# Self-Study Report to the Accreditation Council for Pharmacy Education

September 2016

Submitted by University of Pittsburgh School of Pharmacy



## School's Overview

The college or school is invited to provide an overview of changes and developments related to the program and the college or school since the last comprehensive on-site evaluation. The summary should be organized by the three sections of the Standards.

[TEXT BOX] [Maximum 5,000 characters including spaces] (approximately two pages)

## **Educational Outcomes**

Since 2009, PittPharmacy:

- Formally articulated "personalizing education" as a goal in the 2012 Long-Range Plan.
  - Increased the number of electives and Special Topics courses; the latter allows students to engage in mentored research.
  - Added six Areas of Concentration (ARCOs) to allow greater focus on one area of pharmacy.
- Advising and portfolio processes complement course additions.
- Created a course entitled the "Emerging Professional" for P1 students to develop self-awareness, establish a leadership foundation, understand the profession and professionalism, and develop a personalized plan to pursue or learn about specific areas of pharmacy.
- Created the Case Conference Series that vertically integrates curricular themes and corresponding outcomes. The course challenges students with increasingly complex cases and hones skills necessary to provide patient care. Cases reinforce disease-specific application of foundational knowledge and clinical reasoning.
- Introduced required and elective innovation experiences in which students acquire skills to use design-based thinking to rapidly develop innovative solutions to problems based on the creative process and innovation cycle. All P2 students use the principles of innovation in an experiential learning project.

#### **Structure and Process**

PittPharmacy:

- Has a new chancellor in addition to a number of changes to the senior leadership.
- Added three associate dean positions: Community Partnerships, Graduate Education, and Research Innovation.
- Expanded the MS in Pharmaceutical Sciences and added an MS in Pharmacy Business Administration.
- Created and implemented the Pharmacist Interaction Tracking Tool (PITT Form) to capture student-patient interactions in simulated and clinical settings in P1 through P4. Students document the patient's disease state, setting, intervention recommended, and action(s) taken. The PITT Form is also used in Community Pharmacy 2 for students to "bill" for a grade using ICD 9 codes.
- Established Career Learning and Advising Groups in 2014. A faculty member is assigned as a mentor for six students per class. Groups meet at least once every semester.

- Created Community Pharmacy Practice 2. The four eight-hour workshop days replicate national meetings with pharmacy leaders as keynote speakers, small group reflection/discussion, and skills-based mini-workshops. CE is provided to pharmacist attendees.
- Established a partnership with APPRISE, a free health insurance counseling program designed to help older Pennsylvanians with Medicare. P1 students complete a four-session primer on Medicare Part D; some students have IPPEs and APPEs at APPRISE.
- Created and implemented Pharmacogenomics PGx Test2Learn<sup>™</sup>, an innovative approach to pharmacogenomics instruction. Students learn from their personal or de-identified pharmacogenomic data.
- Created RxPedition, a semester-long educational game for drug development, as the Drug Discovery and Development course. Student teams experience drug development; they select a drug candidate, design studies and interpret data and make scientific, economic and regulatory decisions leading to FDA approval. They compete to win the game by ending with the highest stock price, quality, and value.
- Increased the number of international pharmacy experiences available to students and created a new elective course in international pharmacy/global health.
- Obtained new physical facilities.
  - Salk Pavilion, a new research facility, opened in May 2015. The Pavilion houses 14 faculty members plus staff and graduate students; the state-of-the art open laboratories, procedure rooms, equipment corridors, offices and conference rooms added greatly to the functionality of research space. The move to the Pavilion provides the opportunity to renovate vacated space in Salk Hall.
  - Connecting Salk Pavilion to Salk Hall is the newly constructed Commons with the Rxpresso Coffee Shop, which is newly acquired interaction space.
  - The NovoNordisk Learning Center opened in 2013. The flat-floor classroom is accommodates 120 students in groups of six, each group with its own monitor and ability to connect a laptop.

## Assessment

PittPharmacy:

- Developed and implemented the Readiness Assessment, which is a blended simulation experience that assesses level of competence and performance of students prior to APPEs and focuses on key patient care outcomes, including:
  - interprofessional preparedness;
  - clinical reasoning skills;
  - attitudes of ownership (professional advocacy).

The Readiness Assessment is administered to students at the end of their P1 and again at the end of their P3 year to assess progression of readiness from P1 to P3 and to assess readiness of P3s in the three main outcomes.

• Added the presentation portfolio in addition to the required assessment portfolios to enhance student preparation for employment and post-graduate training opportunities.

## Summary of the School's Self-Study Process

<u>The college or school is invited to provide</u> a summary of the self-study process. ACPE does not require any supporting documentation for the Summary of the Self-Study Process; however, the college or school may provide supporting documentation (such as, a list of the members of the self-study committees) as an appendix in the self-study report.

[TEXT BOX] [Maximum 5,000 characters including spaces] (approximately two pages)

#### **Original Timeline and Extension**

- PittPharmacy's accreditation term was through June 30, 2016, with a comprehensive review set for fall 2015.
- Three members of PittPharmacy's Leadership Team participated in the ACPE Self-Study Chairs Workshop in August 2013.
- In January 2014, PittPharmacy was granted an administrative extension of term through January 31, 2017, with a comprehensive review set for fall 2016.

## Preparation Triggered by Draft Standards 2016

- February 2014: A For Your Information and Input (FYII) session was held with faculty and staff to provide an overview of information shared by ACPE at the AACP Interim Meeting regarding Draft Standards 2016.
- May 2015: A five-member faculty team participated in the AACP Institute on Standards 2016.
- Spring/Summer 2015: The Curriculum Committee was charged to propose revised curricular outcomes reflective of the 2013 CAPE Educational Outcomes, the IPEC Core Competencies, and ACPE Standards 1 through 4. An iterative process that included the Curriculum Committee, Leadership Team, and entire faculty body led to adoption of the revised PittPharmacy Outcomes in July 2015.

#### Self-Study Committee Structure

In June 2015, Dean Kroboth appointed Susan Meyer and Neal Benedict as self-study chair and co-chair, respectively. With input from the department chairs, individuals were identified to participate in the self-study process as chairs, cochairs, and members of self-study subcommittees. Of the 62 faculty members that participate in the PharmD program, 52 (83.9 percent) actively participated as members of the Steering Committee and/or one of the six subcommittees appointed to address sets of standards. Twelve staff members and four graduate students also participated as members of subcommittees. The Steering Committee comprised the chairs and co-chairs of the subcommittees, selected members of the School Leadership Team, and staff leaders. Steering Committee members and subcommittee members are listed in an appendix to this summary.

The dean charged the Steering Committee to guide PittPharmacy's overall self-study process, keep colleagues informed of the process and findings, and assure the integrity of self-study report. Chairs of the subcommittees were charged to engage subcommittee members and analyze data, prepare draft narratives for assigned standards, and assemble relevant appendices.

## Process and Timeline

• July 2015: The self-study process was launched and the Steering Committee met monthly thereafter to complete its work. To facilitate communication, sharing of documents, and remote access to files, a shared space in the

University's cloud storage platform (Pitt Box) was established for the Steering Committee and each of the subcommittees.

- January 5, 2016: A School-wide retreat was held to review and discuss first drafts of all narratives and gather input into key questions related to the curriculum, curricular outcomes, and assessment.
- April 1, 2016: Responses were submitted to ACPE's Standards 2016 Readiness Survey.
- April 22, 2016: Revised drafts and appendices were compiled into draft self-study report for the mock site visit.
- May 9-10, 2016: Dr. Robert Beardsley was invited for a consultative visit to provide feedback on his observations and an early draft of the Self Study. The visit ended with a School-wide meeting during which he provided his analysis of the extent to which the School met Standards 2016, provided feedback on the on-going self-study process, and responded to questions from faculty and staff.
- July, August, and September 2016: A series of FYII sessions for faculty and staff were held to gather input on evolving drafts and develop consensus around areas of strength and aspects in need of improvement.
- September 2, 2016: A revised self-study draft was circulated to faculty and staff for thorough review and final comments. Faculty directly engaged in the PharmD program were asked to agree or disagree with the statement "The self-study report accurately reflects the status of the School relative to the ACPE standards for accreditation." The report was approved unanimously by the faculty on September 14, 2016. The final formatting and revisions were completed in mid-September.
- September 19, 2016: The self-study report was mailed to the members of the site evaluation team and ACPE and the AAMS document was marked complete.

## Transparency and Broad-Based Input

The Self Study is available on the PittPharmacy Web site so that the broad base of stakeholders, including preceptors and other practice partners, alumni, and students, and the School's Board of Visitors could learn about the major themes of the report, the areas deemed in need of improvement, the items identified as notable, and the values, behaviors, and strategies that form the culture of innovation and quality advancement at PittPharmacy.

Appendix PittPharmacy Self-Study Steering Committee and Subcommittees.pdf

## Summary of the School's Self-Evaluation of All Standards

Please complete this summary () after self-assessing compliance with the individual standards using the Self-Assessment Instrument.

Standards		Compliant with Monitoring	Partially Compliant	Non Compliant
SECTION I: EDUCATIONAL OUTCOMES				
1. Foundational Knowledge	V			
2. Essentials for Practice and Care	V			
3. Approach to Practice and Care	V			
4. Personal and Professional Development	V			
SECTION II: STRUCTURE AND PROCESS TO PROMOTE ACHIVEMENT OF EDUCATIONAL OUTCOMES				
5. Eligibility and Reporting Requirements	V			
6. College or School Vision, Mission, and Goals	V			
7. Strategic Plan	V			
8. Organization and Governance	V			
9. Organizational Culture	V			
10. Curriculum Design, Delivery, and Oversight	V			
11. Interprofessional Education (IPE)	V			
12. Pre-Advanced Pharmacy Practice Experiences (Pre-APPE) Curriculum	Ø			
13. Advanced Pharmacy Practice Experiences (APPE) Curriculum	V			
14. Student Services	V			
15. Academic Environment	V			
16. Admissions	V			
17. Progression	V			
<ol> <li>Faculty and Staff – Quantitative Factors</li> </ol>	V			
19. Faculty and Staff – Qualitative Factors	V			
20. Preceptors	V			
21. Physical Facilities and Educational Resources				
22. Practice Facilities	V			
23. Financial Resources	V			
SECTION III: ASSESSMENT OF STANDARDS AND KEY ELEMENTS				
24. Assessment Elements for Section I: Educational Outcomes	M			
25. Assessment Elements for Section II: Structure and Process	V			

## Section I Educational Outcomes

Standard No. 1: Foundational Knowledge: The professional program leading to the Doctor of Pharmacy degree (hereinafter "the program") develops in the graduate the knowledge, skills, abilities, behaviors, and attitudes necessary to apply the foundational sciences to the provision of patient-centered care.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- Annual performance of students nearing completion of the didactic curriculum on Pharmacy Curriculum Outcomes Assessment (PCOA) outcome data **broken down by campus/branch/pathway** (only required for multi-campus and/or multi-pathway programs)
- ☑ Performance of graduates (passing rates of <u>first-time candidates</u> on North American Pharmacist Licensure Examination™ (NAPLEX®) for the last 3 years broken down by campus/branch/pathway (only required for multi-campus and/or multi-pathway programs) Template available to download
- ☑ Performance of graduates (passing rate, Competency Area 1<sup>1</sup> scores, Competency Area 2 scores, and Competency Area 3 scores for <u>first-time candidates</u>) on North American Pharmacist Licensure Examination™ (NAPLEX®) for the last 3 years Template available to download
- Performance of graduates (passing rate of <u>first-time candidates</u>) on Multistate Pharmacy Jurisprudence Examination® (MPJE®) for the last 3 years Template available to download

#### **Required Documentation for On-Site Review:**

(None required for this Standard)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- Analysis of student academic performance throughout the program (e.g. progression rates, academic probation rates, attrition rates)
- AACP Standardized Survey: Students Questions 12-14, 77
- ☑ AACP Standardized Survey: Preceptors Questions 19-22
- AACP Standardized Survey: Alumni Questions 26-28

#### **Optional Documentation and Data:**

- ☑ Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program's compliance with the requirements of the standard and accompanying guidelines:

U

 $\bigcirc$ 

N.I.

 $\bigcirc$ 

S

 $\bigcirc$ 

**1.1. Foundational knowledge** – The graduate is able to develop, integrate, and apply knowledge from the foundational sciences (i.e., biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care.

<sup>&</sup>lt;sup>1</sup> Competency Area 1 = Assess Pharmacotherapy to Assure Safe and Effective Therapeutic Outcomes; Area 2 = Assess Safe and Accurate Preparation and Dispensing of Medications; Area 3 = Assess, Recommend, and Provide Health care Information that Promotes Public Health

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - A description of the breadth and depth of the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences components of the didactic curriculum, and the strategies utilized to integrate these components
  - How the college or school integrates the foundational sciences to improve student ability to develop, integrate and apply knowledge to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

#### [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

PittPharmacy has a dynamic and modular, integrated curriculum where the foundational sciences are deliberately interwoven with the biomedical; pharmaceutical; social, behavioral, and administrative; and clinical sciences. The design allows rapid curricular evolution in response to emerging roles and expectations for pharmacists in practice, feedback from students, and assessment data. The curriculum aligns content vertically and horizontally across professional years and affords opportunities for students to personalize their education. Symbolic of the integrated nature of the curriculum, courses are labeled "PHARM" and are not attributable to a specific department. Each course undergoes deliberate review by the Curriculum Committee at least every four years.

PittPharmacy Outcomes (Appendix 1A, optional) articulate specific expectations for the development of foundational knowledge, particularly PITTPharmacy 1—Learner:

The student will:

- develop, integrate, and apply the breadth and depth of foundational knowledge and skills needed to advance population health and patient-centered care; and
- use critical thinking skills to:
- retrieve and evaluate the scientific literature in order to make appropriate decisions.
- identify, solve, and prevent therapeutic problems in order to advance population health and patientcentered care.

The map of core courses by curricular outcomes (Appendix 1B, optional) illustrates the extent to which Learner is addressed across the curriculum.

## P1 year

The courses of the P1 year provide students with a foundation in the pharmaceutical sciences and the principles of practice. Biochemistry and Principles of Drug Action introduce principles of biochemical pathways, genetics, structure-

activity relationships, drug-receptor interactions, drug design and development, and pharmacokinetics and pharmacodynamics. Anatomy and Physiology frames and develops the concepts of cellular physiology, organ-system specific anatomy, and physiology. To move students to expert faster, the foundational science courses are designed to integrate pharmacy relevance of the content, including the biochemical, pharmaceutical, and pharmacological basis for the 120 most commonly prescribed medications. In addition, case-based learning activities integrate the foundational sciences.

The Pharmacist Patient Care Process 1 and 2 courses introduce students to the profession of pharmacy and the behavioral, social, and administrative sciences basic to the provision of direct patient care through simulated patients, standardized patients, and actual patient interactions. Students answer drug-related questions and complete a variety of written and oral assignments. IPPEs in the P1 year introduce basic pharmacy practice skills and aspects of professional responsibility to meet the health care needs of diverse populations.

## P2 year

The courses of the P2 year expand on the science and practice foundations of the P1 year and content is integrated horizontally across courses. In the drug development courses, students develop knowledge and skills in pharmacokinetics, pharmacogenetics, dosage forms, and pharmacy calculations. The Infectious Disease, Cardiology, and Gastroenterology/Nutrition therapeutic modules incorporate biomedical and pharmaceutical sciences and practice concepts. The P2 year expands on the professional behaviors introduced in the P1 year with a focus on development of skills in self-care through the Nonprescription Therapies and Self-Care Practice course. Students develop skills in evaluating scientific literature in the Drug Literature Analysis and Evaluation course and principles are applied to concurrent courses. The deliberate focus of IPPEs is to implement direct patient care practice patient interviewing skills and documenting patient assessment, drug therapy recommendations, and solutions to therapeutic problems. Reflections and small group discussions allow students to consolidate and synthesize their learning.

## P3 year

Foundational pharmaceutical sciences and practice concepts are integrated through all of the organ-based therapeutic modules in the P3 year: Immunology, Endocrinology, Pulmonology/Rheumatology, Neurology/Psychiatry, Oncology/Hematology, and Critical Care/Nephrology. Students gain skills in management and advancing population health in two courses: Public Health and Management; and Safe Medication Use and Pharmacoeconomics. These latter two courses are designed for students to further develop literature evaluation skills with application to journal club and debates, apply management principles to practice in health systems, and consider aspects of the health care delivery system, including pharmacoeconomics and continuous quality improvement practices. IPPEs in the P3 year focus on practice in hospital and health-system settings.

Throughout the three years, students demonstrate the ability to critically evaluate the medical/pharmaceutical literature and to demonstrate their facility with scientific literature through verbal presentations. In the P3 year, each student prepares and delivers a seminar on a drug therapy or disease management topic. The student is expected to:

- Analyze the study design and determine whether the methodology was appropriate for the research hypothesis.
- Determine whether the:
  - o outcome measures chosen to determine drug efficacy or effectiveness were appropriate;

- o statistical tests used were appropriate for the data analyzed;
- results were valid based on the study design.
- Assess how a research study's findings will impact patient care.
- Provide a strong conclusion and recommendation about place in therapy.

A minimum of six credits of professional electives allows students to personalize their education by selecting and participating in courses targeted to their strengths and career interests. Beyond individual electives, Areas of Concentration (ARCOs), which require 15 credit hours that draw from didactic, experiential, and mentored scholarly inquiry, are available for students. A research ARCO is available to students who wish to pursue advanced training in scientific inquiry in the basic biomedical, pharmaceutical, clinical/translational, or administrative sciences.

#### P4 year

The P4 year is the culmination of application and integration of students' knowledge and experiences. Students provide patient care in a variety of settings, refine literature retrieval and evaluation skills, enhance their understanding of statistical concepts, practice oral and written communication, apply pharmacy management principles, and determine therapeutic outcomes. Specific outcomes for each core rotation are included in the course syllabi and are described in the narrative of Standard 13.

## **Example Curricular Changes**

PittPharmacy's curriculum assessment process identifies opportunities to enable content to be taught more efficiently and sequentially, while minimizing redundancy. Several notable examples are provided.

<u>Profession of Pharmacy.</u> P2 and P3 courses in the former Profession of Pharmacy series were realigned to expand the social, behavioral, and administrative sciences content. Courses within the series were then named to reflect the content taught in each for clarity (Appendix 1C, optional). The realignment also allowed for redistribution of credits to allow for creation of the Case Conference Series.

<u>Case Conference Series</u>. The Case Conference Series was developed to increase the number and complexity of patient cases to equip student with the skills necessary to provide direct patient care. Cases, which reinforce disease-specific application of foundational knowledge and clinical reasoning, are collaboratively created by faculty of concurrent foundational courses. Knowledge and skills emphasized include, but are not limited to, retrieval and critical evaluation of quality health care information, patient assessment, clinical decision making, development of pharmaceutical care plans, verbal and written communication with patients and other health care providers, and professional behaviors.

<u>Personalized Education</u>. In 2012, PittPharmacy articulated a goal in the Long-Range Plan that committed to providing students with a "personalized education." Students identify their own unique talents and interests and develop a personalized plan to pursue or learn about specific areas of pharmacy. The faculty increased the number of available electives and added six Areas of Concentration (ARCOs; see Standard 10) to enable students to more intensively study one area of pharmacy. As an example, Appendix 1D (optional) provides a description of the ARCO in Pharmacy Business Administration. Special Topics elective courses allow students the opportunity to personalize their education by engaging in a mentored experience in a particular area of pharmaceutical science, pharmacy practice, or pharmacy

education through individual or small group work under the direction of a faculty member. Many ARCO and Special Topics students disseminate findings as poster and podium presentations at state and national conferences.

<u>Pharmacy Innovation 1 and 2 (Electives)</u>. Students acquire the skills to use design-based thinking to rapidly develop innovative solutions to problems. Students learn the creative process and the innovation cycle and then apply these skills to identify and solve pharmacy and medication related problems.

## **Foundational Course Innovations**

Faculty continually assess the environment for emerging scientific, practice, and teaching and learning advancements and respond quickly to incorporate the elements into the curriculum. This practice is a part of the dynamic and modular nature of the overall curriculum.

<u>Pharmacogenomics – PGx Test2Learn</u><sup>™</sup>. PGx Test2Learn<sup>™</sup>, an innovative approach to pharmacogenomics instruction in the P2 year, was initially funded through a competitive Provost's Advisory Council on Instructional Excellence Award. It was also recognized with the 2015 AACP Innovations in Teaching Award. Students have the option for personal pharmacogenomics testing via 23andMe within a careful ethical framework. Students who did not test their genetics have access to de-identified data. In the first year of implementation, objective knowledge/learning metrics for pharmacogenetics improved; greater than 80 percent of the students chose to actively participate in the screening; 100 percent were positive about the experience; of the 20 percent that opted out of testing, approximately half regretted their decision. Pharmacogenomics is now threaded through the PharmD curriculum, starting with integration into the P1 year.

<u>Drug Literature Analysis and Evaluation</u>. Beginning in 2015, in this newly named and aligned course, every student is given a hands-on experience with "big data." Students extract, analyze, and interpret population-level electronic health record data using SAS data-mining software and then interpret the results in context of current literature to make evidence-based decisions and recommendations.

Drug Discovery and Development (former Drug Development 1). PittPharmacy faculty created a semester-long educational game for drug development, Rxpedition. The class is divided into groups of six with each group representing a mock biotech company; each student assumes an executive role, e.g. chief scientific officer. Teams experience drug development; they select a drug candidate, design studies and interpret data and make scientific, economic and regulatory decisions leading to FDA approval. Students use foundational knowledge in all of these decisions. The students must balance cost, quality, time, stock price, and public opinion. They compete to win the game by ending with the highest stock price, quality, and value. The course is a blend of lecture, practicum, student presentations, clinical trial simulation, and jigsaw, which is a cooperative learning exercise where each student plays an expert role (executive role).

## **Curriculum Outcomes Assessment**

<u>Pharmacy Curriculum Outcomes Assessment® (PCOA®).</u> PittPharmacy administered the PCOA® for the first time in April 2016 to all students in the P3 class. Students were informed of the role of the PCOA® in providing data for curriculum quality improvement and for their personal formative development. No deliberate preparation for the exam was planned or implemented by the School. Students were aware that there were to be no consequences for their performance, positive or negative. Aggregate results placed PittPharmacy at the 50<sup>th</sup> percentile overall and near the 50<sup>th</sup> percentile for each of the subparts. More deliberate attention will be paid to preparation for the PCOA® administration in future years.

<u>Licensure Exam Performance</u>. As shown in the required upload of NAPLEX and MJPE data, PittPharmacy graduates consistently exceed the state and national pass rates on both exams. Since 2012, only 4 PittPharmacy graduates failed the NAPLEX as first-time test-takers (3 in 2013; 1 in 2015) and just 3 PittPharmacy graduates failed the MJPE in Pennsylvania as first-time test-takers (1 in 2013; 1 in 2014; 1 in 2015).

## Notable

The PittPharmacy curriculum is notable for:

- Personalizing education, which allows students to identify and use their own unique talents and interests and customize their learning.
- The high NAPLEX pass rates, which exceed national pass rates.
- PGx Test2Learn<sup>™</sup> in which students learn pharmacogenetics from their own gene profiles.
- Drug Discovery and Development and its implementation as a semester-long educational game.
- The Drug Literature Analysis and Evaluation course, in which every student gains hands-on experience with "big data" and extract, analyze, and interpret population data to make evidence-based decisions and recommendations.

4) **College or School's Final Self-Evaluation:** Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box  $\square$ :

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated /or</li> <li>Adequate information was not provided to assess compliance.</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

#### 6) **APPENDICES**

Appendix	File Name
1A	PITTPharmacy Outcomes.pdf
1B	Curricular Map-Core Courses by Curricular Outcomes.pdf
1C	Transition in Course Names.pdf
1D	ARCO-PharmBusAdmin.pdf
1E	2016_W2_PCOA-58-School_Report-1.pdf
1F	MJPE_FiveYearReport.pdf
1G	NAPLEX_FiveYearReportv2.pdf

Standard No. 2: Essentials for Practice and Care: The program imparts to the graduate the knowledge, skills, abilities, behaviors, and attitudes necessary to provide patient-centered care, manage medication use systems, promote health and wellness, and describe the influence of population-based care on patient-centered care.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ Outcome assessment data summarizing overall student achievement of learning objectives for didactic coursework.
- Outcome assessment data summarizing overall student achievement of learning objectives for introductory pharmacy practice experiences (IPPE).
- ☑ Outcome assessment data summarizing overall student achievement of learning objectives for advance pharmacy practice experiences (APPE).

#### Required Documentation for On-Site Review:

(None required for this Standard)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Students Questions 15-19
- AACP Standardized Survey: Preceptors Questions 22-26
- AACP Standardized Survey: Alumni Questions 29-33

#### Optional Documentation and Data: (Uploads)

- ☑ Other documentation or data that provides supporting evidence of compliance with the standard
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program's compliance with the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>2.1. Patient-centered care</b> – The graduate is able to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities).	0	0	0
2.2. Medication use systems management – The graduate is able to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.	0	0	0
<b>2.3. Health and wellness</b> – The graduate is able to design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.	0	0	0
<b>2.4. Population-based care</b> – The graduate is able to describe how population-based care influences patient- centered care and the development of practice guidelines and evidence-based best practices.	0	0	0

3) **College or School's Comments on the Standard:** The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working.

Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.

- B How the college or school supports the development of pharmacy graduates who are able to provide patient-centered care
- B How the college or school supports the development of pharmacy graduates who are able to manage medication use systems
- If How the college or school supports the development of pharmacy graduates who are able to promote health and wellness
- How the college or school supports the development of pharmacy graduates who are able to describe the influence of populationbased care on patient-centered care
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements
- ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

#### [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

Since 2004, PittPharmacy has been a leader in advancing pharmacist patient care practice by:

- developing practice models in collaboration with community chain partners;
- delivering programs to educate faculty across the US about effective and meaningful community pharmacy-based patient research to facilitate practice and curricular change (i.e., NACDS Foundation Faculty Scholars program designed and administered by PittPharmacy);
- creating curricular resources to educate pharmacists and students on the pharmacist-delivered patient-centered care (e.g., Pennsylvania Pharmacists Care Network (PPCN) Medication Management Training Program).

PittPharmacy uses simulations to facilitate student patient-centered learning in a safe environment where feedback targets specific skills; simulations also have known correct answers and can be repeated. Simulations complement IPPE experiences with patients who have complex diseases. Simulations in the P1 year include the Jones Family, My First Patient, and Friends and Family, which prepare students to meet patients in the real world setting, while developing professional communication skills. P2 and P3 years use human patient and virtual patient simulators in various courses to develop clinical decision making. Standardized patients and colleagues are foundational components of assessment in all years of the curriculum to assess student proficiency in patient and interprofessional communication.

Students use Docucare, a simulated electronic health record (EHR) in pre-APPE curriculum. Recognizing the limitations of Docucare, the School partnered with UPMC to provide students with access to simulated charts in the training platform of the UPMC EHR.

#### **Patient-Centered Care**

Students are introduced to the Pharmacists Patient Care Process in P1 during a required two-course sequence (Pharmacist Patient Care Process 1: Process and Skills; Pharmacist Patient Care Process 2: Skills and Environments). Student develop competence in the patient-centered practice of pharmacy in different practice settings. The courses focus on practicing as a professional, allowing the students to articulate a philosophy of practice and demonstrate professionalism.

In the Pharmacist Patient Care Process 1 course, students learn the elements necessary to conduct an effective patient encounter to optimize the patient's pharmacotherapy and to resolve drug-related problems. The students begin this process by learning what it is like to be a patient who has a chronic medical disease and must take prescriptions; they act as the patient according to a case scenario, fill and take prescription drugs (placebos) for a week.

Students are introduced to the JCPP Pharmacists Patient Care Process through a series of learning simulations with standardized patients.

<u>Learning Simulation Example.</u> Jones Family (Initial Visit): This first introduction to the patient care process begins with the student introducing him or herself and identifying the patient (standardized patient), followed by "patient intake," collecting past medical history and medication history. COLLECT in Pharmacists' Patient Care Process.

Jones Family (Reminder Call for Follow-up Visit): Students call a simulated patient voicemail (Voices) to leave a HIPAAcompliant message reminding the patient of a scheduled follow-up visit.

Jones Family (Follow-up Visit): Continuation of above with interviews to gather more data from the patient already met. Students begin to identify drug therapy problems. ASSESS in Pharmacists' Patient Care Process.

Jones Family (Follow-up Call to Physician): Students call a simulated answering service (Voices) to leave a message for the physician outlining the primary conclusion of the patient visit. PLAN and IMPLEMENT in Pharmacist Patient Care Process.

<u>MTM Patient Interviews</u>. Students work in small groups to complete the interview process in an MTM-type setting using the skills developed throughout the semester. Students rotate to four different standardized patients and demonstrate the COLLECT, ASSESS, and PLAN steps in the Pharmacists Patient Care Process. Students then provide individual evidence of communication skills and baseline knowledge through completion of a final MTM session with a standardized patient, demonstrating the IMPLEMENT, MONITOR, and EVALUATE steps.

<u>Other Formative Experiences.</u> Patient care skill development is continued in the Pharmacist Care Process 2 course, in which students practice the steps of the JCPP Pharmacists Patient Care Process with older adults in SilverScripts. Students meet with the same individuals across two visits, with the first visit focused on the COLLECT and ASSESS steps. Between visits, students continue the ASSESS step to identify any drug therapy problems and develop a PLAN to address those problems. On the return visit, students IMPLEMENT the plan and propose a strategy to MONITOR and EVALUATE.

Building off the skills learned in Pharmacist Care Process 1 and 2 in the P2 year, students complete the PPCN Medication Management Training Program, which is required for participation in the network. In IPPE, students focus on developing patient care services in a community pharmacy setting. P2 students have opportunity in Self-Care and Nonprescription Therapies to enhance their techniques in a series of team- and individual-based simulations including virtual patients, role-play, and standardized patients. The focus on the JCPP Pharmacists Patient Care Process extends to therapeutics courses that integrate pharmaceutical sciences, therapeutic principles, and disease management strategies. Patient assessment skills, therapeutic plan development, and patient care delivery considerations are woven throughout these courses.

Case Conference Series is a series of one-credit courses in each semester, beginning with the P2 and P3 years in fall 2016 and expanding to the P1 year in fall 2017. The series integrates content and abilities across concurrent courses and provides students with opportunities to apply the Pharmacists Patient Care Process to increasingly complex patient cases in a variety of simulated settings. Cases in the P2 year address assessment skills, therapeutic decision making, application of biomedical literature, written communication in the medical record, and verbal communication with healthcare providers. Cases in the P3 year require demonstration of advanced skills with increasing complex cases that challenge clinical decision making with multiple alternatives, and refine interprofessional communication skills. All reinforce the Pharmacists Patient Care Process.

The Capstone in each semester of P3 is both a formative and summative assessment of patient care skills related to the patient interview, physician consult, and medical record documentation. To successfully demonstrate skills, students must meet an expected level of competence on individual components. Students complete a complex practice capstone case where they receive formative feedback to improve their skills prior to the summative Capstone evaluation.

## Assessment Data

From the Assessment Matrix for 2015-16 (Appendix 2A, required)

- 98 percent of students scored at or above 80 percent for the Standardized Patient final interview (P1);
- 95 percent scored at or above 80 percent for the documentation (P1);
- 87 percent of students scored at or above 80 percent for the self-care standardized patient final, which incorporates therapeutic decision making skills. (P2)
- 95 percent and 97 percent of students scored at or above 80 percent for the fall and spring capstone cases, respectively (P3).

In the Readiness Assessment (Standards 24 and 25), students demonstrate interprofessional communication, clinical decision making (problem solving and critical thinking), and attitudes of ownership (professional responsibility and advocacy).

APPE assessments using the School's mastery scale show high levels of student competence in patient-centered care skills. In 2015-16:

- 98 percent of P4 students achieved a minimum rating of Intermediate competence for patient assessment skills;
- 97.4 percent achieved the same minimum rating for formulating pharmaceutical plans and decision making.

## **Medication Use Systems Management**

P1 students learn pharmacy dispensing rules and regulations. Medication use systems management is also addressed in Dosage Form Design and Delivery and in the Safe Medication Use and Pharmacoeconomics courses. International medication use systems are address in the Global Health: Determinants and Application course. Students complete assignments during IPPE rotations that focus on medication use systems in community and hospital pharmacy in the P2 and P3 years, respectively. Appendix 2B (optional) shows IPPE institutional medication experiences; Appendices 2C and

2D (optional) show manuals for P2 and P3 IPPEs. Ultimately, students apply the learned principles to practice in the required and elective APPE rotations. On the 2015 AACP Graduating Student Survey, 92 percent of students strongly agreed/agreed that they were prepared to manage the system of mediation use to affect patients and to identify and use risk reduction strategies to minimize medication errors.

## **Health and Wellness**

Emphasis is placed on skills to promote health and wellness in the P1 year beginning with a focus on Healthy People 2020 in Community Health 1. Students apply health promotion principles in a series of public health projects through community-based IPPEs in P1 and P2. One hundred percent of P1 students achieved scores of 80 percent or better on the Community Health Project for both the oral presentation and written report. Each group of P1 students collaborates on health and wellness presentations for the annual Health Fair.

P2 and P3 students are required to complete additional service learning hours that incorporate health and wellness promotion, such as brown bags, blood pressure screenings, medication adherence programs, and medication take-back programs. Health promotion opportunities occur in the P3 year in the Case Conference Series where students design pharmacist-directed interventions that impact the patient's health and wellness. All students are trained to administer immunizations. Ninety-nine percent of the graduating class of 2015 strongly agreed/agreed that the School prepared them to promote wellness and disease prevention services.

## **Population-based Care**

The curriculum is designed to facilitate student development of knowledge and skills needed to describe the influence of population-based care on patient-centered care. This development begins in the P1 year when students are exposed to drugs of abuse in the Principles of Drug Action course. Students develop skills for screening, brief intervention, and referral to treatment (SBIRT) to identify and manage patients with substance abuse. In the P2 year, the Drug Literature Evaluation course focuses on literature evaluation around public health research. In the P3 year, the Population Health and Management course emphasizes cultural competence and diverse patient populations. The Safe Medication Use and Pharmacoeconomics course concentrates on population-based medication safety, evaluation of population and health-related outcomes, and continuous quality improvement. Ninety percent of P3 students achieved a score of 80 percent or better for the public health problem analysis group paper and logic model individual paper. In the P4 year, students rated themselves highly for self-assessment of mastery for the public health curricular outcome (3.7 on 4-point scale), a rating mirrored by preceptors (3.72). On the 2015 AACP Graduating Student Survey, 93.4 percent of students indicated that they were prepared to interpret epidemiologic data relevant to specific diseases and their management.

## Notable

<u>Standardized Patients</u>. Since 2008, PittPharmacy has used the standardized patient strategy to enhance student learning and as an assessment strategy and has been an innovator in the use of standardized colleagues since 2010. Through the implementation of standardized patients and colleagues in the curriculum, students formally apply and practice patientcare skills in a safe environment. Faculty were the first to publish on the use of standardized colleagues for student assessment and received national recognition through an invited presentation at the national 2014 Assessment Institute hosted by Indiana University – Purdue University Indianapolis (IUPUI). The Readiness Assessment blends the use of standardized patients and colleagues with virtual patients and human patient simulators to assess students' progressive in practice and care across the curriculum, ultimately demonstrating readiness for APPEs. <u>Human Patient Simulators.</u> The School has demonstrated excellence in innovation in the area of virtual patients and high fidelity patient simulators. Faculty have received national recognition in both through 18 publications (Appendix 2E, optional). PittPharmacy Faculty Publications Related to Simulation) and 2 national teaching awards, including AACP Innovations in Teaching Award (2010 and 2014). Simulations are embedded in each year of the didactic curriculum. Students interact with the simulators individually at various levels to promote readiness for practice and care. In the P1 year, students train with high fidelity simulators to develop proficiency and accuracy in blood pressure screening. Further training with both virtual patients and human simulators develops clinical decision making skills in both formative and summative assessments in each year of the curriculum.

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

#### 6) **APPENDICES**

Appendix	File Name
2A	PharmD Matrix 2016.pdf
2B	IPPE Simulation and Experience Hrs 2015-16.pdf
2C	CPP2 Student Manual FINAL 2015-16.pdf
2D	P3 Manual 2015-16 final july2015.pdf
2E	PittPharmacy Faculty Publications Related to Simulation.pdf
2F	Aggregate IPPE Student Performance 2014-15.pdf
2G	2014-15 APPE Assessment Summary.pdf

<u>Standard No. 3: Approach to Practice and Care:</u> The program imparts to the graduate the knowledge, skills, abilities, behaviors, and attitudes necessary to solve problems; educate, advocate, and collaborate, working with a broad range of people; recognize social determinants of health; and effectively communicate verbally and nonverbally.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- Examples of student participation in IPE activities (e.g. didactic, simulation, experiential)
- ☑ Outcome assessment data of student achievement of learning objectives for didactic course work
- Outcome assessment data of student achievement of learning objectives for introductory pharmacy practice experiences
- Ø Outcome assessment data of student achievement of learning objectives for advanced pharmacy practice experiences
- ☑ Outcome assessment data of overall student participation in IPE activities
- Examples of curricular and co-curricular experiences available to students to document developing competence in affective domainrelated expectations of Standard 3
- ☑ Outcome assessment data of student achievement of problem-solving and critical thinking
- ☑ Outcome assessment data of student ability to communicate professionally
- ☑ Outcome assessment data of student ability to advocate for patients
- ☑ Outcome assessment data of student ability to educate others
- ☑ Outcome assessment data of student demonstration of cultural awareness and sensitivity

#### **Required Documentation for On-Site Review:**

(None required for this Standard)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Students Questions 20-26
- AACP Standardized Survey: Preceptors Questions 27-33
- AACP Standardized Survey: Alumni Questions 34-40

#### Optional Documentation and Data: (Uploads)

Image: Other documentation or data that provides supporting evidence of compliance with the standard

2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>3.1. Problem solving</b> – The graduate is able to identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.	0	0	0
<b>3.2. Education</b> – The graduate is able to educate all audiences by determining the most effective and enduring ways to impart information and assess learning.	0	0	0
<b>3.3. Patient advocacy</b> – The graduate is able to represent the patient's best interests.	0	0	0
<b>3.4. Interprofessional collaboration</b> – The graduate is able to actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.	0	0	0
<b>3.5. Cultural sensitivity</b> – The graduate is able to recognize social determinants of health to diminish disparities and inequities in access to quality care.	0	0	0
<b>3.6. Communication</b> – The graduate is able to effectively communicate verbally and nonverbally when interacting with individuals, groups, and organizations.	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - How the college or school supports the development of pharmacy graduates who are to solve problems; educate, advocate, and collaborate, working with a broad range of people; recognize social determinants of health; and effectively communicate verbally and nonverbally
  - If How the college or school incorporates interprofessional education activities into the curriculum
  - $\blacksquare$  How assessments have resulted in improvements in patient education and advocacy.
  - $\ensuremath{\boxtimes}$  How assessments have resulted in improvements in professional communication.
  - B How assessments have resulted in improvements in student problem-solving and critical thinking achievement
  - ☑ Innovations and best practices implemented by the college or school
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements

#### [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

The PittPharmacy PharmD curriculum has been deliberately designed to facilitate students' progressive development of knowledge, abilities, behaviors, attitudes, and skills that form the critical approach to effective patient care and practice. Specifically, these elements are explicitly reflected in seven of the PittPharmacy Outcomes: Learner, Patient Assessor, Health Promotor and Provider, Problem Solver, Educator and Communicator, Professional and Advocate, and Collaborator (Appendix 3A, optional).

The Curriculum Committee, through its regular schedule of course-specific reviews and content theme reviews, and by working in concert with the Curriculum Assessment Committee, stimulates a continuous quality improvement model that results in a contemporary curriculum that is responsive to the external environment, feedback from students, and

data from the PharmD Assessment Matrix (Appendix 3B, required). The PharmD Assessment Matrix has provided a structure for curricular assessment and quality improvement since 2008 and serves as a mechanism that propels informed evolution and continuous quality improvement. The Curriculum Assessment Committee has chosen specific sentinel assessments to indicate achievement of outcomes and has selected benchmark levels of achievement for each of these sentinel assessments. See Standards 24 and 25 for more detail.

## **Problem Solving**

PittPharmacy graduates are expected to be able to identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution for identified problems. Each course within the curriculum facilitates student development of critical thinking and problem-solving skills, as noted in the map of core courses to the PittPharmacy Outcomes (Appendix 3C, optional). Specific course-embedded learning activities and assessments related to the development of problem solving and critical thinking skills are outlined in the rows of the PharmD Assessment Matrix associated with PittPharmacy Outcome 7: Problem Solver.

Problem-solving skill development spans the curriculum; examples of specific learning opportunities and assessments can be drawn from the pharmaceutical sciences, as well as the pharmacy practice courses. Literature evaluation and clinical reasoning associated with standardized patient assessments are two examples among many of problem-solving skills that are tracked across the curriculum. For example, literature evaluation begins in the P1 year in Principles of Drug Action and grows in complexity in the P2 year in Pharmacokinetics and Drug Response. Literature analysis, study design, data analysis, and evidence-based medicine are explored in the Drug Literature Analysis and Evaluation course. Clinical applications of problem-solving skills also begin in the P1 year as students interact with standardized patients in the Jones Family simulations and with older adults in the IPPE SilverScripts program. Data analysis and problem solving are also foundational to successfully navigating consultations with older adults contemplating various Medicare options (see Patient Advocacy section below). Problem-solving skills are demonstrated in the standardized patient assessments across all years of the curriculum. Prior to APPEs, P3 students are challenged with capstone cases apply clinical decision making skills to complex patient cases that demand integration of knowledge and skills drawn from numerous concurrent and previous courses.

Co-curricular opportunities to further enhance clinical applications of problem-solving skills include annual competitions, such as the ASHP Clinical Skills Competition and the AMCP Pharmacy & Therapeutics Competition, that foster creative thinking, problem-solving, communication, and leadership skills. PittPharmacy chapters for both organizations host local competitions and the winners of each compete at the national competitions.

#### Education

Development of students to educate all audiences begins in the P1 year and progressively develops across the curriculum. P1 students learn to educate patients through the Jones Family standardized patient simulations and IPPE SilverScripts program (see Standard 2). P1 students also learn strategies for public health education and awareness building and conduct a Health Fair, now in its seventh year, to educate the University and UPMC community on timely health-related topics.

Patient education skill development continues and expands in the P2 in the Nonprescription Therapies and Self-care course with standardized patient learning opportunities and assessments, as well as student designed and delivered

presentations on herbals and dietary supplements. In the Community Pharmacist Practice courses, P2 students develop health promotion programs that are implemented at various community pharmacy sites around the Pittsburgh area that annually engage approximately 4,000 to 5,000 patients. Journal club activities in the Drug Literature Analysis and Evaluation course help P2 students develop skills educating colleagues through literature evaluation. Students develop skills to educate other health care professionals using oral presentations.

