development in all areas assessed, especially in the areas of communication and values/ethics, a foundational objective of this IPE event. Overall, the event was well-received, with a favorable response to continue the event in a virtual or in-person environment. Identified opportunities for improvement included consistent standardized patient training, as well as additional time for SP interviews and team debriefing in-between SP encounters.

CONTACT US

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The Use of an Acute Care Simulation Experience to Develop the IPEC Core Competencies of Interprofessional Teams of 1st Year Healthcare Students

Michelle Masterson, PT, PhD; Maggie Maloney, OT, PhD; Erin Mastin, Program Manager; Tiffany Hemminger, OTD Student; Jordan Norris, MD Student

Introduction

- Interprofessional simulations provide the opportunity to learn with, from, and about each profession in a safe environment, practice Core Competencies (CCs), and prepare for collaborative practice.
- There is a need for simulations that promote the CCs in the early phases of professional education.

Purpose

- Develop an interprofessional acute care simulation experience for 1st year healthcare students.
- Evaluate its effectiveness in promoting the CCs and team-based patient care skills.

Methods

600+ students from 9 healthcare professions worked together on interprofessional teams of 4-6 students as follows:

TIME	TASK
(10 min)	**PREPARATION:** Students arrive, introduce themselves, and develop a plan for the patient encounter
(17 min)	**SIMULATION (gather info; complete mobility task):** Team 1B meets with Connie, Team 1A observes Team 2B meets with Ralph, Team 2A observes
(3 min)	Teams switch and prepare for next simulation
(17 min)	**SIMULATION (gather info; complete mobility task):** Team 1B meets with Connie, Team 1A observes Team 2B meets with Ralph, Team 2A observes
(3 min)	Teams travel to assigned debrief room
(15 min)	**DEBRIEF (guided by a facilitator):** Discuss and provide feedback about the encounter: • What worked well and what could be improved • Focus on communication with each other and the patient, collaborative practice, pros/cons of working as a team in the acute care environment

Results & Findings

93%+ agreed or strongly agreed the experience improved their knowledge and skills in the CCs.

95%+ agreed or strongly agreed it was effective to prepare for future collaborative practice.

Conclusion

The outcomes of this experience support the use of an acute care simulation to further develop the CCs for interprofessional teams of 1st year healthcare students and to prepare them for future collaborative practice.

THE UNIVERSITY OF TOLEDO

WORK INTEGRATED LEARNING – OPPORTUNITIES FOR INTERPROFESSIONAL COLLABORATIVE TEAMWORK (IPCT)

Self rated perceived interprofessional competency significantly improved

'a chance to build relationships with students from other professions'

OUR TEAM

Our Program

LEARNING NEEDS ANALYSIS

Students rate their confidence in IPCT

QUALITY IMPROVEMENT PROJECTS

Interprofessional student teams follow a quality improvement framework to create resources for future students

WORKSHOPS & SIMULATIONS

Workshops focusing on IPCT skills & Simulations providing students opportunities to demonstrate their IPCT competencies

IPCT ON THE RUN

Informal learning activities such as work shadowing other health professionals

2021 new hospital – Surgical, Treatment & Rehabilitation Services (STARS)

- 100 sub acute rehabilitation
- Large procedural unit

Providing over 200 clinical placements each year – to over 10 disciplines

STARS Education and Research Alliance

CREATING KNOWLEDGE | TRANSFORMING CARE

The University Of Queensland | Metro North Health | Queensland Government

Working Together is Better: *Team-based Learning to Improve Oral and Systemic Health*

Pinar Emecen-Huja, DDS, PhD; Elizabeth Pilcher, DMD; Michelle Ziegler, DDS, FSCDA; Joni Nelson, PhD, MS

MUSC Medical University of South Carolina

PURPOSE & PROJECT GOALS

Collaboration among healthcare professionals to improve health outcomes has become a national priority. Specifically, individuals with special health care needs (SHCN) with complex medical issues can be best served utilizing interprofessional (IP) health care teams. Therefore, we sought to improve oral and systemic health education within our curriculum by developing a unique IP team.

IPEC COMPETENCY PRIORITIES

Competency 2: Roles and responsibilities
Competency 3: Interprofessional Communication

METHODS

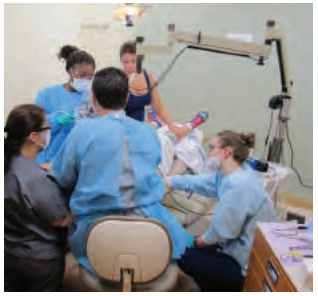
Study Design & Data Collection: We introduce a novel IP clinical rotation composed of dental, occupational therapy, physician assistant and pharmacy students. The IPEC Core Competency Domains were used to inform our study (See Figure 1). The Interprofessional Collaborative Competencies Attainment Survey (ICCAS) was used to examine pre and post program experiences for each student (*n*=67). Responses were collected via SurveyMonkey.

Data Analysis: Means and standard deviations of the retrospective pre-program and post-program responses were reported for each of the survey items (n=20). Paired samples t-tests were conducted on each of the questions, and the mean difference (post-value minus pre-value), and the associated p-value are reported, along with the effect size using SAS (version 9.4). .

Figure 1. IPEC Core Competency Domains

RESULTS

'IP Teams Working Together'



Clinical care delivery

Patient and caregiver interview

Roles	Dental Content Expert	Physician Assistant Content Expert	Pharmacy Content Expert	Occupational therapy Content Expert
Responsibilities	Establishing goals for oral health care	Chronic disease management and prevention	Medication management	Physical adaptations for oral health and daily life improvement
Activities	Motivational interview on oral health needs Evidence based patient education Follow up to monitor management goals	Motivational interview to develop risk mitigation plan Review life-style factors and impact on oral health	Motivational interview on medication management Review medications that impact oral health	Conduct patient assessment Develop plan of action for physical adaptations

ICCAS Survey Results

TABLE 1. Pre-Post Student Experiences by ICCAS Domains

ICCAS Domains	Mean (SD) Retrospective Pre-Program	Mean (SD) Post-Program	Mean Difference Post-Pre	Effect Size*
Communication	3.3 (0.9)	4.2 (0.7)	1.0*	1.2
Collaboration	3.0 (0.9)	4.4 (0.7)	1.4*	1.7
Roles & Responsibilities	3.1 (0.9)	4.3(0.7)	1.2*	1.5
Collaborative Patient/Family Centered Approach	3.1 (1.0)	4.4 (0.7)	1.3*	1.5
Conflict Management/Resolution	3.4 (0.9)	4.4 (0.7)	0.98*	1.2
Team Functioning	2.9 (1.0)	4.3 (0.7)	1.4*	1.6

*paired sample t-tests, $p < 0.001$

TABLE 2. Pre-Post Student Rotation Experiences by ICCAS Survey Items

ICCAS Domains	Item	Mean (SD) Retrospective Pre-Program	Mean (SD) Post-Program	Mean Difference Post-Pre	Effect Size*
Communication	1	3.1 (0.8)	4.3 (0.7)	1.2*	1.6
	2	3.4 (1.0)	4.5 (0.7)	1.1*	1.3
	3	3.7 (0.9)	4.4 (0.7)	0.7*	0.8
	4	2.9 (1.0)	4.0 (0.8)	1.1*	1.2
	5	3.2 (1.0)	4.1 (0.7)	0.9*	1.0
Collaboration	6	2.9 (1.0)	4.3 (0.6)	1.4*	1.7
	7	3.1 (0.9)	4.4 (0.7)	1.3*	1.6
	8	3.1 (0.9)	4.5 (0.7)	1.4*	1.7
Roles & Responsibilities	9	3.1 (0.9)	4.2 (0.7)	1.1*	1.4
	10	3.3 (0.9)	4.3 (0.7)	1.0*	1.2
	11	3.1 (0.9)	4.4 (0.7)	1.3*	1.6
	12	3.0 (0.9)	4.4 (0.7)	1.4*	1.7
Collaborative Patient/Family Centered Approach	13	2.9 (1.0)	4.4 (0.7)	1.5*	1.7
	14	3.0 (1.0)	4.4 (0.7)	1.4*	1.6
	15	3.3 (1.1)	4.3 (0.7)	1.0*	1.2
Conflict Management/Resolution	16	3.4 (1.0)	4.5 (0.7)	1.1*	1.3
	17	3.5 (0.9)	4.4 (0.6)	0.9*	1.2
	18	3.4 (0.9)	4.2 (0.8)	0.8*	0.9
Team Functioning	19	3.0 (1.0)	4.3 (0.8)	1.3*	1.4
	20	2.9 (0.9)	4.3 (0.7)	1.4*	1.7

*paired sample t-tests, $p < 0.001$

LESSONS LEARNED

- **In this project, we identified key lessons learned as a result of the Clinical IP Rotation implementation:**
  1. Coordination with clinical schedules across colleges/recruitment
  2. Faculty availability for preceptor time
  3. Patient coordinator accessibility before and after the completion of the appointment
  4. Social desirability/self-report
  5. Clarity of goals for the IP Rotation is critical for implementation
  6. Institutional culture and investment is a necessity
  7. Development of faculty champions as subject matter experts for students
  8. Assess opportunities for quality improvement

INTERPROFESSIONAL PRACTICE IMPLICATIONS

- These findings present a significant quality improvement opportunity among clinical healthcare professional training programs with respect to the delivery of care for individuals with SHCN.
- Strategies moving forward to enhance interprofessional training for individuals with SHCN at clinical training institutions include: an emphasis on IPEC competency attainment, efficacy training in motivational interviewing to promote patient conversations, and prioritization of care delivery to special populations through continuing education.

