

Study of the Impact of Interprofessional Education on the Advanced Pharmacy Practice Experiences of Jefferson School of Pharmacy Students

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Purpose

- To evaluate the impact of interprofessional education (IPE) in the first three years of pharmacy school
- This was investigated by looking at students' preparedness for and degree of interprofessional collaboration in the final year of advanced pharmacy practice experiences (APPEs)

Advanced Pharmacy Practice Experiences (APPEs) at Jefferson School of Pharmacy

- 6 rotations in the final year of school
 - Hospital
 - Community
 - Ambulatory Care
 - Inpatient
 - 2 electives
 - Direct patient care
 - Indirect patient care

Background

- First and second-year multi-discipline students participate in a two-year, longitudinal, IPE experience
 - Health Mentors Program
- Students may also participate in other IPE programs in the first three years of the program, where addressing IPE competencies is deliberate
- To date, the impact of these IPE programs on APPEs has not been evaluated

Interprofessional Education at Jefferson School of Pharmacy

- Health Mentors
- Other IPE during P1-P3 years
 - Introductory pharmacy practice experiences (IPPE's)
 - Clinical Care Planning
 - Team STEPS
 - End of Life Symposium
 - Clinical Skills Planning
 - Discharge Planning

Previous Studies

- Mu K, Chao CC, Jensen GM, Royeen CB. Effect of interprofessional rural training on students' perceptions of interprofessional health care services. *J Allied Health*. 2004;33:125-131
 - Students had a 3-year interprofessional training (similar to Health Mentors)
 - Results showed students were more aware that collaboration between healthcare professionals is necessary
- Maldonado AQ, Bray BS, Woodard LJ, et al. Impact of participation on a solid organ transplant team on student pharmacists' perceptions of interprofessional roles. *American Journal of Pharmaceutical Educations*. 2013;77:74
 - Evaluated impact of IPE during APPE
 - This study showed that an increase in opportunities and expanding varieties and types of IPE in the pharmacy school curriculum may better prepare students for effective involvement on multidisciplinary teams

Methods - Description of Intervention

- Three questions were created and added to all APPE course evaluations for graduating classes of 2013 and 2014
 1. During an average full-time day on this APPE, what percentage of your time did you spend working with a colleague(s) from one or more other healthcare disciplines?
 - 0%, 1-25%, 26-50%, 51-75%, 76-100%
 2. Over the course of this APPE, with which disciplines did you interact with on a regular basis (more than 2 times per week)? Check all that apply.
 - None, physician, nurse, dietician, occupational therapist, physical therapist, family therapist, social worker
- Student perception of IP practice among the various rotation types
 - Breadth of professionals with whom interacted and amount of time spent interacting with other healthcare professionals by rotation type
 - Evaluated all 6 rotations
 - MANOVA