P3 students further develop skills with oral presentations in the Immunology course and their required seminar presentation. Students also engage in co-curricular activities that contribute to the development of their skills as educators and communicators, including, but not limited to, developing and delivering presentations for elementary school-aged students on OTC medication safety, for University student organizations on contraception and sexually transmitted diseases, and for men recovering from substance use disorders.

## **Patient Advocacy**

Students are first introduced to the social determinants of health in the P1 year, with continued attention throughout the curriculum to how social, economic, cultural, and other factors directly and indirectly drive individual and population-based health. P1 students begin to develop patient advocacy skills at IPPE sites in the Community Health 1 and 2 courses. All P1 students receive training from APPRISE, a local organization that assists patients in selecting appropriate Medicare healthcare plan. Forty students then complete P1 IPPE with APPRISE, counseling older adults in person and by telephone and conducting community health information projects and presentations.

Patient advocacy skills are further developed in the P2 year through service at various underserved clinics in the Pittsburgh area. Skills are also fostered through participation in Legislative Day, whereby the P2 class travels to Harrisburg to lobby at the State Capital for health care-related referendums. In 2016, students met with 85 legislators. Notably, the Pennsylvania Pharmacists Association recognized PittPharmacy students with a Government Relations Award two separate years.

P3 students explore patient education and advocacy issues related to medication access and direct-to-consumer advertisement. Students participate in a policy debate session in the Population Health and Management course. Skills are further developed in the final semester in the Safe Medication Use and Pharmacoeconomics course through activities related to medication adherence screening, quality of life assessments, and shared decision making.

## Interprofessional Collaboration

Components of the PittPharmacy PharmD curriculum that facilitate student development of the knowledge, skills, and abilities to actively participate and engage as a health care team member, including by demonstrating mutual respect, understanding, and values to meet patient care needs, are described in detail in Standard 11.

## **Cultural Sensitivity**

Students learn throughout the curriculum about the social determinants of health that shape the conditions of daily life. P1 students are introduced to cultural sensitivity and patient diversity by participating in a Worlds Apart workshop in Patient Care Process 2. Two faculty members have participated in the University's two-week Diversity Seminar focused on inclusion and cultural sensitivity issues across campus and strategies to revise teaching and learning activities to better reflect diversity and facilitate the skills needed to provide culturally responsive care. Specifically, in the Nonprescription Therapies and Self-Care course, virtual patient simulation is used to present P2 students with diverse array of patients based on age, race/ethnicity, culture, and other factors, with whom students must engage to triage, assess, and provide appropriate care.

Cultural sensitivity is also specifically addressed in the P3 year in Population Health and Management in a practicum session designed to illustrate health access issues that introduce students to a four-person panel; each panelist represents a critical population (religious minority, immigrant, transgender, physical disability). Each student meets with each panelist to learn in their own words about their experiences with seeking health care and their perspectives on opportunities for improved engagement. Cultural sensitivity is also addressed through the Explanatory Models Approach, the use of medical interpreters in care environments, HOPE Spirituality Assessment Questions, and an exploration of the differences between Eastern and Western philosophies of health and health care. Cultural sensitivity concepts are incorporated into cases used in the Case Conference courses with specific reflection and class discussion to reiterate thoughtful consideration of patient needs.

Cultural sensitivity is also addressed through co-curricular experiences. The majority of students participate in IPPEs in either the Grace Lamsam Pharmacy Program for the Underserved or the APPRISE program to help Pennsylvania residents understand Medicare and other health insurance benefits. Many students continue with co-curricular experiences by volunteering at APPRISE, Lamsam Program clinics, Allegheny County Jail, or Salvation Army Adult Rehabilitation Center.

Students successfully compete for travel awards through the Graduate School of Public Health to conduct global health projects and for Nationality Room (travel abroad) Scholarships. Up to 30 percent of P4 students have international experiences and approximately 30 of our 114 P4 students participate in Indian Health Service APPEs, which further enhance their cultural sensitivity. PittPharmacy students have also been awarded Albert Schweitzer Fellowships and Paul Ambrose Scholarships.

## Communication

Students progressively develop communication skills beginning in the first semester of the P1 year. P1 students develop skills in patient interview techniques, applied within the context of the Pharmacist Patient Care Process, to elicit vital information to formulate a patient care database and identify drug-related problems that are then communicated to the patient's interprofessional care team. Students are trained in motivational interviewing techniques through the Community Health 1 and 2 IPPE courses in P1 year, apply them in simulated experiences and IPPEs, and then are provided specific formative feedback in the Pharmacist Patient Care Process 2 course. In the P2 year, students hone interview skills and begin to formulate drug therapy recommendations. Students continue to refine their skills in the P3 year through written and verbal communication to both patients and physicians. Students, with faculty guidance, provide written and verbal recommendations directly to physicians regarding therapy recommendations and medication management. Physician written communication is introduced in the P1 year through consult letters written after standardized patient interactions. Interprofessional communication expanded in the P3 years to direct verbal communication skills with physicians. Simulation activities in the P2 and P3 years reinforce skills through role play, human patient simulators, virtual and standardized patients, and standardized colleagues.

Assessments of professional communication are built sequentially across the curriculum and are embedded in targeted courses. Student performance is assessed using rubrics that facilitate a standardized approach to assessment and detailed feedback important to continued refinement of patient care skills. In the P3 year, students receive feedback after each assessment, beginning with a formative practice capstone assessment, followed by a summative assessment in both fall and spring semesters. Communication scores for the past four years have consistently demonstrated improvement from the fall to the spring capstone case.

Communication is the highest rated skill by both students and preceptors at the end of the curriculum: students assess themselves at near proficiency in communication skills (3.92 on a 4-point scale). On the 2015 AACP Graduating Student Survey, 100 percent of students strongly agreed/agreed that they were prepared to communicate with patients and 96.7 percent strongly agreed/agreed that they are prepared to communicate with health care providers.

## Notable

- PittPharmacy has a deliberate and integrated approach to assuring that each student can communicate effectively in a culturally sensitive context with health care providers, patients, and the public.
- The use and frequency of simulated and actual patient care experiences and assessment woven throughout the pre-APPE curriculum enhances student self-efficacy and prepares them to be highly effective in their APPEs.
- 4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <i>/or</i></li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

### 6) **APPENDICES**

Appendix	File Name
3A	PittPharmacy Outcomes that Address Approach to Practice and Care.pdf
3B	PharmD Assessment Matrix 2016.pdf
3C	Curricular Map-Core Courses by Curricular Outcomes.pdf
3D	Examples of IPE activities.pdf
3E	Aggregate IPPE Student Performance 2014-15.pdf
3F	2014-15 APPE Assessment Summary.pdf
3G	Readiness Assessment Data graph.pdf
3H	Assessment of Ability to Function as a Member of an Interprofessional Team Over Time.pdf
31	Examples of co-curricular activities for affective domain.pdf

**Standard No. 4: Personal and Professional Development:** The program imparts to the graduate the knowledge, skills, abilities, behaviors, and attitudes necessary to demonstrate self-awareness, leadership, innovation and entrepreneurship, and professionalism.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ Outcome assessment data summarizing students' overall achievement of professionalism
- ☑ Outcome assessment data summarizing students' overall achievement of leadership
- ☑ Outcome assessment data summarizing students' overall achievement of self-awareness
- ☑ Outcome assessment data summarizing students' overall achievement of creative thinking
- Examples of curricular and co-curricular experiences available to students to document developing competence in affective domainrelated expectations of Standard 4
- Description of tools utilized to capture students' reflections on personal/professional growth and development
- Description of processes by which students are guided to develop a commitment to continuous professional development and to self-directed lifelong learning
- ☑ Outcome assessment data of student achievement of learning objectives for didactic course work
- ☑ Outcome assessment data of student achievement of learning objectives for introductory pharmacy practice experiences
- Outcome assessment data of student achievement of learning objectives for advanced pharmacy practice experiences

#### **Required Documentation for On-Site Review:**

(None required for this Standard)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Students Questions 27-31, 33
- AACP Standardized Survey: Preceptors Questions 34-37
- AACP Standardized Survey: Alumni Questions 20, 41-44

#### **Optional Documentation and Data:**

- Image: Other documentation or data that provides supporting evidence of compliance with the standard
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>4.1. Self-awareness</b> – The graduate is able to examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth.	0	0	0
<b>4.2. Leadership</b> – The graduate is able to demonstrate responsibility for creating and achieving shared goals, regardless of position.		0	0

**4.3. Innovation and entrepreneurship** – The graduate is able to engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.

**4.4. Professionalism** – The graduate is able to exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.

3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.

 $\bigcirc$ 

 $\bigcirc$ 

- Description of tools utilized to capture students' reflections on personal/professional growth and development
- Description of processes by which students are guided to develop a commitment to continuous professional development and to self-directed lifelong learning
- Description of curricular and co-curricular experiences related to professionalism, leadership, self-awareness, and creative thinking.
- B How assessments have resulted in improvements in professionalism, leadership, self-awareness, and creative thinking.
- ☑ Innovations and best practices implemented by the college or school
- Box How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- Any other notable achievements, innovations or quality improvements

#### [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

The PittPharmacy curriculum is designed so that required courses ensure that all PharmD students have a strong foundation in the affective domain, including leadership, innovation and entrepreneurship, self-awareness, and professionalism (power skills). *Longitudinally integrating student learning in these skills anchors the strong science foundation of the curriculum; these skills are essential for students to be well-rounded pharmacy professionals.* 

Appendix 4A (optional) maps required and elective courses, IPPEs, and extracurricular activities to each power skill and shows the assessment method for each. Skill development, when embedded in courses, is assessed within those courses. For the co-curriculum that exists outside the didactic courses, self-selected student experiences are captured in reflections in their portfolios. Appendix 4B (optional) is a summary of the expectations for required and selective co-curricular experiences.

The portfolio process sets a foundation of self-awareness and reflection (Appendix 4C, required). All students are required to use their portfolios to guide self-directed learning. Students select evidence of achievement for each curricular outcome, including the co-curricular power skills. Students are required to create reflections using the three-question format of "What? So what? Now what?" Students must consider how each entry achieves the designated curricular outcome, what they learned from the experience, and future actions needed to progress towards mastery of that outcome. An example of a student portfolio is in Appendix 4D (optional).

The standardized four-point Mastery Scale and Stages of Professional Mastery are shown in Appendices 4E (optional) and 4F (optional). The Mastery Scale is a powerful self-assessment tool that promotes self-awareness. Students complete baseline mastery self-assessment for each curriculum outcome in P1 fall semester. Subsequently, students

complete and record assessments in their portfolios each semester prior to meetings with faculty to guide discussions of progress. Students report progression from awareness to proficiency from P1 through P4 years. See aggregate graph of Mastery Scale data with preceptor assessment (Appendix 4G, optional).

### Self-Awareness

Self-awareness is emphasized in the P1 year through the Emerging Professional course. Students experience an intense team exercise, identify their strengths using *StrengthsFinder 2.0* and have other development experiences. Reflections on their unique talents and interests guide their development of goals and their personalized education plans. Self-awareness is sustained through portfolios and application of the Mastery Scale, both of which increase student independence as self-directed learners.

#### Leadership

The leadership co-curriculum comprises required courses, elective courses, IPPEs, student organizations, and extracurricular activities. In the Emerging Professional, concepts of leadership, including shared leadership with its principles, coaching, and commitment management are introduced. Students examine leadership, which is a part of the PittPharmacy mission, as expressed in positional leadership as well as situational leadership in professional and personal settings. Students learn to embrace and foster leadership in both forms, recognizing that not everyone can be or wants to be a positional leader. Leadership is taking the personal responsibility for identifying and capturing opportunities for improvement, being a role model for others, and is ultimately a component of the profession, which is self-regulating. Developing personal mission and value statements is a requirement of the course.

Students practice positional leadership in Drug Discovery and Development when groups of six each serves as a specific company and each student assumes the role of a company executive in the semester-long drug development game, RxPedition.

Other examples of curriculum-related opportunities to develop power skills include Areas of Concentration (ARCOs), special topics courses, and electives. By managing and completing a project, which is required of each student in an ARCO, students experience situational leadership. Non-ARCO students also have a similar opportunity through Special Topics elective courses. In elective courses, students learn from other alumni positional leaders who explain and role model leadership.

Extracurricular opportunities for leadership development abound. Students are elected to represent their peers on most School committees that affect the PharmD program, including the Curriculum Committee. Separately, class representatives serve on the Dean's Advisory Committee. Students have the opportunity to participate in one or more of the 14 student pharmacy organizations which offer opportunities for positional leadership as well as situational leadership and development.

Evidence that students live up to PittPharmacy mission of leadership and that the co-curriculum is working is in the numerous national, regional, and local leadership awards and positions. PittPharmacy students have received national awards for leadership, including the ASHP Student Leadership Award (2016). Current/recent examples of student elected leadership in national, regional, and University organizations includes and is not limited to:

• APhA-ASP – Speaker of the House (2016-2017)

- Kappa Psi Pharmaceutical Fraternity Graduate Member-at-Large (2015-2016)
- IPSF Development Fund Committee International Representative (2016-2017)
- IPSF Corporate Relations Committee (2015-2016)
- ASHP Student Society Development Advisory Group (2015-2016)
- APhA-ASP Midyear Regional Coordinator (2014-2015)
- University of Pittsburgh Graduate Professional Student Government President (2016-2017)

### Innovation and Entrepreneurship

Innovation and entrepreneurship as well as leadership are part of the PittPharmacy culture as required curricular elements. In Drug Discovery and Development students experience leadership and simulated entrepreneurship through RxPedition. All P3 students participate in the Continuous Quality Improvement challenge, where teams identify problems and use specified paradigms to develop solutions. Innovative thinking has been cultivated throughout electives including Health Care Innovation.

In 2014, the PittPharmacy Innovation Lab was established to engage students and representatives from corporate entities to collaborate on addressing complex medication use problems. Bringing together expertise and perspectives from many disciplines, including those external to health, sparks innovation and leads to novel solutions to complex problems. This was successful with an initial cohort of 10 students, shown by their individual progress in innovation including starting a company, developing apps and games for delivering educational content, and a training program for health care professionals to learn to apply pharmacogenetics to personalize medication therapy. The success with the initial cohort led to the development of a required innovation curriculum, beginning with the P1 year.

In spring 2016, creativity and design-based thinking was introduced in the required P1 course and in Pharmacist Patient Care Process 2, where students apply this approach as they see opportunities during IPPEs. During the P2 year, all students propose new patient services or ways to improve patient services in community pharmacy as part of their experiential learning curriculum and have the opportunity make a pitch for funding for their project. Successful projects will receive funding to create a prototype of their idea during their P3 year.

The University also promotes a culture of innovation. Our students have won support from The Randall Big Idea and Pitt Innovation Challenge. Selected students also participate in First GEAR to develop entrepreneurship skills. PittPharmacy students have also won the Pennsylvania Pharmacists Association Achieving Independence competition four years in a row.

#### Professionalism

The foundation for professionalism is established in the P1 year. The Pharmacist Patient Care Process 1 course focuses on the development of the professional. The Emerging Professional includes didactic discussions on professionalism and personalizing education to achieve goals and assignments related to development of résumés, SMART goals, and networking through Career Roundtables. These courses establish their student identity as professionalism and result in students earning their white coats in winter of the P1 year. They receive this symbol of professionalism in a formal ceremony attended by families, friends, faculty, staff, and student leaders. Personalizing of their education gives students ways to develop professionalism to be better prepared for success as they navigate the rapidly changing health care landscape and post-graduate environment. Elective courses, Areas of Concentration, and Special Topics courses enable them to participate in practice enhancement projects, mentored independent research, global health work, and to disseminate findings at regional and national conferences.

Appendix 4H (required) describes the range of processes by which students are guided to develop continuous professional development and self-directed lifelong learning and increase the value of the Pitt PharmD education. Additional co-curricular activities include:

- Policy, advocacy, and preparation for meeting legislators, followed by P2 class participation in Legislative Day. Annually, 100 percent of the P2 class meets with legislators to advocate for the profession for consultative visits. In 2016, students visited with 85 Pennsylvania legislators.
- Interprofessional understanding and collaboration fostered through Pitt chapters of the Institute for Healthcare Improvement Open School (in which students completed the Basic Certificate in Quality and Safety) and Primary Care Progress (in which students gather to consider complex patient scenarios).
- RxPrep, a student-run organization that guides pre-pharmacy students as they prepare for application to the PharmD Program, and our newly-formed Student Talent Team (recruitment), which develops strategies for recruiting students to pharmacy.
- Presentations at national/regional pharmacy meetings.
- Participation in the Community Pharmacist Practice Course, of which one portion includes CE for pharmacists for the four day-long presentations and workshops.

On the 2015 AACP Graduating Student Survey,

- 98.9 percent of students strongly agreed/agreed that the program prepared them to critically reflect and make plans to improve on personal skills (96.1 percent national; 94.4 percent peer)
- 98.9 percent of students strongly agreed/ agreed that the program included opportunities to develop professional attitudes, ethics and behaviors (95.1 percent national; 93.8 percent peer)
- 98.9 percent of students strongly agreed/agreed that the program prepared them well for providing patient care in accordance with legal, ethical, social, economic, and professional guidelines (97.0 percent national; 95.9 percent peer)

## Notable

- The breadth and depth with which co-curricular learning experiences have been incorporated throughout the curriculum is notable.
- The classroom assessments and long history of using the portfolio as means of documenting achievement of curricular outcomes, including those in the affective domain, are notable.

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box 🗹:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <i>lor</i></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

#### 6) APPENDICES

Appendix	File Name
4A	Co-curriculum map.pdf
4B	Required co-curriculum.pdf
4C	Portfolio process.pdf
4D	Example Student Portfolio.pdf
4E	PITT Mastery Scale P1 and P2 Fall 2016.pdf
4F	Stages of Mastery.pdf
4G	Aggregate Mastery Data P1 to P4.pdf
4H	Description of professional development and self-directed learning.pdf
41	PharmD Matrix 2016.pdf
4J	Examples of co-curricular activities for affective domain.pdf
4K	Aggregate IPPE Student Performance 2014-15.pdf
4L	2014-15 APPE Assessment Summary.pdf

## Section II: Structure and Process To Promote Achievement of Educational Outcomes

## Subsection IIA: Planning and Organization

Standard No. 5: Eligibility and Reporting Requirements: The program meets all stated degree-granting eligibility and reporting requirements.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ University organizational chart depicting the reporting relationship(s) for the Dean of the college or school.
- Document(s) verifying institutional accreditation.
- ☑ Documents verifying legal authority to offer/award the Doctor of Pharmacy degree
- ☑ Accreditation reports identifying deficiencies (if applicable)
- ☑ Description of level of autonomy of the college or school
- Relevant extract(s) from accreditation report that identifies any deficiencies from institutional accreditation that impact or potentially impact the college, school or program.
  - Ø Or check here if no applicable deficiencies.

#### **Required Documentation for On-Site Review:**

☑ Complete institutional accreditation report (only if applicable, as above)

#### Data Views and Standardized Tables:

(None apply to this Standard)

#### **Optional Documentation and Data:**

- Ø Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>5.1. Autonomy</b> – The academic unit offering the Doctor of Pharmacy program is an autonomous unit organized as a college or school of pharmacy (within a university or as an independent entity). This includes autonomy to manage the professional program within stated policies and procedures, as well as applicable state and federal regulations.		0	0
5.2. Legal empowerment – The college or school is legally empowered to offer and award the Doctor of Pharmacy degree.	0	0	0
<b>5.3. Dean's leadership</b> – The college or school is led by a dean, who serves as the chief administrative and academic officer of the college or school and is responsible for ensuring that all accreditation requirements of ACPE are met.	0	0	0
<b>5.4. Regional/institutional accreditation</b> – The institution housing the college or school, or the independent college or school, has (or, in the case of new programs, is seeking) full accreditation by a regional/institutional accreditation agency recognized by the U.S. Department of Education.	0	0	0

**5.5. Regional/institutional accreditation actions** – The college or school reports to ACPE within 30 days any issue identified in regional/institutional accreditation actions that may have a negative impact on the quality of the professional degree program and compliance with ACPE standards.

**5.6. Substantive change** – The dean promptly reports substantive changes in organizational structure and/or processes (including financial factors) to ACPE for the purpose of evaluation of their impact on programmatic quality.

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - How the college or school participates in the governance of the university (if applicable)
  - I How the autonomy of the college or school is assured and maintained
  - How the college or school collaborates with university officials to secure adequate resources to effectively deliver the program and comply with all accreditation standards
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements

#### [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

#### Autonomy, Legal Empowerment, and Dean Leadership

The School of Pharmacy functions as an autonomous unit organized within the six schools of the Health Sciences and within the University of Pittsburgh (Appendix 5A, required). Dean Patricia Kroboth is chief executive and academic officer of the School of Pharmacy, chief spokesperson for, and representative of the School in both academic and professional communities. The Board of Trustees has formally delegated both the academic and managerial responsibilities through the chain of command to the academic unit level (School and/or department).

The University is organized by campuses, colleges/schools, and centers. Each school is administered by a dean. In other areas, including budget operation, personnel management, and salary practice, authority is specifically delegated from the Trustees through an administrative chain including the Chancellor and Chief Executive Officer, the Provost, or Senior Vice Chancellor for Health Sciences, Executive Vice Chancellor, Vice Chancellor for Budget and Controller, deans and regional campus presidents, and chairs of the academic departments. In summary, the pattern of governance in the University is one of shared responsibilities and authority, with the ultimate legal authority residing in the Board of Trustees.

> University of Pittsburgh Faculty Handbook I.3.2 http://www.provost.pitt.edu/handbook/ch1\_gov\_admin.htm

0 | 0 | 0

 $\bigcirc$ 

 $0 \mid 0$ 

The dean, who reports to the senior vice chancellor for the health sciences, is a member of both the Senior Vice Chancellor's Staff and the Provost's Council of Deans; both groups meet monthly. The School's autonomy derives from the dean's responsibility for all aspects of the School, including strategic planning, quality assessment, student and faculty recruitment and enrollment management, resource development and allocation, and representation to external entities. The dean's responsibilities are fully articulated with the Descriptions of Responsibilities of Leadership Team Members (Appendix 8A) and in Article II, Section C, of the School's Bylaws (Appendix 8D). Dean Kroboth is a champion for the daily application of the ACPE standards.

The dean has direct access to members of the administration of the University, who encourage decision-making at the unit level. The dean works on a regular basis with Dr. Arthur Levine, Senior Vice Chancellor for the Health Sciences and Dean of the School of Medicine as well as other members of the Office of the Senior Vice Chancellor on academic, financial, physical, and technological issues as well as and human resources. She also works on specific academic matters with Provost Patricia Beeson and other members of the Office of the Provost. Topics include a range of academic and other health sciences and University matters, progress toward health sciences and University goals, directions for the future, practices, institutional advancement, budget, and planning. Academic appointments, promotions, and tenure decisions are vetted by both the senior vice chancellor and the provost, and, in cases of the award of tenure, by the chancellor as per University policy.

The dean works regularly with University officials to secure the resources and programmatic changes essential to deliver quality educational programs and meet accreditation standards. On an annual basis, the dean submits a request for capital improvements to the senior vice chancellor, who often provides funding for specific renovation requests. When the focus is classroom updates, those requests are forwarded to the Office of the Provost for potential funding. The dean also periodically submits requests for programmatic enhancements, including start-up packages for new faculty, to the senior vice chancellor. Changes to the tuition structure for the PharmD program were approved by a number of campus officials, including but not limited to the senior vice chancellor, the registrar, and the provost.

The dean works collaboratively with a broad network of other individuals within the University and UPMC who have access to or oversight of resources vital to the School, including Associate Vice Chancellor for Facilities Scott Bernotas, Chief Financial Officer Arthur Ramicone, President of UPMC Presbyterian Shadyside John Innocenti, and Interim Vice Chancellor for Health Sciences Development/Interim President of the Medical Health Sciences Foundation Kellie Anderson.

The organizational chart for the University (Appendix 5A, required) shows that the School of Pharmacy, with the other five schools of the health sciences, reports to the senior vice chancellor for the health sciences and has a dotted-line reporting relationship to the provost. The structure reflects the role of the provost in reviewing and approving all academic programs and faculty actions. The nine schools outside of the health sciences report directly to the provost.

# Regional/Institutional Accreditation, Actions, and Substantive Changes

The University of Pittsburgh has been accredited by the Middle States Commission on Higher Education since 1921, with the last team visit on April 2012 (Appendix 5B, required). The visiting team highly commended the University for the progress made under Chancellor Emeritus Nordenberg's leadership over the previous six years, which was particularly noted in the Evaluation Overview with the following quote (Appendix 5C, optional):

"The University of Pittsburgh is an outstanding university with an extraordinarily talented and beloved leadership team... Over the past 15 years, the University of Pittsburgh's reputation as a world class research university has been advancing steadily. By any measure, this reputational advance reflects reality." In particular, the Middle States' visiting team was impressed with the institutional focus on the stated mission and goals and the record of achievement. They commented on the extraordinary collegial relationships among faculty, staff, administration, students, alumni, and the Board of Trustees. The University's financial soundness was also recognized. The team found that the University met or exceeded all prescribed standards. Progress continues in the new era under the leadership of Chancellor Patrick Gallagher. The next periodic review by the Commission on Higher Education is planned for 2017 with the next full self-study review planned for 2021-22.

In 2009, the Doctor of Pharmacy Program underwent a comprehensive review by the Accreditation Council for Pharmacy Education. See Appendix 5D (required) for the ACPE Accreditation Action and Recommendations. The ACPE Board of Directors granted accreditation through 2015-16. An interim report describing programmatic progress regarding pharmacy practice experiences, admissions criteria, and physical facilities was submitted in March 2012 (Appendix 5E, optional). A second interim report (Appendix 5F, March 2014, optional) and letter of substantive change (Appendix 5G, July 2015, optional) were provided to describe renovations, administrative changes, and the addition of a Master of Science in Pharmacy Business Administration. The dean requested an administrative extension of term so as to be better aligned with the new ACPE standards; ACPE approved the request (Appendix 5H, optional).

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box 🗹:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

# 6) **APPENDICES**

Appendix	File Name
5A	University Organizational Charts 2015.pdf
5B	Middle States Statement of Accreditation Link.pdf
5C	Middle States Report.pdf
5D	ACPE Accreditation F2009.pdf
5E	Interim Report & ACPE Compliance Finding 2012 v 8.pdf
5F	Interim Report to ACPE 2014.pdf
5G	University and School Substantive Change Letter.pdf
5H	Administrative term extension accepted by ACPE 2014.pdf
51	Legal Authority to Award Degrees.pdf

Standard No. 6: College or School Vision, Mission, and Goals: The college or school publishes statements of its vision, mission, and goals.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ Vision, mission and goal statements (college/school, parent institution, and department/division, if applicable)
- Ø Outcome assessment data summarizing the extent to which the college or school is achieving its vision, mission, and goals

#### Required Documentation for On-Site Review:

(None required for this Standard)

#### Data Views and Standardized Tables:

#### (None apply to this Standard)

#### **Optional Documentation and Data:**

- Image: Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program's compliance with the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>6.1. College or school vision and mission</b> – These statements are compatible with the vision and mission of the university in which the college or school operates.	0	0	0
<b>6.2. Commitment to educational outcomes</b> – The mission statement is consistent with a commitment to the achievement of the Educational Outcomes (Standards 1–4).	0	0	0
<b>6.3. Education, scholarship, service, and practice –</b> The statements address the college or school's commitment to professional education, research and scholarship, professional and community service, pharmacy practice, and continuing professional development.	0	0	0
<b>6.4. Consistency of initiatives</b> – All program initiatives are consistent with the college or school's vision, mission, and goals.	0	0	0
<b>6.5. Subunit goals and objectives alignment</b> – If the college or school organizes its faculty into subunits, the subunit goals are aligned with those of the college or school.	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - $\blacksquare$  How the college or school's mission is aligned with the mission of the institution
  - How the mission and associated goals<sup>2</sup> address education, research/scholarship, service, and practice and provide the basis for strategic planning

- How the mission and associated goals<sup>2</sup> are developed and approved with the involvement of various stakeholders, such as, faculty, students, preceptors, alumni, etc.
- $\blacksquare$  How and where the mission statement is published and communicated
- If How the college or school promotes initiatives and programs that specifically advance its stated mission
- ☑ How the college or school supports postgraduate professional education and training of pharmacists and the development of pharmacy graduates who are trained with other health professionals to provide patient care as a team
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements
- ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **School Mission and Vision**

PittPharmacy has clear, concise statements of mission, vision, and values, first adopted in the current format in 2001. Since then, the members of the School have periodically reviewed and either reaffirmed or modified the mission, vision, and values statements, most recently in 2016. The statements appear on the School's Web site <u>www.pharmacy.pitt.edu</u> and are displayed in locations throughout the School of Pharmacy.

## **Mission**

The School of Pharmacy is committed to improving health through excellence, innovation, and leadership in education of pharmacists and pharmaceutical scientists, in research and scholarship, in care of patients, and in service to our communities. *Adopted July 2006, Modified July 2009* 

## Vision

To be an outstanding school of pharmacy renowned for excellence in discovery and advancement of science-based use of medicines and other interventions to enhance the vitality and quality of life. *Adopted July 2006* 

## <u>Values</u>

Integrity guides our daily work. We foster: Passion, commitment, and diligence; Creativity and personal growth; Collaboration and teamwork; A culture of respect for the individual. *Adopted July 2006* The commitment to improving health as e

The commitment to improving health as expressed in the PittPharmacy mission of education, research, and care of patients and service to our communities is the foundation for the School's Long-Range Plan, which is described in Standard 7. The process by which the school promotes initiatives and programs that advance the mission is also described in Standard 7 and its associated appendices.

The dean introduces students to the School's mission, vision, and values during student orientation; the discussion occurs again during the P2 and P3 years. The periodic reviews with faculty and staff also reinforce the mission, vision, and values. The people of the School truly live the characteristics espoused.

The School's mission aligns and is consistent with the University's mission, which is to "• Offer superior educational programs • Advance the frontiers of knowledge and creative endeavor; • Share expertise with private, community, and public partners." Likewise, School values are aligned with those of the University: "With respect for each other and our rich tradition, the University of Pittsburgh embraces as core values: "• Excellence, Impact • Integrity, Virtue • Collaboration, Collegiality • Diversity, Inclusion • Entrepreneurship, Agility.

# **Commitment to Educational Outcomes**

Excellence, innovation, and leadership are central to the School's mission. In addition to the School's mission of excellence, innovation, and leadership in education, scholarship, care of patients, and service to communities, the faculty have adopted a mission statement specific for the PharmD program. The mission of the PharmD program, which is printed on the syllabus of every course taught in the curriculum, is consistent with curricular outcomes in Standards 1-4. As expressed in the PharmD mission, faculty and administration share a commitment to interprofessional education so that graduates are ready to work with other health care professionals as part of a team. As part of personalizing education, faculty and administration are committed to preparing students to be career ready, to successfully compete for positions as pharmacists, and to compete for and complete residencies.

## Mission of the PharmD Program

Through our commitment to personalizing education, PittPharmacy inspires students to use their unique interests and talents to improve the lives of people through the safe, effective, and responsible use of medications and other interventions.

The PharmD program prepares students to be practitioners who advance the profession by fostering innovation, leadership, interprofessional collaboration, civic engagement, advocacy, life-long learning, and a professional attitude of inclusion. *Modified June 7, 2016* 

## **Consistency of Goals**

Building, renewing and revising the mission, vision, and goals are ongoing processes that are reflected in the School's Long-Range Plan (Standard 7). The goals of the School's Long-Range Plan are aligned with the University-wide strategic planning process in which both the University and School have defined the five priority areas.

## University of Pittsburgh Goals

- 1. Advance Educational Excellence
- 2. Engage in Research of Impact
- 3. Strengthen Communities
- 4. Build Foundational Strength
- 5. Embrace Diversity and Inclusion

# PittPharmacy Goals

- 1. Leader in Pharmacy and Pharmaceutical Science Education
- 2. Engage in Research of Impact
- 3. Build Health and Engaged Communities

- 4. Build Foundational Strength
- 5. Embrace Diversity

Each of the two departments of the School assumes the responsibility to execute relevant elements of the Long-Range Plan, either as an individual department or in collaboration in cross-departmental efforts in support of the School's mission, vision, and goals.

The School's annual reports provide direct and clear evidence of the high degree of focus and achievement on the mission and goals. Selected summaries of achievements of faculty and staff are presented that speak directly toward the School's mission of education, research and scholarship, patient care, and service for each academic year. The annual reports are available to the public on the School's Web site.

http://www.pages.pharmacy.pitt.edu/publications/category/report/annualreport/

PittPharmacy fared particularly well on two of the four required 2015 AACP survey questions for faculty (one question) and graduating students (three questions). Of the responding faculty, 100 percent strongly agreed/agreed that the curriculum is consistent with the collective vision of the faculty and administration (85.3 and 83.4 percent for national and peer schools, respectively). Of responding graduating students, 94.5 percent indicated that they strongly agreed/agreed that they would choose the same school of pharmacy if they were "starting my pharmacy program over again" (84 and 82.9 percent for national and peer schools, respectively).

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) **APPENDICES**

Appendix	File Name
6A	Mission Vision Values.pdf
6B	PittPharmacy Programmatic Matrix and Outcomes Data.pdf

Standard No. 7: Strategic Plan: The college or school develops, utilizes, assesses, and revises on an ongoing basis a strategic plan that includes tactics to advance its vision, mission, and goals.

1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ College or school's strategic planning documents
- ☑ Description of the development process of the strategic plan.
- Outcome assessment data summarizing the implementation of the strategic plan

#### **Required Documentation for On-Site Review:**

The strategic plan of the parent institution (if applicable)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

☑ Questions –11-12 from Faculty Survey

#### **Optional Documentation and Data:**

- Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program's compliance with the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>7.1. Inclusive process</b> – The strategic plan is developed through an inclusive process, including faculty, staff, students, preceptors, practitioners, and other relevant constituents, and is disseminated in summary form to key stakeholders.	0	0	0
<b>7.2. Appropriate resources</b> – Elements within the strategic plan are appropriately resourced and have the support of the university administration as needed for implementation.	0	0	0
<b>7.3. Substantive change planning</b> – Substantive programmatic changes contemplated by the college or school are linked to its ongoing strategic planning process.	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - How the college or school's strategic plan was developed, including evidence of the involvement of various stakeholder groups, such as, faculty, students, preceptors, alumni, etc.
  - If How the strategic plan facilitates the achievement of mission-based (long-term) goals
  - How the college or school's strategic plan incorporates timelines for action, measures, responsible parties, identification of resources needed, mechanisms for ongoing monitoring and reporting of progress

- How the college or school monitors, evaluates and documents progress in achieving the goals and objectives of the strategic plan
- How the support and cooperation of University administration for the college or school plan was sought and achieved, including evidence of support for resourcing the strategic plan
- How the strategic plan is driving decision making in the college or school, including for substantive changes to the program
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements
- ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Inclusive Planning Process**

PittPharmacy has a long-standing and strong tradition of strategic planning beginning with its first formalized process that generated the long-term plan for 2001-2006. Like previous plans, PittPharmacy's newest plan, Long-Range Plan 2016 to 2020 (Appendix 7A, required) is mission and vision driven, is aligned with University's plan, and relies on measurable outcomes. Under the direction of Chancellor Gallagher, the University completed a University-wide strategic planning process in late 2015; the process was collaborative across all units within a campus and all campuses. Participants included the Board of Trustees, the Chancellor's Senior Leadership Team, Council of Deans, Planning and Budgeting Committee Members, Faculty Assembly, Student Leaders, Staff Association Council and the Allegheny Conference on Community Development. University- and community-wide dialogues occurred at open meetings. The result is now known as *"The Plan for Pitt: Making a Difference Together, Academic Years 2016-2020" (Appendix 7B, optional); the document* can also be found at <u>http://www.pitt.edu/sites/default/files/ThePlanforPitt10232015.pdf</u>

The PittPharmacy Long-Range Plan uses measurable outcomes to assess success. Historically, the School tracked measures using an internally-developed dashboard known as PAGE (Progress At a GlancE), which provided data-driven evidence of success and provided an easy way to review initiatives requiring more focused resource allocation or emphasis. The annual plans for the upcoming year and progress from the past year are submitted annually to the senior vice chancellor. Coincident with the development of the University's Plan for Pitt in 2015, the Office of the Provost requested that each unit/school of the University use a standardized assessment matrix for planning and measurement of progress on each of the five strategic areas elucidated in the Plan for Pitt; that form includes timelines. PittPharmacy's Programmatic Planning Matrix (Appendix 7C, required) shows retrospective data from the academic year 2014-15. The dean will annually submit the PittPharmacy Programmatic Matrix along with projected goals and actions for the next academic year.

The School of Pharmacy clearly has autonomy in setting its own goals, which the PittPharmacy administration continually seeks to align with the Plan for Pitt. The process for strategic planning has been a deliberative, collaborative dialogue among PittPharmacy administration and faculty, staff, students, and with stakeholders external to the School, including University administration, alumni through the Alumni Society, and community and professional stakeholders. Through the process, the School builds commitments to a shared vision, establishing metrics/outcomes that are specific and measurable, and identifying progress towards priority goals. The School's planning process is continuous and flexible.

Extensive discussions among faculty and staff occur during dedicated School retreats, yearly staff and faculty meetings, and other venues. Even after a plan is articulated and adopted, it undergoes yearly scrutiny to position the School to respond to timely strategic opportunities that align with focus areas. Appendix 7D (required) visually describes the interrelationship of contributors, those administratively responsible for implementation and the data-driven evaluation process used in the School of Pharmacy.

By 2011 when "personalizing education" and "getting to expert faster" were articulated in the PittPharmacy Long-Range Plan, faculty developed additional electives and also began developing six Areas of Concentration (ARCOs) that give students opportunities to develop in-depth learning in an area of their choosing. Each ARCO was approved by the Curriculum Committee, then the School's Planning and Budgeting Committee, and subsequently the Leadership Team, the Senior Vice Chancellor's Office, and Office of the Provost and Registrar. The name of the ARCO is an official designation that appears on the transcripts of students who complete them.

The overall process for developing a plan for a new program through its approval process is found in the Master of Science in Pharmacy Business Administration. A faculty group developed a proposal, which was submitted first to the department chair for departmental approval, to the Leadership Team for approval, to faculty for discussion at both a faculty meeting and an FYII (For Your Information and Input) session, and to the School's Planning and Budgeting Committee for approval. It was subsequently submitted to the Health Sciences Planning and Budgeting Committee and received final approval by the University Council on Graduate Studies of the Office of the Provost.

# PittPharmacy Strategic Resource Allocation and University Support for the Long-Range Plan

The Long-Range Plan provides the foundation and framework that enables resource allocations to achieve strategic priorities. The engagement of faculty and staff in the development of the Long-Range Plan assures that the talents of faculty are aligned with the strategic goals; faculty and staff and their time are among the School's most valuable resources. The close alignment of the School's Long-Range Plan with "The Plan for Pitt" also assures efficiency and informed investment of resources.

When needed, the dean reaches out to University administration for resources to accomplish specific goals. One of PittPharmacy's strategic goals articulated in 2012 was to establish a translational pharmacogenetic research, clinical patient care, and education program that was pharmacy based and integrated with UPMC. With financial support from the senior vice chancellor, that program was planned and implemented and is now thriving in association with Institute for Personalized Medicine that exists as a collaboration between Pitt and UPMC. In addition, the pharmacogenetic teaching platform in partnership with 23andMe resulted in Test2Learn, which earned the 2015 AACP Teaching Innovation Award.

An example of internal resource allocation is aligned with a strategic goal of being a leader in education. PittPharmacy made the investment of resources to develop and conduct the Readiness Assessment (Appendix 7E, optional) of clinical skills, which was implemented for the first time in April 2015 and again in April 2016. This comprehensive assessment engages P1 and P3 students as well as PGY1 residents in branched-algorithm simulated patient cases, standardized patient interactions, and a hi-fidelity human patient simulator in a simulated interprofessional setting. Seventeen faculty and staff members conducted the Readiness Assessment in approximately 250 learners over a three-day period of time; the commitment of faculty and staff time to plan the logistics and implement the Readiness Assessment is an example of

commitment to the excellence, innovation, and leadership expressed in the School's mission as well as the strategic focus on the long-term goal of being a leader in education.

# Planning, Implementation, and Oversight

Implementation of the School's Long-Range Plan is supervised by the dean and Leadership Team. Targeted data collection, review of outcome measures and discussion of progress toward goals are conducted at least yearly and generally more frequently to assess progress toward targets (e.g., student admissions or programs undergoing development). Appendix 7F (optional) summarizes the input, review, and monitoring functions of various groups. Individuals responsible for elements of the Long-Range Plan present to the Leadership Team for review of progress and further planning at least yearly and generally more frequently for those targeted priority areas. Reporting of major successes in priority areas occurs at major faculty and staff meetings.

The "Annual Report of the School of Pharmacy," constructed for University administrative review, is organized by key strategic areas and report provides yearly progress towards achievement of articulated goals and defined measurable outcomes. The Annual Report for 2014-15 is in Appendix 7G (optional) and is made available to stakeholders through the School's Web site <u>http://www.pages.pharmacy.pitt.edu/publications/category/report/annualreport/</u>. That 2014-2015 Annual Report reflects the six strategic focus areas that were in place with the previous chancellor.

# Evidence of Effectiveness of the School's Planning Process

Faculty, staff, students and other stakeholders are engaged in a dynamic, active program that responds to change and acts on opportunities that align with focus areas.

The overall effectiveness of the PittPharmacy planning process is confirmed by the School's success in achieving its mission and goals. An example is the progress under the Long-Range Plan initiative "Leading Pharmacy Education." When this focus was articulated in 2005, faculty had already been introducing innovative approaches to teaching; however, they quickly began submitting education-focused manuscripts for peer-review publication and began planning for sessions at the AACP annual meeting. The energy that began in 2005 continues today. Key faculty recruitments also occurred as a result of the PittPharmacy Long-Range Plan; the dean allocated resources to develop and purchase technology and hire educational support staff. The AACP 2012 award for Excellence in Assessment and the two consecutive year AACP Innovations in Teaching Awards in 2014 and 2015 (Appendix 7H, optional) to PittPharmacy faculty are evidence of the success of the PittPharmacy Long-Range Plan and resource allocation; those awards also demonstrate commitment to excellence, innovation, and leadership in education.