Medical student and staff nurse perceptions of nurse-shadowing program for first-year medical students

Jay Patel, BS[1], Vineet Arora, MD[2] , Jeanne Farnan, MD[2], Margaret DeKoning, MSN, NE-BC, NPD-BC[2], Alesia A. Coe, DNP, RN, NEA-BC[2], Tia Kostas, MD[2]

[1]Pritzker School of Medicine, University of Chicago, Chicago, IL; [2]Department of Medicine, The University of Chicago Medicine & Biological Sciences, Chicago, IL

Background

- Both physicians and nurses play a crucial role in the delivery of healthcare
- Variance in attitudes and behaviors towards the other profession can hinder communication
- Understanding Nursing Interprofessional Team Experiences (UNITE) program was started at UChicago during the 2015-2016 school year to provide first-year medical students an interprofessional education experience shadowing staff nurses

Objective

- To improve first-year medical students attitudes about interprofessional teamwork with nurses

Methods

- First-year medical students shadowed staff nurses in various departments for a total of four hours
- Medical students completed pre- and post-shadowing REDCap electronic surveys; staff nurses completed post-shift surveys

Results

- 410 medical students participated over five years
- 378 responses from staff nurses were acquired
  - Nurses rated medical students “Excellent” or “Very Good” in engagement during shift (98.7%), interest in learning (98.4%), interaction with patients (93.4%), and interaction with Nurses (98.4%)

Results

Figure 1. Percent of medical students agreeing to various post-shift statements

After the experience, >90% of students agreed they:

- Had a better understanding of nurse’s role on patient-care team
- Were more open to learning from nurses
- Had greater respect for nurses’ skills
- Were more familiar with how much time nurses spend with patients
- Were glad they spent time shadowing a nurse

After the experience, >70% of students agreed they:

- Had a better understanding of how communication takes place between nurses and physicians, and nurses and other healthcare providers
- Were more appreciate of teamwork

Figure 2. Nurse Post-Shift Survey

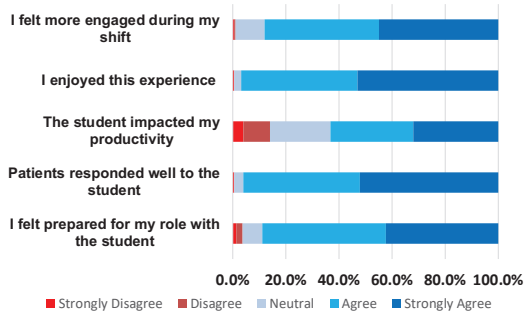
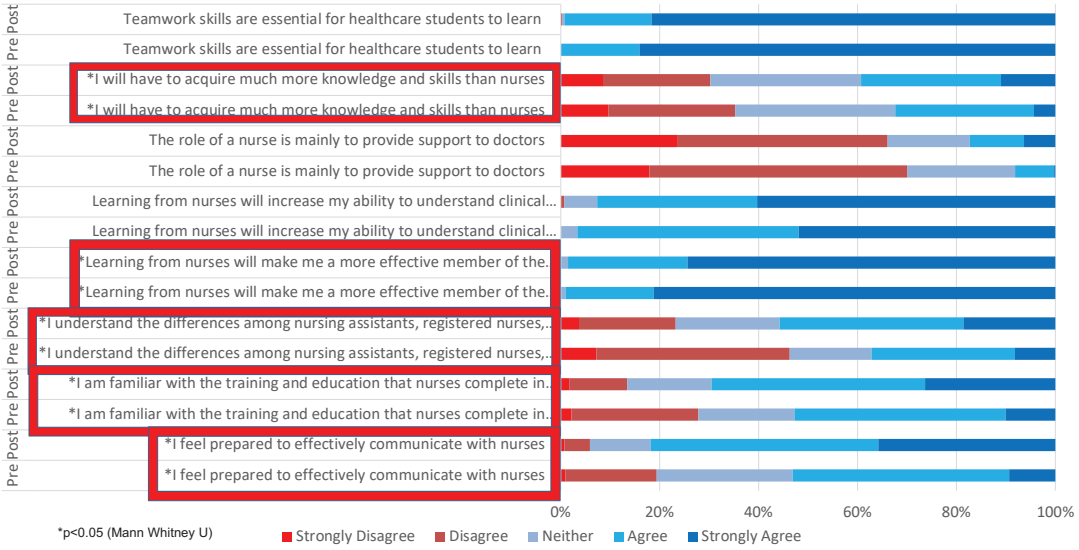


Figure 3. Pre- and Post-Survey Data (Medical Students)



*p<0.05 (Mann Whitney U)

Conclusion

- The majority of medical students viewed the UNITE experience positively
- Following the shadowing shift, students demonstrated improved attitude and perceptions of communication abilities
- Although nurses noted that students added more work, they made their shift more enjoyable
- Future directions: Qualitative analysis of the UNITE program and revamping of the program to optimize logistics

Limitations

- Single-center
- Possible ambiguity in interpreting some questions
- Data analyzed in aggregate, not paired

Acknowledgements

• We appreciate the work of Margaret DeKoning, MSN, NE-BC, NPD-BC and Alesia A. Coe, DNP, RN, NEA-BC in helping carry out this work. This work was supported by the grant “The AMA Accelerating Change in Medical Education: VISTA: Value Improvement Safety Teams Advocacy

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Student Attitudes Toward IPE: A Two-Year Review of a Labor and Delivery IPE Program

Jocelyn Greely MD, Amanda Williams MD, Lena Shay MD, Helen Dunnington MD

Obstetrics & Gynecology

Baylor College of Medicine, Houston, TX

OBJECTIVE

To analyze the impact of an interprofessional education (IPE) program on student attitudes towards interprofessional work

BACKGROUND

Teamwork is important to providing high quality care in medicine.[1] There is growing dependency on interprofessional work, resulting in a need for IPE.[2]

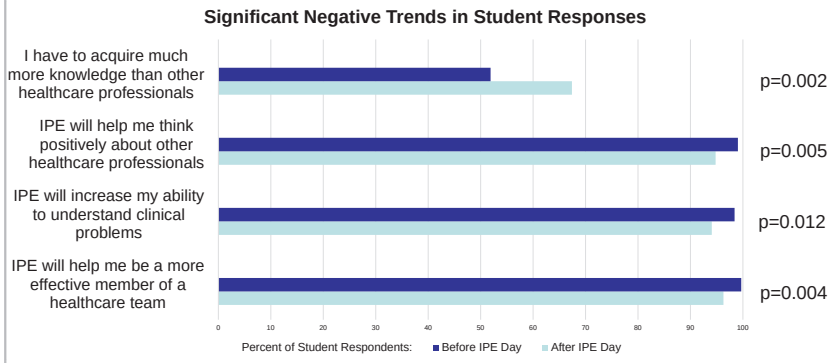
IPE can have a positive impact on students' ability to work with other healthcare professions.[3] IPE can also allow non-physicians to educate medical students about their unique skills and roles.[4]

Our OB/Gyn clerkship has implemented an IPE experience in which medical students on Labor and Delivery spend one day working with a labor nurse.

METHODS

A survey was developed to assess student attitudes related to IPE. Student surveys were administered before and after IPE experiences (n=316 and n=135). Data was collected from 2018-2020 at two clinical sites. Data was analyzed in aggregate and responses were compared between pre-experience and post-experience surveys using Chi-squared tests. Researchers reviewed open-ended comments independently.

RESULTS



Pre-existing positive attitudes of student respondents towards interprofessional work and its importance to patient care and collaboration remained unchanged.

	Pre IPE Day	Post IPE Day
Team-working skills are essential for all healthcare professionals to learn	100%	100%
Patients ultimately benefit if healthcare professionals work together to solve patient problems	100%	100%

RESULTS

Observations from open-ended comments

- Unclear expectations
- Differing experiences in student participation in patient care and procedures
- Overall positive comments regarding the importance and value of the experience
- Rare student comments detailing extremely negative experiences, often involving unprofessional behavior

DISCUSSION

The majority of participants had favorable views of IPE and positive experiences.

However, the proportion of students with certain negative attitudes towards IPE increased after the experience, although the absolute number of negative responses was small. We suspect that rare instances of very negative experiences disproportionately influenced results due to limited sample size.

A negative IPE experience can affect how students view collaboration. This highlights the importance of team members involved in IPE. We recommend that participants have interest and/or experience in IPE and medical student education.

Additionally, an IPE program requires structure, with pre-existing expectations and goals distributed to educators and learners. Based on this study, continued improvements to the IPE experience at our institution are ongoing. Additional research is needed to further develop and refine these programs.

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Changing Curricula to Increase Interprofessional Learning and Collaboration Opportunities: Results from the First Graduating Cohort

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Introduction

Faculty in the Health Science Division of the College of Health and Human Services (CHHS) at Widener University valued interprofessional learning (IPL) and collaboration (IPC) but within the curricula of the various programs, there were few well-structured learning experiences.

In 2017, faculty stakeholders from each of the disciplines met regularly to identify a core curriculum and learning opportunities based on the Interprofessional Education Collaborative (IPEC) Core Competencies. The creation of a health science division that included new health profession programs and the creation of new interprofessional teaching and learning spaces provided the opportunity for curricula redesign and implementation.

Curriculum

Using an experiential, transformative learning approach based on social-cultural constructivism, IPL/C opportunities were integrated into 7 courses and a student-run pro bono clinic. Learning about other professional disciplines and having to work collaboratively on meaningful projects makes learning transformative.

The skills need to collaborate effectively are facilitated through interactions in an authentic environment involving the pro bono clinic. Coupled with opportunities to work on teams on course projects, community-based initiatives and clinical practice helps increase student awareness of the complexities of working collaboratively and valuing the contributions of other professionals, as well as their own.

The curricular changes were launched in 2019 and the first cohort consisted of occupational (OT) and physical therapy (PT) students, who went on to graduate in 2022.

Project Goals

The primary project goals were to create a true interprofessional curriculum that was longitudinal and had students from multiple professions taking and interacting collaboratively both in courses and in actual clinical practice. Each course in the sequence had learning objectives that mapped to IPEC Core Competencies.

Assessment Plan

Students completed the Readiness for Interprofessional Learning Scale (RIPLS) and Interprofessional Collaborative Competencies Attainment Scale (ICCAS) at multiple points in the curriculum – prior to starting their programs, at the end of first year, and 2 years later immediately prior to graduation. Differences were explored using one-way repeated measures ANOVA (RIPLS) and paired sample t-tests (ICCAS).

Preliminary First Cohort Outcomes

The first grading cohort (n=52) consisted of 12 OT and 40 PT students (mean age = 26.1 ± 2.3 yrs.; 67.0% identified as female). Ninety percent of participants self-reported having 1 or more opportunities for collaboration with other disciplines during a clinical rotation prior to graduation and all had in-class and pro bono clinic IPC opportunities.

RIPLS. Table 1 supports student perceptions of initial optimism for IPL/C but later uncertainty at year 1 about learning from peers in other disciplines as indicated by a significant decrease in subsequent mean scores. When compared to initial perceptions, the sense of professional identity decreased significantly (p=.023) at graduation. Reported understanding of roles and responsibilities was consistent throughout the program.

ICCAS. Table 1 provides support for the acquisition of skills necessary for IPC with all score increasing significantly from before to after in year 1 and at graduation (p<.001).

Discussion

The interesting pattern in the RIPLS data suggests that students are overly optimistic in perceptions and understanding of their interprofessional roles upon entering the professional education phase of the curriculum. Their educational journey, which involves collaborating with peers in other disciplines, may have help them achieve a more realistic appraisal of what is required to function effectively on interprofessional teams resulting in lower scores after the first year in the program. In almost all cases, scores on the RIPLS increase at graduation but remain below those at program entry.

The ICCAS findings support the acquisition of attitudes and, potentially, the skills necessary for collaborating with peers in other disciplines. Reassurance that the program was having its intended impact was provided by the ICCAS findings. Year 1 results on the RIPLS led to the development and inclusion of the Foundation of Interprofessional Practice course in the curriculum. For the gradating cohort, COVID-19 limited the implementation of some IPL experiences.