Methods – Description of Intervention

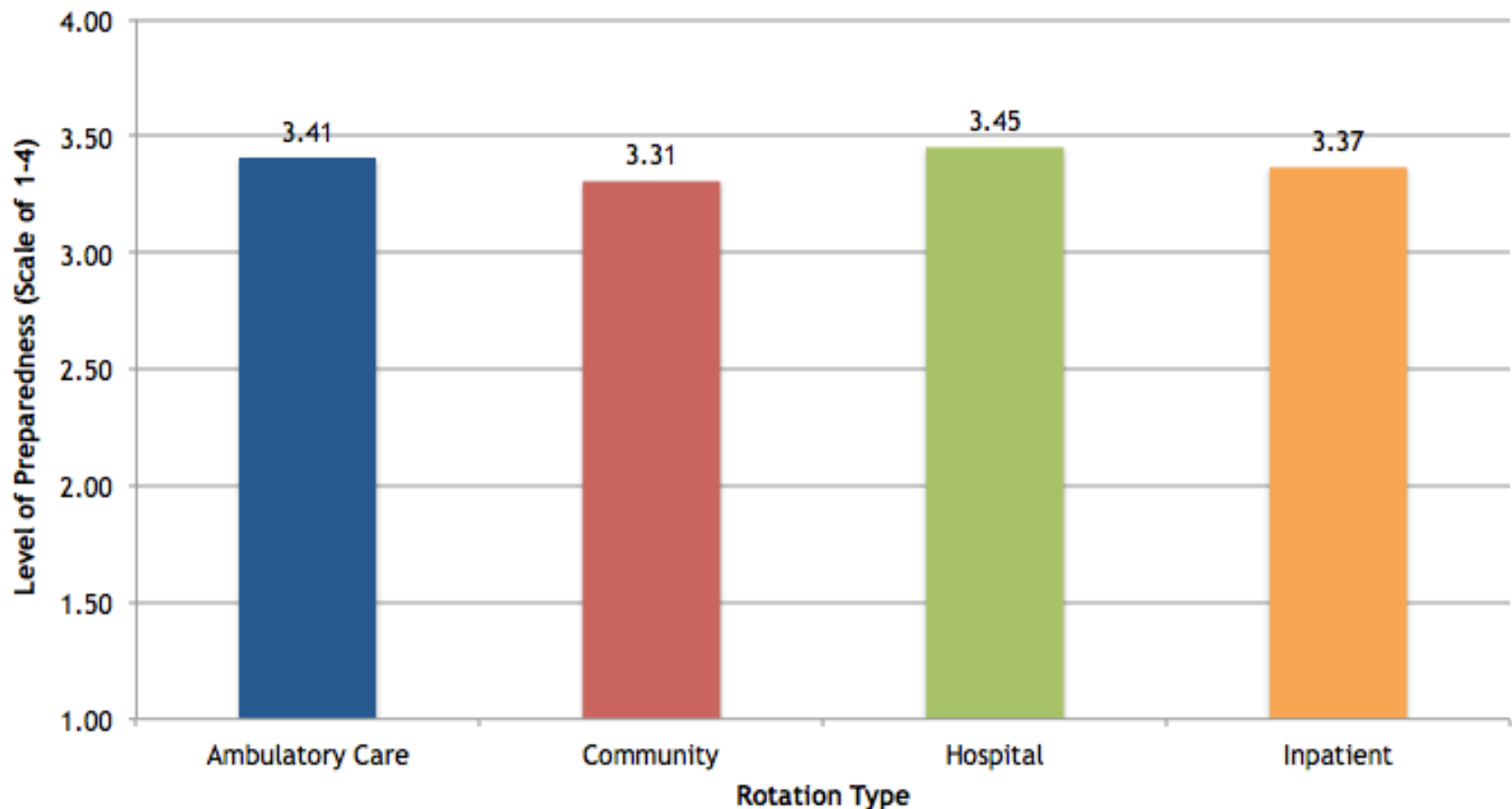
3. On a scale of 1-4 (1=Not at all, 4=Very well), how well did your interprofessional experiences during the P1-P3 years prepare you for the interprofessional interactions during this APPE?
 - Student perceived preparedness (Scale of 1-4)
 - Level of student preparedness by rotation type, (only evaluated 4 required rotations due to variability in selective/elective rotations) community, hospital, acute care, ambulatory care
 - If students completed community elective(s) the average of the students preparedness was used
 - If students completed two ambulatory care or two inpatient care APPES the average of the students preparedness was used
 - Data was entered in Excel, and analyzed using SPSS