Another example is the articulated commitment in 2003 to developing a standard of care in community pharmacy. Through re-deployment of faculty to focus on that area and making strategic faculty hires, the community-based pharmacy program is exceptional, having received numerous awards for practice implementation and research grants. The group established the first community-based fellowship program and now, two former community practice research fellows hold faculty positions (one tenured) at prestigious public universities associated with academic health centers. Among other recognitions is that the National Association of Chain Drug Stores Foundation has supported the Faculty Scholars program since 2012 to train faculty from pharmacy schools across the country in the approaches to communitybased research. All of this is the result of developing a goal, associated strategies, and allocating resources. In the 2015 AACP Faculty Survey, faculty strongly agreed/agreed (school, national, peer) that:

- The School effectively employs strategic planning (94.6 percent, 80.8 percent, 87.2 percent)
- The School requested my input during the development of the current strategic plan (91.9 percent, 86.7 percent, 92.1 percent)

# Notable

PittPharmacy has taken a deliberate, consistent, and inclusive approach to long-range planning and has been extraordinarily focused and true to its plans for 15 years. Evidence of the success of planning is found in the examples provided, which include personalizing education, award-winning innovations in teaching and assessment, the development of the comprehensive translational pharmacogenetics program, and building a nationally recognized community-based pharmacy practice program.

The result of the 2015 AACP Faculty Survey that 94.6 percent of faculty strongly agree/agree that the School effectively employs strategic planning is further evidence of the noteworthy nature of PittPharmacy's long-range planning.

4) **College or School's Final Self-Evaluation:** Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated /or</li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

# 6) **APPENDICES**

Appendix	File Name
7A	PittPharmacy Long Range Plan 2016.pdf
7B	Plan for Pitt.pdf
7C	PittPharmacy Programmatic Matrix 2016 June.pdf
7D	Plan & Eval Process.pdf
7E	Readiness Assessment Summary.pdf
7F	Monitoring Eval Progress.pdf
7G	Annual Report 14-15.pdf
7H	PittPharmacy Fac Awards v2.pdf
71	LRPlan Bubble Diagram.pdf

Standard No. 8: Organization and Governance: The college or school is organized and staffed to advance its vision and facilitate the accomplishment of its mission and goals.

1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ College or school organizational chart
- ☑ Job descriptions and responsibilities for college or school Dean and other administrative leadership team members
- ☑ List of committees with their members and designated charges
- College, school, or university policies and procedures that address systems failures, data security and backup, and contingency planning
- ☑ Curriculum Vitae of the Dean and other administrative leadership team members
- ☑ Evidence of faculty participation in university governance

#### **Required Documentation for On-Site Review:**

- Written bylaws and policies and procedures of college or school
- Faculty Handbook

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Faculty Questions 1, 2, 5, 10
- AACP Standardized Survey: Alumni Question 14
- ☑ Table: Distribution of Full-Time faculty by Department and Rank

#### **Optional Documentation and Data:**

- Ø Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	N.I.
<b>8.1. Leadership collaboration</b> – University leadership and the college or school dean collaborate to advance the program's vision and mission and to meet ACPE accreditation standards. The dean has direct access to the university administrator(s) with ultimate responsibility for the program.	0	0	0
<b>8.2. Qualified dean</b> – The dean is qualified to provide leadership in pharmacy professional education and practice, research and scholarship, and professional and community service.	0	0	0
<b>8.3. Qualified administrative team</b> – The dean and other college or school administrative leaders have credentials and experience that have prepared them for their respective roles and collectively have the needed backgrounds to effectively manage the educational program.	0	0	0

<b>8.4. Dean's other substantial administrative responsibilities</b> – If the dean is assigned other substantial administrative responsibilities, the university ensures adequate resources to support the effective administration of the affairs of the college or school.	0	0	0
<b>8.5. Authority, collegiality, and resources</b> – The college or school administration has defined lines of authority and responsibility, fosters organizational unit collegiality and effectiveness, and allocates resources appropriately.	0	0	0
<b>8.6. College or school participation in university governance</b> – College or school administrators and faculty are effectively represented in the governance of the university, in accordance with its policies and procedures.	0	0	0
<b>8.7. Faculty participation in college or school governance</b> – The college or school uses updated, published documents, such as bylaws, policies, and procedures, to ensure faculty participation in the governance of the college or school.	O	0	0
<b>8.8. Systems failures</b> – The college or school has comprehensive policies and procedures that address potential systems failures, including technical, administrative, and curricular failures.	0	0	0
<b>8.9. Alternate pathway equitability</b> * – The college or school ensures that any alternative pathways to the Doctor of Pharmacy degree are equitably resourced and integrated into the college or school's regular administrative structures, policies, and procedures, including planning, oversight, and evaluation.	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - A description of the college or school's organization and administration and the process for ongoing evaluation of the effectiveness of each operational unit
  - A self-assessment of how well the organizational structure and systems of communication and collaboration are serving the program and supporting the achievement of the mission and goals
  - ☑ How college or school bylaws, policies and procedures are developed and modified
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - How the college or school's administrative leaders are developing and evaluating interprofessional education and practice opportunities
  - ☑ How the credentials and experience of college or school administrative leaders working with the dean have prepared them for their respective roles.
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms
  - How the dean provides leadership for the college or school and program and how the qualifications and characteristics of the dean support the achievement of the mission and goals
  - If The authority and responsibility of the dean to ensure all expectations of the standard and guidelines are achieved
  - I How the dean interacts with and is supported by the other administrative leaders in the college or school
  - ☑ How the dean is providing leadership to the academy at large, and advancing the pharmacy education enterprise on local, regional, and national levels.
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

# [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## Leadership, Dean, and Administrative Team

Patricia D. Kroboth, PhD is dean and chief executive and academic officer of the School of Pharmacy, an autonomous unit within the University of Pittsburgh. She chairs the Leadership Team of the School, which includes 12 individuals who are exceptional in their fields and extremely well-suited for their positions. A review of the CVs of the members of the Leadership Team shows the extensive qualifications and national reputation that each person brings to their respective areas of focus.

Appendix 8A (required) provides a compilation of position descriptions for each member of the team. As stated in the PittPharmacy Bylaws (Appendix 8B, optional), the School's Leadership Team convenes at least monthly to advance the mission, vision, and goals; the group exchanges information, recommends actions, and advises the dean and department chairs. The strategic and broad ranging nature of the topics at the monthly Leadership Team meetings assures the academic leadership development of team members beyond their professional and scientific expertise.

As an organization, the School of Pharmacy, its leadership, and its faculty and staff have extensive experience with participative and systematic short and long-term planning. A source of pride for the School is the culture of continuous quality improvement that is evident in the curricular programs and across PittPharmacy overall. PittPharmacy is agile in response to external and internal environmental changes; this culture provides stability with the expectation of change. Both the PharmD curriculum and the PittPharmacy Long-Range Plan are "living" examples of agility. The dean and Leadership Team foster not only civility, but also collaboration and teamwork as well as pervasive professionalism.

Organizational charts for the School of Pharmacy's Administrative and Center Structures are in Appendix 8C (required) and Appendix 8D (optional) respectively. Once every three years, faculty members evaluate the dean and department chairs in a comprehensive evaluation conducted by University administration. The supervisor (senior vice chancellor or dean) for those individuals reviews the results of the evaluation with the individual and together they develop an improvement plan if needed. Annually, the dean reviews all members of the Leadership Team with attention to achieving strategic goals and objectives of the School on their own and through others whom they lead.

Since 2002, Dean Kroboth has served as CEO dean, starting as interim dean. Prior to being named dean, she served as chair of Department of Pharmacy and Therapeutics from 1988 to 1996, then as chair of the Department of Pharmaceutical Sciences from 1996 to 2002. As documented in her curriculum vitae (Appendix 8E, required), she has had hands-on experience with all aspects of academic pharmacy. She has been and is significantly engaged with pharmacy education (leadership in AACP), the profession (leadership in ACCP), and science (leadership in AAPS). She began her academic career with a direct patient care practice in general internal medicine; she has developed programs (PharmD and Clinical Pharmaceutical Scientist PhD Program) and courses, and has engaged in the scholarship of teaching. She sustained continuous funding for research and for her graduate students, including NIH funding, for more than 20 years until 2004. She is an elected fellow of the American College of Clinical Pharmacy (1991), the American Association of Pharmaceutical Scientists (1996), and the American Association for the Advancement of Science (2016). She provides extensive service to the University; she currently chairs the Council of Deans Capital Campaign Committee and is a member of the Facilities Committee to develop a Capital Plan through 2020.

The dean has direct access to the administration of the University. She works on a regular basis with the Office of the Senior Vice Chancellor for the Health Sciences on academic, financial, facilities, and human resources. In addition, she works on specific academic matters such as technological infrastructure and classroom renovation with the Office of the Provost. The dean participates in the monthly Senior Vice Chancellor Staff meetings and in the monthly meetings chaired by the Provost. She is also a member of the University's Planning and Budget Committee and the University Facilities Planning Committee and chairs the Council of Dean's Institutional Advancement Committee. She is a member of the Internal Advisory Committee for the Clinical and Translational Science Institute (CTSI) and chairs the CTSI's Education Core Internal Advisory Committee.

Dean Kroboth enjoys the respect and support of faculty, staff, students, and alumni. In the 2015 AACP Faculty Survey, 91.9 percent of PittPharmacy faculty strongly agreed/agreed with the statement, "The dean is an effective leader of the School;" national and peer responses were 80.3 percent and 88.8 percent, respectively. She has been an effective advocate for the School; has the support of the University administration, including the senior vice chancellor and the provost; and has access to the members of the University's administration. She has advocated for the School to administration and to UPMC and has led all stakeholders to a shared vision that is synchronous with the goals of the University. Under her leadership, PittPharmacy has:

- 26. Increased its University-allocated space 1.7 fold;
- 27. Tripled the book value of its endowment; the market value has grown by a greater amount;
- 28. More than tripled the number of graduate students;
- 29. Been ranked number one among Pitt's schools based on alumni engagement;
- 30. Consistently ranked among the top schools of pharmacy in National Institutes of Health (NIH) funding;
- 31. Increased its reputation-based US News & World Report ranking;
- 32. Grown the financial support from the University and UPMC.

## Authority, Collaboration and Teamwork, and Resources

The Leadership Team has responsibility for implementing elements of the School's Long-Range Plan; the faculty and staff of the School and two departments share in the development of the plan and execution of specific elements. The two departments work strategically to accomplish unified goals rather than having independent plans, which is another element that fosters collaboration and teamwork among the members of the School.

The faculty of the School are organized into two departments: the Department of Pharmaceutical Sciences and the Department of Pharmacy and Therapeutics. Each department is led by a chair who is also a member of the Leadership Team. Department chairs have responsibility for their respective budgets, and for hiring, supporting, developing, and evaluating faculty; chairs ensure participation in the teaching mission and the quality of delivery of educational programs as well as scholarly achievement. The distribution of full-time faculty by rank and department is in Appendix 8F (optional). Centers within the School request group resources (such as staff support and other center related requests) from the Dean and Leadership Team. Research progress of the faculty within the centers and the success of individual faculty members are reviewed regularly by the department chairs.

Department chairs convene meetings of their faculty generally once each month or more frequently if needed. Schoolwide faculty meeting minutes are maintained on the shared network drive and are available for review by faculty.

# **School Participation in University Governance**

As stated in the quote from the Faculty Handbook, "the pattern of governance in the University is one of shared responsibilities and authority." The School has demonstrated a high level of commitment and leadership within University committees. More than half (39) of the School's 72 full-time faculty members serve on at least one University committee and many serve on multiple committees (Appendix 8G, required). Faculty share in governance through the University Senate, which provides communication channels with administrative officers of the University and the Board of Trustees. Of note, a School of Pharmacy faculty member is an officer on the University Senate (Susan Skledar, Senate Secretary). Also, faculty hold additional officer positions within the Senate Committees including: co-chair, Educational Policies (Bonnie Falcione); co-chair, Tenure and Academic Freedom (Barry Gold); and Faculty Representative to the Health Sciences Board of Trustees (Susan Skledar). Recommendations to the Senate are expressed through two deliberative bodies, the Faculty Assembly and the Senate Council; each has School faculty representation. Shared governance is also reflected in the University Planning and Budget System

<u>http://www.provost.pitt.edu/handbook/ch1\_gov\_plan\_budget\_sys.htm</u> and in the primary faculty governance committees, which are listed at <u>http://www.provost.pitt.edu/information-on/committees.html</u>. Susan Meyer is the codirector for the Pitt Center for Interprofessional Practice and Education of the Health Policy Institute.

Because pharmacy expertise is considered essential to human investigation, faculty members in the School provide support and pharmacotherapy expertise to all eight Institutional Review Board subcommittees. The Institutional Review Board Executive Committee reports to George A. Huber, JD, MSIE, MSSM who, in addition to his role as Interim Vice-Provost for Research Conduct and Compliance, retains a faculty appointment in the Graduate School of Public Health.

# **Faculty Participation in School Governance**

Faculty and staff participate and lead School of Pharmacy committees and taskforces (Appendix 8H, optional); nearly 100 percent of the faculty currently participate on at least one School committee. Committees have rotating membership and leadership according to Bylaws and individual committee guidance documents. When PittPharmacy policies overlap with University policies, PittPharmacy policies must be approved by the University; examples are the Research Incentive Policy and the School's Appointment, Promotion and Tenure Policies and Guidelines. In many situations, the School follows University policies rather than establishing its own policies, for example intellectual property.

As described in the School's Bylaws (Appendix 8D, optional), PittPharmacy has a culture of consensus building rather than voting. Changes to the School's Bylaws, however, do require a vote by faculty. The Bylaws, first developed in 2009, are reviewed periodically by the Leadership Team. Changes may be proposed by standing committees, by the Leadership Team, by the dean, or by petition signed by ten or more members of the faculty. Amendments to the bylaws are distributed to faculty at least ten days prior to the faculty meeting at which the vote will occur. Modifications to the Bylaws requires approval by two-thirds of voting faculty (those present at the meeting and those who have received written ballots). Using the described process, the PittPharmacy Bylaws were modified in 2016 with respect to leadership and duration of committee appointments.

School-wide communication occurs through Faculty meetings, retreats, and For Your Information and Input sessions; at the latter, in-depth conversations occur on a single topic. The dean also provides periodic short email updates or more extensive "New and Noteworthy" communications by email. Within departments and centers, meetings and emails are

major modes of communications. Throughout the School, informal conversation is encouraged. Communication within the School is effective based on cohesiveness among faculty and staff and administration.

# **Systems Failures**

Contingency plans are in place in the event of technical failures; secure backups of critical applications and systems data occur daily. The School is in the final phase of moving servers to the Network Operations Center, known as the NOC, which is the University's secure off-site computer facility with 24/7 coverage.

The University uses the Emergency Notification System to alert members of the University to emergency situations via cell phone, text, and email within a matter of minutes of an event occurring. This Emergency Notification System can be used in any emergency situation that could arise on campus. Messages are customized to the nature and location of the emergency. PittPharmacy follows the safety measures and disaster plans of the University (Appendix 8I, required). In addition, the School has internal means of emergency communications, including a public address system in Salk Hall, medical emergency assistance through the School of Dental Medicine Department of Anesthesia, Web site postings, and fire alarms.

An unfortunate example of the deployment of the Emergency Notification System occurred in spring 2012 when Pitt received 52 bomb threats that affected 160 buildings during all hours of the day and night. These events thoroughly tested the effectiveness of the system and response time upon activation of the system. The University took each threat seriously, evacuating dormitories and classroom/research/office buildings. Alternative mechanisms for locating and holding classes and administering final examinations were developed. The University's administration orchestrated a plan that evolved as threats continued; deans collaborated on messaging to students, faculty and staff; associate deans collaborated across schools to bring the semester to a successful close.

The School has a Customer Information Security Plan that is annually updated. The purpose of the plan is to:

- Ensure the security and confidentiality of customer information;
- Protect against anticipated threats to the security and/or integrity of customer information;
- Guard against unauthorized access to, or use of, customer information that could result in harm or inconvenience to any customer; and
- Comply with the Gramm-Leach-Bliley Act.
- 4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	compromise current	has been initiated; the plan has	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated /or</li> <li>Adequate information was not provided to assess compliance</li> </ul>

	implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.		
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

# 6) **APPENDICES**

Appendix	File Name
8A	Leadership Team Responsibilities 2016.pdf
8B	Bylaws Revised Approved May2015.pdf
8C	School of Pharmacy Org Chart.pdf
8D	School of Pharmacy Centers.pdf
8E	CV KROBOTH 16 Feb.pdf
8F	FT Faculty by Rank TS NTS.pdf
8G	Faculty Participation in Univ Govern.pdf
8H	School Committees.pdf
81	University Emergency Management Guidelines.pdf

Standard No. 9: Organizational Culture: The college or school provides an environment and culture that promotes self-directed lifelong learning, professional behavior, leadership, collegial relationships, and collaboration within and across academic units, disciplines, and professions.

#### 1) Documentation and Data:

Use a check I to indicate the information provided by the college or school and used to self-assess this standard:

#### Required Documentation and Data:

#### Uploads:

- College, school, or university policies describing expectations of faculty, administrators, students and staff behaviors
- ☑ Examples of intra/interprofessional and intra/interdisciplinary collaboration
- Z Examples of affiliation agreements for practice or service relationships (other than experiential education agreements)
- ☑ Examples of affiliation agreements for the purposes of research collaboration (if applicable)
- Examples of affiliation agreements for academic or teaching collaboration (if applicable)

#### **Required Documentation for On-Site Review:**

(None required for this standard)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Faculty Questions 3, 4, 6, 35, 37
- AACP Standardized Survey: Student Questions –54, 59-61, 63
- AACP Standardized Survey: Alumni Questions 13, 15-17
- ☑ AACP Standardized Survey: Preceptor Question 38

#### **Optional Documentation and Data:**

- Ø Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>9.1. Leadership and professionalism</b> – The college or school demonstrates a commitment to developing professionalism and to fostering leadership in administrators, faculty, preceptors, staff, and students. Faculty and preceptors serve as mentors and positive role models for students.		0	0
<b>9.2. Behaviors</b> – The college or school has policies that define expected behaviors for administrators, faculty, preceptors, staff, and students, along with consequences for deviation from those behaviors.	0	0	0
<b>9.3. Culture of collaboration</b> – The college or school develops and fosters a culture of collaboration within subunits of the college or school, as well as within and outside the university, to advance its vision, mission, and goals, and to support the profession.	0	0	0

3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's

self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.

- Strategies that the college or school has used to promote professional behavior and outcomes
- Strategies that the college or school has used to promote harmonious relationships among students, faculty, administrators, preceptors, and staff; and the outcomes
- Strategies that the college or school has used to promote student mentoring and leadership development, and the outcomes
- ☑ The number and nature of affiliations external to the college or school
- Details of academic research activity, partnerships and collaborations outside the college or school
- ☑ Details of alliances that promote and facilitate interprofessional or collaborative education
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements
- ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **The PittPharmacy Culture**

The attitudes and behaviors of students, faculty, staff, and preceptors of the School individually and collectively exemplify PittPharmacy's characteristics expressed in the mission of "excellence, innovation, and leadership." Together, the people of School of Pharmacy live the PittPharmacy values and create the PittPharmacy culture. As stated in the PittPharmacy values, "Integrity guides our daily work. We foster passion, commitment, and diligence; creativity and personal growth; collaboration and teamwork; a culture of respect for the individual."

Leadership, which is a part of the mission, is demonstrated through positional and situational professional leadership. PittPharmacy embraces and fosters leadership in both forms, recognizing that not everyone can be or wants to be a positional leader. Leadership is taking the personal responsibility for identifying and capturing opportunities for improvement and being a role model for others; it is ultimately a component of the profession, which is self-regulating. The PittPharmacy values celebrate leadership through the respect for the individual and believing that each person brings important talents, perspectives, and experiences to the team. Also, leadership is celebrated in the passion, commitment, diligence, and creativity of individuals and the collaboration and teamwork that accelerate the achievement of goals. The PittPharmacy values provide a cultural framework for behaviors, including the ability to feel "safe" when experimenting with ideas. Collectively, the accomplishments of PittPharmacy administrators, faculty, staff, and students exemplify the commitment to leadership development and professionalism.

Evidence of the culture and living the PittPharmacy values can readily be found in three examples:

- The consensus process for developing policies and Long-Range Plan,
- The investment in development of people,
- Innovations in education, practice, and research.

Consensus Process. The consensus process (Appendix 9A, optional) for decisions, policy development, and Long-Range

Plan development/strategic planning is an integral part of the PittPharmacy culture. School-wide meetings titled "For Your Information and Input" (FYII) are single-focus meetings where in-depth conversations occur that are often part of the consensus development. Multiple FYIIs are held intermittently during the year; in addition to building consensus, the FYIIs have the additional purposes of faculty development, fostering a sense of community, and enhancing communications and professional relationships. A list of recent FYII sessions and topics is included in Appendix 9B (optional).

Other meetings, including once per semester faculty meetings and twice-yearly retreats of faculty and staff, also serve as venues for consensus development and for strengthening inter-departmental collaborative relationships and the conduct of School business.

Investment in People. The people of PittPharmacy are its greatest resource and therefore the School's administration invests in their professional and leadership development. Leadership development was the focus of the School Retreat in 2011 and centered on "Shared Leadership Frameworks;" an expert external to the School led the sessions to provide development of skills, language, and behaviors to achieve excellence in desired programmatic outcomes through shared leadership. In addition, the dean engaged the consultant for six months to provide approximately one third of the faculty and administrative staff with detailed training in small groups in order to embed the language and behaviors of shared in the culture.

The PittPharmacy administration encourages faculty and staff to avail themselves of the University's rich array of learning and development opportunities for faculty, staff, and students. For the sake of brevity, this description is limited to a few of the extensive University opportunities for development.

- The Office of Academic Career Development of the Health Sciences offers a nine-part faculty leadership development program titled "Leadership Academy for Early Career Faculty."
- The Center for Instructional Design and Distance Education provides extensive group and individual opportunities for faculty to engage with experts in curricular design and delivery.
- Human Resources provides a broad array of faculty and staff development opportunities, generally in half-day meetings that range from one to multiple sessions, depending on the complexity of the topic.
- Leadership development is offered for department chairs and associate deans through the Office of the Provost.
- An online offering for learning is available for free to Pitt faculty and staff through Lynda.com, which is an online education company that offers thousands of video courses in software, creative and business skills.

In addition, Human Resources of the University offers an extensive Faculty and Staff Development program which is detailed here <a href="http://www.hr.pitt.edu/training-development/faculty-st">http://www.hr.pitt.edu/training-development/faculty-st</a>. Staff members have multiple additional avenues to pursue professional development both internal to the School and University and through external opportunities. The staff members attend internal Staff Technology and Resource Sessions (STARS) to share information and effective processes within the School.

PittPharmacy administration has also encouraged and financially supported the development of faculty in programs including AACP's Academic Leadership Fellows Program training program, the ACCP Teaching and Learning Academy, and ASHP's Pharmacy Leadership Academy.

In response to the 2015 AACP Faculty Survey results, the dean charged a task force to make recommendations regarding orienting non-practice faculty to the profession of pharmacy and professional education; implementation of actions is underway.

<u>Innovations in Education, Practice, and Research.</u> Innovation is strategically positioned in the PittPharmacy Long-Range Plan as shown in the bubble chart (Appendix 9C, optional) that shows innovation overlapping each of the five focus areas of the Long-Range Plan: Leader in Education, Research of Impact, Building Healthy and Engaged Communities, Foundational Strength, and Diversity and Inclusion. The commitment to innovation is seen in the specific goals and sub goals within the Plan.

The PittPharmacy leadership creates the culture that stimulates the drive for excellence and innovation balanced with integrity of educational and professional principles. Innovation permeates the training and experiences of all PittPharmacy students.

One example is IPPE Community Pharmacy Practice course in the P2 year, which demonstrates layers of innovation with faculty and separately with students. It is also an interprofessional experience and an example of the co-curriculum building leadership and innovation. The faculty developed the Community Pharmacy Practice course, which is delivered in partnership with 78 individual pharmacies in the Western Pennsylvania area as a "classroom in the community." The patient care is the required IPPE where students individually care for patients and record data. The innovation is the additional learning opportunity for transforming their individual patient care experiences to population health by compiling the de-identified data from all approximately 4500 patients to document overall student impact on patients with specific problems, e.g. heart disease.

The second layer of innovation is student-driven. Individual P2 classes of students in 2013 through 2016 went beyond the required course experience and chose to lead three public health initiatives and apply for grants. The P2 classes won the NACDS Foundation Million Hearts Campaign in 2013, the AACP Script Your Future National Award Winner in 2015 and 2016, and the Pennsylvania Pharmacists Association Good Government Award in 2014 and 2015.

All of this is possible because of the PittPharmacy culture. The PittPharmacy administration is always open to finding a better way; that culture is one of "permission-less innovation" and respect for the creativity and ideas of each individual. Staff members serve on all standing committees; they are essential members of the PittPharmacy team and support the faculty to continually improve. Alumni enhance the educational experience of students, often in the classroom; through sharing their experiences in small group discussions, panel discussions, and the classroom, they bring a sense of reality to students and serve as positive role models showing students that they, too, can lead change.

# Policies

The culture fostered by the members of the School is supported by University and School policies and procedures and by their respective mission and values statements (Standard 6). The University's Faculty Handbook (Appendix 9D, required; <a href="http://www.provost.pitt.edu/handbook/handbook.html">http://www.provost.pitt.edu/handbook/handbook.html</a>), updated in 2002 and again in 2011, includes policies on nondiscrimination, anti-harassment, academic integrity, and faculty-student relationships that extend to all faculty, staff, preceptors, and students. Provisions for due process and appeals for violations of policies are consistent with University

policies. Similarly, the Staff Handbook can be accessed here <u>http://www.hr.pitt.edu/staff-handbook</u> (Appendix 9E, required).

The School's values are likewise fostered among faculty, staff, students, and preceptor peers. The School's Code of Conduct is presented in Appendix 9F (required). The Code of Conduct is introduced to students during P1 orientation; each student signs a copy of the code that is preceded by the statement, "My signature below certifies that I have read, understand and agree to abide by the School of Pharmacy's Professional Code of Conduct for Students." All students reaffirm their commitment to uphold the principles of the code by signing a copy of the code at the beginning of each subsequent year.

Two survey items serve as evidence of the commitment to a culture of professionalism among faculty and students.

- On the 2015 AACP Faculty Survey, 97.9 percent of faculty strongly agreed/agreed that the School provides an environment and culture that promotes professional behavior (90.3 percent and 93.4 percent for national and peer faculty, respectively).
- On the 2015 AACP Graduating Student Survey, 98.9 percent of graduating students strongly agreed/agreed that the program included opportunities to develop professional attitudes, ethics, and behaviors.

# **Culture of Collaboration**

PittPharmacy is one of six schools of the Health Sciences housed on a 132 acre campus. In addition to the health sciences, the Swanson School of Engineering, Dietrich School of Arts and Sciences, and all other schools of the University are located in geographic proximity of the School. Four UPMC hospitals and the VA are also co-located within walking distance of all schools of the University.

The culture of collaboration and teamwork extends beyond the walls of the School, throughout the University and to national and international universities, governmental and non-governmental agencies. As a part of a public university and academic health center, the School of Pharmacy as an organization and faculty members as individuals have developed interprofessional and other collaborations that are truly too numerous to list, and all are facilitated by geographic proximity. As a single example, Pitt-Pharmacy faculty have leadership and collaborative roles in the NIH-funded Clinical and Translational Science Institute in the Educational Core (Kroboth), in the Small Molecule and Biomarker Core (Poloyac), in the newly funded Precision Medicine Initiative (McGivney), and in the Institute for Personalized Medicine (Empey). Also, faculty have a leadership role in the Opiate Taskforce within the Institute of Politics. Educational efforts have flourished under the leadership of Dr. Susan Meyer, Co-director of the Pitt Center for Interprofessional Practice and Education and Associate Dean for Education. Through her leadership, PittPharmacy leads the working group on interprofessional education drawn from the six schools of the health sciences and the School of Social Work with representatives from the Office of the Senior Vice Chancellor. The extensive collaborations add richness and enhance the ability of faculty and the School to achieve and have impact.

PittPharmacy faculty led the development of an elective journal club course among five schools of pharmacy with interests in clinical pharmaceutical sciences research. The offering, which is available to graduate students and PharmD students in the PharmD Research Area of Concentration, this course has proven effective, and is direct evidence of PittPharmacy's commitment to collaboration both within and outside the University.

An overarching affiliation is the agreement for practice, education, and research between UPMC and the University that came about when UPMC was established in 1992.

In addition, formal agreements exist between the School of Pharmacy and

- NACDS for the Faculty Scholars Program directed by a PittPharmacy faculty member;
- NACDS for the Test2Learn pharmacogenetics national program that launches in September 2016;
- 23andMe for pharmacogenetic testing for educational purposes (Appendix 9G, required);
- Skipta as a partner of the PittPharmacy Innovation Lab;
- Rite Aid as a partner of the PittPharmacy Innovation Lab (Appendix 9H, required).
- A number of international universities for the purposes of educational exchange programs and research collaboration (Appendix 9I and 9J, required).

Interprofessional and interdisciplinary collaboration is essential for both novel educational opportunities and research discoveries. PittPharmacy has developed a culture to promote such collaborative efforts. Encouraging multiple PI grant submissions, development of cross-institutional educational offerings, and advancing interprofessional education are several initiatives that provide direct evidence of support for such collaborative efforts.

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) **APPENDICES**

Appendix	File Name
9A	Consensus process.pdf
9B	FYII Topics.pdf
9C	LRPlan Bubble Diagram.pdf
9D	University Faculty Handbook.pdf
9E	University Staff Handbook link.pdf
9F	School of Pharmacy Student Guidelines Code of Conduct.pdf
9G	Example of Affiliation Agreement - Education - 23 and me Collaboration Agreement.pdf
9H	Example of Affiliation Agreement - Practice Relationships Rite Aid Co-Op Agreement 2015-16.pdf
91	Example of Affiliation Agreement - Shanghai Changhai Hospital.pdf
9J	Example of Affiliation Agreement – Research IGNITE.pdf
9К	Examples of interprofessional and interdisciplinary research.pdf

# Subsection IIB: Educational Program for the Doctor of Pharmacy Degree

Standard No. 10: Curriculum Design, Delivery, and Oversight: The curriculum is designed, delivered, and monitored by faculty to ensure breadth and depth of requisite knowledge and skills, the maturation of professional attitudes and behaviors, and the opportunity to explore professional areas of interest. The curriculum also emphasizes active learning pedagogy, content integration, knowledge acquisition, skill development, and the application of knowledge and skills to therapeutic decision-making.

#### 1) Documentation and Data:

Use a check 🗹 to indicate the information provided by the college or school and used to self-assess this standard:

#### **Required Documentation and Data:**

#### Uploads:

- Description of curricular and degree requirements, including elective didactic and experiential expectations
- A map/cross-walk of the curriculum (didactic and experiential) to the professional competencies and outcome expectations of the program
- A map/cross-walk of the curriculum to Appendix 1 of the ACPE Standards
- Curriculum vitae of faculty teaching within the curriculum
- ☑ Tabular display of courses, faculty members assigned to each course and their role, and credentials supporting the teaching assignments
- ☑ List of the professional competencies and outcome expectations for the professional program in pharmacy
- A list of the members of the Curriculum Committee (or equivalent) with details of their position/affiliation to the college or school
- A list of the charges, assignments and major accomplishments of the Curriculum Committee in the last 1-3 years
- Examples of instructional tools, such as portfolios, used by students to document self-assessment of, and reflection on, learning needs, plans and achievements, and professional growth and development
- Sample documents used by faculty, preceptors and students to evaluate learning experiences and provide formative and/or summative feedback
- ☑ Policies related to academic integrity
- Policies related to experiential learning that ensures compliance with Key Element 10.5 (professional attitudes and behaviors development)
- Z Examples of instructional methods employed by faculty and the extent of their employment to actively engage learners
- Examples of instructional methods employed by faculty and the extent of their employment to integrate and reinforce content across the curriculum
- Examples of instructional methods employed by faculty and the extent of their employment to provide opportunity for mastery of skills

- Examples of instructional methods employed by faculty and the extent of their employment to instruct within the experiential learning program
- Examples of instructional methods employed by faculty and the extent of their employment to stimulate higher-order thinking, problem solving, and clinical-reasoning skills
- Examples of instructional methods employed by faculty and the extent of their employment to foster self-directed lifelong learning skills and attitudes
- Examples of instructional methods employed by faculty and the extent of their employment to address/accommodate diverse learning styles
- Examples of instructional methods employed by faculty and the extent of their employment to incorporate meaningful interprofessional learning opportunities

#### **Required Documentation for On-Site Review:**

☑ All course syllabi (didactic and experiential)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- ☑ AACP Standardized Survey: Faculty Questions –9, 32-36
- AACP Standardized Survey: Student Questions 31-36, 63, 68
- AACP Standardized Survey: Alumni Questions –19, 20, 24
- ☑ AACP Standardized Survey: Preceptor Questions 10, 17

#### **Optional Documentation and Data:**

- Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include a curricular overview, the college or school's curricular map, and data that link teaching-and-learning methods with curricular outcomes. Examples could include assessments and documentation of student performance and the attainment of desired core knowledge, skills and values.
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>10.1. Program duration</b> – The professional curriculum is a minimum of four academic years of full-time study or the equivalent.	0	0	0
<b>10.2. Curricular oversight</b> – Curricular oversight involves collaboration between faculty and administration. The body/bodies charged with curricular oversight: (1) are representative of the faculty at large, (2) include student representation, (3) effectively communicate and coordinate efforts with body/bodies responsible for curricular assessment, and (4) are adequately resourced to ensure and continually advance curricular quality.	0	0	0
<b>10.3. Knowledge application</b> – Curricular expectations build on a pre-professional foundation of scientific and liberal studies. The professional curriculum is organized to allow for the logical building of a sound scientific and clinical knowledge base that culminates in the demonstrated ability of learners to apply knowledge to practice.	0	0	0
<b>10.4. Skill development</b> – The curriculum is rigorous, contemporary, and intentionally sequenced to promote integration and reinforcement of content and the demonstration of competency in skills required to achieve the Educational Outcomes articulated in Section I.	0	0	0
<b>10.5. Professional attitudes and behaviors development</b> – The curriculum inculcates professional attitudes and behaviors leading to personal and professional maturity consistent with the Oath of the Pharmacist.	0	0	0

<b>10.6. Faculty and preceptor credentials/expertise</b> – All courses in the curriculum are taught by individuals with academic credentials and expertise that are explicitly linked to their teaching responsibilities.		0	0
<b>10.7. Content breadth and depth</b> – Programs document, through mapping or other comparable methods, the breadth and depth of exposure to curricular content areas deemed essential to pharmacy education at the doctoral level (Appendices 1 and 2).		0	0
<b>10.8. Pharmacists' Patient Care Process</b> – The curriculum prepares students to provide patient-centered collaborative care as described in the <i>Pharmacists' Patient Care Process</i> model endorsed by the Joint Commission of Pharmacy Practitioners.		0	0
<b>10.9. Electives</b> – Time is reserved within the core curriculum for elective didactic and experiential education courses that permit exploration of and/or advanced study in areas of professional interest.	0	0	0
<b>10.10. Feedback</b> – The curriculum allows for timely, formative performance feedback to students in both didactic and experiential education courses. Students are also provided the opportunity to give formative and/or summative feedback to faculty, including preceptors, on their perceptions of teaching/learning effectiveness.		0	0
<b>10.11. Curriculum review and quality assurance</b> – Curriculum design, delivery, and sequencing are regularly reviewed and, when appropriate, revised by program faculty to ensure optimal achievement of educational outcomes with reasonable student workload expectations.		0	0
<b>10.12. Teaching and learning methods</b> – The didactic curriculum is delivered via teaching/learning methods that: (1) facilitate achievement of learning outcomes, (2) actively engage learners, (3) promote student responsibility for self-directed learning, (4) foster collaborative learning, and (5) are appropriate for the student population (i.e., campus-based vs. distance-based).		0	0
<b>10.13. Diverse learners</b> – The didactic curriculum incorporates teaching techniques and strategies that address the diverse learning needs of students.	0	0	0
<b>10.14. Course syllabi</b> – Syllabi for didactic and experiential education courses, developed and updated through a faculty-approved process, contain information that supports curricular quality assurance assessment.	0	0	0
<b>10.15. Experiential quality assurance</b> – A quality assurance procedure for all pharmacy practice experiences is established and implemented to: (1) facilitate achievement of stated course expectations, (2) standardize key components of experiences across all sites offering the same experiential course, and (3) promote consistent assessment of student performance.		0	0
<b>10.16. Remuneration/employment</b> – Students do not receive payment for participating in curricular pharmacy practice experiences, nor are they placed in the specific practice area within a pharmacy practice site where they are currently employed. <sup>3</sup>		0	0
<b>10.17. Academic integrity</b> * – To ensure the credibility of the degree awarded, the validity of individual student assessments, and the integrity of student work, the college or school ensures that assignments and examinations take place under circumstances that minimize opportunities for academic misconduct. The college or school ensures the correct identity of all students (including distance students) completing proctored assessments.	0	0	0

<sup>3</sup> A professional degree program in an institution that meets the definition of and has an institution-wide commitment to "cooperative education" (Cooperative Education and Internship Association; <u>http://www.ceiainc.org</u>) may apply to ACPE for a waiver of this requirement.

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - $\ensuremath{\boxtimes}$  A description of the professional competencies of the curriculum

- A description of the assessment measures and methods used to evaluate achievement of professional competencies and outcomes along with evidence of how feedback from the assessments is used to improve outcomes
- ☑ The curricular structure and content of all curricular pathways
- ☑ How the curricular content for all curricular pathways is linked to Appendix 1 of Standards 2016 through mapping and other techniques and how gaps in curricular content or inappropriate redundancies identified inform curricular revision
- Examples of assessment and documentation of student performance and the attainment of desired core knowledge, skills and values
- Evidence that knowledge, practice skills and professional attitudes and values are integrated, reinforced and advanced throughout the didactic and experiential curriculum
- A description of the curricular structure, including a description of the elective courses and experiences available to students
- How both the didactic and experiential components comply with Standards for core curriculum and IPPE and APPEs in regard to percentage of curricular length
- Any nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)
- $\ensuremath{\boxtimes}$  How the results of curricular assessments are used to improve the curriculum
- ☑ How the components and contents of the curriculum are linked to the expected competencies and outcomes through curricular mapping and other techniques and how gaps in competency development or inappropriate redundancies identified inform curricular revision
- How the curricular design allows for students to be challenged with increasing rigor and expectations as they matriculate through the program to achieve the desired competencies and how the curriculum design enables students to integrate and apply all competency areas needed for the delivery of holistic patient care.
- ☑ A description of the college or school's curricular philosophy
- A description of how the curriculum fosters the development of students as leaders and agents of change and helps students to embrace the moral purpose that underpins the profession and develop the ability to use tools and strategies needed to affect positive change in pharmacy practice and health care delivery
- A description of teaching and learning methods and strategies employed in the delivery of the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable), and how those methods are expected to advance meaningful learning in the courses in which they are employed.
- If Efforts of the college or school to address the diverse learning needs of students
- ☑ The formative and summative assessments used to evaluate teaching and learning methods used in the curriculum, including nontraditional pathway(s) leading to the Doctor of Pharmacy degree (if applicable)
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- Any other notable achievements, innovations or quality improvements
- ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

#### [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Curriculum Structure**

The PharmD program mission statement was revised by the faculty in June 2016 and appears on each course syllabus (syllabus template—Appendix 10A, optional).

The PharmD program prepares student pharmacists to be health care practitioners who optimize the health of patients and society through the effective use of medicines and other interventions. The PharmD program inspires students to advance the profession by fostering collaboration, lifelong learning, leadership, professionalism, and civic engagement.

PittPharmacy has an integrated and modular curriculum that allows changes to be made using a continuous quality improvement model. What makes evolution possible is the courses are not "owned" by faculty members or a department, and thus can evolve based on the external environment, feedback from students, and data from the Assessment Matrix. The Assessment Matrix has been firmly established since 2008 and has served as a mechanism that propels informed evolution and continuous quality improvement.

The curriculum is organized across nine academic terms; a minimum of 128.5 credits is required for graduation: 80.5 credits of required didactic, 6 credits didactic electives, 6 credits required IPPEs, 26 credits required APPEs, and 10 credits elective APPEs (Appendix 10B, required).

# **Curricular Oversight and Quality Assurance**

The Curriculum Committee (CC) provides proactive oversight of the curriculum (charges and members—Appendix 10C, required). The CC is composed of 11 voting members: eight faculty, elected to the committee by their peers, with four focused on the P1 and P2 years and four engaged in the P3 and P4 years; the chair, vice chair, and past chair are appointed by the dean. Thirteen non-voting members include eight students (two elected from each class) and an alumnus appointed by the dean. Four ex officio members, associate dean for education, Curriculum Assessment Committee chair, director of experiential learning, and the School registrar participate for the purpose of facilitating communication and feedback among committees and with the Leadership Team. For example, the CC addresses results of Curriculum Assessment Committee evaluations of aggregate student performance and curricular effectiveness (Standards 24 and 25). Close coordination with the Experiential Learning Committee provides for quality assurance procedures for IPPEs and APPEs. Student engagement on the CC and Curriculum Assessment Committee provides opportunities for direct student input on the curriculum and teaching effectiveness. Recommendations for policy or major curricular change are submitted to the Leadership Team and brought before the faculty at large for discussion and consensus.

CC members serve as professional year coordinators (PYCs) to facilitate communication among faculty teaching concurrent courses to implement initiatives within and across professional years. PYCs also coordinate timing of major projects and assessments to assure reasonable student workload expectations (PYC responsibilities—Appendix 10D, optional). Weekly grids are prepared to facilitate coordination (sample grid—Appendix 10E, optional).

Courses are sequenced to facilitate progressive development and maturation of knowledge, skills, and attitudes fundamental to the practice of pharmacy. The CC systematically reviews the content, design, and delivery of each course at least once every four years according to the review process and rubric (Appendix 10F, optional) to ensure course integrity and vertical and horizontal integration in the curriculum. A CC subcommittee conducts the review using the course syllabus, handouts and lecture notes, assignments, examinations, student evaluations, and an interview with the course coordinator as sources of data. The rubric is completed independently by the course coordinator and the subcommittee. The CC reviews and approves proposed new courses and significant changes to existing courses before and after implementation. The review process provides feedback for quality improvement at the course level, as well as informing overall curriculum enhancement by ensuring that course content is appropriate, properly sequenced, and integrated across the curriculum.

The CC periodically evaluates content threads to ensure the integrity of curricular design. As an example, in 2014, work groups evaluated critical inquiry, evidence-based medicine, management, and public health. The changes that were proposed and implemented are included in the three-year summary of CC accomplishments (Appendix 10G, required). School-wide faculty FYII (For Your Information and Input) sessions provide additional opportunities for faculty and staff input on curricular issues that emerge. Sessions held in 2013, 2014, and 2015 specific to the PharmD curriculum are highlighted in Appendix 10H (optional).