Interprofessional Curriculum Developed

Interprofessional Curricula

FIRST YEAR IPE COURSES	PT	OT	SLP	PA
Foundations of Interprofessional Practice	x	x	x	x
Gross Anatomy	x	x	x	x
Global Health	x	x	x	x
Client Management I	x	x		
Neuroscience		x	x	
Health Promotion & Wellness	x	x		x
Evidence Based Practice	x	x	x	
CLINICAL EXPERIENCES THROUGHOUT				
Student-Run Interprofessional Pro Bono Clinic	x	x	x	x
Grand Rounds	x	x	x	x
Full-time Clinical Affiliations & Rotations	x	x	x	x
CULMINTATING EXPERIENCE				
IPE Signature Capstone	x	x	x	x

Widener University

Table 1. Mean and Standard Deviation Scores on the Readiness for Interprofessional Learning Scale (RIPLS) and Interprofessional Collaborative Competencies Attainment Scale (ICCAS)

	Outcome	Initial	1-year		Graduation	
RIPLS	Total	74.7 ± 5.4	71.8 ± 6.9*		72.0 ± 6.4*	
	Teamwork & Collaboration	42.4 ± 2.9	40.9 ± 3.9*		41.2 ± 3.7*	
	Professional Identity	32.2 ± 2.9	31.0 ± 3.4		30.8 ± 3.3*	
	Roles & Responsibilities	8.3 ± 1.4	8.3 ± 1.2		8.2 ± 1.6	
ICCAS	Communication	-	14.4 ± 3.9	19.1 ± 3.3‡	13.9 ± 4.2	21.6 ± 2.6‡
	Collaboration	-	8.1 ± 2.6	11.6 ± 1.9‡	7.8 ± 2.9	13.0 ± 1.6‡
	Collaboration – Patient/Family	-	8.1 ± 2.6	11.5 ± 1.9‡	7.8 ± 3.1	13.4 ± 1.9‡
	Conflict Management	-	9.7 ± 2.4	11.4 ± 2.3‡	8.5 ± 2.8	13.3 ± 1.7‡
	Team Functioning	-	5.1 ± 2.0	7.3 ± 1.5‡	4.9 ± 2.0	8.7 ± 1.3‡
	Role & Responsibilities	-	11.4 ± 3.3	16.1 ± 2.3‡	10.7 ± 3.7	17.6 ± 2.3‡

RIPLS: *p<.05 when compared to initial program entry; ICCAS: ‡p<.001 when comparing before and after perceptions.

Interprofessional Education

Developing and Implementing an Interprofessional Education Scholars Program for Nursing and Medical Students

Selena Gilles DNP, ANP-BC, CNEcl, FNYAM,
Beth Latimer DNP, GNP-BC, CHSE &
Natalya Pasklinsky DNP, ACNP-BC, CHSE, FNYAM

We are currently faced with a changing healthcare system, with increasingly complex patient health needs requiring us to be innovative and transform practice preparation for patient care. Also, as healthcare providers, we often work alongside one another without a true understanding or appreciation of each other's role. With interprofessional educational experiences, members of the healthcare team learn and work together in order to meet key competencies such as effective communication, and teamwork and collaboration. In order to improve the quality of teamwork, collaboration, and communication among nursing and medical students, an interprofessional education program was developed fostered by a collaboration between a Universities School of Nursing and School of Medicine.

$7 million
gift from the
Meyers Family Foundation

The scholarship was established for

5

years

OUR TEAM

12 students
in their junior year

Connect
Innovate
Inspire

Clinical Experiences

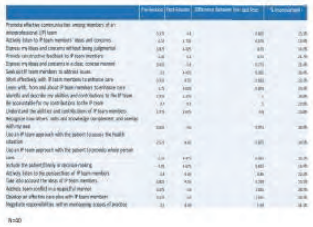
Hospital Experiences – Fall and Spring

- Nursing and medical students form a dyad to provide care for the same patient during the Internal Medicine Clerkship on a Medical Surgical Unit.
- Dyad will collaborate to :
  - Attend Patient-centered Interprofessional rounds
  - Complete a social determinants of health assessment
  - Identify other healthcare professional needed to address patient needs
  - Use SBAR to communicate

Simulation Experiences

The program is guided by learning objectives with measurable outcomes and relates to educational program critical competencies. This includes foundational knowledge on team development, characteristics of high performing teams, effective communication and roles of various health professions. With participation of practitioners and students from other health professions, including pharmacy and physical therapy, participants engage in experiential learning through simulated collaborative patient care activities and team based collaborative project execution. In the hospital clinical setting, members of the healthcare team are provided opportunities to take care of the same patient together, including attending and actively participating in interdisciplinary rounds.

COHORT 1 EVALUATION



Student Feedback

"The interaction with my interprofessional colleagues did give me confidence to interact with others in the unit."

"Communicating the information during the meeting helped me to understand which information would be useful to pay specific attention to in my care plan."

"I wish there were more opportunities to collaborate with medical students."

ICCAS CHART: Schmitz, C. C., Radosevich, D. M., Jardine, P., MacDonald, C. J., Trumpower, D., & Archibald, D. (2017). The Interprofessional Collaborative Competency Attainment Survey (ICCAS): A replication validation study. Journal of interprofessional care, 31(1), 28–34. https://doi.org/10.1080/13561820.2016.1233096

NYU Long Island School of Medicine

NYU | MEYERS

A Novel Approach to Interprofessional Education Using Simulation of the Project ECHO® Model

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Needs Assessment

Project ECHO AT NEOMED

Project ECHO is a collaborative model leveraging technology to reduce health disparities.

Project Goals

We aimed to create a meaningful and engaging interprofessional experience that would expose students to a unique learning modality while providing an opportunity for authentic discussion related to challenging social justice based patient care topics.

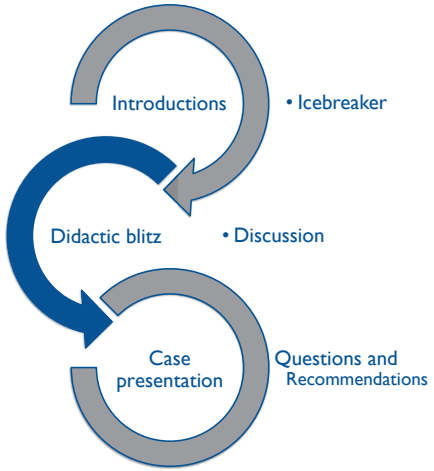
Interprofessional Faculty

- Health Policy
- Humanities
- Medicine
- Mental Health Counseling
- Pharmacy
- Public Health
- Social Work

Educational Strategies

The series consists of 3 sessions:

1. Introduction to the module
2. Faculty-led example
3. Students present didactics and cases



The ECHO model is versatile and can be adapted to focus on any topic or area of need.

Project Evaluation

96% of students rate the experience as **"very"** or **"somewhat"** applicable to their development as physicians.

"This was extremely helpful. I liked the team-oriented mentality of ECHO and how everyone has a voice. I also like the idea of utilizing each member of the team to combat multi-faceted issues."

"I loved the interdisciplinary sessions, the insights I gained from the didactics my colleagues shared, and the collaboration we all took part in each case presented! I also loved the professors on the Zoom from different aspects of healthcare who gave insights as well."

https://www.neomed.edu/projectecho/

Poverty Simulation: Addressing Poverty Invoked Health Disparities From an Interprofessional Approach

Eric West & Dr. Tiffany Sterling - ARKANSAS STATE UNIVERSITY

INTRODUCTION & PURPOSE

Poverty rates in the U.S. were 12.8% in 2021, but varied according to age with child poverty rates at 16.9% (US Census Bureau, 2022). Poverty and income status has long been associated with morbidity and mortality. It can impact ones health through a combination of clinical, environmental, social, and behavioral factors. Further, poor health results in reduced income, leading to a health-poverty negative feedback loop (Khullar & Chokshi, 2018). The Poverty Simulation, developed by Missouri Community Action Network, aims to bridge the gap from perceived health disparities in those facing poverty to understanding the actual issues at hand. The simulation allows participants to assume the persona of a character based on actual people living in poverty.

OBJECTIVES

The objective behind the Poverty Simulation is to comprehend the inequalities in health that is exacerbated by poverty. The simulation allows students from various health fields to strategically problem-solve situations through a simulated month of poverty to gain a deeper understanding of how each health profession can work interprofessionally to better accommodate the needs of the those living in poverty.

METHODS

Arkansas State University students from physical therapy, occupational therapy, dietetics, health studies, and athletic training (n = 151) participated in a simulation on 10/7/22. The simulation lasted approximately one hour with 15-minute intervals posing as one week. Students were paired randomly and spent time introducing themselves and their scope of practice before orienting to their assigned roles. At the end of each week, students were faced with a new random set of obstacles including illness, child care, home foreclosure, or other similar situations. At the conclusion of the simulation, students were asked to reflect on their experience and how each profession can play a role in alleviating certain factors of inequality.

RETHINK POVERTY
#PovertySimulation

DEBRIEF & RESULTS

The debrief portion of the simulation involves the facilitators posing prompts to guide discussion. Examples include: “What feelings did you have while navigating your weeks?” or “Did you feel you were treated with respect at all stations you visited?” Volunteers within the simulation running the various locations (i.e., Pawn Shop, Cash Advance Center, Social Services) are instructed to act callous periodically to simulate some of the biases towards this population in routine daily activities. Responses included:

“Put in the shoes of a family in poverty with the stress and tough decisions that come with it was eye opening”

“As a future health care provider, I got a sense of the struggles this populations face day to day just to survive”

“This experience rewarded me with compassion, empathy, and a deeper understanding of the obstacles that others experience and inevitably shifted the way that I want to practice and provide care to my future clients”

“This highlighted that poverty prevents you from doing a lot that we take for granted, and those suffering from it are not just a stereotype as they often get labeled.”

One additional intended result from this simulation is to help shape how they approach patients in their clinical rotations. For many students, this event takes place prior to supervised practice. Having this experience can greatly impact the way they interact with patients moving forward, as Arkansas ranks #5 in poverty in the US at 16.3% ("U.S. Census Bureau QuickFacts: Arkansas," n.d.). This outcome is measured through a self-reflection assignment that most disciplines require of students. It gives those who did not, or were uncomfortable sharing due to personal reasons, a chance to express their feelings and comments.

Student participation in Poverty Simulation 1

Student participation in Poverty Simulation 2

DISCUSSION & CONCLUSION

Students within the College of Nursing and Health Professions (CNHP) participate in a variety of interprofessional events, however they are primarily focused on case studies and simulated patients. They also study cultural competencies and the health disparities that accompany them. The Poverty Simulation is an opportunity for students to disengage from their chosen field of study and assume the role of someone in poverty. While the Missouri Community Action Network emphasizes that this is not a game, there is a great deal of strategic thinking that is involved. Those living in poverty make difficult decisions daily that will likely impact the rest of their month. Over the years, this event has shown the capacity of helping students really consider what it is like to live in poverty, see the day to day struggles this population faces, and as it pertains to healthcare, deciding what is important; medications/appointments or keeping shelter and food available.

Future iterations of this event will hopefully include more disciplines within the health professions to offer a wider scope for students. The Interprofessional Education Committee within CNHP are actively working to incorporate aspects of this event with future endeavors, such as being able to actively provide services free of charge to this population through the use of a mobile health assessments.

