Assessment Plan

Purdue University – College of Pharmacy Doctor of Pharmacy (Pharm.D.) Program

Introduction

The Purdue University College of Pharmacy is dedicated to encouraging the growth and development of our students, and facilitating their achievement of our stated educational outcomes. The mission of the College is to: 1) educate and train students to become leading pharmacists and scientists, 2) advance scientific discovery and development, and 3) maximize global health outcomes through patient care and public service. It is with this mission in mind that we have developed a plan for continuous and comprehensive assessment in our college. Program assessment is meant to assess the entire program, including its students, curriculum, processes, and outcomes surrounding the program. Our goal in conducting various assessment activities is to provide for continuous improvement in our academic processes through the evaluation and utilization of relevant assessment data.

Student Learning Outcome and Program Assessment Data

Faculty in the College established a set of Professional Program Outcome Ability Goals in the 1990's. The most recent revision of these student outcomes was approved by the faculty in 2016 for the Doctor of Pharmacy program (Appendix A). These program-specific outcome abilities are established to ensure the student's transitional growth across the didactic curriculum and throughout the introductory and advanced pharmacy practices experiences results in professional competency and the ability to provide patient-centered care by meeting the criteria of good science, professional skills, attitudes, behaviors, values, and evidence-based practice. A parallel set of outcome ability goals has been established for the Bachelor of Science in the Pharmaceutical Sciences (BSPS) program as well as the graduate programs in the three departments in the College. This document focuses on the assessment plan for the Doctor of Pharmacy program.

In addition to evaluation of the extent to which individual students acquire the outcome ability goals for our program, there is a need to examine the extent to which broader outcomes related to other aspects of the College mission are achieved. This includes evaluation of such things as student performance on national licensure examinations, accomplishments related to the strategic plan of the college, and information and feedback on various aspects of our program obtained through surveys of faculty, students, preceptors and alumni.

Use of Assessment Data for Improvement

Assessment data collected are intended to provide the College with information about the areas where we are doing well in the professional program as well as areas where improvements are needed. The data are not intended to evaluate individual faculty. It is important to recognize that assessment data collected require interpretation and that results obtained should not be taken out of context. It is important to collect data from multiple sources, both quantitative and qualitative in order to draw valid conclusions. The overall goal in collecting these data is to provide evidence documenting the extent to which we are achieving the desired outcomes of our program. A number of assessment activities are in place within

the College. Some are regularly scheduled to collect data in a longitudinal fashion whereas others are completed on a periodic basis to provide a snapshot of student or College performance in a particular area. The document titled Core Assessment Activities for the Doctor of Pharmacy Program lists these ongoing and periodic assessments (Appendix B). The various parties responsible for assessment within the College have established a variety of reporting requirements in order to obtain the data necessary to evaluate our progress in assisting students in achieving our outcomes as well as determining our success related to the broader components of our mission. In designing these reporting requirements, the goal is to make data reporting straight-forward and to have data collection be part of the standard activities undertaken by faculty and staff within the College.

Assessment Responsibilities

Assessment responsibilities within the College lie with several groups: 1) the Assessment Committee, a standing committee in the College charged by the dean to plan and review assessment activities, 2) the Curriculum Committee, a standing committee in the College charged by the dean to review the curricular structure and functioning and to make recommendations for improvement to the faculty, including course assessment activities, 3) the Faculty of the College for providing assessment data and responding to recommendations from the previously named committees, 4) the Office of Experiential Programs for providing assessment data and responding to recommendations related to IPPE and APPE experiences, 5) the Students in the College for completion of assessments and information requests related to activities both within and outside the classroom, 6) the Office of the Dean, where the Senior Associate Dean has responsibility for coordinating assessment activities in the College, and the 7) College Executive Committee, which sets policy for the College. Specific responsibilities include the following:

- 1. Assessment Committee The Assessment Committee has the responsibility to work with faculty to collect curricular mapping information; to monitor student achievement related to program outcomes; to collect and evaluate assessment data from students in the program and from recent graduates; and to evaluate data related to experiential rotations. Faculty will provide the Assessment Committee with information regarding modification of course outcomes that will be used to update the College's curricular mapping document. The results of ongoing assessment projects or assessment data collected by the Office of the Dean, the Office of Experiential Programs, the Office of Student Services, and the Curriculum Committee will be forwarded to the Assessment Committee for review. Based on analysis of this information, the Assessment Committee will make recommendations to the Curriculum Committee, the Dean's Office, the Office of Student Services, the Office of Experiential Programs, the College Executive Committee or individual course faculty, as appropriate. The Chair of the Assessment Committee will also provide regular reports to the faculty on its findings and recommendations. The Assessment Committee will develop an annual report to the faculty that addresses the following:
- a) A summary of findings regarding the extent to which outcome abilities are being achieved by our students.
- b) Identification of areas where the Doctor of Pharmacy program is successful in achieving its educational mission.
- c) Identification of areas where improvements are needed with respect to achievement of outcome abilities or other components of the program mission.