Course coordinators are responsible for the content and conduct of the courses to which they are assigned and for coordinating the efforts of contributing faculty to ensure the integrity of courses. The CC maintains guidelines for course coordinators (Appendix 10I, optional).

# Knowledge, Skill, Attitude, and Behavior Development

Students are prepared to practice in diverse patient care settings through the integration of the biomedical, pharmaceutical, behavioral, and social and administrative sciences with pharmacy practice and professional experience. The curriculum is designed to address the PittPharmacy Outcomes (Appendix 10J, required), which were revised in July 2015 and align closely with the CAPE Educational Outcomes.

P1 students develop a foundation in the pharmaceutical sciences and principles of patient care practice. In the P2 and P3 years, the science-practice foundation is expanded and organ system-based therapeutics courses integrate pharmaceutical sciences with therapeutic principles and disease management. Patient assessment skills, therapeutic plan development, and other professional competencies are interwoven throughout these courses. Additionally, science, practice, and professional experiences are integrated within each professional year (horizontal integration) and across years (vertical integration). In spring of the P3 year, students demonstrate the integration of science and patient care practice through their PharmD seminar presentation, performance on the cross-course capstone, and the cross-curricular Readiness Assessment. The P4 year is the culmination of application and integration with completion of APPE rotations.

Horizontal and vertical integration is illustrated in how courses map to the PittPharmacy Outcomes (core courses— Appendix 10K, required; elective courses—Appendix 10L, required) and map to required elements of the didactic curriculum (core courses—Appendix 10M, required; elective courses—Appendix 10N, required).

Students do not receive payment for participating in course-based, co-curricular based, or experiential learning activities, nor are they placed in the specific practice area at a pharmacy practice site where they are currently employed as an intern outside the curriculum.

<u>Pharmacists Patient Care Process.</u> The Pharmacists' Patient Care Process is introduced in a required two-course sequence (Pharmacist Patient Care Process 1: Process and Skills; Pharmacist Patient Care Process 2: Skills and Environments) in the P1 year. These courses support development of competence in the patient-centered practice of pharmacy in different practice settings, focus on practicing as a professional, and introduce the elements necessary to conduct an effective patient encounter to optimize the patient's pharmacotherapy and to resolve drug-related problems. For example, students practice the Pharmacists' Patient Care Process with older adults in the SilverScripts program. Students meet with the same individuals in two separate visits, with the first visit focused on the COLLECT and ASSESS steps. Between visits, students continue the ASSESS step to identify any drug therapy problems and develop a PLAN to address those problems. On the return visit, students IMPLEMENT the plan and propose a strategy to MONITOR and EVALUATE. Example learning simulation and assessment activities are described in Appendix 100 (optional).

P2 students complete the Pennsylvania Pharmacists Care Network (PPCN) Medication Management Training Program, which is required for participation in the PPCN to provide medication management services. In IPPEs, P2 students focus on developing patient care services in community pharmacy settings.

The focus on the Pharmacists' Patient Care Process is also addressed in therapeutics courses that integrate pharmaceutical sciences, therapeutic principles, and disease management strategies. Patient assessment skills, therapeutic plan development, and patient care delivery considerations are woven throughout these courses. The Case Conference Series, implemented the P2 and P3 years, integrates content and abilities across concurrent courses and provides students with opportunities to apply the Pharmacists' Patient Care Process to increasingly complex patient cases in a variety of simulated settings.

# Teaching, Learning and Assessment Methods

Faculty members employ multiple teaching and assessment methods. Methods include lectures and active learning approaches, computer-assisted learning cases, role play, human patient simulations, virtual simulations, projects, standardized patients and colleagues, and laboratory sessions. Skills are mastered and refined when applied to actual practice situations in IPPEs and APPEs.

<u>Teaching and Learning Methods</u>. More than 90 percent of PittPharmacy courses use two or more teaching methods, illustrated in the curricular maps of core courses (Appendix 10P, optional) and elective courses (Appendix 10Q, optional).

In the pre-APPE curriculum, weekly practicum and laboratory sessions facilitate student development of skills necessary for the practice of pharmacy in a variety of settings. Graduating students, faculty and preceptors all indicate the PharmD program prepares students with the various and requisite skills for practice. On the 2015 AACP Graduating Student Survey:

- 95.6 percent of students strongly agreed/agreed that they were academically prepared to enter APPEs;
- 98.9 percent strongly agreed/agreed that they were prepared to enter practice;
- 98.9 percent strongly agreed/agreed that they were provided opportunities to engage in active learning; and
- 86.8 percent strongly agreed/agreed that the sequence of courses was appropriate to build knowledge and skills and elective courses to meet their needs.

<u>Electives.</u> Students complete a minimum of six course-based elective credits to develop areas of personal interest, expand understanding of professional opportunities, and achieve the curricular outcomes. A wide variety of elective courses is available to students (Appendix 10R, optional). Students also have the option of selecting electives from a preapproved list of courses offered by other University units; students seeking to take elective courses not on the list must obtain pre-approval by the CC (process outlined in Appendix 10S, optional). Students are encouraged to earn professional elective credit for scholarly investigations in pharmaceutical sciences, professional practice, or other professional topic areas through the Special Topics elective option. Appendix 10T (optional) outlines the requirements for Special Topics electives; examples are provided in Appendix 10U (optional). In addition, P4 students select two of their seven APPEs as electives. Beginning in 2017-18, P4 students will select three of their eight APPEs as electives.

<u>Areas of Concentration (ARCOs).</u> The CC developed guidelines for the development of ARCOs (Appendix 10V, optional). ARCOs allow students to build a depth of understanding and skill in a defined practice or research interest area and consist of a minimum of 15 credits of elective courses and APPEs focused in the designated area, along with a mentored scholarly project. The University recognizes completion of an ARCO with a designation on the student's transcript. The six PittPharmacy ARCOs are Community Leadership, Innovation, and Practice; Global Health; Pediatrics; Pharmacotherapy Scholars; Pharmacy Business Administration; and Research (brief descriptions--Appendix 10W, optional).

<u>Feedback and Assessment.</u> More than 90 percent of courses employ two or more methods of assessment. Assessment methods used in core courses (Appendix 10X, optional) and elective courses (Appendix 10Y, optional) include examinations, case analyses, standardized patients, capstone cases, written assignments, oral presentations, projects, interviews, medical chart analyses, written treatment and monitoring plans, and preparation of patient education materials.

Innovative approaches to assessment are woven across the curriculum. For example, standardized patients are incorporated in formative and summative capstone experiences. Capstone cases are used in the P3 year to incorporate concepts from multiple therapeutics courses within a single case. Computer-assisted cases provide formative feedback to students as they apply knowledge and skills to "real-life" cases. The Readiness Assessment uses blended simulation progress testing to gauge team readiness and readiness for patient care responsibilities (Standards 24 and 25).

Students provide reflections and self-assessment of their experiences in relationship to their progress toward achieving the PittPharmacy Outcomes, which represent expectations outlined in Standards 1 through 4, in their portfolios. Periodic debriefing sessions are held with small groups of students in the IPPE and APPE courses.

Students have the opportunity to provide formative and summative feedback on their perceptions of faculty teaching effectiveness at the midpoint of a course through detailed data-gathering facilitated by the associate dean for education, upon request by the course coordinator, and at course conclusion through student surveys. Evaluations of IPPE and APPE rotations and preceptors are discussed in Standards 12 and 13.

# Notable

PittPharmacy is committed to improving student learning through innovations in teaching and assessment. The 18 papers published between 2010 and 2016 and the 3 in press are evidence of the commitment (Appendix 10Z, optional). That these innovations are selected for publication in peer-reviewed journals is a testament to the rigor with which improvements are undertaken and analyzed.

Since 2003, the Provost's Advisory Council on Instructional Excellence has awarded 12 competitive grants to PittPharmacy faculty members for innovative teaching and assessment initiatives (Appendix 10AA, optional).

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box  $\square$ :

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <i>lor</i></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) APPENDICES

Appendix	File Name
10A	Course Syllabus Template June 2016.pdf
10B	Curriculum Table with Coordinators 2016-17.pdf
10C	Charges and Members of the Curriculum Committee 2016-17.pdf
10D	Responsibilities Professional Year Coordinators.pdf
10E	Example Grid.pdf
10F	Course Review Process and Rubric.pdf
10G	3-year Summary of Curriculum Committee Accomplishments.pdf
10H	PittPharmacy FYII sessions.pdf
101	Course Coordinator Responsibilities.pdf
10J	PITTPharmacy Outcomes.pdf
10K	Curricular Map-Core Courses by Curricular Outcomes.pdf
10L	Curricular Map-Electives by Curricular Outcomes.pdf
10M	Curricular Map-Core Courses by Appendix 1 Keywords.pdf
10N	Curricular Map-Electives by Appendix 1 Keywords.pdf
100	Pharmacist Patient Care Process Simulation and Assessment Examples.pdf
10P	Curricular Map-Core Courses by Teaching Strategies.pdf
10Q	Curricular Map-Electives by Teaching Strategies.pdf
10R	Pharmacy Electives 2015-16.pdf
10S	Selection of Pharmacy Electives.pdf
10T	Special Topics Course Requirements and Process.pdf
10U	Example Special Topics Courses.pdf
10V	ARCO Guidelines.pdf

10W	PittPharmacy Areas of Concentration.pdf
10X	Curricular Map-Core Courses by Assessment Strategies.pdf
10Y	Curricular Map-Electives by Assessment Strategies.pdf
10Z	Examples of Educational Innovations.pdf
10AA	ACIE Awards to Pharmacy Faculty.pdf
10AB	Faculty Assignments by Course.pdf
10AC	Portfolio Requirements and Process 2016.pdf
10AD	Sample document used to evaluation student learning experiences – P3 Capstone.pdf
10AE	University Guidelines on Academic Integrity.pdf
10AF	University Student Code of Conduct.pdf
10AG	University Faculty Guidelines for Dealing with Issues of Academic Dishonesty.pdf
10AH	PharmD Student Guidelines for Dealing with Issues Related to the Code of Conduct.pdf
10AI	PharmD Code of Conduct Complete 2013.pdf
10AJ	Policies Related to Experiential Learning that Ensure Compliance with Key Element 10-5.pdf
10AK	Examples of Instructional Methods to Actively Engage Learners.pdf
10AL	Examples of Instructional Methods to Actively Engage Learners-Published Examples.pdf
10AM	Examples of Instructional Methods to Integrate and Reinforce Content Across the Curriculum-P3
	Capstone.pdf
10AN	Examples of Instructional Methods to Provide Opportunity for Mastery of Skills-Published Examples.pdf
10AO	Examples of Instructional Methods within the Experiential Learning Program-CPP2 Preceptor Manual.pdf
10AP	Examples of Instructional Methods within the Experiential Learning Program-Preceptor Manual 2016.pdf
10AQ	Examples of Instructional Methods within the Experiential Learning Program-Published Examples.pdf
10AR	Examples of Instructional Methods to Stimulate Higher Order Thinking-Logistic Regression.pdf
10AS	Examples of Instructional Methods to Stimulate Higher Order Thinking-Predictive Analytics.pdf
10AT	Examples of Instructional Methods to Stimulate Higher Order Thinking-Published Examples.pdf
10AU	Examples of Instructional Methods to Foster Self-Directed Learning-Published Examples.pdf
10AV	Examples of Instructional Methods to Address Diverse Learning Styles-Published Examples.pdf
10AW	Examples of Instructional Methods to Incorporate Meaningful Interprofessional Learning-Overview.pdf
10AX	Examples of Instructional Methods to Incorporate Meaningful Interprofessional Learning-Published Example.pdf

Standard No. 11: Interprofessional Education (IPE): The curriculum prepares all students to provide entry-level, patient-centered care in a variety of practice settings as a contributing member of an interprofessional team. In the aggregate, team exposure includes prescribers as well as other healthcare professionals.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ Vision, mission, and goal statements related to interprofessional education
- Statements addressing interprofessional education and practice contained within student handbooks and/or catalogs
- Relevant syllabi for required and elective didactic and experiential education course that incorporate elements of interprofessional education to document that concepts are reinforced throughout the curriculum and that interprofessional education related skills are practiced at appropriate times during pre-APPE
- Student IPPE and APPE evaluation data documenting the extent of exposure ton interprofessional, team-based patient care
- Outcome assessment data summarizing students' overall achievement of expected interprofessional education outcomes in the pre-APPE and APPE curriculum

#### **Required Documentation for On-Site Review:**

(None required for this Standard)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

☑ AACP Standardized Survey: Student – Questions –11, 46

#### **Optional Documentation and Data:**

- Image: Other documentation or data that provides supporting evidence of compliance with the standard
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>11.1. Interprofessional team dynamics</b> – All students demonstrate competence in interprofessional team dynamics, including articulating the values and ethics that underpin interprofessional practice, engaging in effective interprofessional communication, including conflict resolution and documentation skills, and honoring interprofessional roles and responsibilities. Interprofessional team dynamics are introduced, reinforced, and practiced in the didactic and Introductory Pharmacy Practice Experience (IPPE) components of the curriculum, and competency is demonstrated in Advanced Pharmacy Practice Experience (APPE) practice settings.		0	0
<b>11.2. Interprofessional team education</b> – To advance collaboration and quality of patient care, the didactic and experiential curricula include opportunities for students to learn about, from, and with other members of the interprofessional healthcare team. Through interprofessional education activities, students gain an understanding of the abilities, competencies, and scope of practice of team members. Some, but not all, of these educational activities may be simulations.		0	0
<b>11.3.</b> Interprofessional team practice – All students competently participate as a healthcare team member in providing direct patient care and engaging in shared therapeutic decision-making. They participate in experiential educational activities with prescribers/student prescribers and other student/professional healthcare team members, including face-to-face interactions that are designed to advance interprofessional team effectiveness.		0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - How the college or school supports postgraduate professional education and training of pharmacists and the development of pharmacy graduates who are trained with other health professionals to provide patient care as a team
  - How the curriculum is preparing graduates to work as members of an interprofessional team, including a description of the courses that focus specifically on interprofessional education
  - If How the results of interprofessional education outcome assessment data are used to improve the curriculum
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## Description

Interprofessional education is a priority at PittPharmacy and across the health sciences at the University of Pittsburgh. Collaboration and teamwork are highlighted in the School's Values statement and in the mission of the PharmD program (Appendix 11A, required). Specifically, "[we] foster...<u>collaboration and teamwork</u>; ..." and the PharmD program "prepares students to be practitioners who advance the profession by fostering innovation, leadership, <u>interprofessional</u> <u>collaboration</u>, civic engagement, advocacy, life-long learning, and a professional attitude of inclusion." In addition, statements addressing interprofessional education and practice are embedded in the School's technical standards and Code of Conduct (Appendix 11B, required) and seven of the 11 PittPharmacy Outcomes (Appendix 11C, required).

Since 2007, advancements in interprofessional education at the University of Pittsburgh have been organized by the University's Working Group on Interprofessional Education, which is chaired by Susan Meyer of PittPharmacy's Leadership Team. The Working Group's mission and current members are listed in Appendix 11D (optional). The University has become a national and international leader in interprofessional practice and education and hosted All Together Better Health (ATBH) VII in June 2014 (Appendix 11E, optional). ATBH is the leading global interprofessional practice and education conference. ATBH VII was the first in the conference series to be held in the US. The conference brought providers, health system executives, educators, policymakers, and health care industry leaders to Pittsburgh to discuss advancements in interprofessionalism locally, regionally, and worldwide.

## **Education-Practice Partnerships**

In 2015, Pitt launched its Center for Interprofessional Practice and Education (CIPE) within the University's Health Policy Institute (Appendix 11F, optional). With a member of the PittPharmacy Leadership Team and the director of UPMC's Office of Advanced Practice Providers serving as co-directors, CIPE is a true practice-education partnership to enhance interprofessional practice and education. CIPE is one of the original sites to affiliate with the National Center on Interprofessional Practice and Education as a Nexus Innovation Incubator Site to study the impact of interprofessional teams on patient care outcomes, population health, and costs of care. CIPE facilitates a "feedback loop" that informs educational content and process with the realities of practice to prepare a collaboration-ready workforce.

UPMC has established a Health Professional Education Service Line (Appendix 11G, optional) to:

- align the educational operations of UPMC across professional programs and levels of learners;
- provide a more coordinated approach to service line management, including learner placements and maintenance of affiliation agreements; and
- facilitate innovation in areas such as interprofessional education to address competencies for new models of interprofessional care delivery for pre-licensure learners, post-graduate learners and residents, and the current UPMC workforce.

The UPMC Health Professional Education Service Line director is also a member of the CIPE leadership team.

PittPharmacy clinical faculty are engaged as members of high functioning interprofessional practice teams in direct patient care environments where students in IPPEs and APPEs are immersed in team-based collaborative care. Example environments include antibiotic stewardship, oncology, transplant, pain and palliative care, cardiology, critical care, internal medicine, geriatrics, pediatrics, primary care, diabetes care, and care for the underserved.

# Interprofessional Education in the Curriculum

Core competencies for interprofessional collaborative practice are addressed throughout the curriculum in didactic courses, simulations, and in direct patient care environments so that PittPharmacy students graduate "team-ready" and are able to provide patient care as contributing members of interprofessional teams. Fourteen required didactic courses, seven elective didactic courses, and all required IPPE and APPE courses incorporate elements of interprofessional education and directly address PittPharmacy Outcomes that reflect one or more of the IPEC Core Competencies. The syllabi for these courses are included in Appendix 11H (required), Appendix 11I (required), and Appendix 11J (required), respectively.

# Example curricular elements include:

Orientation. Students are first introduced to interprofessional practice in orientation, prior to the start of P1 classes.

- Forty students participate with incoming students in dental medicine and public health in a Community Action Poverty Simulation designed to create to a broader awareness of the social determinants of health.
- Twenty-five students participate in an activity focused on opportunities for pharmacists to contribute along with others to public health and to the health of communities.
- Twenty-five students view the documentary "Alive Inside" and engage in a facilitated discussion of what it means to provide holistic care with teams that involve pharmacists, physicians, social workers, physical and occupational therapists, and music therapists.
- Twenty-five students view selected portions of the documentary "Escape Fire" and engage in a facilitated conversation about challenges in the current US health care system and the role of the pharmacist on teams as the US transitions from a disease management system to a health care system.

<u>P1 year.</u> Since 2008, the Interprofessional Forum, Educating Health Care Teams of the Future, has annually engaged approximately 650 first-year students from across the health sciences. This two-hour event illustrates the areas of

expertise of various health professionals in the context of a simulated patient case, demonstrates the importance of teamwork from the patient's perspective, and identifies benefits and challenges to practicing in an interprofessional environment (Appendix 11K, optional). Even at the P1 level, PittPharmacy students value team-based care delivery. On a pre-survey prior to the 2015 Interprofessional Forum, 97 percent of P1 students strongly agreed/agreed that health care delivery in the near future will need teams of different professionals to provide improved patient outcomes.

Pharmacist Patient Care Process I and 2 and the Emerging Professional are didactic courses in which students consider their unique contributions to patient care as pharmacist members of interprofessional teams, gain an understanding of the roles and responsibilities of other health care professionals, and begin to develop interprofessional communication skills related to care plan development.

In IPPEs, students actively contribute to interprofessional teams in communities by demonstrating mutual respect, understanding, and values to meet patient care needs and goals; and communicate directly with simulated and actual prescribers regarding drug-related care plans.

<u>P2 year.</u> Interprofessional communication skills continue to be developed in the classroom in the Nonprescription Therapies and Self-Care course and then are applied in IPPEs. In Community Pharmacist Practice 1 and 2, students interact with patients, caregivers, and health care providers at senior centers, community pharmacies, and underserved clinics. Focus areas include community health outreach, transitions of care, and care for older adults. In underserved clinics, students work collaboratively with students and practitioners from other professions to provide care in targeted communities. Students apply communication skills through patient interviews, medication histories, and care plan development. Students are also given opportunities to provide recommendations to physicians regarding drug therapy plans.

<u>P3 year</u>. In a classroom setting, students engage with a panel of practicing health professionals to learn about interprofessional interactions and care teams in the hospital setting. The dialog focuses specifically on the pharmacist-physician-nurse relationship. Additionally, students are exposed to simulated interprofessional education through the cross-course capstone. In these simulation-based assessments, students must demonstrate effective pharmacist-patient and interprofessional communication. Students review a patient's medication profile and interview a standardized patient to identify drug-related problems. Students then investigate the patient's problems and draft a letter to the physician, detailing a care plan for the patient. The following day, students meet with a standardized colleague to provide verbal recommendations. Students complete the activity twice, as a practice case and for a final capstone grade. Standardized colleagues are played by family medicine physicians for the final capstone activity. Interprofessional communication skills and use of evidence-based medicine are assessed using a standardized rubric (Appendix 11L, optional). In IPPEs, students have reflection assignments specifically focused on interprofessional teams in institutional settings.

<u>P4 year.</u> Interprofessional team dynamics are observed and analyzed and students engage in shared therapeutic decision making in a variety of practice environments across the APPEs. Specific required learning activities that directly address core competencies for interprofessional collaborative care are included for APPEs in inpatient acute care, community pharmacy, hospital/health system pharmacy, and ambulatory patient care (Appendix 11M, optional). Beginning in January 2017, medical students in their first-year clinical experiences course will use parallel questions to trigger

reflections on interprofessional interactions. Interprofessional Health Care Teams is an elective, direct patient care APPE rotation that engages P4 students, senior nursing students, third-year medical students, and second-year master of social work students in the study and delivery of coordinated, team-based care for patients with end-stage renal disease in an outpatient dialysis clinic and in inpatient pre- and post-transplant care. The course schedule and example learning activity are included in Appendix 11N (optional).

Interprofessional Student Organizations and Activities. In addition to curricular-based interprofessional education, PittPharmacy students lead and are actively engaged in interprofessional co-curricular and extra-curricular activities. Brief descriptions are included in Appendix 110 (optional).

# Assessment

PittPharmacy implemented a Readiness Assessment for P1 and P3 students to determine team-readiness and readiness for APPEs. Clinical decision making, interprofessional and patient communication, and attitudes of ownership for patient outcomes are assessed in this knowledge and performance-based assessment. Readiness Assessment data trigger individualized feedback to guide student progressive development and are used by the Curriculum Assessment Committee and Curriculum Committee to drive curricular enhancements. The rubric used to evaluate student performance and structure personalized feedback is included as Appendix 11P (required). Interprofessional communication is addressed specifically in Station 4 of the Readiness Assessment. The data in Appendix 11Q (required) shows comparative results from the 2015 Readiness Assessment for the class of 2016 as P3s and the class of 2018 as P1s. The difference among cohorts on Station 4 (ownership for patient outcomes) were statistically significant.

Each semester throughout the curriculum and within each APPE rotation, students self-assess and are evaluated by their preceptors on their ability to function as members of interprofessional teams. Aggregate data for the class of 2016, fall P1 semester through spring P4 semester, are included in Appendix 11R (required).

Student exposure to interprofessional, team-based patient care is captured on the PITT Form completed by students throughout the curriculum for simulated and direct patient care interactions. A summary of the highlights and aggregate numbers of interactions, sorted by student level, are included in Appendix 11S (required). In aggregate, in 23.2 percent of the patient encounters, students interacted with other health care providers.

PITT Form data showed that students documented interprofessional interactions in:

- 7.7 percent of P1 patient interactions;
- 1.2 percent of P2 patient interactions;
- 32.9 percent of P3 patient interactions;
- 30.0 percent of P4 patient interactions.

On the 2015 AACP Graduating Student Survey, students strongly agreed/agreed (PittPharmacy, national, peer) that:

- they were prepared to work with the health care team to implement the patient care plan (96.7, 94.6, 91.6 percent);
- they were prepared to work with other stakeholders to engender a team approach to assure appropriate use of the health care resources in providing patient care (92.3, 92.6, 90.5 percent);

their pharmacy practice experiences allowed them to collaborate with other health care professionals (100, 98, 97 percent).

## Notable

- The extent of PittPharmacy student interactions with other health care providers, both simulated and actual practice, is notable.
- PittPharmacy's leadership in the infrastructure supporting interprofessional education and practice across the health sciences at Pitt is noteworthy.
- 4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box 🗹:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) APPENDICES

Appendix	File Name
11A	PharmD mission.pdf
11B	Statements Addressing Interprofessional Education and Practice Contained within the Student
	Handbook.pdf
11C	PittPharmacy Outcomes that Address Interprofessional Education and Practice.pdf
11D	Working Group on Interprofessional Education Mission and Members.pdf
11E	All Together Better Health VII Web Page.pdf
11F	Pitt Center for Interprofessional Practice and Education.pdf
11G	UPMC Health Professional Education Service Line.pdf
11H	Didactic course syllabi combined.pdf
111	Elective course syllabi combined.pdf
11J	Experiential course syllabi combined.pdf
11K	2015 Interprofessional Forum Agenda.pdf

11L	P3 Capstone Rubric.pdf
11M	Required Interprofessional Learning Activities in APPEs.pdf
11N	Interprofessional Healthcare Teams Course 2016.pdf
110	Example Interprofessional Extra-Curricular Activities.pdf
11P	Readiness Assessment Station 4 SC Rubric.pdf
11Q	Readiness Assessment Data graph.pdf
11R	Assessment of Ability to Function as a Member of an Interprofessional Team Over Time.pdf
11S	IPPE and APPE Data Documenting Extent of Exposure to Interprofessional Care.pdf

<u>Standard No. 12: Pre-Advanced Pharmacy Practice Experience (Pre-APPE) Curriculum</u>: The Pre-APPE curriculum provides a rigorous foundation in the biomedical, pharmaceutical, social/administrative/behavioral, and clinical sciences, incorporates Introductory Pharmacy Practice Experience (IPPE), and inculcates habits of self-directed lifelong learning to prepare students for Advanced Pharmacy Practice Experience (APPE).

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- Description of curricular and degree requirements, including elective didactic and experiential expectations
- A tabular display of courses, faculty members assigned to each course and their role, and credentials supporting the teaching assignments
- Curriculum maps documenting breadth and depth of coverage of Appendix 1 content and learning expectations in the professional (and, if appropriate, preprofessional) curriculum
- Examples of curricular and co-curricular experiences made available to students to document developing competence in affective domain-related expectations of Standards 3 and 4
- ☑ Outcome assessment data of student preparedness to progress to advanced pharmacy practice experiences (e.g., comprehensive assessments of knowledge, skills, and competencies)
- Description of the introductory pharmacy practice experiences learning program and its goals, objectives, and time requirements
- Z List of simulation activities and hours counted within the introductory pharmacy practice experiences 300 hour requirement
- Introductory pharmacy practice experiences course syllabi including general and rotation-specific learning objectives and extent of IPE exposure
- ☑ Introductory pharmacy practice experiences student and preceptor manuals
- ☑ Introductory pharmacy practice experiences student and preceptor assessment tools
- ☑ Introductory pharmacy practice experiences preceptor recruitment and training manuals and/or programs
- ☑ Outcome assessment data summarizing overall student achievement of Pre-APPE educational outcomes

#### **Required Documentation for On-Site Review:**

☑ List of current preceptors with details of credentials (including licensure) and practice site

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Faculty Question 34
- AACP Standardized Survey: Student Questions –32, 34-36, 66, 67, 77-79
- AACP Standardized Survey: Alumni Questions 19, 22

#### **Optional Documentation and Data:**

- ☑ Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include assessments and documentation of student performance, nature and extent of patient and health care professional interactions, and the attainment of desired outcomes; aggregate data from students about the type (diversity) and number of patients, problems encountered, and interventions; evidence of assuring, measuring, and maintaining the quality of site used for practice experiences; and quality improvements resulting from practice site assessments.
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>12.1. Didactic curriculum</b> – The didactic portion of the Pre-APPE curriculum includes rigorous instruction in all sciences that define the profession (see Appendix 1). Appropriate breadth and depth of instruction in these sciences is documented regardless of curricular model employed (e.g., blocked, integrated, traditional 'stand-alone' course structure, etc.).		0	0
<b>12.2. Development and maturation</b> – The Pre-APPE curriculum allows for the development and maturation of the knowledge, skills, abilities, attitudes, and behaviors that underpin the Educational Outcomes articulated in Standards 1–4 and within Appendices 1 and 2.	0	0	0
<b>12.3.</b> Affective domain elements – Curricular and, if needed, co-curricular activities and experiences are purposely developed and implemented to ensure an array of opportunities for students to document competency in the affective domain-related expectations of Standards 3 and 4. Co-curricular activities complement and advance the learning that occurs within the formal didactic and experiential curriculum.	0	0	0
<b>12.4. Care across the lifespan</b> – The Pre-APPE curriculum provides foundational knowledge and skills that allow for care across the patient's lifespan.	0	0	0
<b>12.5. IPPE expectations</b> – IPPEs expose students to common contemporary U.S. practice models, including interprofessional practice involving shared patient care decision-making, professional ethics and expected behaviors, and direct patient care activities. IPPEs are structured and sequenced to intentionally develop in students a clear understanding of what constitutes exemplary pharmacy practice in the U.S. prior to beginning APPE.		0	0
<b>12.6. IPPE duration</b> – IPPE totals no less than 300 clock hours of experience and is purposely integrated into the didactic curriculum. A minimum of 150 hours of IPPE are balanced between community and institutional health-system settings.	0	0	0
<b>12.7. Simulation for IPPE</b> – Simulated practice experiences (a maximum of 60 clock hours of the total 300 hours) may be used to mimic actual or realistic pharmacist-delivered patient care situations. However, simulation hours do not substitute for the 150 clock hours of required IPPE time in community and institutional health-system settings. Didactic instruction associated with the implementation of simulated practice experiences is not counted toward any portion of the 300 clock hour IPPE requirement.		0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - How student performance is assessed and documented, including the nature and extent of patient and health care professional interactions, and the attainment of desired outcomes
  - How, in aggregate, the practice experiences assure that students have direct interactions with diverse patient populations in a variety of health care settings
  - How the college or school ensures that the majority of students' IPPE hours are provided in and balanced between community pharmacy and institutional health system settings
  - How the college or school uses simulation in the IPPE curriculum

- B How the college or school establishes objectives and criteria to distinguish introductory from advanced practice experiences.
- If How the college or schools assures, measures, and maintains the quality of sites used for practice experiences
- How quality improvements are made based on assessment data from practice sites
- Any other notable achievements, innovations or quality improvements
- Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

The didactic and IPPE elements of the PittPharmacy pre-APPE curriculum are purposefully integrated and are intentionally sequenced to progressively prepare students for exemplary practice in an array of contemporary and emerging pharmacy settings. During IPPEs (minimum of 300 clock hours of experience), students enhance their professional behavior and engage in professional ethical and shared patient-care decision making. Appendix 12A (required) lists the PharmD degree course requirements. Appendix 12B (required) displays all courses and faculty members assigned. The pre-APPE curriculum engages students in rigorous instruction in biomedical, pharmaceutical, behavioral, social, and administrative science instruction that is integrated with pharmacy practice and professional experience. See Standard 10. Appendix 12C (optional) outlines IPPE activities by program year, the role of simulation in IPPEs, and the balance between community and institutional settings.

In the first three years, time is allotted weekly for practicum or laboratory sessions and IPPEs that facilitate student development of skills necessary for the practice of pharmacy. Practicum sessions are allotted to specific courses and to the cross-course Case Conference series. In the P2 and P3 years, integrated practica sessions are shared by multiple courses, providing opportunities for more complex cases. A description of the progressive development and maturation of the knowledge, skills, abilities, attitudes, and behaviors threaded through IPPE/APPE experiences is provided in Appendix 12D (required), with greater detail provided in the Experiential Learning Program Manual for students (Appendix 12E, optional).

# The Pharmacist Interaction Tracking Tool (PITT Form)

The PITT Form, a PittPharmacy faculty innovation, is a data collection tool for capturing student-patient interactions in any setting including simulation, clinical practice, standardized patients, or case work and to document the disease state of the patient, the setting in which the interaction takes place, the intervention recommended, and action(s) taken. As a result, the PITT Form provides individual and aggregate data on achievements and direct assessment of number of patients, spectrum of disease states, and patient care services practiced. The PITT Form is also used in Community Pharmacy 2 for students to "bill" for a grade using ICD 9 codes built into the form.

## **Interprofessional Education**

Interprofessional education is woven throughout the didactic courses; students gain experience with interprofessional practice and communications through IPPEs. Standardized colleagues are also a mechanism through which students practice and are assessed on the effectiveness of their contributions as a member of a health care team. See Standard 11 for a detailed description of the interprofessional curriculum and Appendix 12F (optional) for details for interprofessional experiences.

In the P1 year, students build foundational knowledge in the pharmaceutical sciences and principles of practice. Anatomy and Physiology frames and develops the concepts of cellular physiology, organ-system specific anatomy, and physiology. Biochemistry, Principles of Drug Action, and drug development courses introduce concepts in pharmacology, pharmacokinetics, drug discovery, pharmaceutical analysis, biotechnology, and gene therapy. Pharmacist Patient Care Process 1 and 2 introduce students to the profession of pharmacy and the behavioral, social, and administrative sciences needed to provide direct patient care. They learn the principles of drug literature and patient care and apply the skills to a series of cases, to themselves as their own "first patient," then to standardized patients, and finally to actual patients in the community.

IPPEs are embedded in Community Health 1 and 2 (Appendix 12G, required), through which students begin developing the professional responsibility to meet the fundamental health care needs of diverse populations. Linking their experiences to "Healthy People 2020" and gaining an understanding of the social determinants of health are key elements.

<u>SilverScripts</u>. SilverScripts is an experience that spans the P1 and P2 years and represents a "classroom in the community." Senior center partners include seven Pittsburgh CitiParks Senior Community Centers, three LifeSpan Community Centers, one retirement living facility, and many others. The objectives of SilverScripts is for students to:

- 1. practice pharmacist patient care skills that include establishing relationships, identifying drug-related needs, and documenting care on the PITT Form.
- 2. demonstrate effective communication skills. Students develop physician letters describing potential solutions to drug-related problems identified during their interactions.
- 3. develop professional identity.

P1 students provide care (precepted) to seniors in the spring term during a two-hour initial visit; they develop a plan for the next interaction with the patient at a two-hour follow-up visit two weeks later. In the P2 year, students see the same seniors in the fall term; P2 students transfer their individual patients to specific P1 students the next spring.

<u>APPRISE.</u> Through a partnership with APPRISE, a free health insurance counseling program designed to help older Pennsylvanians with Medicare, all P1 students complete a four-session primer on prescription benefits associated with Medicare Part D and other federal and state benefits. Forty P1 students move on to earn IPPE hours at APPRISE, where they assist Pennsylvania seniors in selecting the optimum benefit plan (with supervision). APPRISE is also a site for elective APPEs.

The program is also an example of student feedback and the PittPharmacy evolving curriculum. Initially, APPRISE was only an IPPE for selected students. Recognizing the critical importance of accessing medications, didactic content became required for all P1 students and the number of students placed in this IPPE increased.

# P2

P2 courses expand on the science and practice foundations and are highly integrated horizontally. In drug development courses, students develop knowledge and skills in pharmacokinetics and dosage forms. The infectious disease, cardiology, and gastrointestinal therapeutic modules incorporate biomedical, pharmaceutical sciences, and practice concepts. Community Pharmacist Practice 1 and 2 expand professional behaviors with development of skills in self-care and management. See syllabi in Appendix 12H (required).

The deliberate focus of the IPPEs embedded in Community Pharmacist Practice 1 and 2 is on the steps to implement direct patient care practices in the community. Students practice patient interviewing skills and patient care documentation regarding patient assessment and therapy recommendations. Students work with community pharmacist preceptors while completing patient-care focused assignments and community outreach projects. Reflections and small group discussions allow students to consolidate their learning.

In Community Pharmacist Practice 2, four eight-hour workshop days replicate national meetings with keynote speakers who are influential leaders in pharmacy practice, small group reflection/discussion, and skills-based mini-workshops. The workshops focus on innovation, leadership, and practice within community pharmacy. CE is provided to pharmacist attendees.

Students complete community IPPE experiences in eight-hour days. Using the PITT Form, students aggregate their patient care experiences to reveal the collective impact on population health. As described in Standard 9, students won the NACDS Foundation Million Hearts Campaign in 2013, the AACP Script Your Future National Award in 2015 and 2016, and the Pennsylvania Pharmacists Association Good Government Award in 2014.

These P1 and P2 courses and experiences develop professionalism and leadership as well as the sense of responsibility for patients and becoming patient advocates and educators.

# Р3

In the P3 year, the complexity of patient care increases with cases that include multiple drug-related problems and incorporate foundational science principles with complex drug therapies and drug interactions. Computer-assisted learning cases in vpSim allow students to develop their clinical decision-making skills, which they then apply to real patients in health-system settings through experiential learning. The P3 year further integrates science and practice in organ-based therapeutic modules. Population Health & Management and Safe Medication Use & Pharmacoeconomics provide deeper understanding of the US health care delivery system and management of drug utilization. Professional electives allow students to personalize their learning.

IPPEs embedded in Health System Pharmacy 1 and 2 (Appendix 12I, optional) focus on practice in institutional/healthsystem settings. Students apply principles of medication management and participate in direct patient care and other specialized areas of health-system practice in the institutional setting.

# Simulation

Though only 60 hours of simulation are included as IPPEs (Appendix 12J, required), PittPharmacy faculty have extensively integrated simulations for learning and formative assessments throughout the P1, P2, and P3 years to stimulate, deepen, and reinforce curricular outcomes prior to APPE. Human patient simulators, standardized patients and colleagues, virtual patients, telephonic patient and physician interactions, and applications of the simulated electronic health record are incorporated across the pre-APPE curriculum. An index of publications (2006 to 2016) by PittPharmacy faculty related to simulation is included in Appendix 12K (optional). An inventory of simulation as a teaching strategy across the curriculum is in Appendix 12L (optional).

# **Affective Domain Skills**

Learning within the affective domains of self-awareness, professionalism, leadership, and communication is fostered in curricular and extracurricular experiences. As described in the Standard 4 narrative and associated appendices, PittPharmacy has an exceptionally robust array of purposefully developed experiences with assessment strategies to document the competency of individual students' power skills in the affective domain.

In addition to the above-mentioned Community Health and Community Pharmacist Practice series, the Emerging Professional course guides students as they develop their professional identities, identify their strengths and personality characteristics, learn their roles in group interactions, learn to give and receive feedback, and develop the foundation for ethical decision making consistent with the expectations and trust placed upon pharmacists. The course ends with an essay on "How I Will Personalize My Education" and small group discussions with the dean.

Ongoing assessment of IPPE and APPE preceptors is discussed in Standard 13.

# Evaluation

IPPE evaluation tools for students and preceptors are attached in Appendix 12M (required); 100 percent of students earned satisfactory or honors (22 percent honors) in 188 student IPPEs evaluated in 2014-15 (Appendix 12N, required). 92 percent scored beginning competence or higher on the PittPharmacy Outcomes, with over 65 percent rated at intermediate competence or proficient.

# Impact by the Numbers

Collated student PITT Form data are included in Appendix 12O (required). The "by the numbers" impact of PittPharmacy students tells a remarkable story. Data from 2015-16 include:

- SilverScripts (P1): Students provided care to over **400** seniors and completed 151 comprehensive medication reviews and 13 targeted medication reviews, identified 189 drug therapy problems, made 63 vaccination referrals, did 252 blood pressure assessments, and referred 39 for care.
- Pharmacist Patient Care Process 1, 2: P1 students learn to extract patient information from the electronic health record and create a problem list in the health-system setting. Of 87 patient whose charts were reviewed, 37 percent were age ≥ 60; 90 percent were taking ≥ 5 medications.
- Community Pharmacist Practice 2: 113 P2 students completed the Pennsylvania Pharmacist Care Network Medication Therapy Management training and cared for **4,593** patients at 79 community pharmacies. The course provides the context for PittPharmacy students to engage in national initiatives and competitions that develop power skills. Students have won the national award for "*Script Your Future*" two times, the Million Hearts Campaign, and have participated in APhA's *Operation Immunization*, and the CDC's *Get Smart: Know When Antibiotics Work* program. See Appendix 12P (optional) for additional experiences to develop the affective domain.
- Health-System Pharmacy 1, 2: P3 students (2014-15) documented interactions for **1,093** patients; 64 percent were > 60 years of age. Of the encounters, 61 percent were initiated by the pharmacist/student; 72 percent were

direct patient/caregiver interactions. Many hospital sites were implementing medication reconciliation processes (The Joint Commission<sup>®</sup> National Patient Safety Goals). Medication reconciliation accounted for 42 percent of student- documented encounters. Drug-related problems were identified in 58 percent; 38 percent needed a change in therapy. Notably, **74 percent of the recommended interventions were accepted.** 

## **Preceptor Training**

Preceptor training materials are provided for IPPE and APPE preceptors as shown in Appendices 12Q (required) and 12R (optional). Further details are provided in Standard 13 and Appendix 12S (optional).

## Notable

PittPharmacy has five notable practices incorporated into the pre-APPE Curriculum.

