

Interprofessional Interactions and Competencies on Clinical Rotations: Preceptors' Perspectives of Student Experiences

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Purpose This study describes (1) preceptors' perceptions of interprofessional encounters that PA students had at clinical sites and (2) ways that the preceptors report evaluating the PA students' interprofessional practice skills.

Methods This study disseminated a single electronic survey of clinical preceptors who were affiliated with an accredited PA program. Descriptive statistics were used to analyze the results.

Results Of 195 preceptors, 66 completed the survey. Practice specialties of respondents and nonrespondents were similar. Preceptors indicated that PA students had frequent interactions with a wide variety of health profes-

sionals and students. These interactions occurred with greater frequency in specialty settings and academic medical centers than in other settings. Preceptors reported that they assess interprofessional practice competencies, although many were not familiar with the definitions that the health care profession has endorsed.

Conclusion Findings suggest that educators may identify specific clinical sites or settings that are more optimal for interprofessional education interventions and that focused preceptor development may encourage deliberate assessment of students' interprofessional practice competencies.

Feature Editor's Note:

The definition of interprofessional education (IPE) is clearly established in physician assistant (PA) education but continues to find a mix of interpretations across interprofessional practice. This study asked preceptors of PA students to respond to questions about IPE to measure students' involvement in interprofessional experiences. The study results showed the continued challenges of clarifying IPE. The authors were able to quantify their students' interprofessional exposure on rotations, finding that this more likely occurs in specialties and at academic medical centers. Programs may find value in similarly identifying intentional interprofessional learning experiences as we prepare our graduates for effective interprofessional engagement.

Michael Huckabee, PhD, MPAS, PA-C

INTRODUCTION

Interprofessional education (IPE) forms one of the strategies that research has recommended for promoting the team-based model of health care delivery.¹ Interprofessional education has been identified as a key component of the expansion of the physician assistant (PA) profession and is an area of instruction required for program accreditation.^{2,3} In 2011, the Physician Assistant Education Association (PAEA) endorsed IPE for PAs and encouraged efforts

to promote IPE and interprofessional practice among its members.⁴

In 2015, PAEA released a statement of policy supporting an expansion in the number of PA clinical training sites and encouraging the development of sites committed to educating interprofessional teams of health care providers.⁵ Health care researchers generally accept that IPE is occurring during clinical rotations. However, few studies describe IPE interventions and outcomes in the clinical phase of PA education.⁶ A study of PA students' views regarding IPE reported that students value IPE and think that it should have minimal didactic components and be offered in a variety of clinical settings.⁷ A survey of multidisciplinary faculty at one institution reported that the faculty support IPE but have difficulty implementing it because of curricular constraints.⁸

Although preceptors may be optimally positioned to facilitate IPE at clinical sites, little is known about their perceptions of students' interprofessional encounters and the preceptors' own role in evaluating interprofessional practice competencies. An increased understanding of preceptors' perspectives could inform the development of IPE interventions at clinical sites. The purpose of this study was to describe (1) preceptors' perceptions of interprofessional encounters that PA students had at clinical sites and (2) ways that the preceptors report evaluating students' interprofessional practice competencies as defined by the Interprofessional Education Collaborative (IPEC).⁹ The IPEC competency domains are (1) values and ethics for interprofessional practice, (2) roles and responsibilities, (3) interprofessional communication, and (4) teams and teamwork.

METHODS

This study involved a single electronic survey of clinical preceptors who were affiliated with an accredited PA

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Table 1. Percentage of PA Students Who Had Interprofessional Interactions by Frequency of Interaction

	Share of PA Students, %
Daily interactions with professionals	
Type of professional	
Physician (MD, DO)	86
Registered nurse	74
Physician assistant	64
Certified nursing assistant	52
Advanced practice nurse (NP)	48
Social worker	24
Nurse specialist (eg, CRNA)	20
Pharmacist	18
Occupational therapist	9
Dietician	9
Weekly or monthly interactions with professionals	
Type of professional	
Dietician	30
Social worker	29
Pharmacist	26
Physical therapist	24
Advanced practice nurse (NP)	20
Occupational therapist	18
Speech language pathologist	17
Professional counselor	17
Psychologist	15
Nurse specialist (eg, CRNA)	14
Daily interactions with non-PA students	
Type of student	
Medical student	27
Nursing student	5
Advanced practice nursing (NP) student	5
Nurse specialist student (eg, CRNA)	5
Social work student	2
Weekly or monthly interactions with non-PA students	
Type of student	
Advanced practice nursing (NP) student	26
Medical student	25
Nursing student	20
Pharmacy student	17
Physical therapy student	12

