



Contents lists available at ScienceDirect

Currents in Pharmacy Teaching and Learning

journal homepage: www.elsevier.com/locate/cptl

Experiences in Teaching and Learning

Curriculum renewal: Alignment of introductory pharmacy practice experiences with didactic course content

Wesley Nuffer^{a,*}, Sheila Botts^b, Kari Franson^a, Eric Gilliam^a, Randy Knutsen^a,
 Monika Nuffer^a, Elizabeth O'Brien^c, Joseph Saseen^a, Megan Thompson^a,
 Joseph Vande Griend^a, Robert Willis^d

^a University of Colorado Skaggs School of Pharmacy & Pharmaceutical Sciences, 12850 E Montview Blvd C238, Aurora, CO 80045, United States^b Kaiser Permanente, 16601 East Centretech Parkway, Aurora, CO 80011, United States^c VA Eastern Colorado Health Care System, 1055 Clermont St, Denver, CO 80220, United States^d Safeway Pharmacy, Denver Division, 6900 S Yosemite St, Centennial, CO 80112, United States

ARTICLE INFO

Keywords:

Pharmacy student

Experiential

Introductory pharmacy practice experience

Curricular alignment

Preceptor

ABSTRACT

Background and purpose: The University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) used the opportunity of curriculum renewal to integrate knowledge and skills learned from didactic courses into the introductory pharmacy practice experiences (IPPEs) occurring simultaneously. This paper describes and evaluates the meaningful application of course content into IPPEs, and evaluates the success using qualitative feedback.

Educational activity and setting: Students entering the renewed curriculum starting in fall 2012 were provided a list of pharmacy skills and activities from didactic course directors that reinforced course content for that semester. The skills and activities were to be completed during the students' IPPE visits in the community or health systems settings, depending on the program year and semester.

Findings: Students successfully completed course assignments during their IPPE course program. Not all activities could be completed as designed, and many required modification, including simulated experiences. Feedback from faculty and preceptor members of the school's experiential education committee demonstrated that these activities were valuable and improved learning of course material, but were challenging to implement.

Discussion and summary: A renewed curriculum that mapped course assignments for completion in experiential settings was successfully established, after some modifications. The program was modified at regular intervals to improve the ability of preceptors to complete these activities in their individual practice environment. A balance between the school providing guidance on what activities students should perform and allowing unstructured independent learning with the preceptor is needed for an optimal experience.

* Corresponding author.

E-mail addresses: Wesley.Nuffer@ucdenver.edu (W. Nuffer), sheila.r.botts@kp.org (S. Botts), Kari.Franson@ucdenver.edu (K. Franson), Eric.Gilliam@ucdenver.edu (E. Gilliam), Randy.Knutsen@ucdenver.edu (R. Knutsen), Monika.Nuffer@ucdenver.edu (M. Nuffer), Joseph.Saseen@ucdenver.edu (J. Saseen), Megan.Thompson@ucdenver.edu (M. Thompson), Joseph.Vandegriend@ucdenver.edu (J. Vande Griend), Robert.Willis@safeway.com (R. Willis).

<http://dx.doi.org/10.1016/j.cptl.2017.07.017>

Received in revised form 25 April 2017; Accepted 28 July 2017

1877-1297/© 2017 Elsevier Inc. All rights reserved.

Background and purpose

Due to an ever-increasing focus on patient-centered care, standards for pharmacy education have evolved substantially over the past fifteen years.¹ The wide recognition that classroom learning was insufficient for training a pharmacist,² and that pharmacy curricula need to emphasize experiential learning across the entire program as opposed to isolated experiences in the final year of the doctor of pharmacy (PharmD) degree, led the Accreditation Council for Pharmacy Education (ACPE) to implement revised standards in 2007.³ These standards specified 300 hours of introductory pharmacy practice experiences (IPPEs) to complement the 1440 hours students complete in their final year during their advanced pharmacy practice experiences (APPEs).³ This challenging mandate forced schools of pharmacy to work diligently to establish IPPE experiences and integrate them into earlier years of the curriculum, which historically have been didactically-based. While ACPE avoided dictating how these sessions should be implemented, they did provide guidance that most of these experiences should be balanced between community pharmacy practice and institutional pharmacy practice and identified outcomes that should be obtained in each setting.³

To quickly create and implement IPPEs for pharmacy students that would meet or exceed these 300 hours, programs were quite creative in establishing the various models and practice settings where these IPPEs would take place.⁴⁻⁷ While there were some initial implementation challenges, IPPEs became a standard part of pharmacy curricula across the United States, providing much more practice exposure to students prior to their APPE year.