- The PITT Form documentation of patient interactions is notable. Faculty and staff have access to an individual student's PITT Form data that documents interactions with diverse patient populations as related to age, gender, race, ethnicity, socioeconomic factors and disease states. Students can acces their own data; students (and faculty and staff) access aggregate data for data analysis and assessment of impact on patient care as a class.
- SilverScripts, which has been a part of the curriculum for twelve years, is a deliberate strategy to engage students with older adults in the community.
- Community Pharmacist Practice 2, with its four eight-hour workshop days, replicates national association meetings with keynote speakers who are influential leaders in pharmacy practice, small group reflection/discussion, and skills based mini-workshops.
- The APPRISE partnership is notable for giving P1 students the unique opportunity to guide seniors in selecting and optimizing their Medicare Part D and other prescription benefits.
- The extensive use of simulation throughout the PittPharmacy curriculum.
- 4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box 🗹:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <i>/or</i></li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated /or</li> <li>Adequate information was not provided to assess compliance</li> </ul>

	factors and will bring the program into full compliance.		
☑ Compliant	Compliant with Monitoring	Partially Compliant	□ Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) APPENDICES

Appendix	File Name
12A	NEW Description of Curricular and Degree Requirements.pdf
12B	Faculty Teaching Commitments PharmD Program.pdf
12C	IPPE Program Hours 2015-16.pdf
12D	Overview of Experiential Learning Program 2016.pdf
12E	EL Student Manual 2016.pdf
12F	Summary of Interprofessional Learning Activities.pdf
12G	Community Health 1 and 2 Syllabi.pdf
12H	Community Pharmacy Practice 1 and 2 Syllabi.pdf
121	Health System Pharm 5312 Final Syllabus v9.Aug2015.pdf
12J	IPPE Simulation and Experience Hrs 2015-16.pdf
12K	PittPharmacy Faculty Publications Related to Simulation.pdf
12L	Compiled Simulation Inventory.pdf
12M	IPPE Evaluation Tools for Students and Preceptors.pdf
12N	Aggregate IPPE Student Performance 2014-15.pdf
120	Collated Pitt Form Data.pdf
12P	Additional Description of Community Pharmacy Practice Co-curriculum.pdf
12Q	CPP2 Preceptor Manual 2016 Final.pdf
12R	Preceptor Training and Educational Opportunities 2016.pdf
12S	EL Preceptor Manual 2016.pdf
12T	Curricular Map-Core Courses by Appendix 1 Keywords.pdf
12U	Co-curriculum map.pdf
12V	Readiness Assessment Results.pdf
12W	IPPE Exp Learning Assignments 2015 2016 year.2015.pdf
12X	CPP2 Student Manual Final 2015-16.pdf
12Y	P3 Manual 2015-16 final july2015.pdf

<u>Standard No. 13: Advanced Pharmacy Practice Experience (APPE) Curriculum:</u> A continuum of required and elective APPEs is of the scope, intensity, and duration required to support the achievement of the Educational Outcomes articulated in Standards 1–4 and within Appendix 2 to prepare practice-ready graduates. APPEs integrate, apply, reinforce, and advance the knowledge, skills, attitudes, abilities, and behaviors developed in the Pre-APPE curriculum and in co-curricular activities.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ The objectives for each introductory and advanced pharmacy practice experience with the responsibilities of the student, preceptor, and site, as applicable
- A map/crosswalk of all advanced pharmacy practice experiences against the activities listed in Appendix 2 of the Standards. (Note: Each practice experience should be mapped to the activities listed and the map should demonstrate that students' experiences will cover all the activities. The list of activities mapped, however, can include activities not specifically listed in Appendix 2.)
- ☑ Overview of APPE curriculum (duration, types of required and elective rotations, etc.)
- Advanced pharmacy practice experience course syllabi including general and experience-specific learning objectives
- ☑ Advanced pharmacy practice experience student and preceptor manuals
- Advanced pharmacy practice experience student and preceptor assessment tools
- ☑ Preceptor recruitment and training manuals and/or programs
- Student advanced pharmacy practice experience evaluation data documenting extent of exposure to diverse patient populations and interprofessional, team-based patient care
- ☑ Outcome assessment data summarizing students' overall achievement of advanced pharmacy practice experience educational outcomes

## **Required Documentation for On-Site Review:**

I List of current preceptors with details of credentials (including licensure) and practice site

## Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Student Questions 37–-46
- AACP Standardized Survey: Alumni Questions 21, 25

#### **Optional Documentation and Data:**

Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include assessments and documentation of student performance, nature and extent of patient and health care professional interactions, and the attainment of desired outcomes; aggregate data from students about the type (diversity) and number of patients, problems encountered, and interventions; evidence of assuring, measuring, and maintaining the quality of site used for practice experiences; and quality improvements resulting from practice site assessments.

2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>13.1. Patient care emphasis</b> – Collectively, APPEs emphasize continuity of care and incorporate acute, chronic, and wellness-promoting patient-care services in outpatient (community/ambulatory care) and inpatient (hospital/health system) settings.	0	0	0
<b>13.2. Diverse populations</b> – In the aggregate, APPEs expose students to diverse patient populations as related to age, gender, race/ethnicity, socioeconomic factors (e.g., rural/urban, poverty/affluence), and disease states)	0	0	0
<b>13.3. Interprofessional experiences</b> – In the aggregate, students gain in-depth experience in delivering direct patient care as part of an interprofessional team.	0	0	0
<b>13.4. APPE duration</b> – The curriculum includes no less than 36 weeks (1440 hours) of APPE. All students are exposed to a minimum of 160 hours in each required APPE area. The majority of APPE is focused on direct patient care.	0	0	0
<b>13.5. Timing</b> – APPEs follow successful completion of all IPPE and required didactic curricular content. Required capstone courses or activities that provide opportunity for additional professional growth and insight are allowed during or after completion of APPEs. These activities do not compromise the quality of the APPEs, nor count toward the required 1440 hours of APPE.	0	0	0
<b>13.6. Required APPE</b> – Required APPEs occur in four practice settings: (1) community pharmacy; (2) ambulatory patient care; (3) hospital/health system pharmacy; and (4) inpatient general medicine patient care.	0	0	0
<ul> <li>13.7. Elective APPE – Elective APPEs are structured to give students the opportunity to: (1) mature professionally,</li> <li>(2) secure the breadth and depth of experiences needed to achieve the Educational Outcomes articulated in Standards 1–4, and (3) explore various sectors of practice.</li> </ul>	0	0	0
<b>13.8. Geographic restrictions</b> – Required APPEs are completed in the United States or its territories or possessions. All quality assurance expectations for U.Sbased experiential education courses apply to elective APPEs offered outside of the U.S.	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - How student performance is assessed and documented, including the nature and extent of patient and health care professional interactions, and the attainment of desired outcomes
  - How, in aggregate, the practice experiences assure that students have direct interactions with diverse patient populations in a variety of health care settings
  - How the college or school ensures that students' advanced pharmacy practice experience hours fulfill the required four practice settings
  - How the college or school provides students' an in-depth experience in delivering direct patient care as part of an interprofessional team
  - How the college or school provides students with elective advances practice pharmacy experiences that allow students the opportunity to mature professionally, meet the educational outcomes articulated in Standards 1-4, and explore a variety of practice sectors
  - Below the college or school establishes objectives and criteria to distinguish introductory from advanced practice experiences.
  - If How the college or schools assures, measures, and maintains the quality of sites used for practice experiences
  - I How quality improvements are made based on assessment data from practice sites
  - How the goals and outcomes for each pharmacy practice experience are mapped to the activities listed in Appendix 2 of Standards 2016 to ensure that students' experience will cover, at a minimum, all the listed activities

- How the college or school is applying the guidelines for this standard, and the additional guidance provided in Appendix 2, in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements
- ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

The PittPharmacy APPE curriculum spans the P4 year and provides a continuum of required and elective individualized pharmacy practice experiences. Appendix 13A (required) provides master syllabi for the APPE core learning experiences. Appendix 13B (required) provides the P4 rotation sequencing overview and description and the student orientation handout. The P4 APPE experiences (1440 hours) are cross walked to curricular outcomes in the **Curricular Map (see Standard 10)**. Pitt Pharmacy has executed an Affiliation Agreement with 100 percent of the APPE sites using either the university-authored agreement (Appendix 13C, optional) or the site-specific agreement.

In 2015-16, PittPharmacy engaged 239 unique sites for APPE rotations where 341 preceptors provided a total of 782 APPE rotations. For each APPE rotation, a site description is posted in the E\*Value system, available at <u>https://www.e-value.net/home-main.cfm</u>, to aid students in selecting their experiences. In addition, a Site Description Form is submitted by each site upon initiation of their association with the School and is used to describe the practice site, populations served, disease states of focus, and interprofessional collaboration opportunity (Appendix 13D, optional). The effectiveness of the site selection process is shown in the 2015 AACP Graduating Student Survey. Students strongly agreed/agreed (PittPharmacy, national, peer) that APPEs:

- provide opportunities for students to have direct interaction with diverse populations: 100.0, 98.2, and 97.5 percent.
- Enabled collaboration with other health care professionals 86.5,79.3, and 80.5 percent.

Additionally, in the 2015 AACP Alumni Survey, 97.5 percent of PittPharmacy alumni strongly agreed/agreed that the School provides an adequate number and mix of practice facilities for experiential rotations (compared to 91.4 percent and 92.2 percent for national and peer schools, respectively.)

To ensure that all students have an equal opportunity to schedule desired APPE rotations and that the ACPE APPE requirements are fulfilled, students are matched with requested APPE sites/preceptors through an electronic matching "optimization" process administered within E\*Value. This takes place in the spring semester of the P3 year. Students indicate their preferences for APPE sites, and then the E\*Value program runs an algorithm to match students with their preferences. The experiential learning director and associate director advise students on APPE selection. Other faculty also advise students regarding rotation choices to help them "get to expert faster" and align with career aspirations. In 2015-16, 97 percent of APPE rotations assigned to students were from their top five choices in each rotation category.

Embedded in this selection process is the requirement that each student chooses a core APPE in each of the following practice settings: community pharmacy; ambulatory patient care; hospital/health-system pharmacy; and inpatient acute care. PittPharmacy also requires students to select an additional rotation in either ambulatory patient care or inpatient acute care. In the P4 year, students complete seven APPE rotations, comprising 36 weeks, with each rotation being five weeks (200 hours) in length except for the first rotation, which is six weeks (240 hours) long. Appendix E (optional) lists the P4 APPE sites and preceptors. Course syllabi contain specific objectives for each rotation, preceptor responsibilities,

and core assignments that the student must complete. Core rotations are completed in the United States. Students must complete two elective rotations to further personalize their education, as described below. In the 2015 AACP Graduating Student Survey, 96.7 percent of students strongly agreed/agreed that APPE site assignments are fair (compared to 89.2 and 90.6 percent for national and peer schools, respectively).

# Site Evaluation and Quality Improvement

Sites and preceptors are evaluated by students at rotation completion (Appendix 13F, required). Students also attend one group debriefing session to discuss notable accomplishments and challenges regarding experiential learning sites. Sites are also evaluated during site visits. Preceptors are interviewed to assess student engagement, preceptor enthusiasm, and site readiness for students. Information gathered from these visits is used for quality improvement purposes.

In the 2015 AACP Preceptor Survey, preceptors strongly agreed/agreed (PittPharmacy, national, peer) that:

- responsibilities of the student have been defined at my site: 98.2, 98.0, and 98.4 percent.
- responsibilities as a preceptor have been defined at my site: 98.6, 96.3, and 94.6 percent.
- assessment tools provided to me are suitable for measuring student performance: 90.7, 92.0, and 89.3 percent.

Ongoing assessment of sites and the longitudinal, progressive development of the overall experiential learning program is provided by the Experiential Learning Committee, which is composed of course coordinators for IPPE courses; the director and associate and assistant directors of experiential learning; and two student representatives from each professional year. The Committee establishes preceptor and site standards, reviews evaluative data, and coordinates and reviews all aspects of the experiential learning program. Committee members provide feedback for the purpose of improvements directly to the site preceptor. The Experiential Learning Committee makes programmatic recommendations to the Curriculum Committee. Additional explanation of site quality improvements and actions is provided in Standard 22.

# **Student Evaluation**

Students are required to complete specific assignments for APPE rotations that demonstrate patient care interactions, as well as experiences including case presentations, drug information questions, and participation at interprofessional meetings. These requirements are detailed on the APPE syllabi (Appendix 13A, required). Students have access to the online Experiential Learning Program Manual and the E\*Value Rotation Management System. For further details, see Appendix 13G (required).

Students complete a mastery scale at the end of each semester of the P1, P2, and P3 years and also at conclusion of the P4 year as a summation of the achievement of curricular outcomes. APPE preceptors complete the P4 Preceptor Evaluation of the Pharmacy Student (Appendix 13H, required), which incorporates the mastery scale, at the midpoint for feedback to students and endpoint of each APPE.

The graphs in Appendix 13I (optional) demonstrate the progression of mastery of knowledge, skills, and attitudes identified in the curricular outcomes through the four years. Also, the graph in Appendix 13J (optional) shows the overlay of preceptor assessment of mastery on the same scale. The congruence of preceptor and student mastery assessments

show the high degree of student self awareness. The high achievements of master of curriculum outcomes through APPEs, as shown in preceptor and student evaluations, has been remarkably consistent over the last five years.

Preceptors evaluated 740 APPE student experiences for 2014-2015 (Appendix 13K, required); 99.7 percent were satisfactory or above and of those, 40 percent were honors. The two unsatisfactory experiences were successfully remediated using a learning plan personalized for the student through collaboration with a specifically-selected preceptor and the experiential learning director.

As an example of progression of knowledge, skills, and attitudes, over 95 percent of students scored intermediate competence (IC) or proficient (P) in practice outcomes using the PittPharmacy Mastery Scale at the end of the P4 year compared to 65 percent at the end of their P3 year. An example of one student's experiences (class of 2016) during two rotations is shown in: <a href="https://ryanwinsteadrotationdata.wordpress.com/">https://ryanwinsteadrotationdata.wordpress.com/</a>

# Direct Patient Care Focus

Students use the PITT Form (see Standard 12) to document their daily patient care activities in the P4 year. Students are required to report at least 25 patient interactions in each of their required rotations. The summary of PITT Form data for all students (Appendix 13L, required) demonstrates the extent of direct care interventions, interprofessional interactions, and diverse population interactions in 18,114 patients.

- Patients were 69 percent Caucasian, 20 percent African-American, 5 percent American Indian, and remainder Asian, Latino or other ethnic background;
- Patient's primary indications were infectious disease (12 percent), diabetes (11 percent), anticoagulation (7 percent), and pain (5 percent) primary indications, with secondary indications of hypertension (48 percent), hyperlipidemia (29 percent), and GI disorders (22 percent.)
- 70 percent of patients were receiving <a>5 or more medications daily;</a>
- 65 percent of patients had drug-related problems identified, with 61 percent necessitating a change in therapy;
- Provider communication was in-person (49 percent) and via the electronic health record (35 percent);
- 98 percent of patient communication was verbal.

# Interprofessional Experiences

PittPharmacy is committed to providing students with in-depth experiences in delivering direct patient care in the interprofessional team setting. A specific query of student self-assessment of mastery for interprofessional team interactions shows growth from "awareness" in the P1 year to the transition to "proficient" in the P4 year using the PittPharmacy Mastery Scale. Eighty-two percent of students gave a self-rating of "proficient" for interprofessional interaction; preceptors rated 70 percent of students as proficient.

In the 2015 AACP Graduating Student Survey, students strongly agreed/agreed (PittPharmacy, national, peer; underscore is highest) that:

- the PharmD program prepared them to work with the healthcare team to implement patient care plan: 96.7, 94.7, and 91.6 percent.
- APPEs allowed them to collaborate with other healthcare professionals: 100.0, 98.0, and 97.0 percent.

# Electives

Students are able to select two elective rotations from a rich array of elective APPE opportunities (Appendix 13M, optional) based on their learning and career interests. Local, regional, national, and international experiences include but are not limited to underserved, rural, specialty pharmacy, managed care, long-term care, industry, government and academic environments. International and global health pharmacy sites are available for students in Australia, Malawi, China, Italy, Ireland, Honduras, and United Kingdom. Students also have opportunity to select research, regulatory, quality, and association management experiences, as well as rotations at the APPRISE Program (<u>http://olderadults.fswp.org/apprise-services</u>), Food and Drug Administration, and Pharmacy Quality Alliance.

# In the 2015 AACP Graduating Student Survey, students strongly agreed/agreed (PittPharmacy, national, peer) that:

- APPE electives met student needs: 93.4, 89.7, and 91.8 percent.
- APPEs were valuable in achieving student's professional competencies: 97.8, 96.9 and 95.4 percent.

## **Preceptor Development**

Preceptors receive online access to the APPE Preceptor and Faculty Manual(Appendix 13N, required). PittPharmacy uses the NACDS/APhA Community Pharmacy Preceptor Education Program as the recommended training for new preceptors. This program, endorsed nationally, is available at

<u>https://www.ascp.com/sites/default/files/PreceptorCEProgramNACDS.pdf</u>. Preceptors will be alerted to a new certificate program available for preceptor training from the American Society of Health-System Pharmacists (ASHP) in summer 2016.

In summer 2016, preceptors were invited to participate in an internally-developed online preceptor development curriculum, which provides content on the PittPharmacy mission and values, ACPE standards, preceptor roles and responsibilities, evaluation process, and effective motivation and teaching methods. Appendices 130 – 13P (required) shows example content. Preceptors are invited to on-site educational programs hosted by PittPharmacy and are provided free access to more than 200 continuing education programs

(<u>https://www.pharmacy.pitt.edu/Programs/ELP/resources.php</u>.) A list of preceptor training and educational opportunities is provided in Appendix 13Q (required).

## Survey Data

In the 2015 AACP Graduating Student Survey, students strongly agreed/agreed (PittPharmacy, national, peer) that:

- Students are able to retrieve and use evidence-based information: 89.3, 71.9, and 58.4 percent.
- Students are able to apply patient care skills in the community setting: 92.4, 94.4 and 91.4 percent.
- Students are able to apply patient care skills in the ambulatory care setting: 97.8, 95.4, and 94.6 percent.
- Students are able to apply patient care skills in the acute care setting: 97.8, 95.9, and 94.5\_percent.

# Notable

- The depth and breadth of student required and elective learning experiences combined with the availability of geographic and patient care diversity in the APPE sites is extraordinary.
- The efficient management of the process that permits students to personalize their education while meeting all curricular outcomes is a tribute to the faculty, staff, and administration's commitment to value-added experiences.

4) **College or School's Final Self-Evaluation:** Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box  $\square$ :

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) APPENDICES

Appendix	File Name
13A	P4 Required APPE Master syllabus Condensed 2016.pdf
13B	Overview of Experiential Learning Program 2016 and Orientation Handout.pdf
13C	Affiliation Agreement-updated-1-4-16.pdf
13D	Site Description Form 5-11.pdf
13E	2015-2016 All-Preceptors.pdf
13F	P4 Student Evaluation of Preceptor Form.pdf
13G	EL Student Manual 2016.pdf
13H	P4 Preceptor Evaluation of the Pharmacy Student EVALUE-10-12-12.pdf
131	Class of 2016 Mastery Assessment 2012-16.pdf
13J	Class of 2016 Mastery Assessment.pdf
13K	2014-15 APPE Assessment Summary.pdf
13L	APPE Exposure Data (Pitt Form) 2015-16.pdf
13M	APPE Opportunities.pdf
13N	EL Preceptor Manual 2016.pdf
130	Preceptor development Module 1.pdf
13P	Preceptor development module 3_evaluation.pdf
13Q	Preceptor Training and Educational Opportunities 2016.pdf
13R	Community Health 1 Fall 5112 Final Syllabus2015 (4).pdf
13S	Community Health II PHARMACY 5113 Syllabus Spring 2016 update.pdf
13T	Community Pharmacy Prac 1 5212 Final Syllabus_8_20(3).pdf
13U	CPP2 syllabus 2016 FINAL.pdf
13V	Health System Pharm 5312 Final Syllabus v9.Aug2015.pdf
13W	Curricular Map-Core Courses by Curricular Outcomes.pdf

	13X	Curricular Map-Electives by Curricular Outcomes.pdf
ſ	13Y	Curricular Map-Core Courses by Appendix 1 Keywords.pdf
	13Z	Curricular Map-Electives by Appendix 1 Keywords.pdf

# Subsection IIC: Students

<u>Standard No. 14: Student Services</u>: The college or school has an appropriately staffed and resourced organizational element dedicated to providing a comprehensive range of services that promote student success and well-being.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ Synopsis of the Curriculum Vitae of the student affairs administrative officer
- An organizational chart depicting student services and the corresponding responsible person(s)
- Student Handbook and/or Catalog (college, school or university), and copies of additional information distributed to students regarding student service elements (financial aid, health insurance, etc.)
- ☑ Copies of policies that ensure nondiscrimination and access to allowed disability accommodations
- Student feedback on the college/school's self-study

#### **Required Documentation for On-Site Review:**

☑ The Student Handbook

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Student Questions 47-51, 53, 57, 58
- AACP Standardized Survey: Alumni Question 23
- AACP Standardized Survey: Preceptor Question 13

#### **Optional Documentation and Data:**

- ☑ Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include documents used for student orientation, guidance and counseling.
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>14.1. FERPA</b> – The college or school has an ordered, accurate, and secure system of student records in compliance with the Family Educational Rights and Privacy Act (FERPA). Student services personnel and faculty are knowledgeable regarding FERPA law and its practices.		0	0
<b>14.2. Financial aid</b> – The college or school provides students with financial aid information and guidance by appropriately trained personnel.	0	0	0

**14.3. Healthcare** – The college or school offers students access to adequate health and counseling services. Appropriate immunization standards are established, along with the means to ensure that such standards are satisfied.

00

0 0

 $\bigcirc \bigcirc \bigcirc \bigcirc$ 

 $\bigcirc \bigcirc \bigcirc \bigcirc$ 

 $\bigcirc \bigcirc \bigcirc \bigcirc$ 

**14.4.** Advising – The college or school provides academic advising, curricular and career-pathway counseling, and information on post-graduate education and training opportunities adequate to meet the needs of its students.

**14.5.** Nondiscrimination – The college or school establishes and implements student service policies that ensure nondiscrimination as defined by state and federal laws and regulations.

**14.6. Disability accommodation** – The college or school provides accommodations to students with documented disabilities that are determined by the university Disability Office (or equivalent) to be reasonable, and provides support to faculty in accommodating disabled students.

**14.7. Student services access**\* – The college or school offering multiple professional degree programs (e.g., PharmD/MPH) or pathways (campus and distance pathways) ensures that all students have equitable access to a comparable system of individualized student services (e.g., tutorial support, faculty advising, counseling, etc.).

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - A description of student services offered and, if applicable, how the college or school ensures that students in all degree program pathways and geographic locations have equal access to and a comparable system of individualized student services (e.g., tutorial support, faculty advising, counseling)
  - A description of the sections of the student handbook that deal with specific requirements of the standard and guidelines
  - How the college or school provides students with financial aid information and guidance, academic advising, career-pathway and other personal counseling, and information about post-graduate education and training opportunities
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Student Services**

PittPharmacy students have access to robust services within both the School and University. The University has extensive student services, including financial aid, health services, disability resources and services, counseling, campus safety, housing, and wellness programs (Appendix 14A, required). The School's John P. and Constance A. Curran Center for Pharmacy Students (Curran Center) is located on the ninth floor of Salk Hall. The faculty and staff of the Curran Center work with PharmD and graduate students to support their academic and personal needs while attending PittPharmacy. Recruitment, admitting, experiential learning, financial aid, academic support, advising, registration, and support for student-led organizations are examples of functions coordinated through the Curran Center.

Responsibilities of the assistant dean for students and the organizational chart for Student Services are shown in Appendices 14B (required) and 14C (required), respectively. The assistant dean is responsible for assisting students in handling academic and personal issues, leading content development and design of orientation programs, recommending student-related policy changes to the Leadership Team, and reporting actions and progress on student-

related Long-Range Plan goals to the Leadership Team. The director of student services oversees the day-to-day operations and achievement of goals of the Curran Center.

# Family Educational Rights and Privacy Act (FERPA)

All faculty and staff of the Curran Center are trained and knowledgeable of FERPA and comply with its requirements. The University policy on FERPA is provided in Appendix 14D (required). PeopleSoft Campus Solutions, the student information management system, is used University-wide. Additionally, Curran Center staff review and sign an affidavit affirming that they understand the University Customer Information Security Plan, inclusive of processes to assure student information confidentiality (Appendix 14E, required). Prior to the start of classes, entering P1 students participate in a two-day orientation to the School. Among items addressed during orientation is an explanation of FERPA. During orientation, P1 students sign a form allowing or refusing limited release of information (name, address and photo); FERPA is readdressed at the beginning of each subsequent fall semester, when student signatures are again required.

# **Financial Aid**

A dedicated Curran Center staff member and a professionally trained member of the University's Office of Admissions and Financial Aid (OAFA) serve as liaisons between the School and University to support students' financial aid information and access needs. Additionally, basic information on financial aid is provided in the PharmD Student Handbook (see list of links for this standard in Appendix 14A, required). The handbook has links to OAFA information. All students receive financial aid information as part of the initial admissions information packet.

Within the Curran Center, staff are also responsible for communicating to students the availability of scholarships available exclusively through PittPharmacy; staff process scholarship applications and provide the School's Scholarship Committee with data to inform the allocation of scholarship funds to specific students. The list of available scholarships and the application form are available in the PharmD Student Handbook and are posted on the student portal (i.e., PoRxtal). In 2014-15, 231 scholarships totaling \$479,700 were awarded to 191 PharmD students. As external scholarship opportunities become known, information is circulated to students through email listservs and is posted on the PoRxtal.

# **Health Care**

PittPharmacy students have access to the University's Student Health Service, which includes an outpatient clinic with an array of medical services, a full-service pharmacy, and robust health education programming including stress management and other types of counseling. When needed, Curran Center staff facilitate student access. The PharmD Student Handbook provides links to available services.

When students are off-campus for experiential learning, they must be familiar with their personal insurance policies and provisions for care and coverage. The University of Pittsburgh/UPMC Student Health Plan is an optional program that a student may select if the student's health insurance does not provide appropriate coverage in Pittsburgh. Additionally, students must provide evidence of and maintain personal medical insurance coverage at all times while at experiential training sites. Student responsibility with regard to injury or accidents is defined in the informed consent they sign each year for participation in the School's experiential learning program. Also, Curran Center staff ensure that all documentation necessary for student participation in the experiential learning program is current and that students

have signed releases to enable staff to communicate that information to preceptors. The School's immunization policy is provided in Appendix 14F (required) and in the PharmD Student Handbook.

# **Advising and Career Mentoring**

Five specific strategies used to guide students as they personalize their education to prepare for success in their chosen professional paths are described below: portfolio reviews, Career Learning and Advising Group Mentors, Areas of Concentration and other affinity groups, career pathway learning opportunities that are curricular and extracurricular, and skill development for postgraduate success. Over the past 15 years, PittPharmacy has had a series of types of student advising programs and arrived at the current multipronged approach in response to direct student input through the Dean's Advisory Board, "Conversation with the Dean," and data from AACP and University surveys of graduating students.

<u>Portfolios.</u> As described in Standards 4 and 24, students develop portfolios as a means of capturing and monitoring their own reflections on personal growth and professional development. Each semester, each student has a private meeting with a faculty member or resident to discuss their portfolio entries, career planning, academic progression, mastery of skills, and achievement of learning outcomes. During these sessions, students and faculty are encouraged to talk not only about the portfolio, but to identify any additional advising and career planning needs. For portfolio reviews in the P3 year, each student is matched to a resident, pharmacist, or employer from the student's area of interest.

<u>Career Learning and Advising Group Mentors.</u> Based on student and faculty input, a Career Learning and Advising Group program was implemented beginning with P1 students in spring 2014. A faculty member is assigned as a mentor for a group of six students. Each fall, a new group of six P1 students is added so that the ultimate group size is 18 P1, P2, and P3 students. Groups, which meet a minimum of once every semester, engage in faculty and peer mentoring, advising, and career planning. Student and faculty input on the initial success of this program has been positive and guides the continuous evolution of the program.

<u>ARCOs and Other Affinity Groups.</u> As part of the School's commitment to personalized education, students have opportunities to complete Special Topics elective courses (independent study) with a faculty member and to participate in an area of concentration (ARCO) led by faculty. These course and curricular-based experiences provide a rich opportunity for small group and personal advising and career planning.

<u>Career Pathway Learning Opportunities.</u> Exposure to career pathways has been embedded into the P1 Emerging Professional course. For at least two decades the Pharmacy Alumni Society has collaborated to sponsor Career Roundtables, where alumni and selected current residents meet with small groups of P1 students to provide an inside view of what it is like to work in specific practice roles and environments, including traditional roles, the Public Health Service, specialty pharmacy, managed care, and more. P3 students also experience Career Roundtables prior to selecting APPE rotations. The APhA Career Pathways program and sessions throughout the year include student organizations and organized classroom sessions with speakers sharing their career planning and pharmacy experiences.

<u>Skill Development for Postgraduate Success.</u> PittPharmacy provides additional specific information sessions on postgraduate training including residencies, fellowships, and graduate programs. Through faculty-led sessions and student organized sessions with invited speakers, students consider approaches to facilitate their success in competitive applications, including the residency match. Students have the opportunity to work with faculty on improving their applications and interview skills for these opportunities through mock interviews and curriculum vitae reviews.

In addition to the strategies detailed above, individualized academic counseling and career planning is available through the Curran Center, as well as through student-initiated interactions with faculty and staff.

Evidence that the advising and career mentoring process works takes two forms:

- On the 2015 AACP Graduating Student Survey, 91.5 percent of students strongly agreed/agreed that the School provided information on additional educational opportunities (e.g. residencies, fellowships, graduate school).
- The ASHP residency match rate was 97.5 percent for the 40 participating students in the class of 2016. Two additional students matched for Indian Health Service residencies and four obtained industry fellowships.

## Nondiscrimination

All faculty and staff of the Curran Center adhere to University policies and procedures on nondiscrimination, equal opportunity, and affirmative action. The policy is provided in Appendix 14G (required). A School Diversity and Inclusion Committee was charged by the dean in fall 2015 to enhance and develop recruitment and retention strategies for underrepresented students, including outreach to underrepresented populations in early years of education. A second charge is to foster the development of even more inclusive behaviors and language among faculty, staff, and students. These charges align with current University goals outlined in the University's strategic plan.

On the 2015 AACP Graduating Student Survey, students strongly agreed/agreed that:

- the school is welcoming to students with diverse backgrounds: 95.6, 95.3, and 93.5 percent (PittPharmacy, national, peer).
- "my pharmacy experiences allowed me to have direct interaction with diverse patient populations . . . :" 100.0, 98.2, 97.5 percent (PittPharmacy, national, peer).

# **Disability Accommodation**

All faculty and staff of the Curran Center adhere to the University policies and procedures on disabilities. A recommended statement regarding disabilities for inclusion in course syllabi was unanimously passed by the University's Faculty Assembly in 2001 and has been added to the syllabus template of PittPharmacy courses. Students with disabilities may register with and be evaluated by the University's Disabilities Resource and Services for eligibility for special accommodations. The Disabilities Resource and Services' recommendations are forwarded to relevant course coordinators. The Curran Center secures alternative test-taking facilities and other accommodations for students as recommended by the Disabilities Resource and Services Center (Appendix 14H, required).

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise	<ul> <li>No factors exist that</li></ul>	Factors exist that compromise	• Factors exist that compromise
current compliance; no factors	compromise current	current compliance; an	current compliance; an
exist that, if not addressed, may	compliance; factors exist that,	appropriate plan exists to	appropriate plan to address the
compromise future compliance.	if not addressed, may	address the factors that	factors that compromise

	<ul> <li>Factors exist that compromise current compliance; an appropriate plan exists to</li> </ul>	compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	compliance does not exist or has not yet been initiated <b>/or</b> • Adequate information was not provided to assess compliance
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

# 6) **APPENDICES**

Appendix	File Name		
14A	Links to Student Handbook and Additional Information Provided to Students Regarding Student Service		
	Elements.pdf		
14B	Synopsis of CV of student affairs administrative officer.pdf		
14C	Organization Charge Student Services v2.pdf		
14D	FERPA University Policy.pdf		
14E	Customer information security plan September 2015.pdf		
14F	Immunization Policy.pdf		
14G	Nondiscrimination.pdf		
14H	Disability Statements and Policies.pdf		

Standard No. 15: Academic Environment: The college or school develops, implements, and assesses its policies and procedures that promote student success and well-being.

1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ URL or link to program information on the college or school's website
- ☑ Copy of student complaint policy related to college or school adherence to ACPE standards
- ☑ Number and nature of student complaints related to college or school adherence to ACPE standards (inspection of the file by evaluation teams during site visits)
- ☑ List of committees involving students with names and professional years of current student members
- ☑ College or school's code of conduct (or equivalent) addressing professional behavior

#### **Required Documentation for On-Site Review:**

- ☑ College or school's Catalog
- ☑ Recruitment brochures
- ☑ Student Handbook
- ☑ The Student Complaints File

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Faculty Question 38, 39
- AACP Standardized Survey: Student Questions 52, 55-56, 58, 64-65, 68
- AACP Standardized Survey: Preceptor Questions 11-12

#### **Optional Documentation and Data**

- Other documentation or data that provides supporting evidence of compliance with the standard. Examples of assessment and documentation of student performance, nature and extent of patient and health care professional interactions, and the attainment of desired outcomes; examples of how assessment data has been used to improve student learning and curricular effectiveness
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

		N.I.	U
<b>15.1. Student information</b> – The college or school produces and makes available to enrolled and prospective students updated information of importance, such as governance documents, policies and procedures, handbooks, and catalogs.		0	0
<b>15.2. Complaints policy</b> – The college or school develops, implements, and makes available to students a complaints policy that includes procedures for how students may file complaints within the college or school and		0	0

so directly to ACPE regarding their college or school's adherence to ACPE standards. The college or school aintains a chronological record of such student complaints, including how each complaint was resolved.			
<b>15.3. Student misconduct</b> – The college or school develops and implements policies regarding academic and non- academic misconduct of students that clearly outline the rights and responsibilities of, and ensures due process for, all parties involved.		0	0
<b>15.4. Student representation</b> – The college or school considers student perspectives and includes student representation, where appropriate, on committees, in policy-development bodies, and in assessment and evaluation activities.		0	0
<b>15.5. Distance learning policies</b> * – For colleges and schools offering distance learning opportunities, admissions information clearly explains the conditions and requirements related to distance learning, including full disclosure of any requirements that cannot be completed at a distance.		0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check i to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - I The participation and contribution of students on college or school committees
  - I The organization, empowerment, and implementation of a student government association or council
  - The other methods (e.g., focus groups, meetings with the Dean or other administrators, involvement in self-study activities, review of student complaints) used to gather student perspectives
  - Examples of quality improvements in the college or school that have been made as a result of student representation and perspectives
  - In How the complaint policy is communicated to students
  - ☑ How the college or school handles student misconduct
  - How the college or school provides information regarding distance education opportunities (if applicable)
  - ☑ The number of complaints since the last accreditation visit and the nature of their resolution
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## The PittPharmacy Web site and Student Access to Information

Relevant links to the PittPharmacy Web site and other pertinent information are found in Appendix A (required). Specific links include:

- The PittPharmacy Web site <u>www.pharmacy.pitt.edu.</u>
- The PharmD Student Handbook <u>http://www.pages.pharmacy.pitt.edu/pharmdhandbook/</u>
- The School's Code of Conduct for Students (Appendix 15B, required)
- The University's <u>student conduct expectations and resources</u> (Appendix 15C, optional) are available in the PharmD Student Handbook.
- <u>Guidelines for Professional Attire</u> (Appendix 15D, optional) and <u>Guidelines for Social Media</u> (Appendix 15E, optional) are provided in the Student Handbook.

The PittPharmacy Web site provides an overview of the School and recent news along with quality indicators and information about curricular and training programs offered as well as application links. With collaboration and extensive input from students, a PharmD student portal, known as the PoRxtal, provides a Web page for each class, student organization pages, a resource area with links to forms such as the PITT Form, scholarship applications, the portfolio platform, the student-published Pitt Capsule newsletter, School committees and councils, and other resources. From the link on the PoRxtal, students can access the PharmD Student Handbook, which is also freely accessible from the School's Web site for review and use by prospective and current students.

## Complaints

PittPharmacy maintains guidelines, policies, and procedures for the submission of student grievances (Appendix 15F, required). Specifically included are the procedures for filing grievances regarding student or faculty conduct, academic integrity, and sexual harassment as well as the process for submitting a complaint to ACPE for unresolved issues related to the accreditation standards.

Students' rights to due process and appeal mechanisms align with University policies. Students have access to those policies and procedures, which are also included in the PharmD Student Handbook.

Entering P1 students participate in a two-day orientation to PittPharmacy prior to the start of classes. Through the orientation, students are introduced to PittPharmacy's mission, values, culture of the School and expectations of them consistent with the mission and values. Orientation provides an overview of the curriculum, group learning activities, policies on code of conduct and academic performance policies and other policies and procedures relevant to students, complaint policies and access to personal and professional help. Use of the PharmD student PoRxtal and CourseWeb (Blackboard) are also a part of orientation. A complete schedule of activities from orientation in fall 2015 is provided in Appendix 15G (optional).

During orientation, students individually sign a form certifying that they have been informed of all aspects of the complaint policy. At the beginning of each subsequent year, students are asked to review the policy and sign the form certifying their understanding of the policy. The file of complaints is kept in a secure location in Student Services.

No complaints have been filed since 2008 when the process was instituted.

## **Student Misconduct**

Links to the University's Guidelines on Academic Integrity and Sexual Harassment Policy are embedded in the School's Guidelines for Professional Code of Conduct for Students. Students are also made aware of resources through the Title IX Office at Pitt and the array of educational programs aimed at preventing sexual assaults and harassment, relationship violence, and stalking. <u>http://www.titleix.pitt.edu/</u> Dr. Corey is the Title IX Officer of the School of Pharmacy.

The accompanying procedures for managing violations of the Codes of Conduct are also available through the PharmD Student Handbook and the links provided in Appendix 15H (optional). The Code of Conduct Committee is constructed of faculty, staff, and students with the assistant dean of students serving as an *ex officio* member of this Committee.

During P1 orientation and at the beginning of the P2 and P3 years, students individually sign the form that accompanies the Professional Code of Conduct to certify that they have read, understand, and agree to abide by the Code. At all levels within the School, violations of the Code of Conduct are handled with strict confidentiality between students and faculty with appropriate notification of the assistant dean of students or Chair of the Code of Conduct Committee.

In the 2015 AACP Graduating Student Survey:

• 100 percent strongly agreed/agreed that they were aware of expected behaviors regarding professional and academic conduct. (98.5 and 98.1 percent: national and peer respectively).

The faculty response with respect to misconduct is worthy of comment.

On the 2015 AACP Faculty Survey, 71.5 percent of the PittPharmacy faculty strongly agreed/agreed that
academic misconduct was handled effectively (80.4 and 79.3 percent for national and peer, respectively). The
low number is consistent with the extremely high level of confidentiality with which academic misconduct is
managed and with the high number (16.2 percent) indicating "unable to comment" on the statement. When
only those responses that registered an opinion are considered, 93.5 percent of faculty respondents strongly
agreed/agreed that the School handles academic misconduct well.

# **Student Representation**

PittPharmacy PharmD students participate in numerous committees, councils, and taskforces of the School; the experience provides opportunities for growth of leadership, professional, and communication skills as student engage with their peers to gather input and then participate as members of these committees.

The PharmD Program Council, which has student members, coordinates student selection and participation in School committees to ensure maintenance of active student engagement. An overview of committees with student membership is provided during the recruitment and election process. (Appendix 15I, optional) A list of student members on committees specific to the PharmD program is found in Appendix 15J (required). In addition, the Alumni Society Board has student members.

On the 2015 AACP Graduating Student Survey, 96.7 percent of respondents strongly agreed/agreed that they were aware that student representatives served on School committees.

Students also have opportunities for sharing perspectives and suggestions for quality improvements through other mechanisms. The Dean's Advisory Board, which convenes once each month to advise the dean and assistant dean for students, includes three students elected from each class to represent their respective classes, plus the APhA-ASP president and APhA-ASP president-elect. Student members of the 2015-16 Dean's Advisory Board are listed in Appendix 15J (required). The Dean's Advisory Board is a forum through which students can address a broad range of issues that impact student life and the quality of the PharmD program. Members also review and comment on the School's Long-Range Plan.

At PittPharmacy, APhA-ASP is the umbrella organization for all student organizations with the exception of RxPrep, which works in collaboration with Student Services to advise pre-pharmacy students. Through APhA-ASP and the 14 other student organizations, students have exceptionally rich opportunities to develop their power skills including

leadership, innovation and entrepreneurship. Each organization has its own budget, through which students learn to maximize the impact of their organization through funds and responsibly managing a budget in line with University policies.

The "Conversations with the Dean" that occur at least annually with each class are an opportunity for all students to provide input on resources, academic environment, and the curriculum overall. Course evaluations, the AACP Graduating Student survey, the University's graduating student survey, and the University-administered SERU (Student Evaluation for Research Universities) all serve as sources of information upon which quality improvements are made.

Students make significant contributions to improvements in curriculum, experiential learning and other aspects of the PharmD program impacted by committees on which they serve. In addition, through venues such as the "Conversation with the Dean" and Dean's Advisory Board, student input, perspectives, insights, and feedback resulted in valuable contributions to the continual improvements in the PharmD program and student life. Some changes that have occurred as a result of student input include:

- Expanding the number and range of electives, then increasing the capacity of electives. A parallel situation occurred as Areas of Concentration were introduced.
- Installing a University self-service printer station in Salk Hall and providing additional printers in the computer lab printers.
- Grouping one-time costs into fees (such as for CPR) with University fees so that students can better plan their expenses for a semester.
- Expanding Career Roundtables so that the experience now includes P3 students in addition to P1 students; P1 and P3 student sessions are held at separate times.
- Establishing a Student IT Committee.
- Establishing and maintaining a student-friendly portal, the PoRxtal, through a collaboration between the IT staff and Student IT Committee.
- Enhancing wireless reception in the Pharmaceutical Care Learning Center (PCLC) and giving the space a face lift with brighter colors and moveable tables.
- Building a coffee shop and installing a hydration station; both were accomplished at the behest of students when the Commons was constructed. The class of 2011 made a \$50,000 pledge to support the construction of Rxpresso.
- Increasing the allocation of funding to student organizations and reallocating the distribution of funding across organizations.
- Revising the class officer and elections process.

An example of the culture that fosters student input and allows students to lead change is the 2015-16 suggestion that resulted in new financial resources and allocation process for student organizations. The process started when a student asked the dean for additional funding for SSHP. Given that APhA-ASP is the umbrella organization, the dean brought the need to the Dean's Advisory Board, which includes ASP leaders. The dean appointed students and charged a taskforce advised by a member of the Leadership Team. The taskforce submitted a proposal to the dean and Dean's Advisory Board. Ultimately, through a process of Board discussions and negotiations with the dean, the overall umbrella funding for APhA-ASP increased; guidelines for adjusting allocation to individual organizations were established.

On the 2015 AACP Graduating Student Survey, 81.4 percent of respondents strongly agreed/agreed that the School's administration responded to problems and issues of concern to the student body.

# **University Student Government**

PittPharmacy students are also leaders in the University Student Government. For example, for the 2016-17, two PharmD students are members of the Executive Board of the Graduate and Professional Student Government as president (PharmD class of 2018) and vice president of programming (PharmD class of 2018).

# Notable

PittPharmacy is notable for creating an environment and culture that seeks and values student perspectives.

- Students are extensively engaged in committees and policy-development decisions.
- All students, not just elected representatives, are invited at least annually to provide input for the purpose of continual improvement of the PharmD program and environment.

These approaches encourage students to use and develop their leadership, creativity, and communication skills as they consider improvements.

The seriousness with which student suggestions are considered builds power skills and develops confident future pharmacists.