The Assessment Committee will review this College Assessment plan regularly and update it when needed.

2. Curriculum Committee – The Curriculum Committee has established a course approval checklist (Appendix C) requiring faculty to provide information about baseline knowledge and skills related to the College's outcome abilities upon course entry, the outcomes to be addressed during the course, the assessment methods related to these outcomes, and the specific assessment data to be provided to the Assessment Committee in order to monitor student achievement of the outcomes for both the didactic and experiential portions of the curriculum. In addition to its role in initial course approval, the Curriculum Committee will review all courses in the curriculum on a regularly scheduled basis (every four years). Included in this committee review is an evaluation of: identified course outcomes, student course evaluations related to outcome achievement, and data on student achievement related to core course outcomes. The Curriculum Committee will make recommendations to core course faculty based on the information as well as for course modification of course outcomes/material based on an evaluation of curricular mapping activities and assessment data provided by the Assessment Committee.

3. Faculty of the College – Faculty are responsible for:

- a) Reviewing and regularly updating their stated course outcome abilities and designing instructional and evaluation approaches to ensure that students are successful in achieving these outcomes.
- b) Including questions on their course evaluations related to student achievement of their stated course outcomes,
- c) Evaluating data from the above to develop strategies to maximize student achievement related to College outcomes featured in their courses.

Beyond these individual faculty course responsibilities, the course coordinators within each professional year and between professional years of the new Doctor of Pharmacy curriculum will meet regularly to assure the coordination, sequencing, and integration of content to encourage the use of optimal teaching methods to achieve our stated curricular outcomes. Individual faculty members are also responsible for pursuing professional development opportunities intended to improve their student performance assessment-related knowledge and skills.

- **4. Office of Experiential Programs** The Office of Experiential Programs will collect data on student achievement of IPPE and APPE objectives and develop strategies to facilitate achievement of these objectives. The Office will provide the Assessment Committee with summary data on student performance and the extent to which each of the program objectives are being achieved. The Office will also monitor evaluations of sites and preceptors to assure that students are assigned in a manner to optimize their practice experiences.
- **5. Students in the College** Students are required to maintain a performance portfolio throughout their time in the professional program and/or participate in a proposed Annual Performance Review, complete requested reflections related to the portfolio and other course-related assignments, participate in classroom/laboratory assessments to the best of their ability, and respond to requests for completion of survey instruments related to assessment, including didactic and experiential course evaluations.

- **6. Office of the Dean** The Dean's Office coordinates overall assessment activities within the College, which includes monitoring and reporting to internal and external audiences. The Senior Associate Dean has the responsibility for compiling student performance and program assessment data and sharing those data with the faculty and other appropriate groups and individuals for follow-up. The Dean's Office provides support for and coordination of faculty development activities related to student performance assessment and program assessment. The Dean's Office also provides resources (e.g., research assistant, student worker assistance, assessment related travel funds) to facilitate the work of the Assessment Committee.
- **7. College Executive Committee** The College Executive Committee reviews compiled information related to student performance and achievement of the overall educational mission and strategic planning goals of the College and sets policy related to assessment initiatives, including endorsement of specific activities to be completed by faculty and staff in the three departments in the College.

Faculty Development in Assessment

The College has an obligation as part of our overall assessment planning to encourage the development of faculty knowledge and skills related to student assessment. Faculty in the College have been involved with a variety of assessment projects over the past 25 years, including some of the first assessment initiatives in pharmacy education funded by the Department of Education through the Fund for the Improvement of Post-secondary Education (FIPSE) and the Grant Awards for Pharmacy Schools (GAPS) program. Several faculty members are currently involved in a variety of local and national initiatives related to assessment. At Purdue University the College participates in the Student Learning Outcome Assessment Working (SLOAW) group that provides guidance to the University Director of Assessment regarding University-wide initiatives including the computerized outcome assessment tracking system. Members of the faculty also participate in the Big Ten Academic Alliance--Pharmacy Assessment Collaborative, (representing the 10 out of the 14 Big Ten universities that have pharmacy programs) that provides a forum for information sharing, instrument development, and multi-institutional assessment project activities.