ACKNOWLEDGMENTS

The authors would like to acknowledge all of the Arkansas State faculty facilitators for their diligence in hosting this event, as well as the tremendous student involvement and commitment to the integrity of the simulation. They also acknowledge the students within the Dietetics program for providing candid feedback on their experience in the simulation.

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Development of an Interprofessional Education Experiential Learning Curriculum

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Project Background

Today's health care system is facing many challenges [1]:

- Rapidly aging population
- A shift from acute to chronic conditions
- Rising communicable and non-communicable disease
- Disparities in health access and outcomes

An integrative health (IH) approach, combined with interprofessional (IP) collaborative practice, is viewed as an effective response to these changing demands [2].

Curricular strategies must be developed and implemented to prepare health professions students to be "collaborative practice-ready" to effectively address these challenges [3].

Project Goals

To develop, assess, and implement a sustainable and innovative curricular strategy for the interprofessional education (IPE) of health professions students.

To prepare health profession students to effectively deliver care in a complex and dynamic healthcare system using IPEC [4] and IH [5] competencies.

Project Evaluation

- Weekly faculty debriefing
- End of semester student feedback
- Course evaluations
- Pre- and post- tests
  - Interprofessional Collaborative Competency Attainment Survey
  - Faculty developed role-specific knowledge assessment [6]
  - Adapted health literacy assessment

Educational Strategies

- PA, PT, OT, Nursing, and Public Health students participated in an IP collaborative practice curriculum which combined didactic and experiential learning.
- IP teams of students collaborated with Hispanic seniors in a medically underserved community to develop integrative health and wellness programs.

	Summer	Fall	Spring
Graduate PT, OT, and PA Students	*IPE Didactic Course *Foundations of Integrative Health (online modules)	*IPE Experiential Course *Weekly client meetings for assessment and planning *Case development	*IPE Experiential Course *Weekly client meetings for implementation and evaluation *Poster development
Undergraduate Nursing Students		*Foundations of Integrative Health (online modules) *IPE Experiential Course *Weekly client meetings for assessment and planning *Case development	*IPE Experiential Course *Weekly client meetings for implementation and evaluation *Poster development
Undergraduate Public Health Students		* Performed community assessments to inform the IP teams for case study development	

Lessons Learned

- **Curriculum Development**
  - Ensuring common knowledge among programs
  - Impact of Faculty involvement
  - Consistency of expectations and assessment
  - Clarity of objectives
- **Working Within the Institution**
  - Fitting activities into established program curricula
  - Grading scale
  - Faculty load
  - Institutional support
- **Working with Community Partners**
  - Involvement of staff in both institutions
  - Client recruitment

IPEC Core Competencies

Values/Ethics for Interprofessional Practice

- Teams worked to implement a clinical practice model among the health professions and with their clients built on mutual respect and shared values.

Roles/Responsibilities

- Based on knowledge learned of the roles/responsibilities of each health profession on the team, students identified and implemented interventions to advance their client's health.

Interprofessional Communication

- Teams communicated with their client and each other to assess unique health and social needs for development and implementation of an effective intervention. This included health literacy considerations and the use of interpreters when needed.

Teams and Teamwork

- Teams worked collaboratively with the client and to create an IP poster presentation describing case development and intervention implementation.

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Initial Impressions of Interprofessional Collaboration Competency Attainment at a University Led, Interprofessional Vaccination Clinic

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1. University of Pittsburgh School of Pharmacy Department of Pharmacy and Therapeutics 2. University of Pittsburgh School of Health and Rehabilitation Science, Department of Physician Assistant Studies

Project Objective

To evaluate health science students' self-reported change in collaboration-related competencies before and after their experience participating in the University's vaccination efforts, including Hub daily operations and mass vaccination events

Background

- Beginning in January 2021, the University of Pittsburgh, led by the School of Pharmacy launched a mass vaccination effort to provide COVID-19 vaccinations.
- The Pitt Vaccination and Health Connection Hub (the Hub) was established in June 2021 to provide COVID-19 vaccination services to the University community.
- The Hub offers a nontraditional learning laboratory setting in which health sciences students collaboratively provide vaccinations and education.
- The Hub engages students from the health sciences schools, primarily Medicine, Nursing, and Pharmacy, through internships, experiential learning for course credit, and volunteer programs.
- The team seeks to better understand the success of existing interprofessional educational (IPE) opportunities at the Hub to inform development and expansion of IPE programming for all six health sciences schools at the Hub in the future.

Graphic 1. University of Pittsburgh COVID-19 Mass Vaccination Event

Needs Assessment/ Intervention

- Developing healthcare professionals who are prepared to be high functioning members of an interprofessional care team is critical to advancing patient care and required by the accreditation standards of all six health sciences schools.
- It is rare to combine students from all the health sciences schools at an institution through a longitudinal, real-world, collaborative patient care experience.
- The educational experience afforded at the Hub fills this gap in IPE for health sciences students, as learners are encouraged to participate in all steps of the vaccination process in collaboration with students across professions.

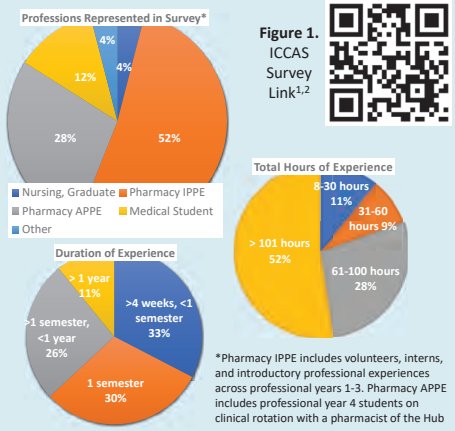

Figure 1. ICCAS Survey Link[1,2]

*Pharmacy IPPE includes volunteers, interns, and introductory professional experiences across professional years 1-3. Pharmacy APPE includes professional year 4 students on clinical rotation with a pharmacist of the Hub

Figure 2. Demographic charts of ICCAS survey respondents

Project Progress and Evaluation

- Students from the Schools of Medicine, Nursing, and Pharmacy who had at least two patient care experiences with the Hub were invited to participate.
- Students were asked to complete an electronic Interprofessional Collaborative Competencies Attainment Survey (ICCAS) after their experience to reflect on their competency attainment.
- Students who participated in a single experience were excluded from analysis.
- When comparing the means of students' (n=46) self-reported pre- and post-experience scores, responses showed an increase in learner perception of their abilities across all domains.

ICCAS Question	Pre-Experience Mean	Post- Experience Mean	Change in Mean	P value
Q1	4.35	4.65	0.3	0.0177
Q2	4.35	4.78	0.43	0.0003
Q3	4.13	4.61	0.48	0.0012
Q4	3.54	4.25	0.71	<0.0001
Q5	3.85	4.51*	0.66	<0.0001
Q6	3.78	4.7	0.92	<0.0001
Q7	3.83	4.7	0.87	<0.0001
Q8	3.87	4.8	0.93	<0.0001
Q9	3.73*	4.61	0.88	<0.0001
Q10	4.07	4.76*	0.69	<0.0001
Q11	3.91	4.65	0.74	<0.0001
Q12	3.76	4.7	0.94	<0.0001
Q13	3.78	4.65	0.87	<0.0001
Q14	3.76	4.67	0.91	<0.0001
Q15	3.8	4.41	0.61	0.0005
Q16	4.15	4.8	0.65	<0.0001
Q17	4.15	4.74	0.59	<0.0001
Q18	3.91	4.59	0.68	<0.0001
Q19	3.7	4.54	0.84	<0.0001
Q20	3.52	4.52	1	<0.0001

Figure 2. Results of ICCAS survey results based on 46 respondents (*45 respondents to select questions)

Future Directions

- To date, the Hub has offered COVID-19 and influenza vaccines but has plans to expand to additional vaccines, travel health consultations, and biometric health screenings.
- Expansion of IPE opportunities is planned at the Hub and in coordination with University-wide IPE efforts
  - Goal to include all six health science schools as well as serve as a connection point on campus to other services offered including nutrition counseling, healthy lifestyle classes, dental clinic on campus, etc.

Graphic 2. Outside of the Pitt Vaccination and Health Connection Hub

Acknowledgements

We would like to thank all the faculty, staff, and students at the University of Pittsburgh who work together to make the services and educational opportunities at the Pitt Vaccination and Health Connection Hub possible.

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TheChicagoSchool® of Professional Psychology

What's Working for Practitioners: A Mixed Method Analysis of the Collaborative Practice Assessment Tool (CPAT)

Teresa Cardon[1], Annette Griffith[1], Anthony Koutsoftas[2], & Chrystal Jansz-Reiken[1]
The Chicago School of Professional Psychology[1] & Seton Hall University[2]

Introduction

- Health professionals that support individuals with developmental disabilities often have the opportunity to work in teams or collaborate with team members from other disciplines.
- The Interprofessional Education Collaborative (IPEC) identified four core competencies to help teams of health professionals increase patient-centered care and outcomes.
- The four competencies include the following: a) Values/Ethics for Interprofessional Practice, b) Roles and Responsibilities for Collaborative Practice, c) Interprofessional Communication Practices, and d) Interprofessional Teamwork and Team-based Practice* (IPEC, 2016).
  - *Color of Competency indicates color on the pie chart in the results section
- The purpose of this research was to a) evaluate perceptions regarding what collaborative practices are working across practitioners who serve individuals with developmental disabilities, and b) utilize a mixed methods approach to take a quantitative and qualitative look at collaborative practices.

Methodology

Participants:

- 66 professionals, self-identified as SLPs (n=25), behavior analysts (n=26), psychologists/counsellors (n=9), and other health professionals (n=6).

Methods:

- Online survey was distributed via social media and email.
- The survey included demographic questions and the Collaborative Practice Assessment Tool (CPAT; Schroder et al., 2011).
  - The CPAT was adapted for clinical practitioners
  - Questions pertaining to physicians were excluded
  - Open-ended CPAT questions regarding collaborative practices were included

Mixed-Method Data Analysis:

- Likert scale CPAT items.
  - Descriptive analyses
- Open-ended CPAT items.
  - Qualitative, thematic analysis of the open-ended questions using the IPEC competencies
- Comparative Group Analysis between SLPs & BCBAs and School vs. Clinic work settings.

References

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Sheridan, S. M., & Colton, D. L. (1994). Conjoint behavioral consultation: A review and case study. Journal of Educational and Psychological Consultation, 5(3), 211-235.

* Special Thanks to Angeline Hanes for joining this project!