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <i>/or</i></li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ⊠:

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) **APPENDICES**

Appendix	File Name
15A	Link to program information on School's website.pdf
15B	School Code of Conduct Complete 2013.pdf
15C	University Student Code of Conduct and Judicial Procedures.pdf
15D	Professional Attire October 2013.pdf
15E	Social Media Guidelines April 2013.pdf
15F	Student Complaint Policy.pdf
15G	Orientation Schedule P1 Class of 2019.pdf
15H	PharmD Student Handbook.pdf
151	P1 Committee Recruitment Summary Fall 2015.pdf
15J	Student Members of the PharmD Committees 2015-2016.pdf
15K	Record of student complaints.pdf

Standard No. 16: Admissions: The college or school develops, implements, and assesses its admission criteria, policies, and procedures to ensure the selection of a qualified and diverse student body into the professional degree program.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

<u>Note</u>: PCAT, GPA, Math GPA and Science GPA data requested below are provided as data views in the Assessment and Accreditation Management System (AAMS) for colleges and schools that participate in PharmCAS. For colleges and schools that do not participate in PharmCAS, the charts and tables must be created from the college or school's own data. Colleges and schools that do not participate in PharmCAS will not have access to peer comparison reports for these data.

- ☑ The list of preprofessional requirements for admission into the professional degree program
- Copies of Early Assurance Program agreement(s) between the college or school and the associated institution(s) or student (if applicable)
- Enrollment data for the past three years by year and enrollment projections for the next year (if applicable, broken down by branch/campus and by pathway). Template available for download
- ☑ Organizational chart depicting Admissions unit and responsible administrator(s)
- Pharmacy College Aptitude Test (PCAT) scores (mean, maximum, and minimum), if required, for the past three admitted classes (required for nonparticipating PharmCAS institutions only)
- GPA scores (mean, maximum, and minimum) for preprofessional coursework for the past three admitted classes (required for nonparticipating PharmCAS institutions only)
- GPA scores (mean, maximum, and minimum) for preprofessional science courses for the past three admitted classes (required for nonparticipating PharmCAS institutions only)
- Comparisons of PCAT scores (if applicable) and preprofessional GPAs with peer schools for last admitted three admitted classes (nonparticipating PharmCAS institutions will not have access to peer data)
- ☑ List of admission committee members with name and affiliation
- Policies and procedures regarding the admissions process including selection of admitted students, transfer of credit, and course waiver policies
- Professional and technical standards for school, college, and/or university (if applicable)
- Copies of instruments used during the admissions process including interview evaluation forms and assessment of written and oral communication
- Section of Student Handbook and/or Catalog (college, school, or university) regarding admissions
- ☑ Link to websites (or documentation of other mechanisms) that provide to the public information on required indicators of quality

#### Required Documentation for On-Site Review:

(None required for this standard)

#### Data Views and Standardized Tables:

<u>Note</u>: PCAT, GPA, and Science GPA data views listed below are provided as data views in the Assessment and Accreditation Management System (AAMS) for colleges and schools that participate in PharmCAS. For colleges and schools that do not participate in PharmCAS, the charts and tables must be created from the college or school's own data (see Required Data and Documentation above).

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- Application and admissions/enrollments for the past three years
- Enrollment data for the past three years by year and gender
- Enrollment data for the past three years by year and race/ethnicity
- PCAT Scores (Mean, Maximum and Minimum) for past 3 admitted classes (if applicable; for participating PharmCAS institutions only)
- GPA (Mean, Maximum and Minimum) for past 3 admitted classes (for participating PharmCAS institutions only)
- Science GPA (Mean, Maximum and Minimum) for past 3 admitted classes (for participating PharmCAS institutions only)
- AACP Standardized Survey: Student Question 64

#### **Optional Documentation and Data:**

- Mean PCAT Scores for Admitted Class for Past 3 Years Compared to Peer Schools (for participating PharmCAS institutions only)
- Mean GPA for Admitted Class for Past 3 Years Compared to Peer Schools (for participating PharmCAS institutions only)
- Mean Science GPA for Admitted Class for Past 3 Years Compared to Peer Schools (for participating PharmCAS institutions only)
- Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include recruitment aids, extracts from the college or school's catalog, brochures, screenshots from the college or school website; data on student employment after graduation; and curricular outcomes data correlated with admissions data.
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>16.1. Enrollment management</b> – Student enrollment is managed by college or school administration. Enrollments are in alignment with available physical, educational, financial, faculty, staff, practice site, preceptor, and administrative resources.	0	0	0
<b>16.2. Admission procedures</b> – A duly constituted committee of the college or school has the responsibility and authority for the selection of students to be offered admission. Admission criteria, policies, and procedures are not compromised regardless of the size or quality of the applicant pool.	0	0	0
<b>16.3. Program description and quality indicators</b> – The college or school produces and makes available to the public, including prospective students: (1) a complete and accurate description of the professional degree program; (2) the program's current accreditation status; and (3) ACPE-required program performance information including on-time graduation rates and most recent NAPLEX first-attempt pass rates.		0	0
<b>16.4.</b> Admission criteria – The college or school sets performance expectations for admission tests, evaluations, and interviews used in selecting students who have the potential for success in the professional degree program and the profession. Applicant performance on admission criteria is documented; and the related records are maintained by the college or school as per program/university requirements.	0	0	0
<b>16.5. Admission materials</b> – The college or school produces and makes available to prospective students the criteria, policies, and procedures for admission to the professional degree program. Admission materials clearly state academic expectations, required communication skills, types of personal history disclosures that may be required, and professional and technical standards for graduation.		0	0
<b>16.6. Written and oral communication assessment</b> – Written and oral communication skills are assessed in a standardized manner as part of the admission process.	0	0	0
<b>16.7. Candidate interviews</b> – Standardized interviews (in-person, telephonic, and/or computer-facilitated) of applicants are conducted as a part of the admission process to assess affective domain characteristics (i.e., the Personal and Professional Development domain articulated in Standard 4).	O	0	0

**16.8. Transfer and waiver policies** – A college or school offering multiple professional degree programs, or accepting transfer students from other schools or colleges of pharmacy, establishes and implements policies and procedures for students who request to transfer credits between programs. Such policies and procedures are based on defensible assessments of course equivalency. A college or school offering multiple pathways to a single degree has policies and procedures for students who wish to change from one pathway to another.



- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check is to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - Admissions and enrollment Information, highlighting how specific requirements of the standards and guidelines are met, including those for early admission agreements or policies, if applicable
  - ☑ How admission evaluations of students are documented and how records are maintained.
  - A description of the college or school's recruitment methods
  - A description of methods used to assess verbal and written communication skills of applicants to the program
  - ☑ How enrollment is managed in alignment with available physical, financial, staff, faculty, practice site, preceptor and administrative resources
  - In the second second
  - The number of transfer students, including (if applicable) international students or graduates of other professional degree programs admitted with advanced standing, and an assessment of the correlation between the criteria in the transfer policy and success in the program. If applicable, comparative performance data should be provided.
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Enrollment Management**

PittPharmacy has the physical, financial, faculty, staff, practice sites, preceptors, and administrative resources to support the PharmD program with the target enrollment of 114 students per class (Appendix 16A, required).

The Admissions Committee oversees all aspects of the admissions process, including the regular assessment of criteria and procedures for admission to the PharmD program (Appendix 16B, optional). The committee is composed of the chair, ten faculty members with representation from each of the two departments, the director of student services, an admissions staff member, and the assistant dean of students. Faculty members are appointed to the committee by the dean upon recommendation of the department chairs. The members of the 2015-16 Admissions Committee are listed in Appendix 16C (required).

PittPharmacy's Web site provides detailed information about the PharmD program, including accreditation status; application guidance and admissions criteria; and annually updated program quality indicators (Appendix 16D, required), including on-time graduation rates, NAPLEX first-attempt pass rates.

## **Admission Procedures**

PittPharmacy offers two pathways of admission to the PharmD program: guaranteed admissions and open admissions; in the 2016-2017 cycle, students will be admitted through open admission in two timeframes: early decision and the regular timeline. The criteria, policies, and procedures for admission to the PharmD program may be accessed through the publicly accessible Web site and in the PharmD Student Handbook. Recruitment and information sessions, or private meetings with an admissions specialist provide opportunities for personal guidance. A copy of the hand out of general information about the PittPharmacy Program and Admissions procedures is found in Appendix 16E (required).

Admissions specialists within the Curran Center for Pharmacy Students manage the PharmCAS application process, guide and support applicants through the application process, and manage the logistics for on-site applicant interviews and applicant communications.

To be admitted, all applicants must complete the PharmCAS and supplemental (Appendix 16F, optional) applications, meet the technical standards (Appendix 16G, required), and have an on-site interview.

<u>Guaranteed admissions.</u> The guaranteed admissions program (referred to as Early Assurance in 2015-16) represents a partnership between the School and the University's Office of Admissions and Financial Aid (OAFA). The School sets its own criteria for guaranteed admission and OAFA applies the criteria to high school seniors appling to the University of Pittsburgh who indicate pre-pharmacy on their application. For the 2016-17 admissions cycle, SAT I (math and critical reading) scores of  $\geq$  1360 with a minimum of 690 on the math section and academic success in high school. Appendix 16H (required) provides the agreement between PittPharmacy and OAFA. PittPharmacy administration and select Admissions Committee members review the criteria annually.

<u>Open Admissions.</u> For open admissions, the Admissions Committee employs a holistic review of candidates. Qualities including academic excellence, effective communication skills, leadership, and motivation to practice in team-centered and culturally diverse environments are taken into account. Exposure to pharmacy practice (shadowing or work experience) is not required, but is considered, for admissions. Oral and written communication skills are also assessed. The Admissions Committee follows the University of Pittsburgh commitment and policies related to nondiscrimination, equal opportunity, and affirmative action.

Applicants who have  $\geq$  3.0 science GPA from the University of Pittsburgh or  $\geq$  3.25 from other colleges or universities (criteria for 2016-2017) plus  $\geq$  70 percent composite score on the PCAT are automatically offered on-site interviews. The qualifications of the remaining open-pool applicants are reviewed by at least one member of a subgroup of the Admissions Committee for the purpose of selecting applicants who will be interviewed.

Applicants who complete an on-site interview are reviewed independently by two Admissions Committee members who provide a global recommendation of "accept now," "accept soon," "accept," or "do not accept." No formal scoring system is used to evaluate applicants. Reviewers receive personalized training on PharmCAS and a guide on "How to Review Admissions Applications" (Appendix 16I, optional). Reviewers note information on academics, extracurricular activities/work, personal essay, and letters of recommendation. Reviewers do not have access to the candidate's interview report or interview scores at the time of conducting their reviews.

At a meeting of the full Admissions Committee, reviewers provide an overview of the applicant. A discussion with the addition of the interview scores and interviewer impressions is held and a decision is made regarding admission. All initial offers were sent out to candidates by the beginning of March 2016, illustrating that PittPharmacy is well positioned for acceptance and implementation of the proposed Cooperative Admissions Guidelines.

<u>Early Decision</u>. For the 2016-17 admissions cycle, PittPharmacy will participate in the early decision pathway as defined by AACP and administered through PharmCAS. The same review process and procedures used for the open admissions pool will be applied to these candidates with the exception of the timetable to meet AACP and PharmCAS requirements for a decision by mid-October.

# **Admission Criteria**

In addition to completing the application, participating in an interview, and meeting technical standards, all competitive applicants must complete required pre-professional courses.

Students must meet the same criteria regardless of college or university where pre-pharmacy preparation occurred or path of entry to the PharmD program. Pre-professional required courses (at least 62 credits) are listed in the PharmD Student Handbook and in Appendix 16J (required). Required pre-professional courses include a minimum of 30 credits of specified mathematics and science courses, 6 credits of English composition, and 24 credits of elective courses in the humanities and social sciences. PittPharmacy accepts and transfers credits for prepharmacy prerequisite courses from any US institution provided a grade of C or better has been obtained. Grades lower than a C are non-transferable from institutions other than the University of Pittsburgh.

Applicants are asked to disclose on the PharmCAS application any previous felony convictions, academic or professional misconduct, or unacceptable academic performance and provide a description of the offense. These are evaluated by the Admissions Committee on a case-by-case basis. Applicants are not required to submit a criminal background check as part of the application process; however, students are informed they may or will be required to provide such information if requested by an experiential learning site (Appendix 16K, optional). While a felony conviction is not listed as an exclusion for admission, the Admissions Committee has not been faced with an applicant who has answered yes in the rememberable past.

<u>Guaranteed Admission Criteria.</u> Students admitted through the guaranteed pathway must have earned a 3.25 overall grade point average, as well as a 3.25 or greater combined science and math grade point average without repeating any course or earning any grade below a C at the University of Pittsburgh. Candidates who do not meet these criteria may apply and be reviewed through the open admissions pathway. Approximately half of each class is composed of students entering through the guaranteed admissions program (Appendix 16L, required).

<u>Open Admission Criteria.</u> Students who apply through the open admission pathway include students with and without previous degrees from any University of Pittsburgh campus and from other US colleges and universities. Credits earned at institutions in Canada or elsewhere may be accepted based on assessment of the University's OAFA assessment.

Applicants should possess a minimum overall grade point average of 3.0, a math and science grade point average of 3.0, earn a grade of C or better in all pre-professional courses. Optimally, applicants will have a minimum composite PCAT score in the 70th percentile, though applicants with scores below that are considered in the holistic review.

## **Admission Materials**

Potential applicants may access the "General Information" about the application procedures and deadlines as well as pre-requisites (Appendix 16E, required) through the publicly-accessible Web page, the PharmD Student Handbook, recruitment and information sessions, or private meetings with an admissions specialist.

## Written and Oral Communication Assessment

Oral communication skills are evaluated by faculty and staff through the on-site interview. Written communication skills are assessed by grades on the pre-requisite English composition courses, by the written component of PCAT, and by the application essay.

## **Candidate Interviews**

Interviewers for the on-site "interviews for all applicants use a behavioral interview strategy with standardized questions designed to obtain evidence of desired characteristics/domains; the domains were selected by faculty through discussions that started at a retreat in 2006 and continued during the following semester. These characteristics include initiative, problem solving/analysis, team player, sensitivity/empathy, stress tolerance and oral communication skills (Appendix 16M, required). Interview training for faculty and staff is provided annually to ensure standardization of interviewers' approach. The PowerPoint training slides for the 2015-2016 admissions cycle can be found in Appendix 16N (optional).

Each on-site interview is conducted by a team of two faculty members or a faculty and staff member. The interviews are "closed folder" meaning that interviewers only know the candidate's name. This approach minimizes interviewer bias for or against specific extracurricular activities or backgrounds.

Each interviewer receives a standardized interview form with the questions specified for each domain. Interviewers independently score the applicant's responses for each domain on a 1-4 scale; descriptions of the ranks are provided on the form. Subsequently, the two-person interviewer team must reach and report a consensus score for each domain and provide an overall evaluation score. These forms are collected by the admissions specialist and are kept in a secure location until the applicant's qualifications are presented and discussed by the Admissions Committee.

An additional overall impression assessment is included on the overall scoring page (Appendix 16M, required), where interviewers independently rank their level of confidence in the candidate's abilities of self-awareness, leadership, innovation and entrepreneurship, and professionalism based on the interview. Ranking options are highly, moderately, and less confident. Additionally, interviewers are asked for an overall impression of how enthusiastic they are about the candidate's admission using the scale highly, moderately, and less enthusiastic.

## **Transfer and Waiver Policies**

The sequencing of the courses beginning in the first professional year and modular design of the curriculum is such that accommodating students who have fulfilled portions of the pharmacy course requirements at other pharmacy schools is not reasonable. PittPharmacy does not admit students to advanced standing.

However, upon enrollment, students may request a waiver from specific professional courses provided they can demonstrate satisfactory performance in a course equivalent in content to the course offered by the School of Pharmacy. The School's policy on Advanced Standing and credit waivers is in Appendix 16O (required). Students requesting more than one exemption are required to enroll in an additional elective course in order to maintain full-time status. The most common requests for exemptions are for Biochemistry and for Anatomy and Physiology. Even when students are exempted, they are encouraged to attend the classes, since the School's courses are developed with vertical integration with therapeutic modules that begin in the second professional year.

## **Correlation of Curricular Outcomes and Admissions Data**

Guaranteed and open admission students are equally qualified for entry to the PharmD program based on science GPA, overall GPA, PCAT, and interview scores. (Appendix 16L, required); students admitted through the two pathways perform equally well in the PharmD program. Retention and graduation rates confirm that admissions policy and procedures maximize the probability that students will successfully complete the program in the expected timeframe. (Appendix 16L, required)

Outcomes show that PittPharmacy students complete the program (Appendix 16P, optional); 99 to 100 percent of the graduating class, depending on year, passes the NAPLEX and MJPE exams; and that the class of 2016 had a 97.5 percent match in the ASHP residency. These data show that those students admitted to PittPharmacy perform extraordinarily well. Therefore, these data are not conducive to developing correlations between outcomes and admissions data.

## Notable

- The academic preparation of students applying, being offered positions, and enrolling is superb. The class of 2020 has an average GPA of 3.59 and an average PCAT score of 85; 90.4 percent of the class were admitted from AAU universities.
- The yield from offers made to applicants has steadily increased over the past four years: 72.9, 77.6, 78.6, 82.1 (class of 2020) percent. The class of 2020 was admitted entirely without going to the waitlist. As a note: the numbers of applications per seat from the guaranteed and open admissions pathways for the classes of 2017, 2018, 2019, and 2020 were 3.59, 3.44, 3.32, and 2.96 respectively.
- Class size has remained stable at 114 (115 for 2016).

4) **College or School's Final Self-Evaluation:** Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box  $\square$ :

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) **APPENDICES**

Appendix	File Name
16A	ACPE Five Year Enrollment_BranchCampus.pdf
16B	PharmD Admissions Committee Guidance Document.pdf
16C	Admissions Committee Structure and Membership v3.pdf
16D	PharmD Student Success and Program Quality Indicators.pdf
16E	General PharmD Application Information.pdf
16F	Supplemental Application.pdf
16G	Technical Standards.pdf
16H	Freshman Early Assurance Admissions Guidelines.pdf
161	Admissions Review how-to.pdf
16J	Preprofessional Requirements.pdf
16K	Criminal Background Check.pdf
16L	Admissions Data Last 3 Admitted Classes.pdf
16M	Interview Questions 2016.pdf
16N	Interviewer Training 2015-16.pdf
160	Advanced Standing Credits and Course Waiver Policy.pdf
16P	Attrition Data 2004-15.pdf
16Q	PCAT Scores and GPA Benchmarking report.pdf

<u>Standard No. 17: Progression</u>: The college or school develops, implements, and assesses its policies and procedures related to student progression through the PharmD program.

1) Documentation and Data:

#### **Required Documentation and Data:**

## Uploads:

- Policies and procedures regarding student progression, early intervention, academic probation, remediation, missed course work or credit, leaves of absence, dismissal, readmission, due process, and appeals
- Section of Student Handbook and/or Catalog (college, school, or university) regarding student progression
- ☑ Correlation analysis of admission variables and academic performance

## **Required Documentation for On-Site Review:**

(None required for this standard

## Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- Ø On-time graduation rates for the last three admitted classes (compared to national rate)
- Percentage total attrition rate for the last three admitted classes (compared to national rate)
- Percentage academic dismissals for the last three admitted classes (compared to national rate)
- ☑ AACP Standardized Survey: Faculty Question 40

## **Optional Documentation and Data:**

Other documentation or data that provides supporting evidence of compliance with the standard.

2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>17.1. Progression policies</b> – The college or school creates, makes available to students and prospective students, and abides by criteria, policies, and procedures related to:	$\bigcirc$	0	0
Academic progression	$\bigcirc$	$ \circ $	0
Remediation	$\bigcirc$	0	0
Missed course work or credit	$\bigcirc$	0	0
Academic probation	$\bigcirc$	0	0
Academic dismissal	$\bigcirc$	0	0
Dismissal for reasons of misconduct	$\bigcirc$	0	0
Readmission	$\bigcirc$	0	0
Leaves of absence	$\bigcirc$	0	0
Rights to due process	Ó	0	0
Appeal mechanisms (including grade appeals)	0	0	0

**17.2. Early intervention** – The college or school's system of monitoring student performance provides for early detection of academic and behavioral issues. The college or school develops and implements appropriate interventions that have the potential for successful resolution of the identified issues.



- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - B How student matriculation, progression and graduation rates correlate to admission and transfer policies
  - How academic counseling and/or student support staff work with students seeking to retain or regain good academic standing, and how extensively they are utilized
  - ☑ How early intervention and remediation rates correlate to progression
  - B How academic probation, leaves of absence, dismissal, readmission, due process, and appeals rates correlate to progression
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - ☑ Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Academic Progression**

PittPharmacy admissions criteria and academic requirements have resulted in the enrollment of PharmD classes that have exceptional retention and graduation rates. A summary of attrition for classes by year of enrollment is in Appendix 17A (required). For admitted classes from 2004 through 2012, all of which have graduated, the total number of students who left for any reason was eight, for an overall attrition rate of 0.61 percent. Including all students admitted from 2004 through 2015, where the latter classes have not yet graduated, a total of 10 students left for personal or academic reasons for an attrition rate of 0.77 percent.

Regardless of using the attrition rate of either 0.61 or 0.77 percent, PittPharmacy attrition is far below national averages reported by AACP (10.2 to 11.6 percent). (source:

http://www.aacp.org/resources/research/institutionalresearch/Documents/Degrees percent20Conferred.pdf) For the small percentage of students that do not progress with their class, their reasons have been resignation from the program for personal reasons or, rarely (4 students in 12 years), academic dismissal for course grades or GPA. To date, for classes admitted between 2004 and 2015, four students were dismissed for poor academic performance and six resigned in good academic standing for personal reasons.

## **Academic Progression and Policies**

Policies and procedures for academic progression, academic probation, dismissal, readmission, rights to due process, and appeal mechanisms are provided to students in the PharmD Student Handbook (Appendix 17B, required). Course-specific grading and handling of missed assignments are contained in each course syllabus.

Student academic progression is monitored through the Curran Center; student grades and cumulative GPAs at the end of each semester are reported to the School's Academic Performance Committee for any necessary action in accordance with academic performance policies and procedures a link to the policy in the PharmD Student Handbook is in Appendix 17C (required). The academic records of students who do not meet academic standards are reviewed by the School's Academic Performance Committee, which is composed of faculty from each department, the School's registrar, the assistant dean of students, and the assistant dean of finance. The School's Policies and Procedures for Academic Progression of Students guide the Committee's decisions. The guidelines address completion of pre-professional courses, maintenance of a full-time course load, the process for withdrawing from a course, and terms for academic resignation or a leave of absence. The policy also outlines the procedure for re-admission of dismissed students to the program and a student's right to due process in addition to the right of appeal for any action taken by the Academic Performance Committee.

## Academic Intervention and Remediation

In 2016, the dean charged a taskforce to recommend a policy that defines a proactive approach for intervention and remediation that is applicable across all P1 through P3 courses. School-wide academic intervention and remediation policy and procedures were discussed extensively by faculty and adopted in July 2016. The policy and procedures outline a proactive approach to facilitating student progression in individual courses and across the curriculum (Appendix 17D, optional).

The policy indicates that course coordinators have the responsibility to identify students who perform below the defined course-specific minimum level by week seven and begin the intervention process. Faculty members are readily available to assist all students, and have the responsibility to be proactive with those who experience academic difficulty. Faculty meet with an identified student and together, they co-develop a written personalized intervention plan.

<u>Prior to the Intervention and Remdiation Policy.</u> Despite the lack of a policy prior to 2016, faculty had been proactive with respect to early identification and intervention with students who perform poorly midway through a course. Many students benefitted from interventions and successfully completed courses. Six students in the past five years needed remediation after the end of the course; all were successfully remediated during the summer after failing Anatomy and Physiology 2 and /or Biochemistry 2 in the P1 spring semester. Five of the six are a success story; three students graduated on time with no further academic difficulty and two are scheduled to graduate on time and have had no further difficulty. One student successfully remediated and eventually resigned from the program.

In addition to intervening on their own, faculty often enlist the assistance of the assistant dean of students Dr. Sharon Corey; likewise students choose to meet with her. She may engage a tutor, or refer the student elsewhere on campus depending on the problem identified. The School's Rho Chi Society provides a tutoring service for students experiencing academic difficulties. Other avenues frequently used by students are student-led study groups and discussion groups. Fewer students use external resources for academic assistance because of access to assistance within the School of Pharmacy.

# Notable

PittPharmacy's phenomenally low attrition rate of 0.61 percent for classes admitted in 2004 through 2012 (classes of 2008 through 2016) is notable. Three factors likely account for the remarkable record of on-time graduation and record of academic performance:

- The quality of the applicant pool and the admissions process by which superb students are identified for admission.
- Early intervention by faculty.
- The engagement of students with faculty and with each other; the peer influence and culture of excellence stimulates academic success.
- Students who graduate have a high pass rate on the NAPLEX exam.
- 4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box 🗹:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <i>/or</i></li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. [TEXT BOX] [1,000 character limit, including spaces]

## 6) APPENDICES

Appendix	File Name
17A	Attrition Data 2004-2015.pdf
17B	Policies and procedures regarding student progression.pdf
17C	Section of student handbook on progression.pdf
17D	Academic Intervention and Remediation.pdf

# Subsection IID: Resources

<u>Standard No. 18:</u> Faculty and Staff—Quantitative Factors: The college or school has a cohort of faculty and staff with the qualifications and experience needed to effectively deliver and evaluate the professional degree program.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- Organizational chart depicting all full-time faculty by department/division
- ACPE Faculty Resource Report related to number of full-time and part-time faculty. Template available for download.
- List of faculty turnover for the last 5 years, by department/division, with reasons for departure
- Description of coursework mapped to full-time and part-time faculty teaching in each course

#### **Required Documentation for On-Site Review:**

☑ List of voluntary faculty, with academic title/status and practice site; specify IPPE and/or APPE

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- ☑ List of key university and college or school administrators, and full-time and part-time (≥ 0.5FTE) faculty, including a summary of their current academic rank, primary discipline, title/position, credentials, post-graduate training, and licensure (if applicable)
- AACP Standardized Survey: Faculty Questions –25, 30
- Table: Allocation of Faculty Effort (total for all faculty with  $\geq 0.5FTE$ ) [see example table at <u>http://www.acpe-accredit.org/pdf/Excel%20Documents/AllocationFacultyEffort.xls</u>]
- ☑ Table: Distribution of Full-Time Pharmacy Faculty by Rank and Years in Rank

#### **Optional Documentation and Data**

- ☑ Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>18.1. Sufficient faculty</b> – The college or school has a sufficient number of faculty members to effectively address the following programmatic needs:	0	0	0
Teaching (didactic, simulation, and experiential)	0	0	0
Professional development	0	0	0
Research and other scholarly activities	0	0	0

Assessment activities	0	0	0
College/school and/or university service	0	0	0
Intraprofessional and interprofessional collaboration	0	0	0
Student advising and career counseling	0	0	0
Faculty mentoring	0	0	0
Professional service	0	0	0
Community service	0	0	0
Pharmacy practice	0	0	0
Responsibilities in other academic programs (if applicable)	0	0	0
<ul> <li>Support of distance students and campus(es) (if applicable)*</li> </ul>	0	0	0
Teaching (didactic, simulation, and experiential)	0	0	0
Professional development	0	0	0
<b>18.2. Sufficient staff</b> – The college or school has a sufficient number of staff to effectively address the following programmatic needs:	0	0	0
<ul> <li>Student and academic affairs-related services, including recruitment and admission</li> </ul>	0	0	O
Experiential education	0	0	0
Assessment activities	0	0	0
Research administration	0	0	0
Laboratory maintenance	0	0	0
Information technology infrastructure	0	0	0
Pedagogical and educational technology support	0	0	0
Teaching assistance	0	0	0
General faculty and administration clerical support	0	0	0
<ul> <li>Support of distance students and campus(es) (if applicable)*</li> </ul>	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - A description of the process and interval for conducting faculty workload and needs assessments
  - An analysis of teaching load of faculty members, including commitments outside the professional degree program
  - If The rational for hiring any part-time faculty, and the anticipated duration of their contract
  - ☑ Evidence of faculty and staff capacity planning and succession planning
  - A discussion of the college or school's student-to-faculty ratio and how the ratio ties in with the college or school's mission and goals for the program
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Description of Faculty**

As of October 2015, PittPharmacy employed a total of 80 faculty members, of which 72 are full-time and 8 are part-time. An organizational chart depicting those full-time faculty by department is in Appendix 18A (required); the ACPE Faculty Resource Report is in Appendix 18B (required). The numerical distribution of full-time faculty by academic rank and department is shown in Appendix 18C (optional). A listing of full-time PittPharmacy faculty by rank and years in current rank is provided in Appendix 18D (optional). Of the 80 full- and part-time faculty members, 62 are actively engaged in the PharmD as instructional full-time faculty; these 62 faculty members were asked to complete the 2015 AACP Faculty Survey according to the guidance provided by AACP and ACPE.

The Department of Pharmaceutical Sciences employs 30 full- and 4 part-time faculty members, while the Department of Pharmacy and Therapeutics employs 42 full- and 4 part-time faculty.

Information about faculty by name in the Department of Pharmaceutical Sciences regarding rank, degree, type of appointment, and tenure status is in Appendices 18E (optional) and in Appendix 18F (optional) for the Department of Pharmacy and Therapeutics. Nine faculty members from across the University hold secondary appointments within the School of Pharmacy, while 21 faculty members with primary appointments in the School hold secondary appointments in other units of the University (Appendix 18G, optional).

PittPharmacy engages a limited number of part-time faculty; reasons for part-time employment are either because of personal preference by the faculty member or because of the need for specific expertise (e.g. Pharmacy Law).

# **Faculty Responsibilites and Teaching Contributions**

Faculty teaching commitments in the PharmD program by course, professional year, and term are listed in Appendix 18H (required), which shows that PittPharmacy has a sufficient number of faculty qualified to effectively address programmatic teaching needs. The daily and weekly schedules of the faculty are appropriately variable, given the wide array of faculty responsibilities related to the mission of the School. The expertise and leadership of PittPharmacy faculty members is also demonstrated through their teaching contributions external to the School, which is detailed in Appendix 18I (optional).

## **Faculty Departures**

A complete list of departures by department, reason for departure, name, and rank is included as Appendix 18J (required). PittPharmacy has consistently maintained an adequate faculty base to support the PharmD program. At the time of 2009 accreditation review, PittPharmacy employed 80 full-time faculty members. Since then, 23 full-time faculty members without prefixes (e.g., research) left the School. Of these, most left for personal reasons; six retired, eight accepted positions at other academic institutions, including Seoul National University/Korea, Groenegen University/Germany, University of Indiana, University of Michigan, and leadership positions at The Ohio State University and University of Georgia. One went into clinical practice absent a faculty position; one chose to become part-time faculty; three returned to Japan or China to pursue positions there and four individuals accepted positions within the pharmaceutical industry. An additional 13 part-time faculty or those with research or visiting prefixes have also departed. Faculty hires have generally matched departures over the time period since 2009.

## **Description of Staff**

A total of 60 staff members serve in the following roles: administrative (20), research (29), communications (1), information technology (3) and student services (7). All administrative and educational support staff members of PittPharmacy are assigned to the Office of the Dean (31). In addition, the departments employ staff, primarily for research support functions, including 18 in the Department of Pharmaceutical Sciences and 11 in the Department of Pharmacy and Therapeutics. Among the 31 non-research staff, 21 have been in place for longer than 5 years, with 15 having 10 or more years of service, and 7 having 20 or more years of service as outlined in Appendix 18K (optional). The college or school has a sufficient number of staff to effectively address programmatic needs.

<u>Staff Departures</u>. Six administrative staff members have resigned since the 2009 accreditation review, three of whom took advantage of the University's one-time Voluntary Early Retirement Program. The time required to find replacements for departing staff is generally one to two months. Details on other staff departures, organized by staff roles, are presented in Appendix 18L (optional); in many cases, research staff left the School when funding was discontinued. PittPharmacy consistently attracts well-qualified staff members and has consistently maintained an employee base to assure the effective and efficient operation of the School's programs for education, research, patient care, and service.

# Assessment of Faculty Workload and Teaching Load

In 2014, the Leadership Team decided against using a formal workload assessment with readily visible comparisons; PittPharmacy has an overall culture of achievement, so it appeared that there would be only a downside to instituting the practice. However, quantitative data are collected annually, when faculty complete an online achievement report that includes data for classroom and experiential teaching (hours) as well as committee service and research achievements. Faculty members support their quantitative data with annotations and an updated curriculum vitae.

As an example of assessing needs, the PharmD Curriculum Committee and the Graduate Program Council communicate detailed information about anticipated curricular changes and resource needs to the Leadership Team. This information is compared with planned or pending changes in personnel (e.g., retirements, resignations, new hires). Department chairs then evaluate faculty workload using the annual achievement reports. Department chairs determine who might have the capacity to take on additional or altered teaching; if faculty have no additional capacity, consideration is given to hiring either full-or part-time faculty to fill the need. As the need for new hires is identified, standard processes for the approval of new faculty positions and for recruitment into those positions are initiated.

Succession planning for leadership is addressed through deliberate rotation of committee chair positions, appointments to committees and purposeful investment in leadership development.

# **Recruitment and Rationale for Hiring Faculty**

The dean, in collaboration with department chairs and assistant dean for business and operations, reviews, analyzes, and establishes faculty and staff recruitment plans based on consideration of both the immediate tactical opportunities and the long- term strategy of the School to fulfill its mission. For example, in 2010, the Leadership Team made a strategic decision to allocate resources toward building a core of faculty with computational and analytical skills to bring a "big data" strength to the School and advance the research agenda and educational programs. The result is that today,

PittPharmacy has a core of seven faculty members who have this expertise. Faculty members participate in search committees, both leading and participating in on-site interviews of prospective new faculty.

The need for recruitment of part-time faculty is also evaluated in this manner. These faculty are hired with the intent of filling a specific teaching role that requires expertise not held by current faculty. Duration of contracts vary.

# Faculty-to-Staff and Student-to-Faculty Ratios

The ratio of full-time faculty (72) to administrative (non-research) support staff (34) is 2-to-1, while the ratio of full-time faculty (72) to total staff (57) is approximately 1.3-to-1. Some support activities, such as educational technology support, research support, and facilities management, are centralized within the Office of the Dean in order to promote a uniform distribution of service to all faculty of the School. Faculty have access to educational support staff who assist in technical details of course delivery. PittPharmacy has a cohort of faculty and staff with the qualifications and experience needed to effectively deliver and evaluate the professional degree program.

The student-to-faculty ratio for instruction in the School is 5.5-to-1, based on PharmD student enrollment in P1 through P3 years and 62 instructional full-time faculty members. Based on P1 through P3 students and 80 faculty, the student-to-faculty ratio is 4.3-to-1. In the P4 year, the student-to-faculty/preceptors is 1-to-1. All but one of the 72 full-time faculty members engaged in PharmD applicant interviews and many faculty who do not teach in the PharmD interact with students regarding research. Part-time faculty also interact with students and some advise student organizations.

This low ratio of students-to-faculty enables the effective delivery of the PharmD curriculum and facilitates the PittPharmacy goal that students will personalize their education. The low ratio facilitates the offering of a broad range of opportunities, including six Areas of Concentration, elective courses, and small group and individualized instructional opportunities such as special topics and mentored research independent study courses.

# **Commentary on AACP Survey Questions**

AACP 2015 Faculty Survey data for questions 62 through 65 shows that PittPharmacy faculty responded that the time spent was appropriate for teaching (78.4 percent), research (70.3 percent), and service (83.8 percent) and compares favorable with national and peer schools. Despite the responses to questions on teaching, research, and service, 29.7 percent of PittPharmacy faculty responded that "In my opinion, the proportion of my time spent on clinical service is too much." The national and peer percentages for that response were 5.7 and 6.6 percent, respectively. Faculty who have clinical practices at UPMC have responsibilities for patient care and are regular members of the interprofessional team. The quality of care, level of commitment and interprofessional interactions ensures that PittPharmacy faculty are at the leading edge of practice. The conflicting results may be explained by the integrated nature of their teaching and scholarship with practice.

The 2015 AACP Faculty Survey data show that faculty strongly agreed/agreed (PittPharmacy, national, peer) that:

- the School has a sufficient number of qualified faculty: 83.8, 69.9, 73.9 percent.
- the School uses an effective faculty recruitment process: 94.8, 77.1, 80.9 percent.

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box 🗹:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated /or</li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) **APPENDICES**

Appendix	File Name
18A	Org Chart FT Faculty by Dept.pdf
18B	ACPE Faculty Resource Report.pdf
18C	FT Faculty by Rank Dept TS NTS.pdf
18D	FT Faculty by Years of Svc with Rank.pdf
18E	Department of Pharmaceutical Sciences v3.pdf
18F	Department of Pharmacy and Therapeutics.pdf
18G	Faculty with Secondary Appointments.pdf
18H	Faculty Teaching Commitments PharmD Program.pdf
181	External Teaching Commitments.pdf
18J	Faculty Departures.pdf
18K	Staff by years of service.pdf
18L	Staff Departures.pdf

<u>Standard No. 19: Faculty and Staff—Qualitative Factors:</u> Faculty and staff have academic and professional credentials and expertise commensurate with their responsibilities to the professional program and their academic rank.

1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ List of active research areas of faculty and an aggregate summary of faculty publications/presentations over the past three years.
- Procedures employed to promote a conceptual understanding of contemporary practice, particularly among non-pharmacist faculty
- Policies and procedures related to faculty recruitment, performance review, promotion, tenure (if applicable), and retention

## **Required Documentation for On-Site Review:**

- ☑ Copy of the Faculty Handbook
- CVs of administrators, faculty and staff
- □ If utilized, examples of faculty portfolios, documenting teaching, research and service activities

## Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Faculty Questions 7, 13-24
- ☑ Table: Distribution of Full-Time Pharmacy Faculty by Rank, Gender and Race/Ethnicity
- ☑ Table: Distribution of Full-Time Pharmacy Faculty by Rank and Highest Degree Earned
- ☑ Table: Distribution of Full-Time Pharmacy Faculty by Rank and Tenure Status
- ☑ Table: Distribution of Full-Time Pharmacy Faculty by Department and Tenure Status
- ☑ Table: Research and Scholarly Activity of Full-Time Faculty by Department

#### **Optional Documentation and Data**

- Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include job descriptions, recruitment advertisements, faculty and staff policies and procedures, and extracts from committee meeting minutes.
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>9.1. Educational effectiveness</b> – Faculty members have the capability and demonstrate a continuous commitment to be effective educators and are able to effectively use contemporary educational techniques to promote student learning in all offered pathways.		0	0
<b>19.2. Scholarly productivity</b> – The college or school creates an environment that both requires and promotes scholarship and also develops mechanisms to assess both the quantity and quality of faculty scholarly productivity.	0	0	0
<b>19.3. Service commitment</b> – In the aggregate, faculty engage in professional, institutional, and community service that advances the program and the profession of pharmacy.	0	0	0

<b>19.4. Practice understanding</b> – Faculty members, regardless of their discipline, have a conceptual understanding of and commitment to advancing current and proposed future pharmacy practice.		0	0
<b>19.5. Faculty/staff development</b> – The college or school provides opportunities for career and professional development of its faculty and staff, individually and collectively, to enhance their role-related skills, scholarly productivity, and leadership.	0	0	0
<b>19.6.</b> Policy application – The college or school ensures that policies and procedures for faculty and staff recruitment, performance review, promotion, tenure (if applicable), and retention are applied in a consistent manner.		0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check i to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - ☑ The process used to assess and confirm the credentials of faculty and staff, and to assure that faculty credentials are appropriate for their assigned teaching responsibilities
  - ☑ How the college or school ensures that the faculty composition, including any contributions from internal and external relationships, encompasses the relevant disciplines within the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences to meet the education and research needs as defined by the mission statement
  - How the college or school ensures that faculty members, regardless of their discipline, have a conceptual understanding of current and future trends in the scientific basis of the biomedical, pharmaceutical social/administrative and clinical sciences
  - How the college or school ensures that faculty members, regardless of their discipline, have a conceptual understanding of contemporary pharmacy practice and future trends in a variety of settings
  - A description of the college or school's policy or expectations regarding research productivity for faculty, including timeline for new faculty
  - Evidence that faculty are generating and disseminating knowledge through productive research and scholarship, including the scholarship of teaching
  - A description, if applicable, of how faculty, instructors, and teaching assistants involved in distance education are qualified through training or experience to manage, teach, evaluate, and grade students engaged in distance learning
  - A description of the performance review process for full-time, part-time and voluntary faculty (including preceptors) and staff
  - A description of faculty and staff development programs and opportunities offered or supported by the college or school
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms.

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Faculty Composition**

Faculty and staff are PittPharmacy's greatest resource. Faculty represent a broad range of disciplines to meet ACPE standards. Through talent and expertise, creativity, and diligence, faculty continually demonstrate "excellence, innovation, and leadership in education of pharmacists and pharmaceutical scientists, in research and scholarship, in care of patients, and in service to our communities" (PittPharmacy mission). Of the 72 full-time faculty members (October 2015), 69 have earned doctoral degrees in disciplines corresponding with their responsibilities to the curriculum and to the mission of the School. Of the 42 full-time faculty members in the Department of Pharmacy and Therapeutics, 39 have a PharmD; of these, 7 have earned an additional degree (MSc, MPH, MBA, or PhD). All full-time

faculty members in the Department of Pharmaceutical Sciences have a PhD; seven have earned an additional degree. In the entire school, 18 faculty members are tenured, and another 6 are in the tenure stream (Appendix 19A, optional). Seventeen faculty members have been elected to fellowship in one or more organization; of the 42 full-time faculty members who provide patient care, 23 hold board certifications.

Appendix 19B (optional) lists clinical faculty members and their practice sites, and demonstrates the range of clinical expertise.

# **Educational Effectiveness**

Sixty-two (86 percent) of the 72 full-time faculty teach in the PharmD program. Appendix 19C (optional) summarizes faculty teaching assignments for each course in the PharmD program. PittPharmacy faculty members demonstrate a continuous commitment to be effective educators. Since the 1990s, PittPharmacy has been using active and group learning; a classroom designed to facilitate group learning, the Novo Nordisk Learning Center, was updated in 2013. Faculty not only effectively use contemporary educational techniques to promote student learning, they are either innovators or early adopters and assessors of contemporary and emerging technology and approaches. Evidence of the PittPharmacy educational environment and culture of teaching excellence and innovation is found in the numerous grants from the Office of the Provost, the AACP 2012 award for Excellence in Assessment and the two consecutive year AACP Innovations in Teaching Awards in 2014 and 2015 (Appendix 19D, optional), and 18 educationally focused papers published between 2010 and 2016.

Every PharmD course has a designated educational support staff member plus teaching assistant support to facilitate adoption and implementation of contemporary approaches and technology. Staff provide expertise that includes but is not limited to filming (e.g. standardized patient interactions), audience response implementation, CourseWeb use, and annual readiness assessment sessions. Most staff were members of PittPharmacy who, through personal commitment and workshop attendance, developed the educational support expertise. In addition to graduate student teaching assistants, selected P3 and P4 students are readers for IPPE reflections.