(Continued)

Table 1. (continued)

	Share of PA Students, %
Nurse specialist student (eg, CRNA)	7
Professional counseling student	5
Occupational therapy student	5
Speech language pathology student	5
Social work student	5

CRNA, certified registered nurse anesthetist; DO, doctor of osteopathic medicine; MD, doctor of medicine; NP, nurse practitioner.

program in 2014. This project was declared exempt for review by the program's institutional review board. Descriptive statistics were used to analyze the results. The investigators defined primary care as rotations in family medicine, pediatrics, and outpatient internal medicine. Data collected regarding interprofessional encounters included information about the types of health care professionals and other types of learners that PA students typically interact with in the care of patients during the rotation and the typical frequency of interaction (none, daily, weekly, and monthly) for each type. Each rotation period for the program was 4 weeks. Differences in mean number of types of professionals or students encountered were evaluated. The investigators referenced the 4 competency domains that IPEC defined as the measures that preceptors potentially evaluated in students during rotations.

RESULTS

Respondents

Of 195 clinical preceptors, 66 completed the survey (response rate = 33%). We found the respondent sample to be representative of all clinical sites after comparison with all sites by area of practice.

Interprofessional Encounters

Across all sites, a majority of students had daily interactions with physicians (86%), registered nurses (74%), PAs (64%), and certified nursing assistants (52%). Students had weekly or monthly interactions with dietitians (30%), social workers (29%), pharmacists (26%), and physical therapists (24%) (Table 1). Across all clinical sites, the mean number of at least monthly interactions with professionals was 7.1 and with non-PA students was 1.8. In a comparison of specialty and primary care settings, the reported mean number of at least monthly interprofessional encounters with professionals was higher in specialty settings (7.8 vs 5.4). The mean number of encounters with non-PA students was also higher in specialty settings (7.0 vs 4.7). In a comparison of academic- and nonacademic-affiliated sites, the reported mean number of at least monthly interprofessional encounters with both professionals (7.9 vs 5.5) and non-PA students (6.9 vs 5.1) was higher at academic affiliated sites.

Evaluation of Interprofessional Practice Competencies

All respondents (100%) reported that they evaluated students in at least 3 of the 4 competency domains as defined by IPEC.

Among all respondents, however, only 12% reported knowledge of the IPEC competencies. Approximately half of all respondents (55%) expressed desire for more information about the IPEC competencies (Figure 1).

DISCUSSION

Interprofessional Encounters

This study is one of the first to report the frequency of encounters that PA students had with health professionals and non-PA students during clinical rotations from the preceptor perspective. Understanding the distribution of interprofessional encounters during the clinical phase of education may help educators promote IPE in clinical settings through specific instructional activities, methods of evaluation, and preceptor development initiatives. Preceptors reported that students typically had daily, weekly, or monthly interactions with a wide variety of professionals and—to a lesser degree—non-PA students.

This finding validates the presumption that IPE can occur deliberately in clinical settings because of the variety of interactions PA students will have with professionals and non-PA students. Physician assistant students are likely to interact with a wider variety of health professionals than with other types of students, and they are likely to interact with those health professionals with greater frequency. This finding suggests that there may be more opportunities for PA students to develop interprofessional practice competencies through experiences with professionals than with other types of students. Also, results indicate that specialty settings and academic medical centers may provide broader exposure to different types of professionals and students.

The sum of these findings suggests that PA educators may be able to design IPE interventions for a variety of clinical sites to enhance IPE, and that some clinical sites may be better for such interventions than others. For example, PA educators may have more success in promoting an IPE activity at a clinical site that is a specialty setting and based in an academic medical center than elsewhere.

