

Back to the Bedside: A Hospital-Based Clinical Interprofessional Educational Activity for Nursing and Medical Students

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INTRODUCTION

- Interprofessional education (IPE), providing students opportunities to learn from, with, or about other health professionals, is an essential core component of nursing education. While there exist a range of simulation, case-based, or procedure focused IPE activities, these do not typically occur in real time where students engage in patient care together
- Opportunity arose for a novel IPE activity through a mutually beneficial partnership with Baylor College of Medicine with enthusiastic leaders, overlapping learner calendars, and student interest

OBJECTIVE

- A novel hospital-based IPE activity was created for teams of nursing and medical students to understand the roles, responsibilities, and day-to-day challenges faced by their colleagues.

METHODS

Piloted a 7-hour experience for nursing and medical students to work side-by-side during a required pediatric hospital rotation.

Nursing students demonstrated and explained patient care activities at the bedside; medical students clarified the dynamics of patient rounds and noon conference (Figure 1).

Used a modified ICCAS (validated interprofessional survey) to capture students' knowledge/attitudes regarding teamwork before and after participating the activity, as well as open-ended questions about the IPE activity



Interprofessional Education



Figure 1: IPE Activity Schedule

Paired-Sample Statistics								
	Question Stem "Before or After participating in the learning activities, I was able to:"		Mean	N	SD	p	Effect Size	
							Cohen's d	Hedges' correction
1	Actively listen to IPE team members' ideas and concerns	Before	3.66	87	0.89	<.001	Cohen's d	1.21
		After	4.62	87	0.62		Hedges' correction	1.20
2	Express my ideas and concerns in a clear concise manner	Before	3.51	87	0.94	<.001	Cohen's d	1.05
		After	4.39	87	0.74		Hedges' correction	1.04
3	Identify and describe my abilities and contributions to the IPE team	Before	3.44	86	0.93	<.001	Cohen's d	1.22
		After	4.48	86	0.66		Hedges' correction	1.21
4	Appreciate the abilities and contributions of IPE team members	Before	3.52	87	0.91	<.001	Cohen's d	1.38
		After	4.69	87	0.58		Hedges' correction	1.36
5	Recognize how others' skills and knowledge complement and overlap with my own	Before	3.33	87	0.93	<.001	Cohen's d	1.46
		After	4.55	87	0.70		Hedges' correction	1.44
6	Consider the ideas of IPE team members	Before	3.61	87	0.91	<.001	Cohen's d	1.17
		After	4.57	87	0.68		Hedges' correction	1.16

Table 1: Paired sample t-tests showed statistically significant differences in scores across all six items on the modified ICCAS, with a large effect size.

LEARNING OBJECTIVES

1. Identify at least one medical or nursing term that was unknown prior to the activity. **CC1**
2. List the roles and responsibilities of physicians and nurses **RR1**
3. As a team, identify a potential advocacy issue or other attitudinal element specific to a patient/family you saw together. **TT7**
4. Verbalize appreciation for a knowledge or skill about the other discipline that was new or different from what you expected. **VE7**

Learning objectives were defined and mapped to IPE competencies

"...fosters a true sense of teamwork. When you're able to see the whole process, you respect the other members roles." -NS

"I would have benefited from spending more time with the nursing students, ideally a whole day." -MS

Student Responses

"...did a great job of providing an overview of the different (and similar) roles that physicians and nurses fulfill... [and] highlighting areas where there can be more collaboration." -MS

RESULTS

- A total of 45 medical and 42 nursing students completed the survey (Feb 22-May 23). Paired sample t-tests showed statistically significant differences ($p < 0.001$) in all questions (Cohen's 1.04-1.46) with improved scores after the activity, especially for the items, "Identify and describe abilities and contributions of IPE team members," and "Recognize how other's skills and knowledge complement and overlap with own". Qualitative data was very positive for the activity, emphasizing the importance of the experience (Table 1).

LIMITATIONS

- Single institution study where experiences are dictated by assigned units.
- Barriers to implementation include compressed clinical time, disparate student calendars, and availability of nursing and medical faculty for debriefing sessions.

CONCLUSION

- Grounded in experiential learning theory, this in-person, hospital-based IPE activity was effective and well-received.
- By facilitating real-time co-learning, this activity allowed nursing and medical students to gain understanding and appreciation for colleagues' contributions on interprofessional teams.

REFERENCES

- Archibald D, Trumppower D, MacDonald CJ. Validation of the interprofessional collaborative competency attainment survey (ICCAS). *Journal of Interprofessional Care*. 2014;28(6):553-558. doi:10.3109/13561820.2014.917407
- Buring SM, Bhushan A, Broeseker A, et al. Interprofessional Education: Definitions, Student Competencies, and Guidelines for Implementation. *Am J Pharm Educ*. 2009;73(4):59.