Although these aforementioned activities have provided a foundation for our current assessment initiatives, they have involved only a subset of our faculty. For the College assessment program to be successful, all faculty need to develop their knowledge and expertise and contribute to the process. One approach to facilitate this is to develop an expectation that individuals involved in assessment activities regularly share information and experiences related to assessment with the faculty as a whole. However, it is also important for faculty to take an active role in their own professional development. There are a number of opportunities for individual faculty to pursue assessment as a personal development activity. The American Association of Colleges of Pharmacy (AACP) has a long history of providing programming related to assessment through their Institute workshops, the Assessment SIG, and national meeting preconferences. The Dean's office also works to facilitate faculty understanding and skill development in assessment through external guest seminar presentations. Faculty members are encouraged to participate in these development activities with the goal of improving assessment approaches within the curriculum. Faculty should routinely report significant professional development activities related to assessment through their annual report process.

Appendix A

PURDUE UNIVERSITY

College of Pharmacy Professional Program Outcomes

- 1. Conceptual Competence and Scientific Comprehension. The student must demonstrate comprehension of the theoretical and scientific foundations of the profession. The student will be able to integrate fundamental concepts from the pharmaceutical sciences, clinical sciences, social/behavioral sciences and economics and apply these to individual practice settings.
- **2. Critical Thinking and Decision-Making.** The student must examine issues rationally and logically; shall acquire, evaluate, and synthesize information and knowledge relevant to an identified problem; and make logical, safe, and ethical decisions in both familiar and unfamiliar contexts.
- **3. Communication Skills and Abilities.** The student must read, write, speak, listen, and use appropriate technologies to send and respond effectively to communications for varied audiences and purposes.
- **4. Information Literacy.** The student must retrieve, analyze, and interpret the professional literature, critically evaluate the scientific credibility of information, utilize information technology and distribution systems that promote the safe use of medications, and provide evidence-based medication and health information to healthcare professionals and the public.
- **5. Practice-Based Competency.** The student will develop a foundational set of skills and abilities to provide consistent and comprehensive patient-centered care to all individuals regardless of demographic characteristics, disease state or therapeutic requirements.
- **6. Team-Based Competency.** The student will learn to collaborate and integrate effectively with pharmacists and other healthcare professionals to provide optimal health care services to patients.
- **7. Leadership Skills and Abilities.** The student will acquire knowledge of leadership traits and skills through curricular and co-curricular activities and develop skills and abilities that will enable him/her to lead or actively contribute to organizational improvement.
- **8. Professionalism and Ethics.** The student must demonstrate sensitivity to personal values and ethical principles in professional and social contexts.
- **9.** Cultural Competence and Social Awareness. The student must demonstrate an understanding of self, the strengths and challenges of cultural diversity, and utilize culturally sensitive and effective skills in delivering patient-centered care.

- **10. Population Health Management.** The student will promote health improvement, wellness and disease prevention by understanding and applying population-based data, processes and strategies to design individual and population-specific, evidence-based disease prevention and management programs.
- 11. **Self-Aware and Career Ready.** The student will apply his/her knowledge, skills and abilities by engaging in experiences and activities that challenge the student to systematically evaluate and continuous develop his/her abilities and goals in order to enter into and thrive in his/chosen career path.

Approved by the Faculty -- May 11, 2016

$\begin{array}{l} \textbf{Appendix B-Core Assessment Activities for the Doctor of Pharmacy Program \ at Purdue University College \ of Pharmacy \end{array}$

Please see the separate **Core Assessment Activities** document.

Appendix C

Pharmacy Curriculum 2015 - New Course Cover Page and Checklist

	Course number PHRM Year in Curriculum: P-1 P-2 P-3 P-4
	Title
	Semester offered
	Hours per week of class/recitation/lab
	Credits
	Course Director(s):
	Participating faculty:
	Course Prerequisites
	Identify learning outcomes from prerequisite course(s) students should enter this course having been introduced to and/or mastered.*
	Identify any School Outcome Abilities students should have addressed and at what level (<i>novice</i> , <i>developing</i> competence, expert) prior to beginning this course*
	Description of course purposes and features*
	Rationale for the course content*
	Relationship of course to prior or concurrent courses in the curriculum*
	Relationship of course to subsequent courses in the curriculum*
	Suggested Skills Lab activities related to this course*
	Pedagogical approach / teaching strategies to be utilized during the course*
	Course learning objectives*
	School Outcome Abilities to be addressed during the course*
	Identify whether these outcome abilities will be introduced, reinforced, and/or mastered during this course and at what level students are expected to perform (novice, developing competence, expert).
	Description of methods to be utilized to assess student achievement of course objectives, outcome abilities, and assign course grades* Identify those outcome abilities for which annual assessment of outcome data for the course will be sent to the assessment committee.* Indicate how outcome data will be collected and forwarded to the assessment committee.
	Detailed course summary outline (syllabus) of course topics, learning activities, assignments to enable students to achieve the learning objectives*
	Description of means to be used to monitor progress of course in meeting stated objectives and make refinements for improvement*

^{* -} attach to this cover page