Results - Overview

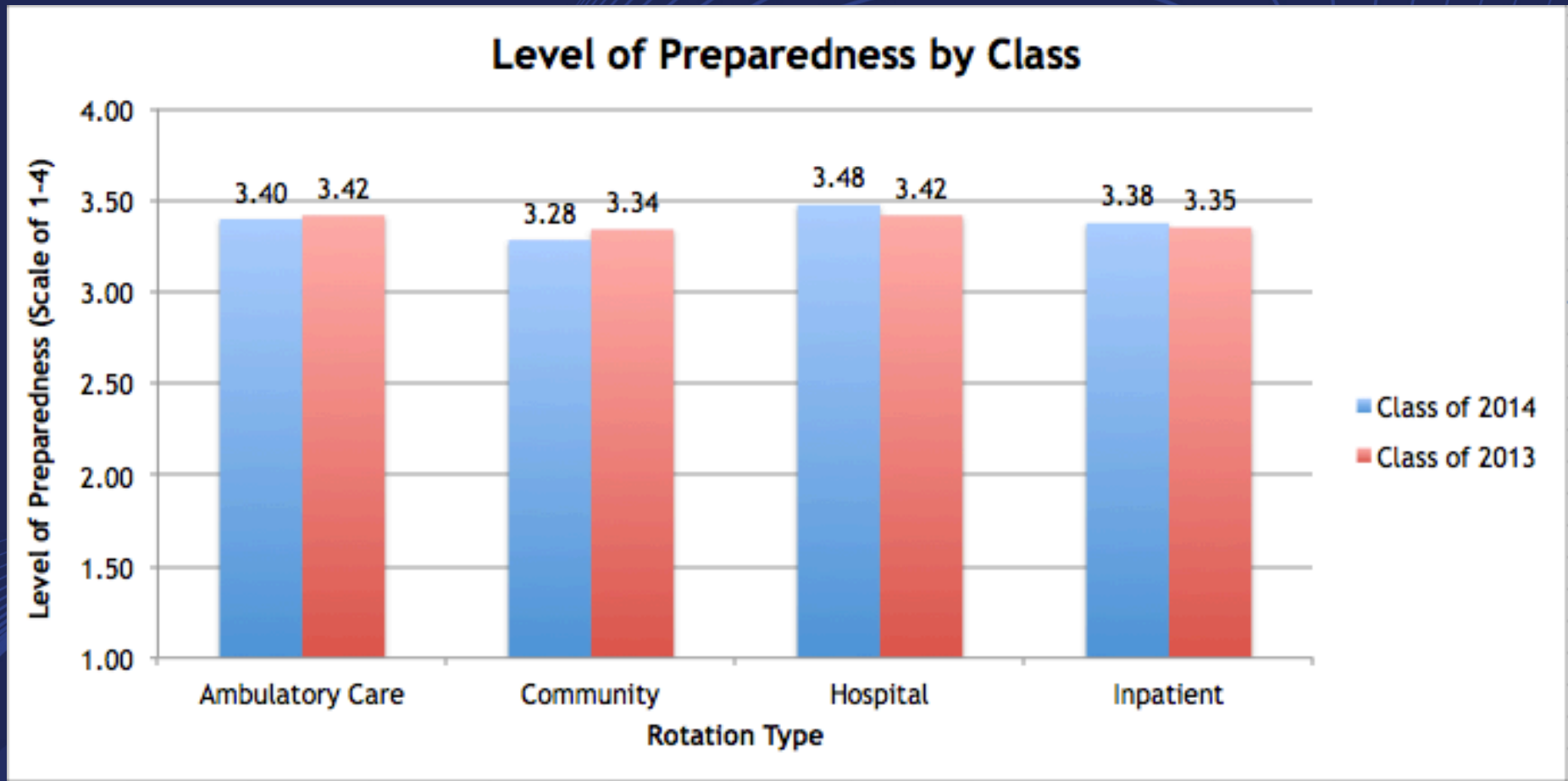
- 138 students from the Classes of 2013 and 2014 were included
 - 1 course evaluation per APPE rotation was completed (6 rotations; community, hospital, direct patient care, ambulatory care, and two electives)
 - Total of 828 course evaluation
- 55 students from the Class of 2013
- 83 students from the Class of 2014