Quantitative Analyses

Figure 1

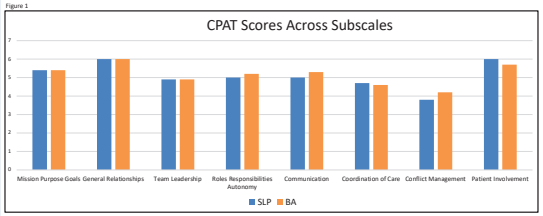
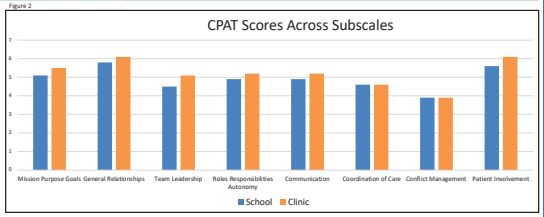
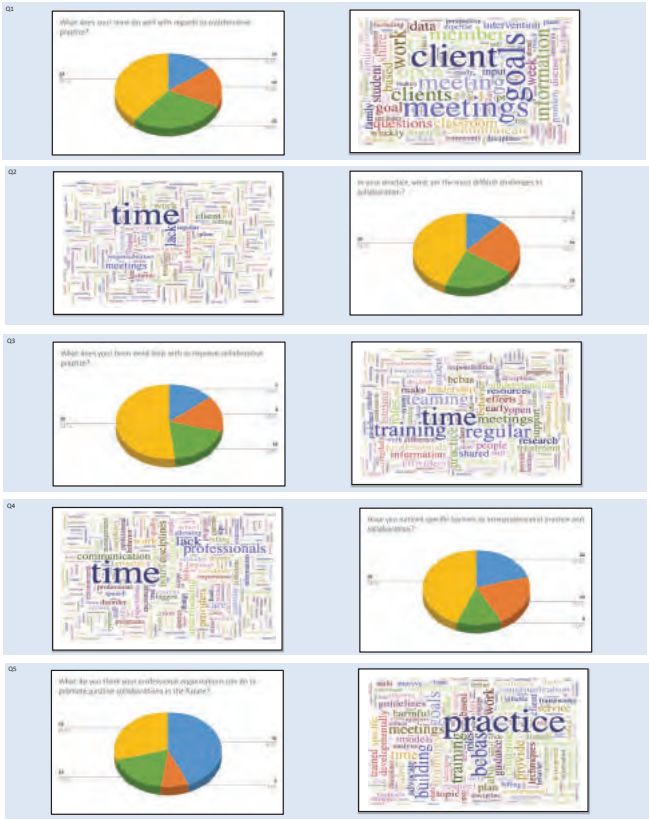


Figure 2



Qualitative Thematic Analyses



Discussion

- Previous research indicates that effective collaboration can support improved outcomes for clients (e.g., Hunt et al., 2003; Kelly & Tincani, 2013; Sheridan & Colton, 1994).
- Response patterns across all eight domains of the CPAT did not differ between practitioner type or settings.
  - Client centered care is a strength across professions
  - Groups were less agreeable on the decision making and conflict management domain indicating the potential need for professional development
  - More time for training, meetings, collaboration, etc. was a recurring theme

Implications:

- The IPEC competencies can include behavioral health practitioners and in fact, momentum in this direction has recently begun (Kirby et al., 2022).
- In general, the IPEC competencies and the CPAT worked well together; however, we were underwhelmed with the limited inclusion of caregivers and families in the IPEC competencies, including very limited guidance on how to include caregivers/families as part of the team.
- While we focused on what works regarding collaborative practice, there are still key points where more support is needed.
  - Time to collaborate
  - Training on how to more effectively collaborate
  - A framework for collaboration, specifically between SLPs and behavior analysts
  - Insurance and billing regulations to support collaboration as opposed to competition for time and resources

Limitations:

- Billing concerns were difficult to code, often referencing scope of practice, but at times more of a leadership issue.
- Significant overlap in the IPEC competencies.
  - Example - ethics appears in multiple sub-competencies
- Multiple responses were double coded which may have impacted the qualitative analysis.

Directions for Future Research:

- More team members, including paraprofessionals.
- Variety of locations.
- IPEC coding broken down further into sub-competencies.

Development of a Disaster Health Competencies Assessment Instrument for Interprofessional Health Profession Students

Mark Siemon, PhD, RN & Cody Bremner, PhD, LAT, ATC

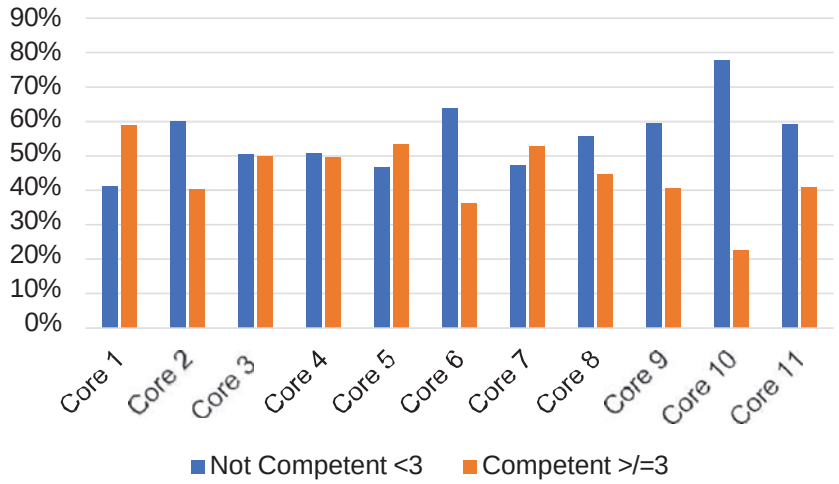
Objective: This research tested a disaster health competencies assessment instrument in undergraduate and graduate health profession students based on the National Center for Disaster Medicine and Public Health (NCDMPH) Disaster Health Competencies (Walsh et al., 2012).

Methods: The researchers used an online survey to measure competence in the NCDMPH Disaster Health Core Competencies. Researchers tested the internal consistency of the instrument, as well as descriptive statistics, based on a sample (n = 250) of undergraduate and graduate health profession students.

Results: Cronbach's Alpha tests found acceptable internal consistency $\alpha > 0.79$ in each of the 11 Disaster Health Core Competencies. Researchers then categorized the student competency means into competent or not competent using an operational definition of competent as a self-reported level 3 or greater (i.e., Knowledgeable or Proficient).

Uniformed Services University
NCDMPH Disaster Health Competencies

Figure 1 Percent of Students Reporting Competence



Conclusions: The study found acceptable internal consistency in the Disaster Health Competency Assessment survey instrument questions. The survey instrument may be used in interprofessional education as a formative assessment of self-reported competence in NCDMPH Disaster Health Core Competencies. Further testing of the instrument among a more diverse population of health profession students is needed.

Walsh, L. et al. (2012) Core competencies for disaster medicine and public health. *Disaster Medicine and Public Health Preparedness,* 6(1), 44-52. doi:10.1001/dmp.2012.4

An Evaluation of IPE Competency Attainment in the Public Library Setting

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[1]Stony Brook University, Program in Public Health, [2]Stony Brook University, School of Nursing, [3]Stony Brook University, School of Social Welfare, [4]Stony Brook University, School of Health Professions

Background

- Public librarians are often asked to assist with patrons' health needs and social needs. (Whiteman et al., 2018).
- Public libraries do not feel comfortable answering health questions (Luo & Park, 2013) which may in-part be due to lack of formal training in health topics (Pandolfelli et al., 2021).
- In recent years, social work practice has grown in public libraries to assist public librarians and patrons (Wahler et al., 2020).
- Interprofessional (IP) teams placed in public libraries is a largely underutilized opportunity for health professions.
- The Stony Brook Medicine Healthy Libraries Program (HeLP) provides a team-based approach to assist librarians with meeting patrons' needs while providing students in health professionals with an IP education (IPE) experience.

Guiding Research Question

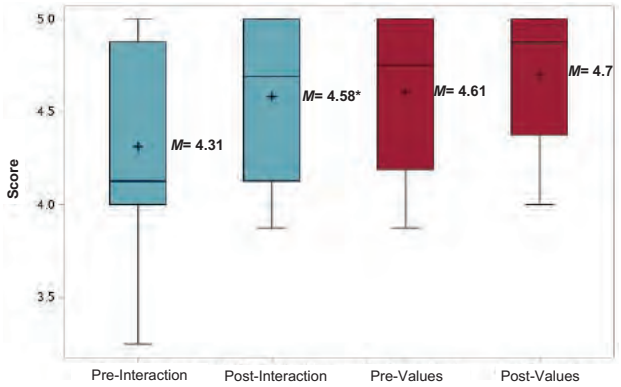
Do students improve IPEC core competency scores after participating in a library-based IP experience?

Methods

- Nursing/Physician Assistant (n=90), Public Health/Library Science (n=6), and Social Welfare (n=6) students were placed on IP teams in public libraries from Sept 2021 – April 2022. Complete data are available for 76 students.
- Students were trained by faculty on each professions' roles/responsibilities, IPEC core competencies, public library culture, and evidence-based health information searching.
- IP teams provided blood pressure screenings, health education, and performed case management and refered to social service organizations.
- Students (n=76) completed the IPEC Competency Self-Assessment tool at pre and post HeLP participation to evaluate "Interaction" and "Values" domains (Lockeman et al., 2016).
- Paired t-tests were conducted to compare student IP scores pre vs. post participation in this IP experience (SAS 9.4).

Results

Figure 1. *Students' Pre- and Post-Test Mean IPE Domain Scores (n=76)*



Note. The mean IPE domain scores and the standard deviation (SD) of 76 participating students before and after participation in their IP experience; where 1= Strongly Disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, 5= Strongly agree. The blue boxes represent the IP interaction domain while the red boxes represent the IP values domain.
* Responses showed significant improvement in the IP Interaction domain (p<0.05).

Table 1. *Students' IPE Mean Change Scores (Pre to Post IP experience, n=76)^+*

Item	Mean Difference
1. I am able to choose communication tools and techniques that facilitate effective team interactions.	0.32***
2. I am able to place the interests of patrons at the center of interprofessional health care delivery.	0.24**
3. I am able to engage other health professionals in shared problem-solving appropriate to the specific care situation.	0.24**
5. I am able to inform care decisions by integrating the knowledge and experience of other professions appropriate to the clinical situation.	0.28***
7. I am able to apply leadership practices that support effective collaborative practice.	0.19*
9. I am able to engage other health professionals to constructively manage disagreements about patron care.	0.36**
10. I am able to develop a trusting relationship with other team members.	0.14*
11. I am able to use strategies that improve the effectiveness of interprofessional teamwork and team-based care.	0.34***
13. I am able to use available evidence to inform effective teamwork and team-based practices.	0.21**
15. I am able to understand the responsibilities and expertise of other health professions.	0.21**

Note. Paired t-tests compared pre- versus post- mean scores for the 16-item IPEC Competency Self-Assessment tool; where 1= Strongly Disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, 5= Strongly agree. Blue rows depict the items within the IP interaction domain and red rows depict the items within the IP values domain.
^ The original tool was modified to fit the library setting, for example the word patient was changed to patron. ⁺ Only statistically significant findings are shown of which 6 items did not have significant mean differences.* p < .05, ** p < .01,*** p < .0001.

Discussion

- Analysis revealed a significant (p<.0001) improvement in the mean domain scores for IP "Interaction" and a marginally significant (p=.0545) improvement for IP "Values" among all professions.
- Pre "Values" scores were high which may be due to exposure to values and ethics themes earlier in students' training.
- A strength of our assessment is the pre and post study design whereas many other IPE evaluations only assess students retrospectively.
- A limitation is that 74.5% of students who participated in HeLP completed the pre and post assessment.
- Students had different exposure levels based upon their participation/schedule.
- Future assessment of students should explore how students translate clinical skills to the non-clinical fieldwork settings.
- Future IPE assessment should consider other methods of measuring student learning outcomes and impact on community health needs.