The University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) has prided itself on the innovative IPPE components that were established because of the 2007 ACPE Standards. Several components of the previous SSPPS longitudinal IPPE model have been described.⁸⁻¹⁰ For first year students, the community pharmacy setting and service-learning education for grade school children were the introduction to the IPPE program. Students then transitioned into health care systems for the second year, and to non-pharmacist clinical providers (e.g., physicians, nurse practitioners) for experiences in the third year. Expectations of student performance increased as students progressed through these IPPE components, with an emphasis on increased autonomy. The IPPE autonomy culminated in the non-pharmacist clinical provider health care setting the third year.

The longitudinal IPPE program established by the SSPPS was robust in its design and expectations, but this experiential portion of the curriculum functioned autonomously from the rest of the doctor of pharmacy curriculum. While there were clear expectations set for increasing performance by students, there was very little “cross-talk” between IPPE experiences and the didactic courses in which students were simultaneously enrolled. Students reported perceiving the curriculum as having two separate “parts” or “programs”; the didactic lessons and skills courses, and the experiential IPPEs and APPEs. This manifested in the students requesting to “do their time” in experiential settings when it was convenient for them, which was typically during months in which they were off from school. Preceptors were often unsure of where the student was in their learning. When application of knowledge and skills occurred in experiential sites, it was to coincidence rather than an intentional integration.

In 2012, the SSPPS implemented curriculum renewal, which provided the opportunity to integrate didactic course content into the IPPE experiential learning environment. This project was determined to be non-human subject research by the University of Colorado Multiple Institutional Review Board.

Educational activity and setting

For the renewed curriculum, the faculty desired to incorporate the application of knowledge and skills from didactic courses into the IPPE program. From an educational standpoint, the ideal learning environment would be to have the student learn the importance of a skill, such as proper inhaler technique, in a Monday didactic lecture, practice the application of that skill in a laboratory setting on Wednesday, and apply the skill on actual patients in a pharmacy setting later that week. While such a defined timeline was understood to be largely impractical, the idea of applying skills and knowledge in pharmacy settings shortly after acquiring them became a key focus within curricular renewal.

To ensure that knowledge and skills were always learned and practiced prior to being applied in the experiential setting, the school's curriculum committee mapped all the ACPE Standards 2007 Appendix B content and the school's identified ability based outcomes (ABOs) to the didactic courses.^{3,11} Experiential courses were not included in the curricular mapping for the required knowledge and skills. The SSPPS desired to have all knowledge and skills learned and practiced within the traditional classroom environment, and the experiential environment would be used to reinforce and apply what was learned from the traditional classroom environment. This represented a major change for the school. In the previous curriculum, there were specific learning activities outlined for students and preceptors for each semester-long IPPE course (e.g., performing allegation to get to intermediate concentrations, drug information requests, preparing intravenous bags), which required completion to pass the course. With the curriculum revision, each semester's IPPE course grade was based off preceptor evaluations of student performance, whereas the activities completed mapped back to individual didactic courses, and were weighted as part of those course grades (Fig. 1).

The IPPE course grade itself did not weight the completion of the various activities, but was designed to make sure all IPPE hours were completed, and integrated the supervising preceptors' evaluation of the student's global performance. The IPPE structure itself was not modified during this renewal; students completed four or five blocks of three-hour community pharmacy visits for their community IPPEs across each semester in P1 and P2 years, and completed five four-hour blocks of health system pharmacy visits during their P2 spring and P3 fall semesters. The exact time when these blocks of IPPEs would occur varied, depending on what was arranged between each preceptor and student, but were designed to span across the semester (as opposed to completing multiple blocks in one week). A four-hour block of time was outlined in each class's schedule as a “suggested” time where a student could complete their IPPEs for that semester. During the transition to the renewed curriculum, each knowledge and skills activity that was

Download English Version:

<https://daneshyari.com/en/article/6840195>

Download Persian Version:

<https://daneshyari.com/article/6840195>

[Daneshyari.com](https://daneshyari.com)