



Assessing Student Application of Community Pharmacy EPAs After Completion of APPEs

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BACKGROUND

APPEs

• Advanced Pharmacy Practice Experiences (APPEs) allow pharmacy students to apply their didactic knowledge in real-world settings. The four required APPE rotations include community, ambulatory patient care, institutional pharmacy, and acute/internal medicine, with community practice being the most prominent career path

EPAs

• Entrustable Professional Activities (EPAs) translate our educational outcomes into hands-on activities. Students should be able to do these with little to no supervision upon graduation from a college of pharmacy. Professional Abilities Labs (PALs) are designed to develop the necessary skills for practicing as a competent pharmacist in any setting. APPE-Readiness courses are integrated into our curriculum during 3rd year to prepare them for APPE rotations.

Our Study

• There have been no previous studies that demonstrate student growth from the end P3 year to completion of P4 year. Utilizing volunteers, we compared assessment scores for students using a community skills assessment similar to the one students were given during the PAL APPE-Readiness course of their 3rd year. We predicted a significant improvement in student assessment score after APPEs.

OBJECTIVES

- ❖ Determine the impact of APPE rotations on the student's ability to perform CORE Entrustable Professional Activities specific to a Community Pharmacy Rotation
- ❖ Identify the relationship between professional demographic factors and student assessment scores

ENDPOINTS

PRIMARY ENDPOINT

Student assessment scores

SECONDARY ENDPOINT

Level of association of professional experience to assessment scores

METHODS

- ❖ 30-item assessment evaluated transcribing voicemails, identifying errors and omissions, product verification, patient counseling, and common drug knowledge
- ❖ 5-item qualitative survey included 1) completion of community APPE, 2) community APPE completed at chain or independent pharmacy, 3) experience of pharmacy practice outside of IPPEs and APPEs, 4) # of years of experience outside of IPPEs and APPEs, and 5) types of APPE rotations completed

Inclusion Criteria

- Current P4 pharmacy student enrolled in XULA's college of pharmacy
- Students who took the initial assessment during Spring 2023
- Students who have completed at least two (2) APPE rotations

Exclusion Criteria

- Students who did not take the initial assessment in Spring 2023
- Students who have completed only one (1) APPE rotation

RESULTS

- ❖ 18 students completed the assessment and survey; a paired samples t-test was conducted to compare student assessment scores before APPE rotations and after APPE rotations
- ❖ There was a significant difference in the assessment scores Pre-APPE (M=74.6, SD= 11.4) and Post-APPE (M=87.9, SD=5.95); $t(17) = -4.62, p = 0.0002$
- ❖ These results suggest that APPE rotations have a positive impact on the community practicum assessment, which should translate to retention and mastery of EPAs

Variable	Obs	Mean	Std. Error	Std. Dev	[95% CII]
Post- APPE	18	74.5556	2.676	11.3512	68.91074 - 80.20037
Pre-APPE	18	87.9444	1.401	5.9456	84.98779 - 90.9011
Diff	18	-13.389	2.896	12.28648	-19.49881 -7.278968
T =		-4.6233			
P =		0.0002			
Degrees of Freedom =	17				

- ❖ There was no significant difference in student assessment scores based on 1) completion of community APPE, 2) community APPE completed at chain or independent pharmacy, 3) experience of pharmacy practice outside of IPPEs and APPEs, 4) # of years of experience outside of IPPEs and APPEs, and 5) types of APPE rotations completed

CONCLUSIONS

- ❖ Although we had a limited cohort size due to voluntary measures, with this data, we are able to conclude that our students are efficiently mastering community EPAs and predict they will be prepared to practice upon graduation. A similar study with more participants will provide further justification for this conclusion.
- ❖ Using this data, we are now able to conduct similar assessments with our ambulatory care, institutional, and acute care/general medicine rotations.

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