Acknowledgements

We would like to thank:
- the Public Library Directors for hosting the HeLP Team.
- the Suffolk Cooperative Library System for supporting and promoting HeLP.
- the public library patrons for utilizing the HeLP team.
- the health professions program faculty for time and support.

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Introducing the IPEC Institutional Assessment Instrument

Joseph A. Zorek[1], Kelly Ragucci[2,3], Jens Eickhoff[4], Ghaidaa Najjar[5], James Ballard[6], Amy V. Blue[7], Laura Bronstein[8], Alan Dow[9], Tina P. Gunaldo[10], Heather Hageman[11], Kelly Karpa[12], Barret Michalec[13], Devin Nickol[14], Janice Odiaga[15], Patricia Ohtake[16], Andrea Pfeifle[17], Janet H. Southerland[10], Frances Vlasses[18], Veronica Young[19], and Meg Zomorodi[20]

University of Texas Health Science Center at San Antonio[1]; American Association of Colleges of Pharmacy[2]; Interprofessional Education Collaborative (IPEC)[3]; University of Wisconsin—Madison[4]; University of Michigan[5]; University of Kentucky[6]; University of Florida[7]; Binghamton University[8]; Virginia Commonwealth University[9]; Louisiana State University Health Sciences Center at New Orleans[10]; Washington University Medical Campus[11]; East Tennessee State University[12]; Arizona State University[13]; University of Nebraska Medical Center[14]; Rush University[15]; University at Buffalo[16]; Ohio State University[17]; Loyola University Chicago[18]; University of Texas at Austin[19]; University of North Carolina at Chapel Hill[20]

Background

- Decades-long attempts to advance interprofessional education (IPE) at academic institutions throughout the United States (US) highlighted two critical barriers:
  - (1) lack of shared language and common goals to facilitate interprofessional collaboration; and,
  - (2) lack of consensus among accreditation expectations to promote cooperation across educational programs.
- Two seminal publications addressed these deficiencies, respectively:
  - Interprofessional Education Collaborative (IPEC): *Core Competencies for Interprofessional Collaborative Practice*; and,
  - Health Professions Accreditors Collaborative (HPAC) and National Center for Interprofessional Practice and Education: *Guidance on Developing Quality Interprofessional Education for the Health Professions*.
- With shared language, common goals, and consensus accreditation expectations in place at the national level, **academic institutions are now challenged to develop, implement, and sustain high-quality programmatic IPE for all learners.**
- To support this effort, IPEC partnered with the University of Texas Health Science Center at San Antonio (UT Health San Antonio) to develop the **IPEC Institutional Assessment Instrument**, a tool capable of measuring institutional capacity for high-quality programmatic IPE.

Methods

Phase 1 – A panel of 16 nationally recognized experts in IPE representing 9 different professions/disciplines, each of whom serves as the designated IPE leader at their respective institution, was assembled to:

- define high-quality programmatic IPE;
- generate consensus regarding institutional characteristics associated with high-quality programmatic IPE using a modified Delphi technique; and,
- transform consensus statements into a pool of pilot items for potential inclusion in the IPEC Institutional Assessment Instrument.

Phase 2 – The pool of pilot items was administered to a convenience sample of designated IPE leaders at academic institutions throughout the US. Data were then analyzed using exploratory factor analysis to identify a psychometrically sound model for the instrument.

Results

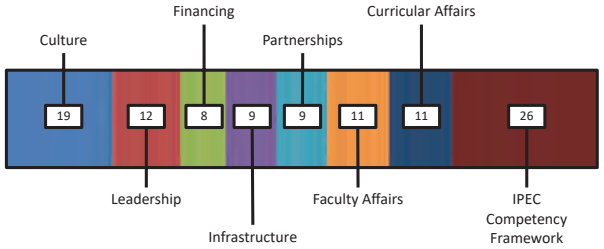
High-Quality Programmatic IPE

"IPE that is integrated into curricula and spans its entire length, from early didactic IPE experiences to advanced clinical IPE experiences, which collectively result in meaningful outcomes."

Consensus Statements

- Expert panel responses to a pre-Delphi open-ended questionnaire exceeded 30,000 words and qualitative analysis yielded **111 potential consensus statements across 8 categories** (Figure 1).
- *Delphi Round 1*: 41% (46/111) of statements endorsed with remaining 65 modified; *Delphi Round 2*: 69% (45/65) of statements endorsed with remaining 20 modified; *Delphi Round 3*: 70% (14/20) of statements endorsed with remaining 6 abandoned, yielding **105 consensus statements in total** (Figure 1).

Figure 1. Breakdown of Consensus Statements by Category



Convenience Sample

- A pool of 48 pilot items based on consensus statements was administered to 158 volunteers who serve as the designated IPE leader at academic institutions located primarily in the US:
  - US—Northeast (n=38), Midwest (n=42), South (n=54), West (n=22); International (n=2)
  - Public (n=80), Private/Not-for-Profit (n=76), Private/For-Profit (2)

Figure 2. Carnegie Classification of Participating Institutions

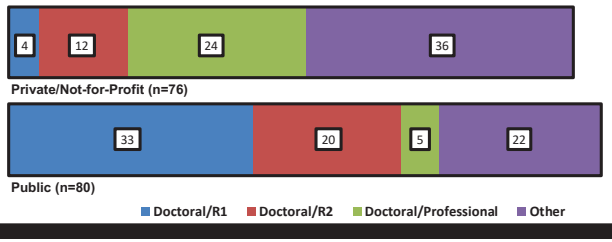


Table 1. IPEC Institutional Assessment Instrument Including 2021 National Baseline Results

	INSTITUTIONAL INFRASTRUCTURE (Response Scale: 0=no; 1=yes)	Mean (SD)
1.	Does your institution have a formal institution-wide organizational structure, such as an IPE office or center, to advance IPE?	0.49 (0.50)
2.	Does your institution's formal institution-wide IPE organizational structure, such as an IPE office or center, have clearly dedicated leadership?	0.49 (0.50)
3.	At your institution, does responsibility for IPE budget management reside within the formal institution-wide organizational structure, such as an IPE office or center?	0.37 (0.49)
4.	At your institution, does responsibility for the collection, analysis, reporting, and quality improvement of IPE-related efforts reside within the formal institution-wide organizational structure, such as an IPE office or center?	0.43 (0.50)
5.	At your institution, does the formal institution-wide organizational structure, such as an IPE office or center, perform IPE teaching/facilitation evaluations for faculty and staff?	0.22 (0.42)
	FACTOR SCORE:	2.0 (2.0)
	INSTITUTIONAL COMMITMENT (Response Scale: 1=Not at all; 2=Small; 3=Moderate; 4=Large; 5=Very Large)	**Mean (SD)**
6.	To what extent has your institution demonstrated a long-term commitment to enhancing collaboration across schools and programs?	3.0 (1.2)
7.	To what extent does your institution's mission, vision, or goals include commitments to advancing interprofessional collaboration?	3.1 (1.2)
8.	To what extent does your institution demonstrate its commitment to interprofessional collaboration by intentionally recruiting administrative leaders and faculty who value it?	2.4 (1.1)
9.	To what extent does your institution deliberately foster interprofessional inclusivity by composing committee and workgroup memberships that reflect a variety of administrative leaders and faculty from diverse health professions?	3.0 (1.3)
10.	To what extent does your institution demonstrate its commitment to interprofessional collaboration by consistently promoting IPE activities and accomplishments to internal audiences?	2.8 (1.1)
	FACTOR SCORE:	14.3 (5.3)
	IPEC COMPETENCY FRAMEWORK (Response Scale: 1=Not at all; 2=Small; 3=Moderate; 4=Large; 5=Very Large)	**Mean (SD)**
11.	To what extent does the quantity of IPE activities offered at your institution meet the needs of health professions students?	2.9 (0.9)
12.	To what extent does the variety of IPE activities offered at your institution meet the needs of health professions students?	2.9 (0.9)
13.	To what extent do IPE activities offered within schools and programs at your institution increase in depth and complexity across the continuum of didactic, experiential, and clinical learning?	2.8 (1.0)
14.	To what extent does your institution use an overarching framework such as the IPEC competencies to guide development and evaluation of IPE across schools and programs?	3.5 (1.3)
15.	To what extent does your institution track IPEC competencies targeted by IPE activities and map them to accreditation mandates?	2.9 (1.3)
16.	To what extent does your institution generate IPE outcomes data across schools and programs based on an overarching framework such as the IPEC competencies and use it in a systematic way to identify best practices and improve quality over time?	2.2 (1.2)
17.	To what extent does your institution develop, implement, and sustain IPE programming to achieve IPEC competencies for students across schools and programs?	2.8 (1.2)
18.	To what extent does your institution leverage frameworks such as the IPEC competencies to align learners across schools and programs according to knowledge and skill level?	2.5 (1.2)
19.	To what extent does your institution leverage frameworks such as the IPEC competencies to align strategic goals of the institution with strategic goals of individual schools and programs?	2.1 (1.1)
20.	To what extent does your institution leverage frameworks such as the IPEC competencies to monitor learner progress throughout their educational programs?	2.2 (1.1)
	FACTOR SCORE:	26.8 (8.5)

Conclusions

IPE leaders throughout the US are encouraged to scan the QR code to the right to access, explore, and utilize the manuscript describing this project that was recently published in the *Journal of Interprofessional Education & Practice*.

Acknowledgements

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Effectiveness of Online Curriculum for Interprofessional Team Preparation in an International Service-Learning Experience

Christienne L Parten, OTD, MEd, OTR, Suzanne Fox Trotter, PT, MPT, ScD

Subjects

- 22 individuals attended the online PDT as part of their commitment to Tesoro Project's policy for participation in the experience.
- 14 individuals (12 PT; 2 OT) consented to the study.

Materials/Methods

- The pre and post-test surveys consisted of 17 closed and 4 open-ended questions to assess participant confidence levels, and to give feedback to the researchers for ways to improve content and delivery.
- All trip participants were required to attend five synchronous sessions addressing **collaboration, communication, and ethical and cultural issues** specific to Guatemala. The final session included a **virtual simulation (V-Sim)** designed to challenge interprofessional collaboration, and cultural and ethical issues through a translator.

Purpose

Interprofessional service-learning teams lacking preparation, understanding of roles, and confidence create safety risks and inferior patient care in under-resourced communities. A 5-week online pre-departure training (PDT) curriculum addressing global health, culturally specific issues, and effective interprofessional collaborative practice was developed for a non-profit organization that guides interprofessional students for global health experiences in Guatemala.