Results – Level of Preparedness

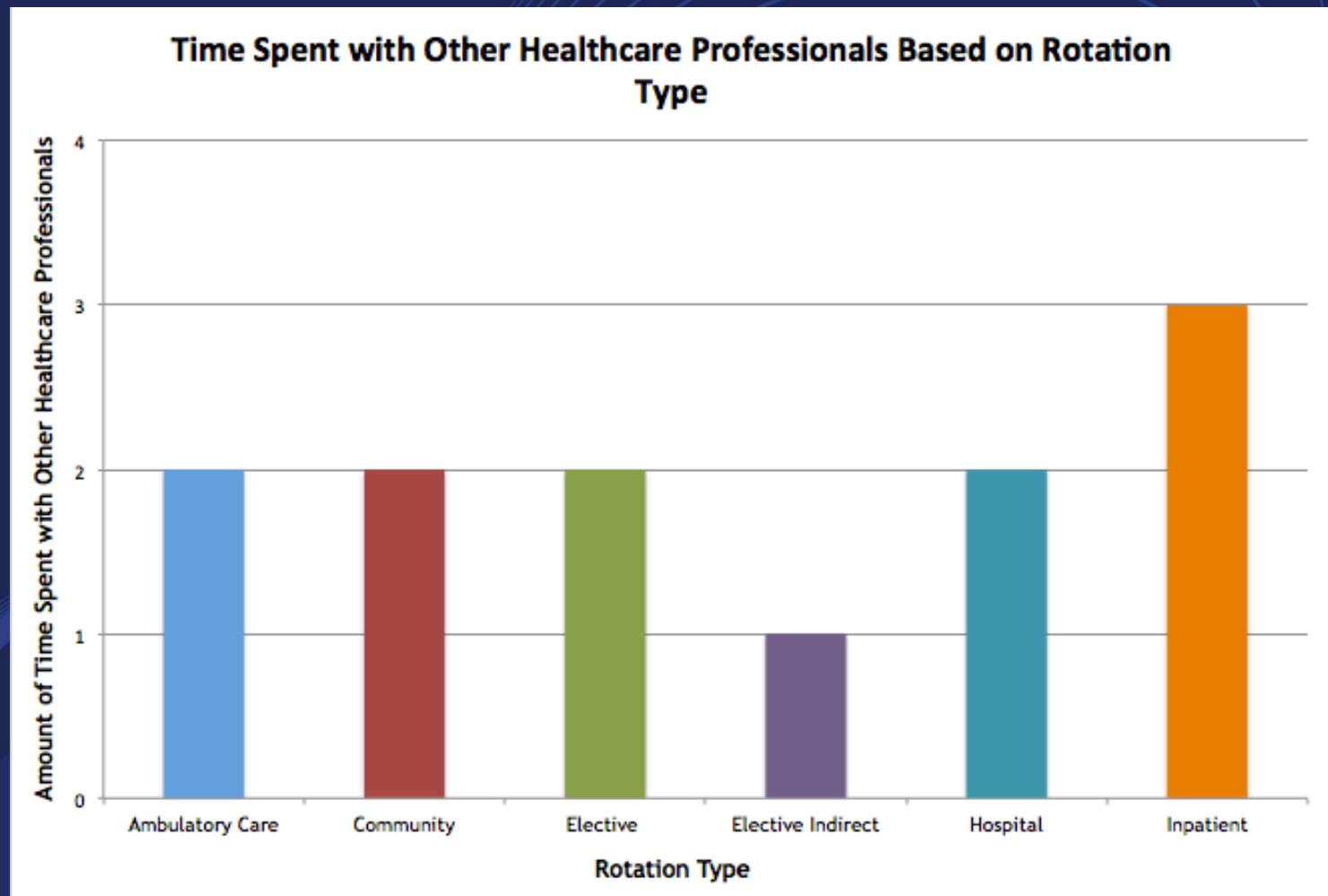
Students' Level of Preparedness (Class of 2013 & 2014)