# **Scholarly Productivity**

PittPharmacy faculty published an aggregate of 184 to 201 peer-reviewed papers annually in each of the past three years. As further evidence of faculty scholarly impact and recognition, faculty members have received 63 national, 10 regional, and 47 University/School honors and awards from 2010 to 2015, (Appendix 19D, optional). PittPharmacy publications demonstrate expertise in pharmacology, computational and synthetic drug discovery, drug formulation and delivery, pharmacogenomics, preclinical ADME, anti-viral and infectious disease research, and "big data" research. Additionally, faculty have expertise in practice-based research in the community, drug addiction and prevention, and extensive therapeutic area clinical research including transplantation. Educational scholarship includes a range of types of simulation and assessment. A comprehensive list of all faculty peer-reviewed publications, by year, from 2013 through 2015 is included as Appendix 19E (required).

<u>Expectations for Research and Scholarly Activity.</u> In addition to fulfilling the teaching, service, and patient care missions of the University and the School, faculty members engage extensively in research and scholarly activity; expectations are described in the University's Faculty Handbook, and also in the School's guidelines for the evaluation of faculty for promotion and tenure (Appendix 19F, required). All faculty are evaluated using the same criteria; however, emphasis

depends on discipline and focus.

The School has consistently ranked among top schools of pharmacy in NIH funding, which is a source of pride for faculty, staff, and administration. As a part of the culture of excellence, faculty seek to fund their programs to achieve the PittPharmacy goal of "engaging in research of impact as a school of distinction." The PittPharmacy Research Incentive Plan, first established in 1999, is an additional encouragement for faculty to seek grant and contract funding that supports scholarly work (Appendix 19G, optional).

## Service Commitment

Committee memberships and leadership among faculty for School, University, and national professional and scientific organizations are numerous (Appendix 19H, optional). Staff are also members of School, University and national committees and working groups. Notably, the assistant dean for business and operations is thecurrent past chair of the Administrative and Financial Officers SIG of AACP. Faculty and staff have expectations for "commitment and diligence, and for creativity and personal growth" as stated in the PittPharmacy values.

# **Orientation and Practice Understanding**

New faculty members are oriented through the University's established campus-wide orientation process. Individualized faculty orientation also is provided by the department chair, staff administrators, and senior faculty. Clinical faculty members meet with physician and nursing directors to establish the foundation for their clinical practice and research.

Each PharmD course that focuses on disease states integrates pharmaceutical science and therapeutic components relevant to that disease state. This approach promotes communication among science and practice faculty and helps non-practice faculty understand and appreciate how the basic science fits with patient care and clinical research. The 2015 AACP Faculty Survey showed that 91.9 percent of PittPharmacy faculty respondents strongly agreed/agreed when asked whether curricular collaboration among disciplines is encouraged (national and peer responses: 86.2 and 89.2 percent, respectively).

# **Faculty and Staff Development**

University, School, and departmental opportunities for faculty and staff professional and career development are plentiful and broad ranging in areas of focus as outlined in Appendix 19I (optional). The Office of Academic Career Development (<u>www.oacd.health.pitt.edu/</u>) offers topics including strategies for success within and outside the tenure stream and workshops on developing grants and managing research programs. The University Center for Teaching and Learning <u>http://www.teaching.pitt.edu/</u> offers workshops focused on teaching methodologies, technologies, and enhancing effectiveness in the classroom. PittPharmacy offers development opportunities through FYII (For Your Information and Input) sessions and the School's annual retreats when topic experts are invited to present. PittPharmacy also supports faculty participation in external leadership and development programs including AACP Academic Leadership Fellows program. In addition, the School supports and encourages faculty to pursue additional degrees; within the past several years, four faculty members have completed or are working toward masters degrees.

The University's Laureate Lecture Series and the annual science festival (e.g. Science 2016)offer faculty access to nationally and internationally prominent researchers. Departments support research and practice development through

separate seminar series, advertised to all faculty. Support is available for faculty to attend meetings that will enhance their teaching, practice and research programs. The Office of Research for the Health Sciences offers expert one-on-one assistance with the preparation of grant proposals. The School also has a voluntary internal scientific review process to assist faculty with the development of grant proposals. Many faculty attend one or more regional, national, or international professional or scientific meetings each year. All faculty members are allowed to attend meetings without taking vacation.

PittPharmacy has been a leader in developing educational opportunities for preceptors throughout Pennsylvania. PittPharmacy was instrumental in developing consensus that all Pennsylvania pharmacy schools would accept APhA's "The Pharmacist Preceptor Education Program" as an initial training tool. PittPharmacy faculty also led the development of the Pennsylvania Pharmacists Care Network and associated training tools for certification. A list of preceptor training and educational opportunities is provided in Appendix 19J (optional). The School provides free access to a number of continuing education programs that are easily accessed through the School Web site.

As with faculty, staff likewise have access to programs on career development through the Office of Human Resources (<u>www.hr.pitt.edu/training-development/faculty-st</u>) and through the School. Staff members attend the PittPharmacy education, research, and strategic planning retreats. Monthly staff meetings are held to discuss development and efficiency issues. The School has made a significant effort to include administrative staff in development and planning retreats to improve overall efficiency.

# **Policy Application**

The University and PittPharmacy have numerous policies and proceures that guide faculty and staff recruitment, performance review, promotion, and tenure.

<u>Recruitment and Retention.</u> "Consistent with the University's core values and the goals of its Strategic Plan, the University has developed and enforces the following Policies, Procedures, and Practices which relate to Diversity and Inclusion." <u>https://www.diversity.pitt.edu/affirmative-action/policies-procedures-and-practices</u>. PittPharmacy follows the University policies, procedures, and practices. Verification of education, training, and licensure status (for clinical faculty) is part of the faculty interview process, which follows University policy and procedure. Neither Pitt nor PittPharmacy has specific retention policies.

# Performance Review.

The University requires that faculty and staff members be reviewed annually by their department chairs or supervisors, respectively. A sample faculty annual achievement form is in Appendix 19K (required), which also shows the quantitative nature of the document. Faculty members document their accomplishments in teaching, research and scholarship, patient care if applicable, and service and include a self evaluation. Faculty members meet with their department chairs annually to discuss performance and goals, both annual and career, to prepare a professional development plan. It is in these meetings that faculty workload is reviewed and discussed. A letter from the department chair documents the outcome of the meeting along with a plan to guide continued development and progress toward promotion and tenure, if applicable.

The dean must document in a letter to the provost by a specific date annually that all faculty members have received

letters describing their evaluation for the past year.

Staff, who must be evaluated on an annual basis by a specific date, complete a performance evaluation form and meet with their supervisors as required by the University. The review includes the staff member's self-appraisal and the supervisor's evaluation. Areas addressed include accomplishments, strengths, annual objectives, and opportunities for professional development. The supervisor and staff member develop goals and a plan for achieving goals to be reviewed during the next annual review.

The Office of Experiential Learning reviews the required preceptor evaluations that students provide at the end of each IPPE and APPE rotation. Preceptors obtain de-identified student reviews in E\*Value. Additional detail is in the narrative for Standard 20.

<u>Promotion and Tenure.</u> The School follows the University appointment, promotion, and tenure process as outlined in the University Faculty Handbook (Appendix 19L, optional). To complement the Faculty Handbook, PittPharmacy established criteria and guidelines for appointment, promotion, and tenure (Appendix 19F, required) and has developed a guidance document that facilitates faculty preparation of their promotion dossier and committee procedures (Appendix 19M, required).

# **Overall Comments**

- PittPharmacy faculty are exemplary, not only for their research, but also for their innovative spirit for the continual improvement in the student learning experience as evidenced by three national awards for assessment and teaching innovation, and numerous publications.
- The effectiveness of the review process is shown in the AACP faculty survey. Notable is that 91.9 percent of PittPharmacy faculty strongly agreed/agreed that the criteria for performance assessment are consistent with their responsibilities (78.1 and 76.3 percent for national and peer faculty).
- On the 2015 AACP Faculty Survey, 27 percent of PittPharmacy responding faculty (national and peer: 32.8, 27.8 percent, respectively) strongly agreed/agreed that programs are available for non-practice faculty to orient them to the pharmacy profession and professional education. Although results are similar to national and peer faculty responses, the dean charged a taskforce to recommend a systematic mechanism by which non-pharmacist faculty members would be oriented to the profession of pharmacy. The taskforce developed recommendations and steps have already been implemented.
- The PittPharmacy staff are extraordinary and have remarkable commitments to excellence and innovation, to supporting research and scholarship, and to service in local and national organizations. Within the PharmD program, the staff meet and exceed expectations supporting admissions and recruitment, placing students at IPPE and APPE sites, supporting faculty in delivering an excellent and innovative educational experience, facilitating the actions of student organizations, advising students, developing print and Web site communications that meet the needs of applicants and students, or organizing the symbolic events.

4) **College or School's Final Self-Evaluation:** Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box  $\square$ :

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <i>lor</i></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) APPENDICES

Appendix	File Name
19A	FT Faculty by Rank Dept TS NTS.pdf
19B	Clinical Faculty and Practice Sites.pdf
19C	Faculty Teaching Commitments PharmD Program.pdf
19D	PittPharmacy Fac Awards v3.pdf
19E	Publications & Presentations.pdf
19F	Pharmacy APT Guidelines Criteria for Promotion Tenure.pdf
19G	Research Incentive Policy.pdf
19H	Faculty Service on Local and National Committees.pdf
191	Faculty Training and Educational Opportunities.pdf
19J	Preceptor Training and Ed opportunities.pdf
19K	Sample Annual Review Summary.pdf
19L	University Faculty Handbook.pdf
19M	Pharmacy APT Guidance Document.pdf
19N	Faculty Research Area – Dept PS.pdf
190	Faculty Research Area – Dept P&T.pdf
19P	Procedures Employed-Conceptual Understanding of Pharmacy Practice.pdf
19Q	Fellowships and Organizations.pdf
19R	Recruiting process 08.pdf
19S	Search Committee Policy.pdf

<u>Standard No. 20: Preceptors</u>: The college or school has a sufficient number of preceptors (practice faculty or external practitioners) to effectively deliver and evaluate students in the experiential component of the curriculum. Preceptors have professional credentials and expertise commensurate with their responsibilities to the professional program.

## 1) Documentation and Data:

## **Required Documentation and Data:**

## Uploads:

- ☑ List of active preceptors with credentials and practice site
- ☑ Number and percentage of required APPE precepted by non-pharmacists categorized by type of experience.
- Description of practice sites (location, type of practice, student/preceptor ratios)
- Policies and procedures related to preceptor recruitment, orientation, development, performance review, promotion, and retention
- ☑ Examples of instruments used by preceptors to assess student performance
- Z Curriculum vitae of administrator(s) responsible for overseeing the experiential education component of the curriculum
- Description of the structure, organization and administrative support of the Experiential Education office (or equivalent)

## **Required Documentation for On-Site Review:**

(None required for this Standard)

## Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Student Questions 61, 62
- AACP Standardized Survey: Preceptor Questions 9, 14-18, 38-41

#### **Optional Documentation and Data:**

- Other documentation or data that provides supporting evidence of compliance with the standard.
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>20.1. Preceptor criteria</b> – The college or school makes available and applies quality criteria for preceptor recruitment, orientation, performance, and evaluation. The majority of preceptors for any given student are U.S. licensed pharmacists.	0	0	0
<b>20.2. Student-to-preceptor ratio</b> – Student to precepting pharmacist ratios allow for the individualized mentoring and targeted professional development of learners.	0	0	0
<b>20.3. Preceptor education and development</b> – Preceptors are oriented to the program's mission, the specific learning expectations for the experience outlined in the syllabus, and effective performance evaluation techniques before accepting students. The college or school fosters the professional development of its preceptors commensurate with their educational responsibilities to the program.		0	0
<b>20.4. Preceptor engagement</b> – The college or school solicits the active involvement of preceptors in the continuous quality improvement of the educational program, especially the experiential component.	0	0	0

**20.5. Experiential education administration** – The experiential education component of the curriculum is led by a pharmacy professional with knowledge and experience in experiential learning. The experiential education program is supported by an appropriate number of qualified faculty and staff.



- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - I How the college or school applies quality criteria for preceptor recruitment, orientation, performance, and evaluation
  - A discussion of the college or school's student-to-preceptor ratio and how the ratio allows for individualized mentoring and targeted professional development of learners
  - How the college or school fosters the professional development of its preceptors commensurate with their educational responsibilities to the program
  - ☑ How the college or school solicits active involvement of preceptors in the continuous quality improvement of the education program, especially the experiential component
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - ☑ Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Preceptor Criteria and Evaluation**

The breadth of expertise of PittPharmacy preceptors is one of the School's greatest strengths. In the 2015-16 academic year, 458 preceptors were engaged in PittPharmacy IPPEs and APPEs. The majority (93.6 percent) are licensed pharmacists; non-pharmacist preceptors included RN/BSN (3; homecare programs); PhD (3; industry or research); MD (2; medical clinic, industry); JD (APPRISE Program, see Standard 12 for description); and MS/MEd/MPH (community health), for selected IPPE and elective APPE rotations. All core IPPEs in the P2 and P3 years and all required APPEs and are conducted under the guidance of qualified licensed pharmacist preceptors. Appendix 20A (required) is an all-inclusive table listing IPPE and APPE sites and preceptors, background, and ratios.

Selection criteria for preceptors and sites are given in Appendix 20B (required). Prospective preceptors submit application materials before a new IPPE or APPE site is approved. The first, the Experiential Learning Site Description Form (Appendix 20C, required), describes the practice site and is detailed in the narrative of Standard 22. In addition, potential preceptors submit a CV/résumé and a Preceptor Data form (Appendix 20D, required), which summarizes preceptor qualifications.

Comprehensively, the University of Pittsburgh School of Pharmacy uses a multi-faceted approach in evaluating suitability of sites and preceptors, including site visits, phone discussions, review of site application materials.

## Preceptor Orientation, Education, and Development

PittPharmacy preceptor orientation consists of an online preceptor guide (Appendix 20E, required) and training modules posted on the School of Pharmacy Web site. Sample content from these CPE-credit-bearing modules is included in Appendix 20F (optional). PittPharmacy offers free remote access to the complete services of the Health Sciences Library System and free access to more than 200 continuing education programs through the PittPharmacy Web site, in addition to a live fall and spring CPE Program (see Appendix 20G, optional). Appendix 20H (required) provides a comprehensive list of preceptor training activities.

## **Student: Preceptor ratio**

The majority (69 percent) of preceptors have a 1-to-1 student-to-preceptor ratio, with the remainder maintaining a 2-to-1, and rarely, a 3-to-1 ratio. On the 2015 AACP Graduating Student Survey, 100 percent strongly agreed/agreed that preceptors provided individualized guidance that met their needs. The 100 percent agreement that preceptors individualize guidance to learners is likely an effect of maintaining optimal student: preceptor ratios for both IPPE and APPEs.

## **Preceptor Performance and Evaluation**

Students do a required evaluation of preceptors at the end of each IPPE and APPE using standardized forms. Preceptors obtain de-identified student reviews in E\*Value. The Office of Experiential Learning reviews the student evaluations of preceptors. A review of evaluation data in aggregate by type of rotation experience (i.e., acute care, ambulatory care, community, and hospital) and (weighted) median show high marks for PittPharmacy preceptors. The high marks have been sustained over time, as the 2015 and 2016 classes noted that overall teaching effectiveness of preceptors at 4.73 (2015) and 4.79 (2016), respectively based on a Likert-type scale with 5 being the highest score. Appendix 20I (optional) displays these data.

The Office of Experiential Learning reviews student evaluations of sites and preceptor performance and information provided by students during live group debriefing sessions. Evaluation of information obtained through these means can result in the following:

- 1. Validation of the site/preceptor as a suitable provider of experiential learning;
- 2. Re-categorization of the type of experience offered by the site;
- 3. Need for contact by the School to offer clarification or information to the preceptor to improve the student experience at the site;
- 4. Removal of the site/preceptor from the Experiential Learning Program.

A more detailed explanation of preceptor and site quality improvement actions can be viewed in Appendix 20J (optional). Over the last two years, 20 changes were made to the PittPharmacy preceptor roster: 17 preceptors were removed due to relocation from primary site, two were removed due to student feedback, with subsequent site visits revealing a poor experience, and one was removed due to site violations/preceptor attitude. The preceptor/site removal rate due to poor evaluation is less than 1 percent (3 removed of 458 active preceptors).

PittPharmacy expectations of preceptors are clear; on the 2015 AACP Preceptor Survey, 83 percent of PittPharmacy preceptors strongly agreed/agreed that they understand the evaluation criteria. However, 21 percent of preceptors disagreed/strongly disagreed that they receive their student evaluations at the end of the rotation. This is similar to peer

institutions, in which 18% of preceptors strongly disagreed/disagreed with the same statement. A possible explanation is that a number of IPPE preceptors did not know how to access evaluation data stored in E\*Value, which is the rotation management Web site. To remedy this problem, specific information for accessing student evaluations of preceptors is now in the PittPharmacy preceptor orientation modules that are detailed below.

# **Preceptor Engagement**

Community and ambulatory care preceptors are invited to the School to participate in Community Leadership Innovation and Practice (CLIP) Workshops, which are held four times each year in conjunction with the P2 Community Pharmacist Practice course. The day-long workshops are designed to mimic a professional pharmacy meeting and begin with a continuing education presentation by an invited speaker who is usually a national or regional leader in pharmacy practice. Preceptors are invited to stay after the presentation and engage with students in various activities designed to explore, enhance, and design patient care activities in community pharmacy settings. This has been a well-received by preceptors and students alike.

<u>Preceptor Feedback to PittPharmacy.</u> In addition to the CLIP Workshops described above, IPPE and APPE preceptors complete evaluations of all students assigned to them (Appendix 20K, required). Preceptors also provide valuable feedback to the School on ways to improve the educational program. A volunteer preceptor who is an alumnus is an active member of the Curriculum Committee as are faculty preceptors.

All preceptors are recognized by PittPharmacy for the contributions they make. All preceptors receive certificates of appreciation annually, conferring on them the title of "Associate Clinical Preceptor of Pharmacy and Therapeutics" (Appendix 20L, optional). In addition, non-faculty preceptors who consistently make significant contributions to the School through precepting and teaching may be offered adjunct faculty appointments.

Students show their appreciation of preceptor efforts by nominating preceptors for the Preceptor of the Year Award. Each year the graduating class presents this award to one volunteer and one faculty preceptor. A chart of past winners of this award is in Appendix 20M (optional).

On the 2015 AACP Preceptor Survey,

- 86 percent of PittPharmacy preceptors strongly agreed/agreed that they have ongoing contact with the Office of Experiential Learning;
- 78 percent of PittPharmacy preceptors strongly agreed/agreed that they are aware of the mechanism to provide feedback on the PharmD curriculum.

These positive responses exceed those of peer institutions.

# Office of Experiential Learning Administration

The Office of Experiential Learning reports to the associate dean for education. The Experiential Learning program is administered by two full-time faculty and one staff member: James Pschirer, PharmD, Director of Experiential Learning and Continuing Professional Development (Appendix 20N, required); Susan Skledar, MPH, RPh, Associate Director of Experiential Learning (Appendix 20O, required); Ms. Anna Schmotzer, Assistant Director of Experiential Learning. In addition to the individuals in the Office of Experiential Learning, PittPharmacy has an Experiential Learning Committee, which is composed of course coordinators for IPPE courses, the director, and associate and assistant director of experiential learning, and two student representatives from each professional year. The Experiential Learning Committee interfaces with the Office of Experiential Learning and the Curriculum Committee as a whole. Together the committee and members of the office provide seamless integration of curricular content, implementation, integrity of the longitudinal experiential learning program, and quality of sites and preceptors. Appendix 20P (required) provides a description of the duties of the Experiential Learning team members.

On an annual basis, the Office of Experiential Learning summarizes data from the student PittPharmacy Preceptor Evaluation. As an example of the results of the aggregate data (Appendix 20Q, required) PittPharmacy students at the end of the APPE rotations strongly agreed/agreed that preceptors:

- provided ample orientation and site specific learning objectives: 95 percent;
- served as a positive role model: 98.1 percent;
- allowed me to assume practice responsibilities: 94.4 percent;
- taught at an appropriate level of difficulty: 95.4 percent;
- had an overall teaching effectiveness: 97.5 percent.

The above data show the strength of the preceptors, the sites, the experiences of students, and the overall quality of program administration.

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <i>/or</i></li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. [TEXT BOX] [1,000 character limit, including spaces]

## 6) **APPENDICES**

Appendix	File Name
20A	All Preceptors Site 2015-16 v2.pdf
20B	Selection Criteria for Preceptors and Sites.pdf
20C	Site Description Form.pdf
20D	Preceptor Data Form.pdf
20E	EL Preceptor Manual 2016.pdf
20F	Preceptor development Module 1.pdf
20G	Preceptor PharmacyCE Spring 2016.pdf
20H	Preceptor Training and Educational Opportunities 2016.pdf
201	Aggregate Preceptor Evals APPE 15-16.pdf
20J	Quality Assurance Actions.pdf
20K	Amb Care APPE Analysis and P2 & P4 Preceptor Evaluation of the Pharmacy Student 0809.pdf
20L	Certificate of Recognition.pdf
20M	Preceptor of the Year Awardees.pdf
20N	Pschirer CV.pdf
200	Skledar CV.pdf
20P	Responsibilities of the EL Program Team.pdf
20Q	Aggregate Preceptor Evals APPE 15-16 Graphs.pdf

<u>Standard No. 21: Physical Facilities and Educational Resources:</u> The college or school has adequate and appropriately equipped physical and educational facilities to achieve its mission and goals.

1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ Floor plans for college or school's facilities and descriptions of the use(s) of available space
- ☑ Description of shared space and how such space promotes interprofessional interaction
- Analysis of the quantity and quality of space available to the program and plans to address identified inadequacies.
- Documentation of Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) or other nationally recognized accreditation of animal care facilities, if applicable
- Description of educational resources available to faculty, preceptors, and students (library, internet access, etc.)
- ☑ CV of the librarian(s) who act as primary contacts for the pharmacy program

## **Required Documentation for On-Site Review:**

Plans/architectural drawings of the physical facilities (if not feasible to provide as part of Self-Study Report)

## Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Faculty Questions 26-29, 31
- AACP Standardized Survey: Student Questions 68-76
- AACP Standardized Survey: Preceptor Questions 42, 43

## **Optional Documentation and Data:**

- ☑ Other documentation or data that provides supporting evidence of compliance with the standard.
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>21.1. Physical facilities</b> – The college or school's physical facilities (or the access to other facilities) meet legal and safety standards, utilize current educational technology, and are clean and well maintained.	0	0	0
21.2. Physical facilities' attributes – The college or school's physical facilities also include adequate:	0	0	0
Faculty office space with sufficient privacy to permit accomplishment of responsibilities	0	0	0
Space that facilitates interaction of administrators, faculty, students, and interprofessional collaborators	0	0	0
<ul> <li>Classrooms that comfortably accommodate the student body and that are equipped to allow for the use of required technology</li> </ul>	0	0	0
Laboratories suitable for skills practice, demonstration, and competency evaluation	0	0	0
Access to educational simulation capabilities	0	0	0

<ul> <li>Faculty research laboratories with well-maintained equipment including research support services within the college or school and the university</li> </ul>	0	0	0
Animal facilities that meet care regulations (if applicable)	0	0	0
<ul> <li>Individual and group student study space and student meeting facilities</li> </ul>	0	0	0
<b>21.3. Educational resource access</b> – The college or school makes available technological access to current scientific literature and other academic and educational resources by students, faculty, and preceptors.	0	0	0
<b>21.4 Librarian expertise access</b> – The college or school has access to librarian resources with the expertise needed to work with students, faculty, and preceptors on effective literature and database search and retrieval strategies.	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - A description of how the college or school's physical facilities (or access to other facilities) utilize current educational technology
  - A description of how the college or school makes available technological access to current scientific literature and other academic and educational resources to students, faculty, and preceptors
  - A description of physical facilities, including available square footage for all areas outlined by research facilities, lecture halls, faculty offices, laboratories, etc.
  - A description of the equipment for the facilities for educational activities, including classroom and simulation areas
  - ☑ A description of the equipment for the facilities for research activities
  - ☑ A description of facility resources available for student organizations
  - A description of facilities available for individual or group student studying and meetings
  - I How the facilities encourage and support interprofessional interactions
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## Description

Salk Hall and Salk Pavilion house the administrative and teaching hub of the School of Pharmacy. The University of Pittsburgh is among the few universities nationally that has six schools of the health sciences, nine additional undergraduate and professional schools, and an academic medical center with several hospitals and clinic buildings all on the same campus. A map of the University of Pittsburgh Oakland campus appears in Appendix 21A (optional). As summarized in Appendix 21B (required), the School occupies a total of 86,660 SF of space that includes 81,200 SF of University allocated space plus 5,460 SF in leased space. Office space provided to clinical faculty at UPMC is not included in the square footage. A list of PittPharmacy classrooms, including conference rooms available for teaching, plus spaces shared with the School of Dental Medicine, is in Appendix 21C (required). Of the 81,200 SF total University allocated space, PittPharmacy has 30,654 SF of teaching space plus access to an additional 7,237 SF space in Salk Hall, **which is**  shared with the School of Dental Medicine. The Commons is an additional 1,561 SF. The School of Dental Medicine occupies space in both Salk Hall and Salk Pavilion.

A significant event for the School of Pharmacy was the opening of Salk Pavilion in May 2015. The Pavilion houses 14 faculty members plus staff and graduate students; the state-of-the art open laboratories, procedure rooms, equipment corridors, offices and conference rooms added greatly to the functionality of research space. The move to the Pavilion provides the opportunity to renovate vacated space in Salk Hall. School faculty occupy the second and third floors of Salk Pavilion, where the Center for Clinical Pharmaceutical Sciences, Center for Pharmacogenetics, Center for Computational and Chemical Genomics, the Small Molecule Biomarker Core, and the Drug Formulation laboratory are located.

Connecting Salk Pavilion to Salk Hall is the newly constructed Commons with the Rxpresso Coffee Shop, which is newly acquired interaction space. The Commons opens directly into the fourth floor of Salk Hall, the location of two large classrooms used primarily by the School. Since Salk Pavilion opened, many of the newly vacated spaces in Salk Hall have been repurposed and/or reallocated to make small classrooms or neighborhoods of faculty offices, allowing some faculty who previously occupied leased space to move back into Salk Hall. Programs located in Salk Hall include the PittPharmacy Innovation Lab, the PittPharmacy Community Leadership and Innovation in Practice Center, the NIDA-funded Center for Excellence in Computational Drug Abuse Research, and the Master of Science in Pharmacy Business Administration program.

Planning for University-supported upgrades and renovations of Salk Hall began in July 2016.

# Faculty and Staff Offices, Research and Equipment

Every pharmacy faculty member has a private office; those who have offices outside Salk have access to drop-in space in Salk Hall. Each faculty and staff member has a desk and appropriate office furniture and computer/printer hardware and software to accomplish their responsibilities. School computers within Salk Hall and Salk Pavilion are linked to the PittPharmacy network. Additionally, faculty, students, and staff are able to obtain an impressive number of software products from the University for little or no cost. Appendix 21D (required) includes links to available technology along with an annotated list of University and School links relevant to Standard 21.

Appendix 21E (optional) provides an inventory of laboratory equipment located in faculty research laboratories in Salk Hall and Salk Pavilion. The department chairs and director of space management regularly evaluate shared equipment needs and purchases, maintenance contracts, and emergency power electrical power needs. The University is accredited by AAALAC (Appendix 21F, required) for responsible animal care and use, though the accreditation documentation is not for external distribution.

# **Classrooms and Other Learning Environments**

Both Salk Hall and the Pavilion have full wireless access as well as data ports for connections to School servers. Most courses are taught in Salk Hall, where the School's two large, one mid-size, and 11 small classrooms along with seven conference rooms (Appendix 21C, required) are located. The School also shares a third large classroom and has access to an additional seven other classrooms in Salk Hall. In addition, School faculty have access to stadium-seating classrooms in Scaife Hall and other campus buildings allowing us to expand when needed for special class sessions, invited speakers,

and workshops. The Biomedical Science Tower South, O'Hara Student Center, William Pitt Union, and David Lawrence Hall are all occasionally used for expanded School offerings.

Since May 2015, PittPharmacy administration reallocated and repurposed selected Salk Hall spaces, resulting in five new small group rooms and a new mid-sized classroom designed to facilitate active learning (included in the above numbers). The Pharmaceutical Care Learning Center and the Student Computer Lab are spaces dedicated to students that were updated in 2016.

<u>Practice Skills Laboratories, Educational Simulation, and Technology.</u> Learning spaces have been designed and constructed to facilitate active learning. Faculty engage P1 students in patient and virtual simulation and steadily intensify skill development experiences and simulations throughout the PharmD program to facilitate "getting to expert faster."

The Novo Nordisk Learning Center (Salk 402) and the Rite Aid/Edward C. Reif Laboratory (810 Lab) are primary Salk Hall locations for skills practice, competency evaluation and simulated experiences. The 810 Lab has 56 student workstations that accommodate dispensing, sterile products compounding, pharmaceutics and dosage forms compounding, and technique laboratories (e.g., proper use of glucometers and insulin).

Simulated patient interactions occur in the five rooms adjoining the 810 Lab, allowing for personal conversations between the student and standardized patients and standardized colleagues. Each room has A/V recording equipment with My Pitt Video (Panopto). The 810 Lab supports simulated patient encounters through the use of two high-fidelity human patient simulators and partial task trainers (blood pressure arms). Additional simulation approaches include the use of virtual patient avatars and vpSim, which provides internally developed patient cases that allows students to enhance their clinical decision making skills. An interactive web-based virtual Electronic Health Record (EHR) called Docucare allows students to extract patient information from a health record and document their interactions with patients. The Novo Nordisk Learning Center is equipped to access the UPMC Cerner EHR Training Version.

<u>Educational Technology</u>. Appendix 21G (optional) provides a matrix of classroom spaces and technology available by room. In addition to the above simulations that include technology applications, PittPharmacy has continued to support and encourage innovative teaching approaches including: video conferencing, use of an audience-response system, Simcyp, PK Sim and SAS Data-Mining. Information technology (IT) staff survey the School's large classrooms daily to ensure equipment is running appropriately and fresh batteries are in place. IT staff are available to troubleshoot technology daily during the hours of 7:30 a.m. to 3:30 p.m.

Throughout the curriculum, students use two internally-developed software adaptations to authentically experience the "Pharmacists' Patient Care Process." The PITT Form allows students to "document and bill" for patient visits; "Voices" simulates phone interactions to teach patient and interprofessional communication skills.

<u>Peter M. Winter Institute for Simulation Education and Research (WISER).</u> WISER, a leading academic medical center healthcare simulation center, is a 16,000 SF nationally accredited simulation facility. WISER is utilized by the University's Schools of Pharmacy, Nursing, and Medicine. PittPharmacy has been a key partner with WISER for the development of drug-related patient cases and uses WISER to deploy its Readiness Assessment. WISER provides access to 13 human

patient simulators and 22 Medical Education Theaters (simulated patient rooms and intensive care units). WISER is also equipped with three debriefing rooms, two large classrooms, two rooms for BLS and ACLS certification examinations, and a multipurpose laboratory with partial task trainers.

# **Student Facilities and Resources**

Student Services staff are located in the Dr. John P. and Constance A. Curran Center for Pharmacy Students, which is located in Salk Hall. Admissions, experiential learning, the registrar and student organization staff are co-located in the Center.

In fall 2016, the Pharmaceutical Care Learning Center (PCLC) in Salk Hall was allocated for exclusive use by students for group work, student organization meetings, and studying. Previously, some classes were held in the PCLC, a practice that is discontinued because of the newly available small classrooms. One PCLC room is outfitted with a sink, refrigerator, and microwave ovens. In addition to the PCLC and Commons, students use The John M. and Gertrude E. Petersen Events Center, the UPMC Presbyterian cafeteria, and Falk Library; the latter three are across the street from Salk Hall and provide interaction, study spaces and/or food service. These spaces also provide opportunities for informal interprofessional interactions.

The University has six computing laboratories for students, one in close proximity to the School in Sutherland Hall (link in Appendix 21D, required).

<u>Interprofessional Interactions</u>. The table in Appendix 21H (required) outlines locations where interprofessional experiences occur for all students in addition to experiential learning sites. In the 2015 AACP Graduating Student survey, 100 percent of students responded that their pharmacy practice experiences allowed them to collaborate with other health care professionals.

## **Educational and Librarian Resource Access**

The University Library System comprises 15 libraries that provide information resources to faculty, staff, and students of the University community. The Falk Library of the Health Sciences, located in Scaife Hall across from Salk Hall, houses the Health Sciences Library System (HSLS), which supports the educational, research, and clinical services of the schools of the health sciences and UPMC.

A link to the overview of HSLS physical and electronic resources is in Appendix 21D (required). HSLS is home to a large number of print journals and books, as well as audiovisual and educational software; it also provides access to digital manuscripts through a number of online journals, as well as databases such as Micromedex, Ovid Medline, and UpToDate, among others. HSLS now subscribes to AccessPharmacy<sup>®</sup>, an online collection of textbooks and other pharmacy-related resources. AccessPharmacy<sup>®</sup> is available to Pitt and UPMC users. Faculty, adjunct faculty, staff, students, and preceptors are eligible for remote access to HSLS resources and can avail themselves of trainings offered by HSLS librarians, including effective use of EndNote, Microsoft PowerPoint, and PubMed. Michele Klein-Fedyshin, MSLS, BA, BSN, RN is the liaison librarian for the School of Pharmacy; see Appendix 211 (required) for her CV.

All volunteer preceptors are eligible to obtain remote access to HSLS by requesting a University e-mail account sponsored by the director of experiential learning.

# Housekeeping and Safety

Facilities Management of the University is responsible for construction and renovations and for general housekeeping and maintenance throughout the University. All buildings have wheelchair entrances and handicapped accessibility. The University's Department of Environmental Health and Safety routinely conducts safety checks and offers training program (link in Appendix 21D, required). The University's Radiation Safety Committee assures safety and regulatory compliance with the use of radioactive materials and radiation in research and clinical practice.

In cases of acute injury or illness, faculty of the Department of Anesthesiology in the School of Dental Medicine (Salk Hall) provide first emergency response by calling 412-648-8621. Calling the campus emergency numbers, 624-2121 or 811, summons police, fire, and ambulance services. Emergency phones are available throughout the campus. The University's Emergency Notification System was implemented in 2007 to send real-time emergency information by e-mail, text and/or voicemail messages to students and employees. See Appendix 21D (required) for links.

## **PittPharmacy Final Self-Evaluation**

On the 2015 AACP Surveys, 89 percent of faculty and 92 percent of graduating students strongly agreed/agreed that laboratories and the non-classroom environment in the school are conducive to learning and meet the educational needs of the students. Further, 97 percent of students feel that their classrooms in the School of Pharmacy or elsewhere in the campus are conducive to learning.

Of the responding faculty:

- 83.8 percent strongly agreed/agreed that the School "has appropriate physical facilities to allow me to fulfill my responsibilities;"
- 92 percent strongly agreed/agreed that the School provides adequate computer resources that enable them to successfully fulfill their academic responsibilities;
- 62.1 percent strongly agreed/agreed that they "have adequate laboratory and/or clinical space for my research and/or scholarship needs;"
- 78.4 percent of faculty strongly agreed/agreed that "I have adequate office space;"
- 73 percent of the faculty indicated that they had "adequate research laboratory and/or clinical resources."

The latter three responses are below the national average. The AACP faculty survey was deployed just as some faculty were moving to Salk Pavilion and prior to any refurbishing or repurposing of space in Salk Hall. Other faculty in UPMC-provided offices had just moved to temporary space due to flooded UPMC offices. Likewise, the 2015 AACP Graduating Student Survey was answered by students who did not have access to new facilities because the Pavilion opened in May 2015. Since May 2015, the leadership of the School committed resources and made improvements to create faculty neighborhoods and improved student spaces and classrooms.

University-planning for renovations to Salk Hall started in July 2016. To keep pace with the evolution of educational approaches and research, new configurations of space, and upgrades to HVAC, a commitment of University resources not only for planning but for the actual renovations is required.

4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
Compliant	☑ Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

The University of Pittsburgh Facilities and Planning Committee and administration has included the School of Pharmacy in its developing Facilities/Capital Plan 2020. Significant infrastructure upgrades to Salk Hall including HVAC upgrade and installation of a fire safety sprinkler system throughout Salk Hall are targeted. Remodeling and reconfiguring areas of Salk Hall is required to make some floors usable and to utilize others efficiently. Renovation is critical in order to attract the next generation of professionals as students and to recruit and retain superb faculty. It is essential that PittPharmacy maintain the quality of its superb learning experiences and research programs.

## 6) APPENDICES

Appendix	File Name
21A	Map of Pitt campus.pdf
21B	Total Square Footage.pdf
21C	FY16 Teaching Space v3.pdf
21D	List of Links.pdf
21E	Research Laboratory Equipment List.pdf
21F	Pitt AAALAC Accreditation.pdf
21G	Matrix of Classroom and Technology Resources.pdf
21H	Interprofessional Resources v3.pdf
211	CV Fedyshin.pdf
21J	Analysis of the quantity and quality of space available.pdf

<u>Standard No. 22: Practice Facilities:</u> The college or school has the appropriate number and mix of facilities in which required and elective practice experiences are conducted to accommodate all students. Practice sites are appropriately licensed and selected based on quality criteria to ensure the effective and timely delivery of the experiential component of the curriculum.

## 1) Documentation and Data:

## **Required Documentation and Data:**

- ☑ Uploads:
- Examples of affiliation agreements between college/school and practice sites (all agreements will be reviewed during site visits)
- Description of practice sites (location, type of practice, student:preceptor ratios) and involvement in IPPE, APPE, or both
- Delicies and procedures related to site selection, recruitment, and assessment
- Examples of quality improvements made to improve student learning outcomes as a result of site/facility assessment
- ☑ ACPE IPPE Capacity Chart. Template available to download.
- ☑ ACPE APPE Capacity Chart. Template available to download.

#### **Required Documentation for On-Site Review:**

A list of practices sites (classified by type of practices), specifying IPPE and/or APPE, with number of students served, interaction with other health professional students and practitioners, the number of pharmacy or other preceptors serving the facility, and their licensure status. (Sites used in the past academic year should be identified.)

## Data Views and Standardized Tables:

#### **Optional Documentation and Data:**

- ☑ Other documentation or data that provides supporting evidence of compliance with the standard.
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>22.1. Quality criteria</b> – The college or school employs quality criteria for practice facility recruitment and selection, as well as setting forth expectations and evaluation based on student opportunity to achieve the required Educational Outcomes as articulated in Standards 1–4.	0	0	0
<b>22.2. Affiliation agreements</b> – The college or school secures and maintains signed affiliation agreements with the practice facilities it utilizes for the experiential component of the curriculum. At a minimum, each affiliation agreement ensures that all experiences are conducted in accordance with state and federal laws.	0	0	0
<b>22.3. Evaluation</b> – Practice sites are regularly evaluated. Quality enhancement initiatives and processes are established, as needed, to improve student learning outcomes.	0	0	0

3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.

- Capacity assessment (surplus or shortage) of the required and elective introductory pharmacy practice experiences (IPPEs) and advanced pharmacy practice experiences (APPEs) sites and preceptors for present and, if applicable, proposed future student enrollment
- Strategies for the ongoing quantitative and qualitative development of sites and preceptors and formalization of affiliation agreements
- I How the college or school employs quality criteria for practice facility recruitment and selection
- How the college or school assesses the quality of sites and preceptors in light of curricular needs and discontinues relationships that do not meet preset quality criteria
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements
- ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

PittPharmacy has a rich diversity of fully qualified and vetted IPPE and APPE sites and preceptors (Appendix 22A, required) that provide students the opportunity to personalize their education by choosing sites to match their interests. In 2015-16, PittPharmacy engaged 239 unique sites for APPE rotations and 178 sites for IPPE rotations. Of 458 preceptors, 341 provided a total of 782 APPE rotations. Ninety-six of these APPE preceptors also provided IPPE rotations for students. An additional 117 preceptors solely provided IPPE rotations. As can be seen from the IPPE and APPE capacity charts (Appendices 22B and 22C, required), site availability is adequate to meet PittPharmacy program requirements. Appendix 22A (required) also provides a comprehensive look at APPE and IPPE experiential sites, including student-preceptor ratios and type of student experience.

## **Affiliation Agreements**

All experiential sites have signed affiliation agreements with the School of Pharmacy. These affiliation agreements articulate the responsibilities, commitments, and expectations for each of the parties and address matters such as insurance requirements, student disclosures, immunization policies, and conduct expectations. The standard affiliation agreement developed by University General Counsel can be viewed in Appendix 22D (required). Some practice sites may elect to use their own affiliation agreement; in these cases, the agreement must be approved by the University Office of General Counsel. Examples of completed affiliation agreements, both PittPharmacy and non-Pitt are also provided in Appendix 22E (required).

The elements of the relationship between the University of Pittsburgh and UPMC are described in a master affiliation agreement that covers all student experiences from all schools of the health sciences. UPMC Health System is the primary partner of PittPharmacy. In 2015-16, UPMC provided 297 APPE rotations (38 percent of total APPE rotations) at 37 sites within the System including hospitals, ambulatory care clinics, senior care homes, and physician practices, UPMC Health Plan, and the Donald D. Wolff, Jr. Center for Quality, Safety, and Innovation.

## **Selection Criteria**

Selection criteria for preceptors and sites are given in Appendix 22F (required). Two forms are used to collect data on prospective preceptors and sites. On the Experiential Learning Site Description form (Appendix 22G, required), preceptors describe the practice site, including specific patient populations served, array of disease states most frequently presented

by those patients, and the extent to which collaboration occurs with other health care providers. Preceptors also provide a brief summary of major learning opportunities and objectives possible during the rotation, along with any features that make the practice site unique. The Preceptor Data form (Appendix 22H, required) is a summary of preceptor qualifications. For ongoing quality improvement, IPPE and APPE sites may be visited by a PittPharmacy faculty member to assess for adequacy to provide student learning. Student evaluations of sites and preceptors, as well as information gleaned from required live debriefing sessions with students, are also used in the quality assurance process and can be a trigger for a targeted site visit. Examples of actions taken as a result of quality assurance and improvement monitoring can be seen in Appendix 22I (required). As described in Standard 20 (Preceptors), over the last two years, 20 changes were made to the preceptor roster: 17 preceptors were removed due to relocation from primary site, 2 were removed due to student feedback and subsequent site visits revealing a poor experience, and 1 removed due to site violations/preceptor attitude.