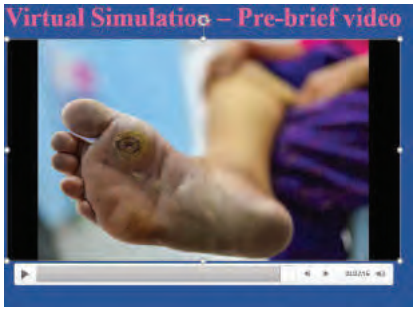
Outcomes

1. PDT was effective in improving participant confidence for a successful experience.
2. V-Sim provided a safe place to communicate and demonstrate cultural awareness with the client while collaborating on an intervention.
3. V-Sim that addresses interprofessional collaboration encountered in resource-limited countries can improve preparedness and confidence to create a safe experience.

Scan code for more information

Clinical Relevance

- Global health experiences for students provide invaluable training for increasing knowledge of cultural values and social issues that affect clients' health. PDT is essential for creating a safe global health experience for all.



Biggest take aways from the PDT course:

- "Learning about my role and responsibilities as a participant in this service trip"
- "Getting to know what to expect"

UNIVERSITY of ST. AUGUSTINE for HEALTH SCIENCES

DEVELOPING CLIMATE AWARENESS THROUGH DISASTER PREPAREDNESS IPE

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INTRODUCTION

With the influx of disasters that medical providers will be expected to manage, we designed an IPE course that would provide communication and leadership training in the context of disaster preparedness.

Through case-based scenarios, we were able to increase awareness of future disasters related to climate change.

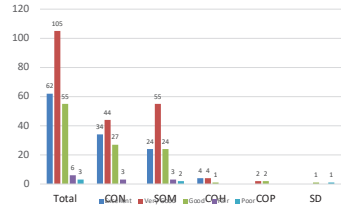
Student Demographics

- 233 Total Students
- Five sessions were taught with an average of 46 students per class

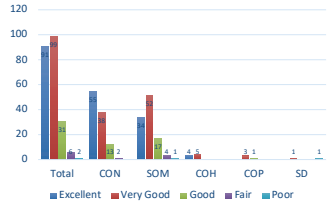
- Nursing: 109
- Medicine: 109
- Health: 9
- Pharmacy: 4
- Dentistry: 2

Interprofessional Collaborative Competencies Attainment Survey (ICCAS)

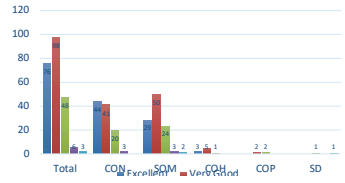
Promotes Active Listening



Promotes Communication

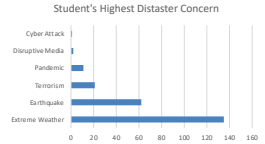


Promotes the Importance of Working Within and or Leading a Team

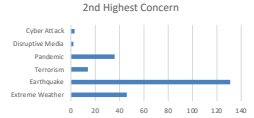


Climate Awareness

- Student's Highest Concern



- Student's 2nd Highest Concern



Conclusion

Case-base scenarios is an effective means to teach core IPE Leadership and Communication skills

Disaster Preparedness is an effective way to demonstrate the importance of Climate Awareness and potential disaster mechanism

Preventing Compassion Fatigue and Suicide in Healthcare Professionals

Jennifer Schady-Brozene, MSN, RN, PMH-BC
Mary Sharon Curran, MS, RN, CNE, PMH-BC
Janina Bukowski, MHP, PA-C
Rebecca Rellihan Brush, MSN, RN, CEN

Needs Assessment

- The literature suggests healthcare professionals are disproportionately affected by suicide.
- Evidence reveals this is related to:
  - Compassion Fatigue
  - Increase in depression and anxiety
- Overwhelming stress in the work setting
  - Pandemic related
  - Staffing shortages
  - Sicker patients
  - Workplace violence

Interprofessional Project Goals

- Assess risk factors for compassion fatigue and for suicide in healthcare professionals
- Increase education on this public health issue
- Improve access to mental health resources for health professionals
- Develop and implement strategies aimed at prevention for those assessed to be at risk
- Increase awareness and mobilize early intervention for those who present or self-report with signs and symptoms of compassion fatigue, anxiety, depression and suicidal ideation
- Improve responsiveness of institutional leadership and healthcare administrators with the goal to increase support to those affected and are at greatest risk for suicide

Gender	Access to means of suicide	Employment uncertainty	Competitive work environment
Emotionally difficult situations with patients and their families	Risk of exposure to infectious diseases and/or workplace violence	Routine exposure to human suffering and death	High job demands

Project Strategies/Interventions

- Educational Strategies:
  - Initial education offered at Nursing Grand Rounds event
  - Expand education to all hospital staff in a recorded webinar format
  - Plan to seek an opportunity to present this education and research project at a Schwartz Rounds in 2023 addressing the interprofessional community working in the healthcare institution.
- Research and Prevention Strategies:
  - Obtain IRB approval to distribute s risk assessment survey to all healthcare workers in the institution.
  - Gather data obtained in the assessment to plan ongoing education and prevention interventions aimed at reducing compassion fatigue and suicide among healthcare workers.
  - Increase access to mental health resources
  - Reduce access to lethal means of suicide within the workplace setting

Evaluation Plan

- Education, prevention and interventional strategies will be designed grounded in:
- Evidence-based strategies supported in the literature
- Data extracted from the risk assessment surveys
- Formative evaluation following all interventions

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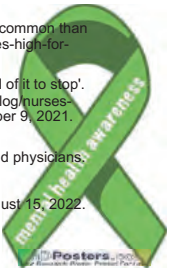

Evaluation of EEG Responses to Sedative and Stimulative Music Using the Muse 2

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Introduction

While electroencephalography (EEG) is widely used for measuring electrical activity in the brain, its cumbersome and costly nature limit research and clinical application. Portable EEG devices are now available and are appealing when use of a more complex system is not possible, such as those related to the practice of music therapy. As little about the use of these devices in music related settings is known, a pilot study was designed to assess use of the commercially available Muse 2 EEG headband during the presentation of sedative and stimulative musical selections. This study allowed for the examination of participants' neurological responses to music that is known to produce subjective differences in mood while also providing information on technical and feasibility constraints that will require consideration during future use of this device

Method

Participants

Thirty-one volunteers from the SRU graduate Physician Assistant and Occupational Therapy programs participated in this study. The average age of volunteers was 24.19 years (range: 21-36 years). The majority of participants identified as female (n = 26; 84%) & White (n = 29; 94%). Length of musical training for participants ranged from none to 5 or more years (Table 1).

Years of Musical Training	Female (n = 26; 84%)		Male (n = 5; 16%)	
	n	%	n	%
None	12	46	2	40
Less Than 1 Year	1	4	0	0
2-4 Years	4	15	1	20
5+ Years	9	35	2	40

Table 1: *Years of Musical Training by Gender*

Materials

Brain wave activity was observed using the Muse 2 (Model MU-03; InterAxon Inc.) headband, which measures brain activity from the AF7, AF8, TP9, and TP10 positions (See Figure 1) TOZO-10 wireless Bluetooth earbuds were utilized to play musical selections from a linked iPad at volume of 60 – 80dB.

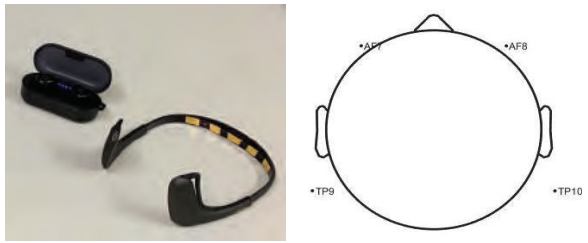

Figure 1: Left: Image of TOZO-10 earbuds and Muse 2 headband. Right: Relative channel positions for AF7, AF8, TP9, and TP10 sensors

Seven musical selections were utilized (3 stimulative, 3 sedative, and 1 neutral). The stimulative and sedative excerpts were selected in accordance with previous literature (Boyle, 1982; see Table 2), while the neutral piece was composed specifically for this study and was played as the first excerpt for each participant.

Music Characteristic	Composer	Composition Title
Stimulative	Gould	"Ride Out"
Stimulative	Bernstein	"Prelude, Fugue, and Riff"
Stimulative	Sousa	"Stars and Stripes Forever"
Sedative	Copeland	"Concerto for Clarinet and Orchestra"
Sedative	Albert	"Feelings"
Sedative	Brahms	"Bb Piano Concerto"

Table 2: *Stimulative and Sedative Excerpts*

Procedure

Participants were randomly assigned into one of two groups (A or B), in which the presentation of stimulative and sedative music was alternated in a counterbalanced fashion. Instruction on headband and earbud placement was provided and connectivity of devices to an iPad was tested. Participants were asked to remain still with their eyes closed during stimulus presentation. Recordings from the Muse 2 headband were obtained using the MindMonitor application for iOS devices during presentation of each musical excerpt. Replicating Boyle (1982), participants rated excerpts on a 5-point scale for the following adjective pairs: happy/sad, restless/calm, joyous/gloomy, whimsical/serious, vigorous/quiet, majestic/soothing, playful/dignified, and exhilarated/dreamy.

Results

Subjective Mood Response

A 2-tailed t-test of combined participants mean mood ratings revealed a significant (p < .001) differential effect of musical quality for all eight adjective pairs (Table 3).

Adjective Pair	Sedative Music		Stimulative Music		$t(30)$	p
	M	SD	M	SD		
Happy/Sad	3.14	.8	1.6	.52	8.94	<.0001
Restless/Calm	4.41	.52	2.17	.83	11.03	<.0001
Joyous/Gloomy	3.37	.84	1.61	.46	10.06	<.0001
Whimsical/Serious	3.49	1.06	1.92	.82	5.54	<.0001
Vigorous/Quiet	4.45	.4	1.71	.44	23.15	<.0001
Majestic/Soothing	3.88	.66	1.96	.61	10.65	<.0001
Playful/Dignified	3.84	.67	1.66	.85	9.59	<.0001
Exhilarated/Dreamy	4.22	.57	1.69	.55	16.28	<.0001

Table 3: *Mean Scores for Adjective Pairs in Response to Sedative and Stimulative music.*

Objective EEG Response

Power Spectra

Analysis of EEG data was completed using the MATLAB EEGLAB toolbox. Initial analyses of the power spectra across all frequencies recorded led to the identification of significant (p < .05) differential effects of music quality on brain activity at several independent frequencies. Differences in the gamma range were noted in both frontal and temporo-parietal regions whereas differences in Delta, Theta, Alpha, and Beta wave frequencies were primarily restricted to the temporo-parietal region (Figure 2).