Educators may collect data about their own clinical sites to determine capacity for IPE. Such data could be obtained through a survey of preceptors, as in this study, or by other means. For example, during site visits, faculty could ask preceptors about PA students' interactions with professionals and non-PA students and about the nature of

those interactions. These discussions could also serve as opportunities to identify ways to increase the quantity and quality of those interactions both at the individual site and across all sites. Another method for assessing the frequency of students' interprofessional interactions is through clinical encounter logging systems. The quality of the interactions could be further assessed as part of course evaluations or focus groups.

Evaluation of Interprofessional Practice Competencies

This study also assessed preceptors' perceptions of interprofessional practice competencies, as defined by the IPEC and endorsed by PAEA. The results indicate that the respondent preceptors commonly evaluate interprofessional practice competencies, although most were not aware of the IPEC competencies as such. This finding has prompted us to (1) revise the student evaluation form that preceptors complete at the end of the rotation and (2) develop initiatives to educate preceptors about the competency definitions.

Our student evaluation form for completion by preceptors assesses 12 performance measures. One of those measures focuses on the degree to which a student is respectful and collaborative with other members of the health care team. Because this item addresses only 2 of the 4 IPEC competency domains, we plan to revise the evaluation form to include the other 2 competency domains, which relate to values for interprofessional practice and to roles and responsibilities. We also plan to include these competencies in the course objectives to align them with the evaluation. Also, we are assessing the curriculum to ensure that students will have had the opportunity to learn about these competencies before they need to put them into practice in clinical settings.

Our findings indicate a need to educate preceptors to increase their ability to facilitate students' interprofessional learning and evaluate students' interprofessional practice competencies. Our preceptor development initiative will involve (1) explaining to preceptors the importance of the skills, (2) making recommendations for students' deliberate practice skills on rotations, and (3) showing preceptors ways to evaluate these skills. Emphasizing the rationale for these competencies may be especially meaningful for preceptors who did not express interest in learning more about the IPEC competencies. This initial information will be provided to all preceptors electronically when the evaluation of student performance form is revised for the cohort of students. Ongoing effort could provide opportunities for preceptors to address questions about these competencies with faculty members on an as-needed basis and during routine site visits.

Study Limitations

This study's sample was a single program's group of preceptors and sites, so the generalizability of the findings is limited. Although the response rate was relatively low, we found the respondent sample to be representative of all clinical sites regarding area of practice. This survey was not designed to describe the quality of interactions PA students have with professionals and non-PA students.

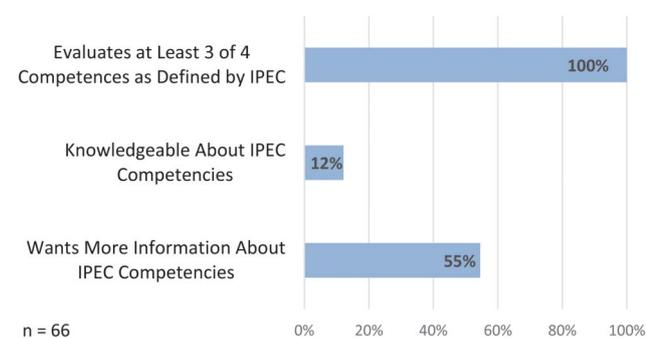


Figure 1. Preceptors' evaluation of Interprofessional Education Collaborative (IPEC) Competencies

Future Research

The overall findings of this study suggest that educators may identify specific clinical sites or settings that are more optimal for IPE interventions and that deliberate preceptor development may promote students' interprofessional learning and evaluation of students' interprofessional practice competencies. Future studies are necessary to describe the nature and quality of interprofessional interactions that PA students have with professionals and non-PA students, and which preceptor, student, and site factors affect these interactions. A greater understanding of how these interactions affect student acquisition of interprofessional practice competencies could inform the design of instructional, experiential, and evaluative IPE interventions in clinical settings. Outcomes of students' development of these competencies and the subsequent effect on patient care could serve as evidence that the PA profession's priority of IPE is being realized.

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