Brothers, Sheila

From: Farrell, Herman
Sent: Thursday, April 26, 2018 11:10 PM
To: Brothers, Sheila; McCormick, Katherine
Subject: College of Pharmacy - Technical Standards
Attachments: Technical Standard Pharmacy Rationale 2018.docx

The SAASC convened on Friday, April 20, 2018 to consider a proposal from the College of Pharmacy involving changes to the technical standards for admission to and completion of the Doctor of Pharmacy.

Attendance: Dan Morey, David Hulse, Fred Danner, Kevin Donohue, Brad Kerns, Rebecca Kellum, Brad Hubbard, Shawn Caudill, Herman Farrell (Chair)

Procedure:

Shawn Caudill acted as facilitator of the proposal.

Discussion:

Caudill noted that this proposal involves a request for approval of new technical standards that will provide to prospective and continuing students clearer definitions of standards and the milestones along the way. The revisions involve upgrading language to current usage in the field. This proposal follows the curriculum changes involving these changes to the technical standards that have been already approved by the Senate. The chair asked for a clearer, broader description of the rationale for the change and it was agreed that an addendum (with the stated rationale) would be included in this cover letter to the Senate Council. It is attached.

Vote:

A motion was made and seconded that the SAASC approve the proposal from the College of Pharmacy involving changes to the technical standards for admission to and completion of the Doctor of Pharmacy.

The committee voted 9 in favor, 0 opposed.

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University of Kentucky
College of Pharmacy
Kelly M. Smith, PharmD, FASHP, FCCP
Associate Dean, Academic and Student Affairs
Professor, Pharmacy Practice and Science

DATE: January 10, 2018

TO: Meredith Houlihan
Health Care Colleges Council

FROM: Kelly M. Smith, PharmD

RE: Revisions to Technical Standards for Doctor of Pharmacy (PharmD) Program

The College of Pharmacy is requesting approval of new technical standards for admission to and completion of the Doctor of Pharmacy. These revisions have been made to reflect the changing profession of pharmacy, the corresponding changes within our PharmD curriculum, and the information prospective students need to make informed decisions about the program and their ability to achieve the educational outcomes deemed essential to practice pharmacy in a contemporary fashion.

Attached to this request are: (1) Existing Technical Standards, as published in the PharmD Student Handbook and referenced in the College Bulletin; and (2) the Revised Technical Standards, as approved by the College of Pharmacy Faculty on December 18, 2017.

The process for this revision was:

Step	Timeframe
Associate Dean requested Curriculum Committee evaluate existing technical standards	October 2016
Results of Curriculum Committee evaluation (no consensus) reported at Faculty Meeting	April 2017
Dean of the College charged a faculty working group to evaluate existing standards	April 2017
Working group convened and revisions drafted	May 2017
High-level summary of draft revisions presented at College Faculty Retreat	May 2017
Proposed revisions shared with both departments, with subsequent review by representative faculty in both departments	August 2017
Revisions presented to and approved by College Faculty at Faculty Meeting	December 2017

R A T I O N A L E

Overview

- **Technical standards** describe the necessary mental and physical abilities for a student to successfully complete a professional degree program. Administered in conjunction with admission and academic standards, they serve as requirements for successful completion of the PharmD program.
- The Accreditation Council for Pharmacy Education requires that all accredited Doctor of Pharmacy (PharmD) degree programs develop and communicate technical standards required for successful program completion. These broader abilities serve to advise prospective students of the very broad expectations necessary for graduation.

Impetus for Change

- The University of Kentucky College of Pharmacy's (UKCOP's) technical standards were designed and approved more than a decade ago. Since that time, multiple changes have occurred:
    - The PharmD program accreditation standards have changed significantly.
    - The profession of pharmacy and the corresponding physical and mental abilities necessary to practice have changed.
    - The UKCOP's PharmD curriculum has been revised to match these changes in accreditation standards and professional practice.
    - The existing technical standards are obsolete and could be viewed as inconsistent with the Americans with Disabilities Act (ADA) of 1990 and the ADA Amendments Act of 2008.

