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Alfred E. Mann School of Pharmacy and Pharmaceutical Sciences

A Three-year Longitudinal Interprofessional Education **Curriculum for Pharmacy Students and Medical Students**

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BACKGROUND

- Pharmacy students at USC Mann School of Pharmacy and Pharmaceutical Sciences have been participating in large group interprofessional education (IPE) sessions with medical students from Keck School of Medicine of USC for several years.
- In 2023, the IPE sessions were expanded to include small groups of all third-year pharmacy and medical students participating in a standardized patient encounter in a simulation center.

PROGRAM OBJECTIVE

• To develop a robust IPE program that logically builds upon students' foundational knowledge of their own professions, fosters understanding of each other's roles and responsibilities, and culminates in the ability to collaboratively contribute to patient care in a simulated clinical setting.

METHODS

M1P1

- In 2022, IPE was introduced to first-year medical (M1) and pharmacy (P1) students through a 2-hour session, using large and small group discussions facilitated by two faculty facilitators from each program.
- This IPE focused on educational content of medical and pharmacy curricula and roles and responsibilities of physicians and pharmacists.
- Two large auditoriums were used with students intentionally seated next to each other in small groups of M1 and P1 students (4-5 in each group).
- The SPICE-R2 survey was administered to ascertain students' experiences and attitudes.

M2P2

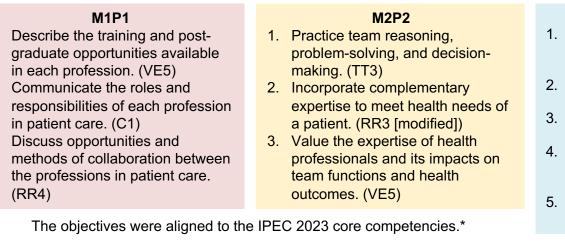
- Second-year medical (M2) and pharmacy (P2) students engaged in a 2-hour session of large and small-group discussions about a patient case progressively shared with the students by faculty facilitators from each program.
- At the end of the session, students completed a selfassessment of their level of confidence in meeting the session objectives of teams and teaming, communication, and values and ethics.

M3P3

- Based on a pilot session in the prior year with 10 medical and 10 pharmacy students, all third-year medical (M3) and pharmacy (P3) learners participated in team simulations with standardized patients (SP) to provide care to the patient.
- The M3P3 teams briefed together, interviewed the SP, and communicated a treatment plan to the SP.
- Two M3P3 teams debriefed with the faculty on their roles and responsibilities, communication, and teaming skills, then completed a self-assessment on their level of competency.

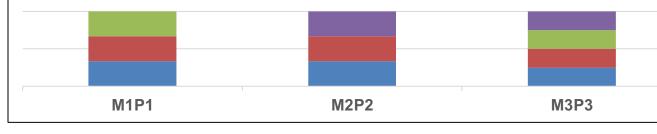
RESULIS												
IPE Events	Dates	Duration	Type of event	# med students	# pharm students	# faculty facilitators	Total					
M1P1	Monday, 10/16/23	2h	Two Large Auditoriums	186	145	8	339					
M2P2	Thursday, 11/30/23	2h	Two Large Auditoriums	165	168	8	341					
	/lon, 10/30/23 Fue, 10/31/23	8h	Simulation Labs with SP	145	193	20	358					

SESSION OBJECTIVES



2.

3.