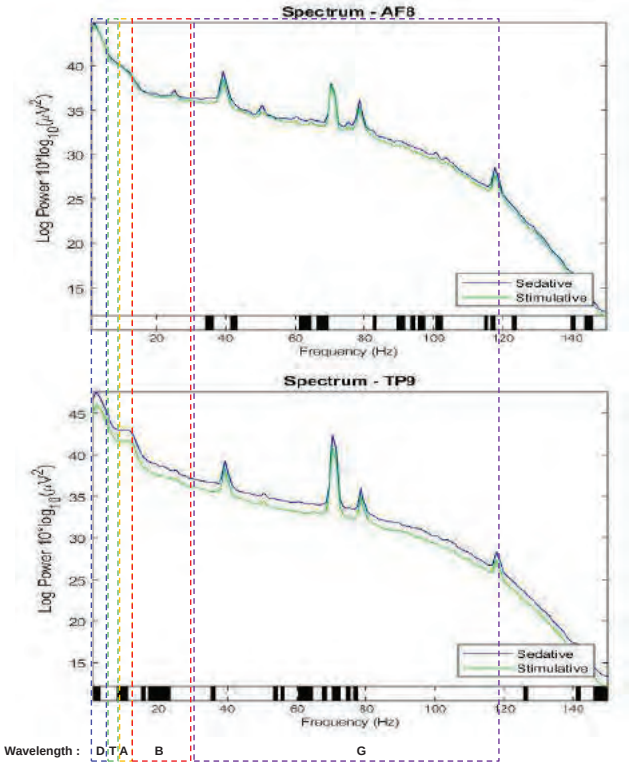

Figure 2: Frequency Spectrum Graph for the AF8 and TP9 sensors. Significance (p < .05) represented by black bars beneath graphs. Wavelengths (D: Delta, T: Theta, A:Alpha, B: Beta, and G:Gamma) are presented as dotted lines around their associated frequency bands regions.

Absolute Power

To evaluate overall effect of music type on brain wave patterns, absolute power for each wave band was calculated with the following frequencies (Hz) comprising each wave type:

Delta < 4; Theta 4-8; Alpha 8-13; Beta 13 -30; Gamma 30 -80

Separately for each sensor, paired t-tests were used to evaluate the average absolute power obtained for each wave in response to sedative v stimulative music. Results illustrated no significant difference between absolute power during sedative recordings as compared with those obtained during stimulative pieces (Table 4).

Sensor	Delta	Theta	Alpha	Beta	Gamma
AF7	t(27) = -1.16	t(27) = -1.37	t(27) = .77	t(27) = 1.07	t(27) = 1.95*
AF8	t(24) = -1.42	t(24) = -.72	t(24) = .86	t(24) = -.17	t(24) = .83
TP9	t(24) = .16	t(24) = -.05	t(24) = .94	t(24) = .63	t(24) = .-0.20
TP10	t(27) = -.19	t(27) = -.32	t(27) = .55	t(27) = .45	t(27) = 1.63

Table 4: *Results of Paired T-Test of Absolute Power for Sedative vs Stimulative music. No significant differences identified. *Trend (p <.10)*

Due to unequal values of N for each sensor (as a result of sensor disconnection or poor recording quality), an exploratory analysis was completed comparing the absolute power of sedative vs stimulative music for the 15 participants who had good quality recordings on all 4 sensors. This analysis also revealed no significant differences in any brain wave on any of the 4 sensors

Discussion

Understanding the physiological impact of music is important for music therapists, as this may be used during the process of choosing and altering music used in practice. Radocy and Boyle (2012) highlighted differences between stimulative and sedative music, reporting that "characteristically stimulative music tended to increase physiological rates (e.g., heart rate), whereas characteristically sedative music tended to have soothing or relaxing effects (e.g., decreased muscle tension)" (p. 49). The present study aimed to add to the literature in terms of objective measures of physiologic response to musical quality by measuring brain activity using the Muse 2 EEG headband. Replication of the musical excerpts and subjective self-report scale used by Boyle (1982) was intended to ensure that this study examined effects that parallel those of prior work.

While subjective mood report data showed significant differences between sedative and stimulative music, replicating the findings of Boyle (1982), physiologic data are less clear. Initial investigation of the power spectra for each sensor suggested the presence of differences in brain activity between the two musical qualities scattered throughout several frequency ranges. However, when taken as a whole, the summative absolute power within each frequency range did not illustrate these same effects. There are a few possible explanations for these outcomes:

1) Differences observed at a single frequency may not be substantial enough to produce an effect when summarized together in wave patterns.
2) An effect may exist within each band that the limitations of our study prevented us from capturing
3) The number of features contributing to differences in sedative vs stimulative music (i.e., tempo, volume, accentuation, musical instrument) may each be influencing brain activity differently

Limitations of this study center around data recording. The inherent difficulty with the Muse 2 is the small number of sensors. If sensors fail or pick up excess noise, data can become difficult to process and interpret. Several instances of failed connections and excess noise were noted during data pre-processing. Possible explanations for these issues include:

- Potential electrical interference of the Bluetooth earbuds
- Muse 2 connectivity differences for participants with different head sizes/shapes
- Issues maintaining connectivity between the Muse 2 and MindMonitor app while conducting studies in a socially distanced manner (separate rooms due to COVID-19 restrictions)

Future Studies are planned to investigate: 1) optimal conditions for recording from the Muse 2 while listening to music, and 2) variation of single parameters related to musical quality.

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USING INTERPROFESSIONAL COLLABORATION TO SUPPORT ENGAGEMENT IN COMMUNITY ARTS FOR PATIENTS WITH PARKINSON'S DISEASE: A PILOT STUDY

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Introduction

Parkinson's is a progressive neuromuscular disease characterized by tremors, rigidity, akinesia (impairment of voluntary control) or bradykinesia (slowness of voluntary movement), postural instability, and the slow regression in the ability of the person to perform self-care. Onset of symptoms usually affects people around the age of 50 to 60-years-old and PD affects approximately 10 million people worldwide.[1] Patients may experience not only physical deficits but also interruptions to their family interactions and social life, resulting in feelings of isolation and low motivation.[2] Self-efficacy refers to a person's confidence in their ability to control or handle themselves and their environment.[3] Confidence in one's abilities can directly impact a person's capabilities. Likewise, a lack of confidence can be detrimental; therefore, self-efficacy directly influences a person's perceptions of their abilities. The role of physical therapists and occupational therapists working with patients who have Parkinson's Disease is to improve balance, coordination, dexterity, and overall daily function to improve quality of life.

Currently a variety of different community-based programs, including boxing and dancing, are offered for patients with PD, however the research is limited on how art-based activity may benefit these specific domains of quality of life. Due to this paucity of knowledge in professional literature, a community-based group session focused on creative arts was implemented in collaboration between the Swope Art Museum and Indiana State University Physical and Occupational therapy students. Effects of a 90-minute weekly group session for 8 weeks of art-based activities led by the Director of Swope Museum on site will be determined by comparing pre and post measures for overall quality of life, balance, coordination, and attitude towards use of assistive technology used in sessions for participants with PD.

Purpose/Hypothesis

The purpose of this pilot study is to determine social and functional benefits of incorporating an art-based therapy intervention for clients with Parkinson's disease (PD) using an interprofessional approach. Along with this, determine what aspects of the current study should be carried forward with a larger sample size.

The hypothesis of this pilot study was that the 6-week art therapy program would decrease TUG times, indicating an increase in functional capacity, balance, and gait.

Methods

Step 1: Subject Recruitment
Subjects were recruited from flyers posted in Sweatbox Gym and local stores in Terre Haute, IN.

Step 2: Informed Consent
Obtained prior to participation in the study.

Step 3: Baseline Measurement
Subjects completed baseline measurements of Timed Up and Go (TUG), TUG manual, and TUG cognitive for one practice trial and one timed trial. Time was measured in seconds. Gait belts were utilized for safety. Additionally, PDQ -39 and Box and Blocks were also performed both pre and post.

Step 4: Intervention
Subjects participated in a 6-week art therapy program. For more detailed information, scan QR code.

Participants included in the study had previous diagnosis of Parkinson´s Disease.

N = 3

Male = 1 | Female = 2

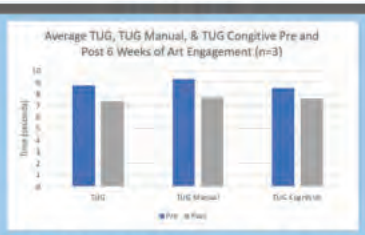
Week	Activity	Inspiration
1	Hand-made spinners	Emotions surrounding diagnosis
2	Silhouette collage	Personality
3	Saran wrap paint	Emotions surrounding symptoms
4	Suncatcher	Combatting fear
5	Pocket Labyrinth	Creativity and meditation
6	Paper butterflies	Support system of loved ones

SCAN ME

Balance and gait interventions were implemented in weekly classes using obstacle courses, exercise balls, and foam balance pads. During some weeks, participants were instructed to step over various obstacles and complete various step patterns on a ladder to facilitate coordination and normal gait mechanics. Other weeks implemented foam balance pads or exercise balls during stationary/seated tasks. Gait belts were used during activities for safety.

Step 5: Post-Test Measurements
Measurements of TUG, TUG manual, and TUG cognitive were assessed again during the final week of interventions. As with the baseline measurement procedure, gait belts were utilized for safety.

Results



Our three high functioning participants scored above average on all three versions of the TUG. Due to this, we utilized the general older adult population norms instead of the Parkinson's Disease norms, as they far surpassed the current data available for this population. The normative data for community dwelling older adults for the TUG, TUG Cognitive, and TUG Manual are 8.39 seconds, 9.82 seconds, and 11.56 seconds, respectively.[4] The participants average pre-intervention scores for the TUG, TUG Cognitive, and TUG Manual were 8.76 seconds, 8.47 seconds, and 9.28 seconds, respectively, The participants average post intervention scores were 7.39 seconds, 7.63 seconds, and 7.71 seconds, respectively.

To make appropriate changes for an additional study, we asked all participants for feedback regarding the 6-week program. One participant indicated they believe the main area of improvement was to include more participants, involving other populations if necessary. They found being around others to be the most enjoyable part. Another agreed additional populations would likely benefit however, that they preferred the class to be only with others diagnosed with PD as they "understand the setbacks we might have as well as the physical problems." When asked about benefits of the program, one participant mentioned how this class ***made them more aware of themselves, learned about where they currently are in life, and what positives they have for the future.***

Conclusion

Due to of the limited number of participants and their high functioning capacity, the results of this study are limited. Although the participants' improved their TUG, TUG Manual, and TUG Cognitive scores from pre-intervention to post-intervention, it was difficult to determine if the change was clinically significant due to how well the participants' scores were pre-intervention.

The research for a clinically significant change for the TUG, TUG Manual, and TUG Cognitive in patients with Parkinson's Disease is limited, which could indicate these outcome measures were not optimal for this study.

Due to this being a pilot study, some recommendations for future studies include:

1. Collaboration with Saint Mary of the Woods Masters of Art Therapy Students
2. More emphasis on relation of art projects to the participants Parkinson's diagnosis
3. Early recruitment of participants to ensure more people have an opportunity to join
4. Potential involvement of other diagnoses besides Parkinson's
5. Evaluation of the TUG, TUG Cognitive, and TUG Manual to determine if another outcome measure may provide more accurate results

Limitations

- Number of participants.
- Participant involvement in local Rock Steady Boxing Program 3x/week. 2 already participating, 1 joined during timeframe of research conduction.
- Difficulty getting participants to follow prompts related to diagnosis
- Cognitive limitations were not considered as a reason for not following prompts
- 1 participant was unable to attend one week
- All subjects on medication to control symptoms
- All subjects were high functioning

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