Thus, there is significant need to harmonize the UKCOP's technical standards with the accreditor's expectations, the contemporary practice of pharmacy, the College's new curriculum, and federal legislation.

NOTE:

- Such program requirements (e.g., technical standards, academic requirements) are required by ACPE to be made available to prospective and currently enrolled students. The customary practice at US Colleges of Pharmacy is to do so through a student handbook.
- The UKCOP Student Handbook is available broadly on the program's official website (http://pharmacy.uky.edu/sites/pharmacy.uky.edu/files/UKCOP%20Student%20Handbook%202017-2018%2003232018.pdf). Additionally, conditionally admitted students are required to acknowledge having read and agreed to terms of the program's requirements, including the technical standards, prior to matriculation into the PharmD program.

Appendix 1. Current Technical Standards – Doctor of Pharmacy Program
University of Kentucky College of Pharmacy

The goal of the College of Pharmacy is to broadly prepare students to practice pharmacy with special emphasis on practicing in primary care settings. Regardless of eventual type of practice (e.g., community, clinic, health care system), students must demonstrate competence in those intellectual, physical and social tasks that together represent the fundamentals of being able to provide contemporary pharmaceutical care. Students will be judged by their respective program faculty not only on their scholastic achievement and ability, but also on their intellectual, physical and emotional capacities to meet the full requirements of the college's curriculum. As an advisory committee to the Dean, the Admissions Committee is instructed to exercise judgment on behalf of the faculty to recommend the entering class, and to consider character, extracurricular achievement, and overall suitability for the pharmacy profession based upon information in the application, letters of recommendation, and personal interviews.

The Accreditation Council on Pharmacy Education, the accrediting body for colleges and schools of pharmacy, requires that the curriculum provide a general professional education, enabling each student to eventually practice as a pharmacy generalist. This requires the development of broad knowledge, skills, behaviors, ongoing self-directed learning, and the eventual ability to deliver competent pharmaceutical care within a reasonable time frame and within the context of the legal and ethical framework of the profession. The basic science curriculum includes the study of biochemistry, medicinal chemistry, molecular biology, immunology, physiology, pharmaceutics, pathology and pharmacology; all within the context of application to solving clinical problems. The practice skill curriculum includes the behavioral, administrative, supervisory, economic, legal, ethical, analytical, integrative, historical and contextual aspects of practice. The basic sciences and practice skills curricula are interwoven and are designed to establish a core of knowledge necessary for understanding pharmacotherapeutics and undergoing advanced clinical training. The clinical curriculum includes diverse experience in primary care, in ambulatory and inpatient setting, and in specialized environments such as long term care, and managed care or home infusion practices. The basic science, practice skills and clinical experiences develop the ability to practice pharmacy with the goal of providing cost-effective improvement in patient outcomes, independently or with a team of other health care professionals, regardless of the future choice of practice site. The faculty requires each student to pass each required course and all of the experiential rotations to graduate.

The following technical standards specify those attributes the faculty considers necessary for completing pharmacy training, enabling each graduate to subsequently enter clinical practice, residency or fellowship training. These standards describe the essential functions students must demonstrate in order to fulfill the requirements of a general pharmacy education, and thus, are prerequisites for entrance, continuation, and graduation from the College of Pharmacy.

The University of Kentucky College of Pharmacy will consider for admission any applicant who demonstrates the ability to perform or to learn to perform the skills listed in this document. Applicants are not required to disclose the nature of their disability(ies), if any, to the

Admissions Committee. However, any applicant with questions about these technical standards is strongly encouraged to discuss the issue with the Chair of the Admissions Committee prior to the interview process. If appropriate, and upon the request of the applicant/student, reasonable accommodations will be provided.

Certain chronic or recurrent illnesses and problems that interfere with patient care or safety may be incompatible with pharmacy training or practice. Other conditions that may lead to a high likelihood of student illness should be carefully considered. Deficiencies in knowledge base, judgment, integrity, character, or professional attitude or demeanor, which may jeopardize patient care, may be grounds for course/rotation failure and possible dismissal.