## **Evaluation and Improvement**

Student satisfaction with site quality can be seen in Appendix 22J (APPE sites, required), Appendix 22K (P3 IPPE sites, required), and 22L (APPE and IPPE sites, required). Overall 97 percent of P3 IPPE sites and 96 percent of APPE sites were rated favorably by current students for overall practice site experience. Similar positive responses were seen with all other site parameters measured in the evaluations. In the 2015 AACP Graduating Student Survey, 97.8 percent of students strongly agreed/agreed that APPE sites were of high quality, exceeding the national and peer site results. In the same survey, 78 percent of students strongly agreed/agreed that IPPE sites were of high quality. This was slightly lower than the national (84.8 percent and peer (80.6 percent). The lower IPPE positive response rate from the Graduating Student survey may be due to the lack of student choice in site selection in the P1 and P2 years for that graduating class. More choice and flexibility in site selection is now offered, particularly in the P2 and following years.

On PittPharmacy student evaluations (Appendix 22M, required), students reported an increase in overall satisfaction with IPPE sites over the last two years, as sites have been better categorized and students can make more informed choices. Student rating of P4 APPE sites reveals a high satisfaction rate in all measures, including preceptors providing opportunities for the student to actively participate in practice, providing a stimulating and valuable experience, and site providing a means to expand student knowledge and practice abilities.

PittPharmacy IPPE sites provide the students with ample opportunity to experience fundamentals of hospital/healthsystem based pharmacy practice. The University of Pittsburgh has extensive partnerships with local, regional and national health care systems.

PittPharmacy has developed a particularly strong ambulatory care APPE program through which students experience direct patient care with a diverse cohort of patients. Most sites are ambulatory care clinics, however a few community sites associated with Giant Eagle and Rite Aid have qualified based on the clinical services and experiences that meet the standards for ambulatory care rotations. Appendix 22N (optional) contains analysis of data compiled from PITT forms of APPE ambulatory care sites. These data show the number, nature, and variety of patients and disease states encountered by the students at PittPharmacy Ambulatory Care APPE sites. Appendix 22O (optional) gives an in-depth audit of four APPE Ambulatory care sites.

# **Elective APPEs**

APPEs provide an opportunity for students to personalize their education, both through their required and elective rotations. PittPharmacy students select two elective APPE rotations from sites offering experience in many areas including international pharmacy, pharmacy research, specialty pharmacy, pharmacy management, population health, or pharmaceutical industry. It is apparent from the distribution of sites by type that PittPharmacy has an "array of quality-assured sites for non-patient care elective pharmacy practice." As seen in capacity charts (Appendix 22B and 22C), PittPharmacy is fortunate to have ample opportunities for students.

## Notable

- The Experiential Learning Committee, Curriculum Committee and Experiential Learning Office work efficiently together to recruit and develop relationships with volunteer preceptors.
- The rich array of required patient care experiences and elective opportunities available to students make the Experiential Learning Program among the best in the country.
- IPPE's provide exceptional opportunities for students to build solid foundations for the patient care process through the integration of classroom content with the "IPPE classroom in the community."
- The variety of APPE experiences maximizes the opportunity for students to meet and exceed standards while personalizing education and getting to expert faster.
- 4) College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <i>/or</i></li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) APPENDICES

Appendix	File Name
22A	All Preceptors Site 2015-16 v2.pdf
22B	ACPE APPE Capacity Chart 11-25-15.pdf
22C	ACPE IPPE Capacity Chart 11-25-15.pdf
22D	Affiliation Agreement.pdf
22E	Pitt and Non-Pitt Completed Affiliation Agreements.pdf
22F	Selection Criteria for Preceptors and Sites.pdf
22G	Site Description Form.pdf
22H	Preceptor Data Form.pdf
221	Quality Assurance Actions.pdf
22J	APPE 2015-2016 Site Evaluation Data.pdf
22K	P3 IPPE 2015-16 Site Evaluation Data.pdf
22L	Aggregate IPPE & APPE Site Eval Data 15-16.pdf
22M	Student Evaluation of Sites IPPE and APPE.pdf
22N	P4 Ambulatory Care Patient Characteristics.pdf
220	P4 Ambulatory Care Deep Dive May-Jun 2016.pdf

Standard No. 23: Financial Resources: The college or school has current and anticipated financial resources to support the stability of the educational program and accomplish its mission, goals, and strategic plan.

1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- Detailed budget plan or proforma (previous, current, and subsequent years)
- ☑ Description of college or school's budgetary processes
- ☑ In-state and out-of-state tuition compared to peer schools

## Required Documentation for On-Site Review:

(None required for this Standard)

## Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Faculty Questions 27, 28
- AACP Standardized Survey: Preceptor Question 42
- In-state tuition for past five years compared to national data
- Out-of-state tuition for past five years compared to national data
- Grant funding for past five years compared to national data

#### **Optional Documentation and Data:**

- ☑ In-state tuition for past five years, with peer school comparisons
- $\ensuremath{\boxtimes}$  Out-of-state tuition for past five years, with peer school comparisons
- ☑ Total grant funding for past five years, with peer school comparisons
- ☑ NIH funding for past five years, with peer school comparisons
- ☑ Faculty salaries by academic rank expressed as a percentile against a selected peer group of colleges and schools. (*Note: This report is available from AACP on request.*). Request form available for download.
- ☑ Other documentation or data that provides supporting evidence of compliance with the standard
- 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>23.1. Enrollment support</b> – The college or school ensures that student enrollment is commensurate with resources.	0	0	0
<b>23.2. Budgetary input</b> – The college or school provides input into the development and operation of a budget that is planned, executed, and managed in accordance with sound and accepted business practices.	0	0	0

**23.3. Revenue allocation** – Tuition and fees for pharmacy students are not increased to support other educational programs if it compromises the quality of the professional program.

 Image: Coloradia state
 Image: Coloradia state

 Image: Coloradia sta

**23.4. Equitable allocation** – The college or school ensures that funds are sufficient to maintain equitable facilities (commensurate with services and activities) across all program pathways.

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check i to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - How the college or school and university develop annual budgets (including how the college or school has input into the process) and an assessment of the adequacy of financial resources to efficiently and effectively deliver the program and support all aspects of the mission and goals.
  - An analysis of federal and state government support (if applicable), tuition, grant funding, and private giving
  - A description of how enrollment is planned and managed in line with resource capabilities, including tuition and professional fees
  - A description of how the resource requirements of the college or school's strategic plan have been or will be addressed in current and future budgets
  - ☑ How business plans were developed to provide for substantive changes in the scope of the program or student numbers, if applicable
  - An assessment of faculty generated external funding support in terms of its contribution to total program revenue
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - ☑ Any other notable achievements, innovations or quality improvements

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

The University of Pittsburgh is a state-related institution and as such, receives an annual appropriation and capital funds from the Commonwealth of Pennsylvania.

## **Budgetary input**

The Chancellor has responsibility and authority for the budget activities in conjunction with the Board of Trustees. Representatives of administration, faculty, staff, and students share in budget and financial planning at the University level through the University Planning and Budgeting Committee (UPBC). The Planning and Budgeting System (PBS) combines the long-range planning and budgeting process within the University. The PBS process is intended to facilitate the academic, research, service components of the strategic plan and ensure consistent framework for planning and budgeting decisions. The detailed description of the planning and budgeting system for the University is outlined in Appendix 23A (required). For additional budgetary details, The University's Fact Book is available at http://www.ir.pitt.edu/factbook/documents/FactBook2016.pdf.

The dean holds the overall financial responsibility for the School's budget. The assistant dean for finance and operations is responsible for the day-to-day financial activity of the School. Department chairs make budgetary decisions for the budgets allocated to their departments. The School-wide Planning and Budgeting Committee (PBC) reviews and

approves programmatic changes that impact faculty resources and budget. The Management Team determines allocations of resources that impact the Long-Range Plan of the School.

On an annual basis, the School submits a budget through the Office of the Senior Vice Chancellor for the Health Sciences to the University. Appendices 23B through 23D (required) provide financial summaries for the past fiscal year, current fiscal year and projections for the next year along with peer school and national data. Sources of funding include an allocation from the University of Pittsburgh, UPMC, continuing education and auxiliary accounts, gifts and endowments and sponsored project awards. In FY15, the School's expenditures were \$22.8 million. Appendix 23F (optional) shows expenditures by source; the School's total expenditures have increased steadily over time.

# **Revenue Sources**

The University allocation to the School is based on that of the previous year. The School receives an annual University allocation, not direct tuition dollars; however, the School receives tuition incentive funds based on enrollment. The School receives a portion of tuition in excess of an established base enrollment.

In an effort to increase opportunities for students to personalize their education, PittPharmacy petitioned University administration for a tuition and fee structure that allows for an annual tuition, where students may register for additional and summer credits with no additional tuition expense; for summer term classes, students pay fees only. This tuition and fee structure permits taking extra courses and research opportunities for credit during the summer at little extra cost (summer fees). The University sets the tuition with the approval of the Board of Trustees. The annual tuition for FY17 is \$30,284 and \$33,908 for in-state and out-of-state students, respectively, and annual fees of \$1,534.

Appendix 23E (optional) provides comparison tuition and mandatory fee data for the University of Pittsburgh, national schools and peer schools for the past five years. Fees during the two semesters cover expenses required of the student to complete the requirements of the program, such as immunization certification and CPR training.

Research funding is an integral part of the resource base for the School. PittPharmacy has consistently ranked among top schools of pharmacy in National Institutes of Health funding and other research support. During FY15, faculty members received a total of \$11.97 million in grant dollars. UPMC continues to be a strong resource base for the support of faculty and residents.

The University supports the School's philanthropic endeavors with a full-time director of development, who, with the Leadership Team, aligns development efforts with the PittPharmacy's Long-Range Plan. In FY15, the School received \$1,168,319 in major gifts and \$186,519 through annual fund support. Appendix 23G (optional) shows the growth in the book value of the endowment.

The School has pursued additional sources of revenue through development of new programs and partnerships. Programs include the Master of Science in Pharmaceutical Sciences, international clinical education training programs, and the Master of Science in Pharmacy Business Administration that launched in January 2016. The PittPharmacy Innovation Lab uses a "membership-driven" financial model with community pharmacies and chains to support advanced learning and research experiences for PharmD students while developing innovations that are deployed in the pharmacies of member partners. Sound business practices and efficient utilization of funds, has created the strong and stable foundation on which PittPharmacy's outstanding programs are built and to allocate resources for innovation.

# **Enrollment support**

Enrollment is managed through analysis of resources including faculty and staff capacity, employment demand for pharmacists, physical space, and budget. Enrollment projections are submitted annually and are reviewed by the Office of the Senior Vice Chancellor. The total number of students in the PharmD program is approximately 450, with a target enrollment of 114 students per class.

On the 2015 AACP Faculty Survey, 89.1 percent of PittPharmacy faculty indicated that they strongly agreed/agreed that the program resources can accommodate current number of enrolled PharmD students; this compares with 78.5 and 76.7 percent for national and peer schools, respectively.

## **Equitable allocation**

Achieving the PittPharmacy education, research, patient care, and service mission requires a strong foundation of funding, physical financial, and people. Allocation of funding, space, and faculty time occurs to assure success of each part of the PittPharmacy mission.

In FY16, for example, reallocating and refurbishing selected Salk Hall space after 14 faculty moved to Salk Pavilion required allocation of funds with the goal of enhancing working and learning environments for faculty of both departments, staff, and students. Creating de novo small classroom/conference spaces from vacated spaces allowed a commitment to PharmD students who will have exclusive use of the Pharmaceutical Care Learning Center and student computer lab; the latter two areas are being refurbished and will have upgraded electrical and Wi-Fi support for the fall 2016 term.

By allocating funds to update space and repurposing laboratories, a neighborhood was created for the PittPharmacy Community Leadership and Innovation in Practice Center, which includes space for faculty who previously did not have private office space in Salk Hall. Repurposing vacated laboratory space allowed for complete renovation to create a new mid-sized classroom for 48 students. Also, PittPharmacy funds were allocated for the purchase of scientific instruments and the upgrade of laboratories both in Salk Hall and the newly-constructed Salk Pavilion.

4)	College or School's Final Self-Evaluation: Self-assess how well the program is in compliance with the standard by putting a check	ĸ
	in the appropriate box $\square$ :	

Compliant	<b>Compliant with Monitoring</b>	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	compromise current compliance; factors exist that, if not addressed, may	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated /or</li> <li>Adequate information was not provided to assess compliance</li> </ul>

	compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.	bring the program into compliance.	
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

# 5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]**

## 6) APPENDICES

Appendix	File Name
23A	Planning and Budgeting System.pdf
23B	Pharmacy Actual FY15.pdf
23C	Pharmacy Actual FY16.pdf
23D	Pharmacy Budget Projections FY17.pdf
23E	Tuition.pdf
23F	Expenditures by Source.pdf
23G	School of Pharmacy Endowment.pdf
23H	Total and NIH Grant rankings.pdf
231	Faculty Salary Comparison with Peers.pdf

# Section III: Assessment of Standards and Key Elements

Standard No. 24: Assessment Elements for Section I: Educational Outcomes: The college or school develops, resources, and implements a plan to assess attainment of educational outcomes to ensure that graduates are prepared to enter practice.

#### 1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ College or school's curriculum assessment plan(s)
- Description of formative and summative assessments of student learning and professional development used by college or school
- Description of standardized and comparative assessments of student learning and professional development used by college or school
- Description of how the college or school uses information generated within the curriculum assessment plan(s) to advance quality within its Doctor of Pharmacy program

#### **Required Documentation for On-Site Review:**

(None required for this Standard)

#### Data Views and Standardized Tables:

It is optional for the college or school to provide brief comments about each chart or table (see Directions).

- AACP Standardized Survey: Student Questions 12-30
- AACP Standardized Survey: Alumni Questions 26-44
- AACP Standardized Survey: Preceptor Question 19-37

#### **Optional Documentation and Data:**

- Other documentation or data that provides supporting evidence of compliance with the standard Examples of assessment and documentation of student performance, nature and extent of patient and health care professional interactions, and the attainment of desired outcomes; examples of how assessment data has been used to improve student learning and curricular effectiveness
- 2) **College or School's Self-Assessment:** Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>24.1. Formative and summative assessment</b> – The assessment plan incorporates systematic, valid, and reliable knowledge-based and performance-based formative and summative assessments.	0	0	0
<b>24.2. Standardized and comparative assessments</b> – The assessment plan includes standardized assessments as required by ACPE (see Appendix 3) that allow for national comparisons and college- or school-determined peer comparisons.	0	0	0

<b>24.3. Student achievement and readiness</b> – The assessment plan measures student achievement at defined levels of the professional competencies that support attainment of the Educational Outcomes in aggregate and at the individual student level. In addition to college/school desired assessments, the plan includes an assessment of student readiness to:	0	0	0
Enter advanced pharmacy practice experiences	0	0	0
Provide direct patient care in a variety of healthcare settings	0	0	0
Contribute as a member of an interprofessional collaborative patient care team	0	0	0
<b>24.4. Continuous improvement</b> – The college or school uses the analysis of assessment measures to improve student learning and the level of achievement of the Educational Outcomes.	0	0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check i to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - ☑ A description of formative and summative assessments of student learning and professional development used by college or school
  - A description of standardized and comparative assessments of student learning and professional development used by college or school
  - ☑ How the assessment plan measures student achievement at defined levels of the professional competencies that support attainment of the educational outcomes in aggregate and at the individual student level
  - A description of how the college or school uses information generated within the curriculum assessment plan(s) to advance quality within its Doctor of Pharmacy program
  - How feedback from the assessments is used to improve student learning, outcomes, and curricular effectiveness
  - ☑ How the college or school uses the analysis of assessment measures to improve student learning and the level of achievement of the educational outcomes
  - How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
  - Any other notable achievements, innovations or quality improvements
  - ☑ Interpretation of the data from the applicable AACP standardized survey questions, especially notable differences from national or peer group norms

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

## **Formative and Summative Assessments**

<u>PharmD Assessment Matrix</u>. The PharmD Assessment Matrix (Appendix 24A, required) serves as PittPharmacy's assessment plan for the purposes of curriculum quality improvement and student learning outcomes assessment. It is inclusive of both qualitative and quantitative measures, as well as direct and indirect measures, for each PittPharmacy Outcome. Constructed initially in 2007, the Assessment Matrix is an innovative and systematic organizing tool that is updated annually to provide evidence of curriculum and student success. The Assessment Matrix also serves as the School's annual report to the Provost's Office on achievement of student learning outcomes and provides feedback to faculty for continuous quality improvements. Chosen measures are diverse forms of evidence from didactic and experiential learning settings, including course-specific formative and summative assessments. Descriptions of selected formative and summative assessments of student learning and professional development are included in Appendix 24B (required). Preceptor evaluations and student self-assessments provide composite representations of student abilities

and teaching effectiveness. Each year, new metrics are added to address new curriculum emphasis areas. The Curriculum Assessment Committee (CAC) also uses results of standardized performance tests, such as NAPLEX and MJPE, and indirect measures, such as data from the AACP Graduating Student Survey, as programmatic assessment.

The Assessment Matrix is an effective tool not only for confirming student achievement but also for formulating recommendations to the Curriculum Committee (CC) and other committees to enhance the educational program. More detail on the use of the Assessment Matrix and the relationship between the CC and the CAC for the purposes of continuous curricular quality improvement is described in the narrative for Standard 25 and in the five-year Student Learning Outcomes Assessment Summary (Appendix 24C, required). The summary documents the use of assessment data for continuous improvement of the curriculum and its delivery.

PittPharmacy's Assessment Matrix is nationally recognized for innovation, receiving the AACP Excellence in Assessment Award in 2012 as well national recognition through invited presentation in the national 2013 Assessment Institute hosted by IUPUI and locally at the University of Pittsburgh Excellence in Assessment Conference.

<u>Mastery Scale</u>. PittPharmacy uses a mastery-based assessment strategy. The CAC, CC, and the Experiential Learning Committee implemented the Mastery Scale (Appendix 24D, optional) and Mastery Form (Appendix 24E, optional) in APPEs in 2007. Subsequently, the Mastery Scale was adopted in P3 IPPEs in 2008 and in P1 and P2 IPPEs in 2009. Use of the Mastery Scale by preceptors and students documents a student's progressive development defined for the PittPharmacy Outcomes in a variety of health care settings. The Mastery Scale is a common assessment tool that promotes consistency and reliability of assessments within and among faculty, practice sites, and preceptors. Students use the same scale to assess their mastery in each experiential placement. The tool allows comparison of preceptor and student self-assessments. These assessments facilitate consistent evaluation of student-specific achievement of curricular outcomes by preceptors in diverse sites while providing a "report card" for the curriculum itself.

The Mastery Scale has been a foundation for development of other evaluation rubrics for curricular outcomes for P1 through P3 didactic courses. Students complete sequential assessments of mastery within their portfolios; self-assessments of mastery provide insight into personal and professional development and career planning throughout the program.

Appendix 24F (optional) is graphical representation of consistent student progress from awareness to proficiency across the curriculum as reported by students and preceptors using the Mastery Scale for the class of 2016. The graph also shows high concordance of P4 student self-assessment with preceptor APPE assessments, indicating student self-awareness. In addition, the data show student achievement of curricular outcomes at the end of the curriculum.

<u>Portfolios</u>. PittPharmacy has over 20 years of experience with student portfolios. The overall portfolio process and requirements are outlined in Appendix 24G (optional). PittPharmacy's portfolio is a structured process that enables students to document and reflect upon their progressive achievement of curricular outcomes across the four program years. PittPharmacy uses two unique portfolio formats: the assessment portfolio and the presentation portfolio. Each is built within an electronic platform designed specifically for PittPharmacy [PittPharmacy Portfolio (https://www.portfolio.pharmacy.pitt.edu/)].

Each student constructs an **assessment** portfolio to demonstrate achievement of PittPharmacy Outcomes by personally selecting quality evidence from didactic, IPPE, APPE, and extracurricular experiences across all four years of the program. Additionally, assessment portfolios contain résumés, CVs, and career plans, revised each year to encourage alignment of career goals with developing knowledge and skills. Student reflection is an essential component of the portfolio process along with required self-assessments using the Mastery Scale. Through the portfolio process, students become self-directed learners, moving from dependent to independent learners. Twice each year during the P1, P2, and P3 years, students meet one-on-one with a faculty or resident reviewer for a personalized discussion of progress towards achieving curricular outcomes and evolving career plans. The assessment portfolio; the process involved in its construction, including selection of evidence and associated written reflections; and the associated personalized review conversations serve as key components of PittPharmacy's career learning and advising program. See Standard 14 for more detail.

P3 and P4 students must also develop and maintain a career-focused **presentation** portfolio that links selected experiences and accomplishments directly to the student's personalized career goal, showcasing preparation and capacity for success in a chosen post-graduate path. Students are encouraged to use their presentation portfolios when applying and interviewing for employment, graduate programs, or residencies. Students are encouraged to develop multiple presentation portfolios if pursuing a variety of post-graduate opportunities. P4 presentation portfolios are reviewed by members of the CAC, specifically for inclusion of evidence drawn from APPEs.

P4 students must prepare a written summative reflection on their overall achievement of each PittPharmacy Outcome, highlighting specific pieces of evidence in their assessment portfolios that document their level of achievement and demonstrate their readiness for practice. This summative reflection serves as the focus for the one mandatory assessment portfolio review conversation each P4 student has with a faculty member.

The PittPharmacy portfolio technology and processes have been recognized nationally through invited presentations at national conferences including the 2013 Assessment Institute hosted by IUPUI.

# **Standardized and Comparative Assessments**

Student performance on standardized assessments such as the NAPLEX and MPJE is an indicator for success and continuous quality improvement. NAPLEX and MJPE scores are consistently and exceptionally high (Appendix 24H, required). For the first time in spring 2016, PittPharmacy required P3 students to take the Pharmacy Curricular Outcomes Assessment (PCOA). This 225 multiple-choice question examination is a comprehensive tool for schools and colleges of pharmacy to use as they assess student performance in the curricula. Student performance on this assessment will be evaluated by the CAC as another measure of student performance to interface with the CC moving forward.

## **Student Achievement and Readiness**

<u>Readiness Assessment</u>. In spring 2015, PittPharmacy implemented the internally developed Readiness Assessment for P1 and P3 students. This innovative assessment uses blended simulation as a progress test to annually evaluate practice readiness and team readiness and is part of the PittPharmacy's comprehensive assessment program. Clinical decision making, interprofessional and patient communications, and attitudes of ownership for patient outcomes are assessed in this knowledge and performance-based assessment. Individualized feedback to students informs them on their

strengths and guides focused knowledge and skill development as their progress in the program and across APPEs. Aggregate Readiness Assessment data (Appendix 24I, required) is used by the CAC to drive curricular modification and advancement. A manuscript describing the Readiness Assessment has been accepted for publication and is listed in Appendix 10Z.

<u>Clinical Capstone Cases</u>. Clinical capstone cases, embedded throughout the curriculum, assess a student's critical thinking, patient assessment, pharmaceutical care plan development, professional responsibility, and communication skills. The capstone cases assess individual student knowledge and skills through review of key therapeutic topics such as acute coronary syndromes, COPD, diabetes, and community acquired infections. The capstone cases use multiple teaching methods, including simulation, and require students to analyze medication records, interview and counsel patients, develop therapeutic plans, communicate and defend those plans, and document actions in a concise SOAP note. CAC members were invited to present at the 2014 Assessment Institute in Indianapolis, Indiana on "Assessing Development of Professional Competence Across the Curriculum through Capstone Cases."

<u>Simulation</u>. Simulation is embedded throughout the curriculum in the form of virtual patients, high-fidelity mannequin models, standardized patients, and standardized colleagues. Simulation affords learners the opportunity to make clinical decisions in protected environments and to get nearly immediate feedback on performance. Faculty have opportunities to actively engage learners; reinforce content; promote mastery of skills; stimulate higher-order thinking, problem solving, and clinical reasoning skills; and accommodate diverse learning styles. These innovative teaching and learning strategies are employed by faculty to get PittPharmacy students to expert faster.

Results from the 2015 AACP Graduating Student Survey indicate that students strongly agreed/agreed that they are prepared to communicate (96.7 percent) and collaborate (100 percent) with health care providers, with patients and caregivers (100 percent), and work with health care teams (96.7 percent). Furthermore, the survey indicated that students strongly agreed/agreed that they are prepared to practice pharmacy in interprofessional and collaborative practice settings (95.6 percent) and were academically prepared to enter APPE experiences (95.6 percent). Responses on the 2015 AACP Preceptor Survey indicate that the curriculum prepares students to communicate with patients, caregivers, and other members of the interprofessional health care team (95.9 percent).

# **Continuous Improvement**

Curricular assessment involves the systematic use of valid and reliable measures that facilitate the sequential assessment of student learning, curricular assessment, and application of an outcomes-driven continuous quality improvement process (Appendix 24J, required). The CAC uses a data-driven process including quantitative and qualitative data collected from internal sources (e.g., curricular assessments, faculty, staff, students, Dean's Advisory Board), external sources (e.g., Board of Visitors, preceptors, employers), and national data of student performance on standardized exams, such as NAPLEX, MJPE, and PCOA. The CAC collects and analyzes data and makes recommendations to the CC, which directs systematic and sequential evaluation of the structure and organization of the curricular content and outcomes. Professional year coordinators work with faculty within years and across the curriculum to develop and implement strategies to address areas of need.

The CAC interfaces with the CC in a bi-directional approach to the quality assurance process. For example, when the CC approved the transition of P4 seminar preparation and presentations to the P3 year, the CAC determined that overall

seminar performance measures were generally unchanged. The CAC sought to improve student performance in the area of public health based on performance reported in the 2013-14 Assessment Matrix. Strategies included discussions with faculty responsible for the content and re-design of activities with new faculty oversight. As a result of these actions, student performance in public health presentations and written reports were significantly improved.

The CAC analyses also impact experiential learning. For example, the CAC recommended the implementation of a prospective monitoring for specific students whose evaluations by preceptors demonstrated that performance on professional characteristics are below expectations. The monitoring process has been successful in identifying and working with students such that no students who have been identified through the process had repeated evaluations below expectations in any subsequent rotations. Additional examples are found in the five-year summary of actions resulting from assessment and the use of the Assessment Matrix (Appendix 24C, required).

Results from the 2015 AACP Faculty Survey indicate that 94.6 percent of responding faculty strongly agreed/agreed that the School uses programmatic assessment data to improve the curriculum.

# Notable

- The development, refinement, and adoption of the PharmD Assessment Matrix is notable.
- PittPharmacy graduates have exceptional performance on NAPLEX and MPJE exams, with frequent 100 percent first-time pass rates.
- PittPharmacy effectively uses portfolios to enhance student learning, career planning and self-reflection, as well as to inform its assessment efforts and documentation of student achievement of curricular outcomes.
- Development and administration of the Readiness Assessment to gauge student readiness for practice is commendable.

4) **College or School's Final Self-Evaluation:** Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box  $\square$ :

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance <i>/or</i></li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the factors and will bring the program into full compliance.</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) APPENDICES

Appendix	File Name
24A	PharmD Assessment Matrix 2016.pdf
24B	Formative and Summative Assessments v2.pdf
24C	5-year Summary PharmD Learning Outcomes Assessment.pdf
24D	PITT Mastery Scale P1 and P2 Fall 2016.pdf
24E	Mastery Summary Form v2.pdf
24F	Aggregate Mastery Scale Graph P1 to P4 Class of 2016.pdf
24G	P4 Portfolio Requirements and Process 2016.pdf
24H	NAPLEX and MJPE Pass Rates.pdf
241	Readiness Assessment Results.pdf
24J	Curricular Assessment Process.pdf

<u>Standard No. 25: Assessment Elements for Section II: Structure and Process:</u> The college or school develops, resources, and implements a plan to assess attainment of the Key Elements within Standards 5–23.

1) Documentation and Data:

#### **Required Documentation and Data:**

#### Uploads:

- ☑ The college or school's assessment plan (or equivalent)
- ☑ List of the individual(s) and/or committee(s) involved in developing and overseeing the evaluation plan
- Examples of instruments used in assessment and evaluation (for all mission-related areas)

## Complete Data Set from the AACP Standardized Surveys:

<u>Note</u>: Data related to specific standards are also presented under the applicable standard. Composite data are provided under this standard for additional reference.

- Graduating Student Survey Summary Report (all questions)
- ☑ Faculty Survey Summary Report (all questions)
- ☑ Preceptor Survey Summary Report (all questions)
- ☑ Alumni Survey Summary Report (all questions)

## Responses to Open-Ended Questions on AACP Standardized Surveys:

<u>Note</u>: These data will have restricted access. For the open-ended questions, ACPE provides the opportunity for programs to redact (not remove) offensive text, names, and identifying characteristics. In the EXCEL document downloaded from the AACP Survey System with the results from each survey, redaction can be achieved through highlighting in black the specific items listed previously. The document can then be saved as a PDF and emailed directly to ACPE. No comments should be completely removed.

- Graduating Student Survey: Responses to Open-Ended Question 80
- ☑ Faculty Survey: Responses to Open-Ended Question 45
- ☑ Preceptor Survey: Responses to Open-Ended Question 44
- ☑ Alumni Survey: Responses to Open-Ended Question 48

#### **Required Documentation for On-Site Review:**

(None required for this Standard)

#### Data Views and Standardized Tables:

(None apply to this Standard)

#### **Optional Documentation and Data:**

Other documentation or data that provides supporting evidence of compliance with the standard. Examples could include extracts from committee or faculty meeting minutes; analyses/evaluation findings/reports generated as a result of assessment and evaluation activities 2) College or School's Self-Assessment: Use the checklist below to self-assess the program on the requirements of the standard and accompanying guidelines:

	S	N.I.	U
<b>25.1. Assessment of organizational effectiveness</b> – The college or school's assessment plan is designed to provide insight into the effectiveness of the organizational structure in engaging and uniting constituents and positioning the college or school for success through purposeful planning.		0	0
<b>25.2. Program evaluation by stakeholders</b> – The assessment plan includes the use of data from AACP standardized surveys of graduating students, faculty, preceptors, and alumni.	0	0	0
<b>25.3. Curriculum assessment and improvement</b> – The college or school systematically assesses its curricular structure, content, organization, and outcomes. The college or school documents the use of assessment data for continuous improvement of the curriculum and its delivery.		0	0
<b>25.4. Faculty productivity assessment</b> – The college or school systematically assesses the productivity of its faculty in scholarship, teaching effectiveness, and professional and community service.	0	0	0
<b>25.5. Pathway comparability</b> * – The assessment plan includes a variety of assessments that will allow comparison and establishment of educational parity of alternative program pathways to degree completion, including geographically dispersed campuses and online or distance learning-based programs.		0	0
<b>25.6. Interprofessional preparedness</b> – The college or school assesses the preparedness of all students to function effectively and professionally on an interprofessional healthcare team.	0	0	0
<b>25.7. Clinical reasoning skills</b> – Evidence-based clinical reasoning skills, the ability to apply these skills across the patient's lifespan, and the retention of knowledge that underpins these skills, are regularly assessed throughout the curriculum.	0	0	0
<b>25.8. APPE preparedness</b> – The Pre-APPE curriculum leads to a defined level of competence in professional knowledge, knowledge application, patient and population-based care, medication therapy management skills, and the attitudes important to success in the advanced experiential program. Competence in these areas is assessed prior to the first APPE.		0	0
<b>25.9.</b> Admission criteria – The college or school regularly assesses the criteria, policies, and procedures to ensure the selection of a qualified and diverse student body, members of which have the potential for academic success and the ability to practice in team-centered and culturally diverse environments.		0	0

- 3) College or School's Comments on the Standard: The college or school's descriptive text and supporting evidence should specifically address the following. Use a check ☑ to indicate that the topic has been adequately addressed. Use the text box provided to describe: areas of the program that are noteworthy, innovative, or exceed the expectation of the standard; the college or school's self-assessment of its issues and its plans for addressing them, with relevant timelines; findings that highlight areas of concern along with actions or recommendations to address them; and additional actions or strategies to further advance the quality of the program. For plans that have already been initiated to address an issue, the college or school should provide evidence that the plan is working. Wherever possible and applicable, survey data should be broken down by demographic and/or branch/campus/pathway groupings, and comments provided on any notable findings.
  - Description of how the college or school uses information generated by assessments related to its organizational effectiveness, mission and goals, didactic curriculum, experiential learning program, co-curriculum activities, and interprofessional education to advance overall programmatic quality
  - If How the college or school's assessment plan provides insight into the effectiveness of the organizational structure
  - A description of how the college or school assesses its curricular structure, content, organization, and outcomes
  - A description of how the college or school assesses the productivity of its faculty in scholarship, teaching effectiveness, and professional and community service
  - A description of how the college or school assesses the comparison of alternative program pathways to degree completion
  - A description of how the college or school assesses the preparedness of all students to function effectively and professionally on an interprofessional healthcare team
  - ☑ How the college or school assesses clinical reasoning skills throughout the curriculum

- ☑ How the college or school assesses student competence in professional knowledge, knowledge application, patient and population-based care, medication therapy management skills, and the attitudes important to success in the advanced experiential program prior to the first APPE
- A description of how the college or school assesses the criteria, policies, and procedures to ensure the selection of a qualified and diverse student body who have the potential for academic success and the ability to practice in team-centered and culturally diverse environments
- How the college or school is applying the guidelines for this standard in order to comply with the intent and expectation of the standard
- ☑ Any other notable achievements, innovations or quality improvements

## [TEXT BOX] [15,000 character limit, including spaces] (approximately six pages)

# **Assessment of Organizational Effectiveness**

PittPharmacy's Long-Range Plan and associated formal and informal assessments are effective and engage, faculty, staff, University administration, students, alumni, and other stakeholder to facilitate success. The continuous planning process is a deliberative and collaborative dialogue among faculty, staff, and students, alumni, community and professional stakeholders, and University administration. In 2008, PittPharmacy pioneered an innovative monitoring strategy through the use of a dashboard known as PAGE. With the University's new strategic plan, the School is now required to use the University's template for tracking outcomes (Appendix 25A, required).

Implementation of the Long-Range Plan is supervised by the Dean, with consultation and input of the Leadership Team. Targeted data collection, review of outcome measures and discussion of progress toward goals are conducted at least yearly to assess mid-point targets. Interim progress summaries during the academic year are organized by strategic plan categories and presented frequently throughout the year to faculty, University administration, alumni and other stakeholders. The "Annual Report of the School of Pharmacy" is a yearly summative progress report, which is distributed to the Board of Visitors, University administration, and other stakeholders through the PittPharmacy Web site. Organized by key strategic focus areas, the report provides a yearly "report card" of progress towards the strategic plan through data collection of defined outcome measures for each initiative. Strategic plan initiatives and progress are shared through PittPharmacy publications circulated through mailings and media.

On the 2015 AACP Faculty Survey, PittPharmacy faculty indicated that:

- the school effectively employs strategic planning (94.6 percent strongly agreed/agreed);
- solicited faculty input during its development (91.9 percent strongly agreed/agreed).

# **Program Evaluation by Stakeholders**

Annual graduating student surveys administered through AACP and the University are routinely evaluated to inform program improvements. One example was student response to advising and the subsequent development of the Career Learning and Advising Groups. Frequent FYIIs (For Your Information and Input sessions) are used to garner input regarding new initiatives often based on assessment. Alumni are engaged through the Board of Visitors and the Pharmacy Alumni Society.

# **Curriculum Assessment and Improvement**

Curricular assessment has been a longstanding tradition at PittPharmacy. In 1998 with the inception of the PharmD degree as the sole professional degree program, curricular effectiveness has been evaluated on a regular and routine

basis. The Curriculum Assessment Committee (CAC) is charged with meeting accreditation standards for assessment, evolving and implementing the School's assessment plan, and analyzing data to document the attainment of student learning. Appendix 25B (required) is a five-year Student Learning Outcomes Assessment Summary with examples. The summary documents the use of assessment data for continuous improvement of the curriculum and its delivery.

Charges to the committee and current members of the CAC are included in Appendix 25C (required). The CAC includes faculty from both departments and student representatives from each professional year. The CAC works with the Curriculum Committee and faculty in a cohesive and complementary fashion for continuous improvement of the curriculum and its delivery. The CAC and Curriculum Committee use a data-driven process including quantitative and qualitative data collected from internal sources (e.g., curricular assessments, faculty, staff, students, Dean's Advisory Board), external sources (e.g., Board of Visitors, preceptors, student employers), and national data of student performance, such as NAPLEX , MJPE, and PCOA data. The data is used by both committees to direct the systematic and sequential evaluation of the structure and organization of curricular content and the curricular outcomes.

Results from the 2015 AACP Faculty Survey indicate the School uses programmatic assessment data to improve the curriculum (94.6 percent strongly agreed/agreed).

# **Faculty Productivity Assessment**

As described in the narrative of Standard 19, the University requires that faculty and staff members be reviewed annually by their department chairs or supervisors, respectively, which includes a self-evaluation. The process for faculty members to document their accomplishments in teaching, research and scholarship, patient care, if applicable, and service is described and the standardized format for data collection and goal setting is provided. After a meeting, the department chair documents the outcome of the meeting and the annual plan for guiding the faculty member's continued development and progress toward promotion and tenure, if applicable.

# The PittPharmacy Readiness Assessment and APPE Preparedness

Appendix 25D (required) provides a description of the internally-developed innovative Readiness Assessment, which evaluates student readiness for APPEs. The Readiness Assessment, which is used both for individual student feedback and to develop plans for curriculum improvements, is a blended simulation experience that assesses level of competence and performance of students prior to APPEs. The Readiness Assessment was developed by a taskforce of faculty and staff charged developing strategies to "get students to expert faster" with specific focus on readiness for APPEs.

The assessment was designed to rapidly propel students to greater levels of mastery of key patient care outcomes, including

- interprofessional preparedness;
- clinical reasoning skills;
- attitudes of ownership (professional advocacy).

In this blended simulation assessment, knowledge, skills, and attitudes of final level competence are assessed as Trainees review the index patient in the health record, then begin making clinical decisions in the virtual arena, as a mannequin model, and as a standardized patient.

The PittPharmacy Readiness Assessment is a 30-minute progress test during which students complete five test stations which starts with the student extracting patient information from an electronic health record. The five stations include:

- Patient assessment: Patient assessment and evaluation through electronic health record (EHR) review (Cerner EHR training domain)
- Knows: Multiple choice questions targeting baseline comprehension of fundamental knowledge/skills of an expert (administered via vpSim)
- Knows how: Virtual patient targeting application of fundamental knowledge/skills. Virtual patient is EHR Station 1 patient (vpSim)
- Shows how: Mannequin model and standardized colleague simulation experience targeting student performance in pharmacist-physician interactions (mannequin model and standardized colleague)
- Shows how: Standardized patient experience targeting student performance in pharmacist-patient interactions (standardized patient)

The Readiness Assessment is administered to students at the end of their P1 and again at the end of their P3 year to assess progression of readiness from P1 to P3 and to assess readiness of P3s in the three main outcomes.

In spring 2015, 25 PGY1 residents, 108 P3 students, and 111 P1 students rotated through the assessment in two eighthour days. Conducting the assessments required 16 faculty members, 10 staff members, 6 P4 students, 5 standardized patients, 5 standardized colleagues, and 6 educational support staff.

Results of the Readiness Assessment for the spring 2015 assessment is in Appendix 25E (optional). P3s scored significantly higher than P1s across all evaluations (P<0.05). Individual scores were shared with trainees to provide feedback as to their strengths and areas of improvement regarding patient care skill development. Now in its third year, the Readiness Assessment is administered annually as part of the PittPharmacy's curricular assessment program.

The participation and assessment of P1 students has the advantage of giving P1 students a vision of professional practice and setting their expectations for their personal development.

# **Interprofessional Preparedness**

Interprofessional preparedness and assessment is described in detail in Standard 11. Briefly, students interact with prescribers and other healthcare professionals throughout the curriculum in patient simulations, and direct patient-care environments. Interprofessional communications develop from written communication to medical record documentation and face-to-face interactions. In addition, interprofessional preparedness is assessed in the Readiness Assessment.

Interprofessional education skills are applied during the P4 year throughout APPEs. Within each APPE experience, students are evaluated on their collaboration with the interprofessional team twice, at both the midpoint and final evaluation.

# **Clinical Reasoning Skills**

As described in Standard 2, students develop evidence-based clinical reasoning skills, the ability to apply these skills across the lifespan, and the retention of knowledge. Briefly, students develop skills in patient interview techniques to elicit vital information to formulate a patient care database and identify drug-related problems that are communicated to the patient's interprofessional care team. Skills are progressively developed in each semester of the curriculum as the complexity of medical problems increases.

Students are assessed in both verbal and nonverbal communication skills for all patient and interprofessional communications. Clinical reasoning skills are assessed in capstone experiences in P2 and in P3 and in the Readiness Assessment in P1 and P3. Specific activities related to the development of clinical reasoning including problem solving and critical thinking skills are outlined in the Assessment Matrix (Appendix 25F, required).

## **Admission Criteria**

PittPharmacy has a phenomenally low attrition rate (0.61 percent) for classes admitted in 2004 through 2012, all of which have graduated. This attrition rate precludes meaningful analysis of admission criteria. Formal review of the admissions criteria policies, procedures, and results is conducted annually with the Leadership Team with discussion on any changes needed to the process. Details are provided in Standards 16 and 17.

## Notable

- The development and implementation of the Readiness Assessment is notable.
- The PharmD Assessment Matrix, curricular assessment process and feedback to the curriculum committee are notable.
- 4) **College or School's Final Self-Evaluation:** Self-assess how well the program is in compliance with the standard by putting a check in the appropriate box ☑:

Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant
No factors exist that compromise current compliance; no factors exist that, if not addressed, may compromise future compliance.	<ul> <li>No factors exist that compromise current compliance; factors exist that, if not addressed, may compromise future compliance /or</li> <li>Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance; the plan has been fully implemented; sufficient evidence already exists that the plan is addressing the</li> </ul>	Factors exist that compromise current compliance; an appropriate plan exists to address the factors that compromise compliance and it has been initiated; the plan has not been fully implemented and/or there is not yet sufficient evidence that the plan is addressing the factors and will bring the program into compliance.	<ul> <li>Factors exist that compromise current compliance; an appropriate plan to address the factors that compromise compliance does not exist or has not yet been initiated <b>/or</b></li> <li>Adequate information was not provided to assess compliance</li> </ul>

	factors and will bring the program into full compliance.		
☑ Compliant	Compliant with Monitoring	Partially Compliant	Non Compliant

5) **Recommended Monitoring:** If applicable, briefly describe issues or elements of the standard that may require further monitoring. **[TEXT BOX] [1,000 character limit, including spaces]** 

## 6) **APPENDICES**

Appendix	File Name
25A	PittPharmacy Programmatic Matrix 2016 June.pdf
25B	5-year Summary PharmD Learning Outcomes Assessment.pdf
25C	Members of the Curriculum Assessment Committee and 2016-17 Agenda.pdf
25D	Readiness Assessment Summary.pdf
25E	Readiness Assessment Results.pdf
25F	PharmD Assessment Matrix 2016.pdf