Results - Level of Preparedness by Class



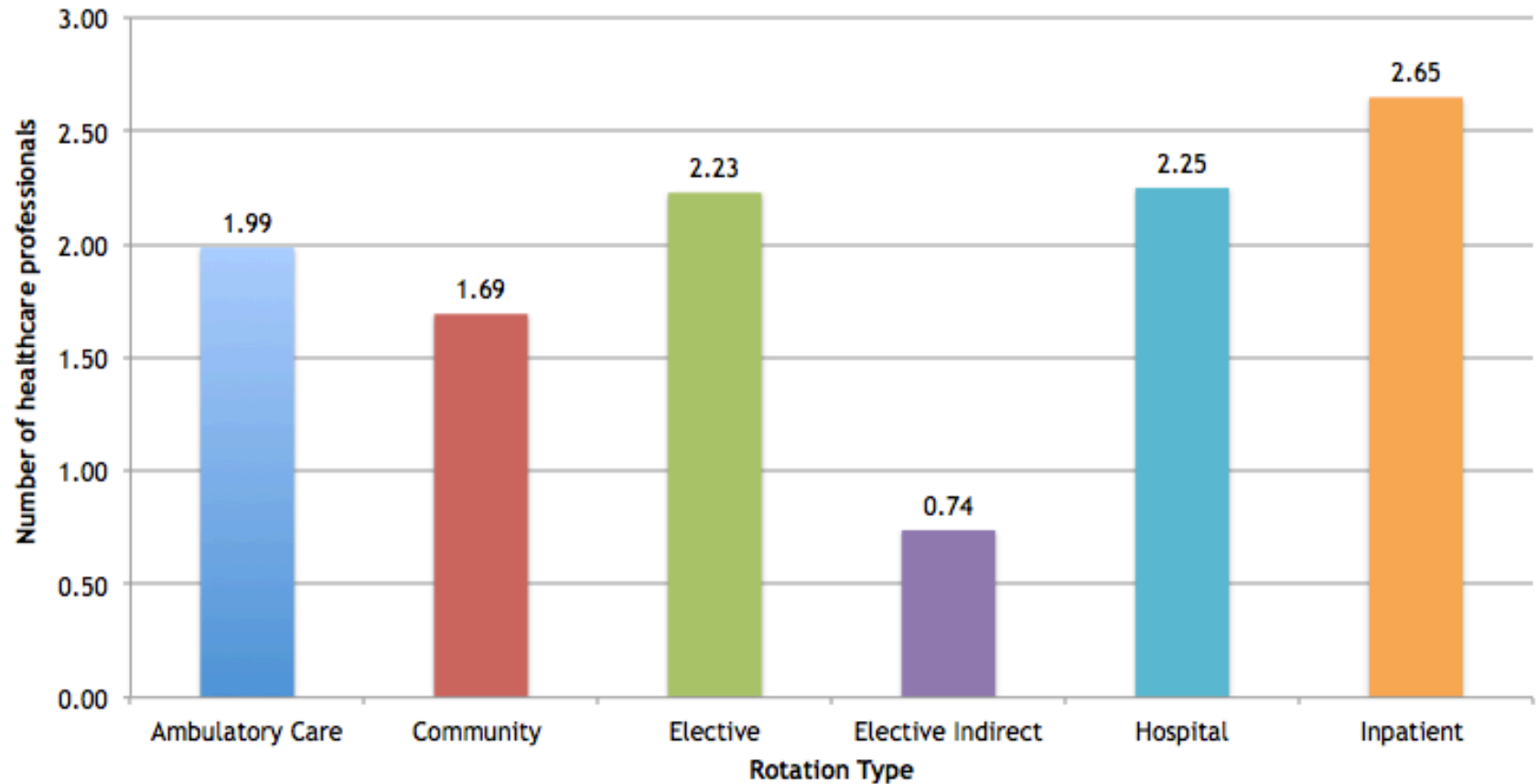
Results - Amount of Time Spent with other Healthcare Professionals



0=0%, 1=0-25%, 2=26-50%, 3=51-75%, 4=76-100%

Results - Interaction with Other Healthcare Professionals

Number of Interactions with Other Healthcare Professionals Based on Rotation Type



Results - Students' Perception of IP Practice Among Various Rotation Types - MANOVA

Independent Variable	Dependent Variables	F	Significance
Rotation Type	Percent of time working with others	40.572	0.000
	Interaction with other healthcare professionals	28.283	0.000

Results - Students' Perception of IP Practice Among Various Rotation Types - Scheffe Post Hoc

- Significant differences between rotations and percent of time working with others
 - Ambulatory care: community, hospital, inpatient
 - Community: ambulatory care, elective, inpatient
 - Elective: community, elective indirect, inpatient
 - Elective indirect: ambulatory care, elective, inpatient
 - Hospital: ambulatory care, inpatient
 - Inpatient: ambulatory care, community, elective, elective indirect, hospital

Conclusion

- IPE during the first three years of pharmacy school has prepared students for interprofessional interactions and collaboration during their APPEs
- Students felt prepared for their interprofessional interactions, and on average spent a little over 50% of their time working with colleagues from other healthcare disciplines
- IPE has also had a positive impact on pharmacy students, as shown by their preparedness and high level of interprofessional interaction during APPEs

Discussion/Relevance

- This study supports previous studies, which have shown IPE programs have had a positive influence on students' perspectives of other healthcare professionals
- This study also shows there is room for increased awareness of collaboration needs in various rotations
- Overall, interprofessional education during pharmacy students' first three years of school prepared them for interdisciplinary interaction during their APPEs

Questions?

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