Development of a faculty-led health-system IPPE pilot program including APPE mentorship

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Background

- Accreditation Council for Pharmacy Education (ACPE) standards 2016, standard 12, pre-advanced pharmacy practice experience (pre-APPE) curriculum, states that Introductory Pharmacy Practice Experiences (IPPEs) should include habits of self-directed learning to prepare students for APPEs. IPPEs should also include direct patient care activities as discussed in key element 12.5 of standard 12.
- A pilot was conducted to identify ways to expose an IPPE student to various components of the health-system by participating in activities that encompass the pre-APPE core domains and Joint Commission of Pharmacy Practitioners: Pharmacists' Patient Care Process.[1]

Objectives

- Identify ways to expose IPPE students to components of the health-system by scheduling activities encompassing the pre-APPE core domains and Joint Commission of Pharmacy Practitioners: Pharmacists' Patient Care Process (PPCP).
- Determine if mentoring a health-system IPPE student can result in benefits for APPE students relative to the Center for Advancement of Pharmacy Education (CAPE) Educational Outcomes subdomains 4.1 (Self-awareness), 4.2 (Leadership), and 4.4 (Professionalism).[2]

Methods

- A faculty-led health-system IPPE pilot was conducted as part of a four-week rotation in which one student participated in activities designed to encompass the pre-APPE core domains and PPCP.
- Five APPE students had a role in mentoring the IPPE student.
- The IPPE and APPE students completed an optional post-rotation survey consisting of closed and open-ended questions to obtain specific and reflective responses.

References
1. Joint Commission of Pharmacy Practitioners. *Pharmacists' Patient Care Process.* Jcpp.net/patient-care-process. Accessed May 3, 2018.
2. Medina MS, Plaza CM, Stowe CD, Robinson ET, DeLanderG, Beck DE, Melchert RB, Supernaw RB, Roche VF, Gleason BL, Strong MN, Bain A, Meyer GE, Dong BJ, Rochon J, Johnston P. Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes 2013. Am J Pharm Educ. 2013; in press

Pre-APPE Core Domain	PPCP Steps	IPPE Activities
Patient Safety	Collect Assess Plan Implement Monitor and Evaluate	Review of inpatient orders; Medication-related event analysis rounds; Attend Medication Safety and Pharmacy & Therapeutics Committees; Shadowing in Travel and Hepatitis C clinics (patient education); Medication use evaluation for proton pump inhibitors
Basic Patient Assessment	Collect Assess	Calculations assignment; Vancomycin SOAP assignment; Drug information assignment
Medication Information	Assess Plan Monitor and Evaluate	Drug information assignment; Medication Safety Journal Rounds presentation; Vancomycin SOAP assignment
Identification, Assessment, and Resolution of Drug-Related Problems	Assess Plan Implement Monitor and Evaluate	Medication-related event analysis rounds; Shadowing in Hepatitis C clinic; Vancomycin SOAP assignment
Mathematics	Assess Plan	Calculations assignment; Vancomycin SOAP assignment; Drug information assignment
Ethical, Professional, and Legal Behavior	Collect Assess Plan Implement Monitor and Evaluate	Applies to all activities
General Communication Abilities	Collect Assess Plan Implement Monitor and Evaluate	Medication Safety Journal Rounds presentation; Shadowing in Travel and Hepatitis C clinics; Communication with preceptor and APPE students
Patient Education	Implement Monitor and Evaluate	Shadowing in Travel and Hepatitis C clinics (patient education)
Drug Information Analysis and Literature Research	Assess Plan	Medication Safety Journal Rounds presentation; Vancomycin SOAP assignment; Drug information assignment
Health and Wellness – Public Health	Collect Assess Plan Implement Monitor and Evaluate	Shadowing in Travel and Hepatitis C clinics
Insurance/Pre-scription Drug Coverage	Assess Plan	Attend Pharmacy & Therapeutics Committee; Shadowing in Travel and Hepatitis C clinics

Results

- The IPPE student completed the survey and reported having exposure to 10 of the 11 (91%) pre-APPE core domains (all except for Insurance/Prescription Drug Coverage).
- The IPPE student reported gaining an understanding of the full PPCP in the health-system setting by shadowing in Hepatitis C and Travel clinics.
- All five APPE students (100%) completed the survey and commented that they had improved their leadership (4.2) skills.
- Mentorship also allowed the APPE students to self-reflect on their progression (4.1 Self-awareness) and to work with peers as a role model (4.4 Professionalism).

Selected IPPE Student Post-Rotation Survey Questions with Responses

How likely is it that you would recommend this health-system IPPE to another student?
"Very likely to recommend"

On average, how much time did you spend with the APPE students on a weekly basis?
"On average between 6-12 hours weekly."

What can you recommend to make this Health-System IPPE experience better for future students?
"To improve the health system IPPE experience I would try to incorporate more opportunity for direct patient contact. I loved my time in the clinics and I felt because each patient's case changed, it allowed me to ask more questions about why the pharmacist was making a change in their treatment plan."

Has your perception of a health-system institution changed as a result of this rotation?
"Yes! Through my experience at MCPHS, I had been exposed to what an ambulatory care pharmacist and hospital pharmacist was but never what they did. This rotation was able to show me the dynamic role they each have in the patient care process and how their presence on the patients' care team greatly benefited the patient. I have even considered changing my career path to explore more of the roles and responsibilities of ambulatory care pharmacists."

Selected APPE Student Post-Rotation Survey Questions with Selected Responses

How (if at all) did your role in the Health-System IPPE affect your leadership skills?
"Participating in IPPE pilot program definitely improved my leadership skills as I had to constantly double check my work and teach the IPPE student. This experience encouraged me to be confident when interacting with other health care professionals as well."

How (if at all) did your role in the Health-System IPPE affect your perception of your own level of professionalism?
"I found that I had a duty to remain professional towards the IPPE student. It made me more aware that I was somewhat of a role-model for the IPPE student and it was my duty to show them how to conduct themselves on an institutional rotation."

Discuss any benefits that you may have experienced while working with the IPPE student.
"Benefits of this experience were that I got to expand on my leadership skills, and I realized that I really enjoyed the teaching moments I had and may possibly consider precepting students in the future when I become a licensed pharmacist.

Implications

- Next steps include a larger pilot with more students and adjunct faculty.
- The IPPE pilot encompassed nearly all pre-APPE core domains. More attention to the Insurance/Prescription Drug Coverage domain will be given during the next offering.
- APPE student mentoring led to benefits in several CAPE areas.

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