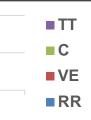


TYPES OF ASSESSMENTS

SPICE-R2 Instrument M1P1				M2P2 SELF-ASS	ESSMENT	M2P2	2			M3P3 SELF-ASSES	SMENT	M3P3]					
interprofessional team, v	ng asked about your attitudes towa we mean two or more health profes	sionals (e.g., n	urse, occupa	tional therap	ist, pharma	acist,		of confidence in meeting	each of the se	ession objecti	ves below:		Considering your own	n performance, to wh	at degree were the	following IPE	C competencies achieved:	
physical therapist, physician, social worker, veterinarian, etc.) who work together to plan, coordinate, and/or deliver care to patients/clients. PLEASE NOTE: The following scale progresses from "Strongly Disagree (1)" \rightarrow "Strongly Agree (5)"								(basic (can understanding implemen	Developing (can implement IPE concepts with	(can implement PE IPE concepts	Exemplary (serves as resource to others)		Beginning (basic understanding of IPE)	Developing (can implement IPE concepts with guidance)	Profici (can implen concepts guidan	hent IPE (serves as resource without to others)		
INSTRUCTIONS:	u indicate the extent of your	Strongly	_			Strongly			1	guidance)	guidance) 3	4	Work with team	1	2	3	4	
disagreement/agreeme	nt with each of the following nterprofessional teams and the	Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Agree (5)	Practice team reason decision-making. (TT	ing, problem-solving, and 3)	0	0	0	0	members to maintain a climate of shared	0	0	0	0	
[T] enhances my ed		1	2	3	4	5	Incorporate complem health needs of a pat	0	0	0	0	values, ethical conduct, and mutual respect. (VE)						
2. My role within [R] defined	an interprofessional team is clearly	1	2	3	4	5		Value the expertise of health professionals and its		L								
3. Patient/client sa [O] delivered by an	tisfaction is improved when care is interprofessional team	1	2	3	4	5	impacts on team func (VE5)	0	0	0	0	Differentiate each team member's role, scope of practice, and responsibility in promoting health	0					
[T] students from d ability to work	educational experiences with ifferent disciplines enhances my on an interprofessional team	1	2	3	4	5	MD only (max of 1	50 words):							0	0	0	
5. I have an understanding of the courses taken by, and training requirements of, other health professionals 1 2 3 4 5									hat you have learned about interprofessional collaboration? Outcomes. (RR4) Practice active									
6. Healthcare costs are reduced when patients/clients 1 2 3 [O] are treated by an interprofessional team		4	5	"I will use what I have learned about interprofessional						listening that encourages ideas and	0	0	0	0				
7. Health professional students from different disciplines should be educated to establish collaborative relationships with one another		1	2	3	4	5			everyday life as a healthcare w my patients to have the best vork in a team with individuals			opinions of other team members. (C2)	0					
8. I understand the roles of other health professionals [R] within an interprofessional team		1	2	3	4	5						Practice team						
[O] delivered by an			-	4	5			ackgrounds and perspectives."			reasoning, problem solving, and decision making. (TT3)	0	0	0	0			
10. During their education, health professional students 1 2 3 4 5 [T] should be involved in teamwork with students from different disciplines in order to understand their 2 3 4 5			- M2 student -						150 words: How might	nt you implement what	at you have learned	l about IPE in	future encounters?					
respective roles													Ĵ					
M1P1	# of Responses		Response Rate (%) Overall Survey Avg		M2P2	# of Responses	Respo Rate		Responded "Proficient" o "Exemplary"		M3P3	# of Respons		onse e (%)	Responded "Proficient" or "Exemplary"			
M1 (N=186)	175	9	4		4.00		M2 (N=165)	163	99)	91%		M3 (N=145)	142	9	8	96%	
P1 (N=145)	111	7	7		4.42		P2 (N=168)	135	78	3	789	%	P3 (N=193)	156	8	1	87%	

Keck School of Medicine of USC

- **M3P3**
- 1. Demonstrate interprofessional collaboration, teamwork, and respect during interprofessional interaction with a patient in an in-patient hospital setting. (VE)
 - Identify your role/responsibilities as evidenced during briefing and the patient encounter. (RR4)
 - Demonstrate effective communication as a member of a healthcare team with the patient and other team members. (C2) Reflect upon the interactions between different healthcare team
 - members to provide patient-centered quality care during the feedback with the simulated patient. (TT3)
 - In the post-encounter session, develop a care plan for the patient with your team members.



- **IPEC 2023 Core Competencies** Teams and Teaming (TT) Communication (C)
- Values and Ethics (VE)
- Roles and Responsibilities (RR)

DISCUSSION

- A longitudinal IPE program was successfully implemented into the first three years of the pharmacy and medical school programs at USC.
- Three of the four IPEC core competencies were met during the M1P1 and M2P2 events and all four IPEC core competencies were met during the M3P3 event.
- The SPICE-R survey administered to the M1P1 students found that the overall average scores on all 10 items were 4.00 versus 4.42 in medical and pharmacy students, respectively.
- More medical students than pharmacy students responded in the self-assessment that they were "Proficient" or "Exemplary" in the M2P2 and M3P3 sessions.
- Both medical and pharmacy students' self-assessment responses increased to the "Proficient" or "Exemplary" levels from the second to the third years.
- Students from the M3P3 session commented:
 - *"It was beneficial learning how to collaborate duties"* and see what gaps in knowledge we can fill for each other. It was a unique experience that excites me to work with other disciplinary teams." – M3 Student
 - "I learned a great deal from the way the medical students handled the patient interview. Working as a team allowed us to gain different perspectives based on the background knowledge of each profession, ultimately helping us reach a better conclusion and plan for the patient." – P3 Student

Future Directions

- The researchers are pursuing IRB approval to further study and assess students' knowledge, skills, attitudes, and behaviors.
- The study aims to evaluate the effectiveness of IPE in preparing pharmacy and medical students for collaborative practice in healthcare settings.

CONCLUSION

- By collaboratively working together, the medical and pharmacy schools at USC were able to successfully implement a longitudinal IPE curriculum into the first three years of the programs.
- The IPE sessions exposed learners to core IPE competencies of roles and responsibilities, values and ethics, communication, and teams and teamwork.
- Medical and pharmacy students worked collaboratively to provide care to a standardized patient in a simulated clinical setting.

REFERENCES

