

# Measuring Changes in Interprofessional Skills after Participation in an Interprofessional Elective Course Erin Appelt PT, DPT, Elizabeth Pogge, PharmD



# Introduction

Interprofessional education (IPE) is an integral component to preparing health care professionals to be competent providers in the current health care environment. Health care needs have shifted from more acute management of illness and injuries to the long term coordination of care for individuals with complex health needs. This requires health care professionals to graduate from their respective educational programs not only with discipline-specific knowledge and skills but also the knowledge and skills to work collaboratively with other professionals. These changes in educational practice have been implemented in many institutions but with very little investigation of the translation to clinical practice. The purpose of this study was to pilot a method of measuring interprofessional skills and values in the clinical setting after students participated in an IPE elective course.

### Methods

Second-year pharmacy students at Midwestern University in Glendale, AZ were offered the opportunity to participate in an elective course that included classroom instruction regarding interprofessional competencies and 10 hours of interprofessional collaboration with dental students at the dental clinic. All pharmacy students in this class were contacted by email to ask for their consent to participate in the study. If the student consented, an email with a survey link was sent to his or her preceptors for each of the final three Advanced Pharmacy Experiences. The survey used was an adapted version of the IPEC Competency Self-Assessment which has been shown to have internal consistency and reliability when students self-assess their interprofessional values and skills. The IPEC Competency Self-Assessment Tool was revised to make it appropriate for an external observer to score and was then used to collect data for this study. Survey results from preceptors of the IPE elective participants were compared to the survey results from preceptors of pharmacy students who did not participate in the IPE elective.

Number of Students Who Completed IPE Elective = 25



Number of Students Who
Consented to Participate in Study =

Number of Preceptors Who Completed the Survey = 5 Number of Students Who Did Not Participate in IPE Elective = 125



Number of Students Who
Consented to Participate in Study =

16

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Number of Preceptors Who Completed the Survey = 13

### **Statistics**

Descriptive statistics were used to analyze the results as this was a convenience sample and was underpowered to detect a different between groups. The results are exploratory.

This study was deemed exempt by Midwestern University Institutional Review Board.

# Table 1: Preceptor Responses Related to Interprofessional Practice Skills of Pharmacy Students on Clinical Rotation

	Participating students; n=5	•
The student is able to choose communication tools and techniques that facilitate effective team interactions	80* (100)**	67* (100)**
The student is able to place the interests of patients at the center of interprofessional health care delivery	60 (100)	58 (100)
The student is able to engage other health professionals in shared problem-solving appropriate to the specific care situation	80 (100)	67 (100)
The student is able to respect the privacy of patients while maintaining confidentiality in the delivery of team-based care	100 (100)	92 (100)
The student is able to inform care decisions by integrating the knowledge and experience of other professions appropriate to the clinical situation	75 (100)	69 (100)
The student is able to embrace the diversity that characterizes the health care team	50 (100)	77 (100)
The student is able to apply leadership practices that support effective collaborative practice	50 (75)	50 (100)
The student is able to respect the cultures and values of other health professions	75 (100)	73 (100)
The student is able to engage other health professionals to constructively manage disagreements about patient care.	75 (100)	67 (100)
The student is able to develop a trusting relationship with other team members	80 (80)	69 (100)
The student is able to use strategies that improve the effectiveness of interprofessional teamwork and teambased care	- 80 (100)	58 (100)
The student is able to demonstrate high standards of ethical conduct in his or her contributions to teambased care	100 (100)	100 (100)
The student is able to use available evidence to inform effective teamwork and team-based practices	60 (100)	77 (100)
The student is able to act with honesty and integrity in relationships with other team members.	80 (100)	100 (100)
The student is able to understand the responsibilities and expertise of other health professions	100 (100)	92 (100)
The student is able to maintain competence in his or her own profession appropriate to the current level of training	100 (100)	69 (100)

Scale: 1= Strongly agree, 2=Somewhat agree, 3=Disagree, 4=Strongly disagree, 5 = Not observed. Percentages are reflected after removing the not observed responses

\* Percent of preceptors who responded strongly agree. \*\*Percent of preceptors who responded strongly agree or somewhat agree

## Discussion

A strength of this study includes a novel method to assess interprofessional practice skills observed by preceptors. Limitations include the small sample size, the use of a non-validated survey, and the variability in clinical practice sites and preceptors. The survey this study used was validated for self-assessment, which could be part of the reason why the preceptor responses were largely in agreement with each statement. Further research should be done to validate a preceptor survey that can accurately capture changes in interprofessional practice behaviors.

# Conclusion

This exploratory study piloted a method of measuring interprofessional skills and values in the clinical setting after students participated in an IPE elective course. Further research should be done to explore how IPE translates into interprofessional clinical practice.