A student must possess aptitude, abilities, and skills in five areas: 1) observation; 2) communication; 3) sensory and motor coordination and function; 4) conceptualization, integration and quantitative evaluation; and 5) behavioral and social skills, abilities and aptitude. These are described in detail below. The program faculty will monitor maintenance of these standards. Students must be able to independently perform the described functions.

1. Observation

Students must be able to observe demonstrations and conduct exercises in a variety of areas related to contemporary pharmacy practice, including but not limited to, monitoring of drug response and preparation of specialty dosage forms. A student must be able to observe a patient accurately at a distance and close at hand, noting nonverbal as well as verbal signals. Specific vision-related requirements include, but are not limited to the following abilities: visualizing and discriminating findings on drug or fluid monitoring tests; reading written and illustrated material; observing demonstrations in the classroom or laboratory, including projected slides and overheads; observing and differentiating changes in body movement; observing anatomic structures; discriminating numbers and patterns associated with diagnostic and monitoring instruments and tests, and competently using instruments for monitoring drug response.

2. Communication

Students must be able to relate effectively and sensitively with patients and their caregivers and or partners, and convey a sense of compassion and empathy. A student must be able to communicate clearly with, and observe patients in order to elicit information, accurately describe changes in mood, activity and posture, and perceive verbal as well as nonverbal communication. Communication includes not only speech but also reading and writing. Students must be able to communicate quickly, effectively and efficiently in oral and written English with all members of the health care team. Specific requirements include but are not limited to the following abilities: communicating rapidly and clearly with the health care team on rounds; eliciting a thorough history from patients; and communicating complex findings in appropriate terms to patients and their caregivers, partners and various members of the health care team (fellow students, physicians, nurses, aides, therapists, social workers, and others). Students must learn to recognize and promptly respond to emotional communication such as sadness, worry, agitation, and lack of comprehension of communication. Each student must be

able to read and record observations and care plans legibly, efficiently and accurately. Students must be able to prepare and communicate concise but complete summaries of individual encounters and complex, prolonged encounters with patients. Students must be able to complete forms or appropriately document activities according to directions in a complete and timely fashion.

3. Sensory and Motor Coordination or Function

Students must have sufficient sensory and motor function to monitor drug response and to prepare and or dispense pharmaceuticals. A student should be able to execute motor movements reasonably required to participate in the general care and emergency treatment of patients. They must be able to respond promptly to urgencies within the practice setting and must not hinder the ability of their coworkers to provide prompt care. Examples of such emergency treatment reasonably required of pharmacists include arriving quickly when called, participating in the initiation of appropriate procedures, and rapidly and accurately preparing appropriate emergency medication.

4. Intellectual-conceptual Integrative and Qualitative Abilities

These abilities include measurement, calculation, reasoning, analysis, judgment, numerical recognition and synthesis. Especially important is the appropriate and rapid calculation of dosages in a variety of conditions such as renal or hepatic failure, obesity, cardiac or respiratory arrest, etc. Additionally, calculations involving appropriate dilution or reconstitution of drug products, electrolytes, etc. must be made accurately and quickly. Problem solving, a critical skill demanded of all pharmacists, requires all of these intellectual abilities and must be performed quickly, especially in emergency situations. Students must be able to identify significant findings from history, physical assessment, and laboratory data; provide a reasonable explanation and analysis of the problem; determine when additional information is required; suggest appropriate medications and therapy; develop appropriate treatment plans to improve patient outcomes; develop patient counseling information at a complexity level appropriate to a particular situation; and retain and recall information in an efficient and timely manner. The ability to incorporate new information from peers or teachers, and to locate and evaluate new information from the literature to be used appropriately in formulating assessments and pharmaceutical care plans is essential, as is good judgment in patient assessment and therapeutic planning for disease management. Students must be able to identify and communicate the limits of their knowledge to others when appropriate and be able to recognize when the limits of their knowledge indicate further study or investigation is essential before participating in decision making. Students must be able to interpret graphs or charts describing biologic, economic or outcome relationships.

5. Behavioral Attributes

Empathy, integrity, honesty, concern for others, good interpersonal skills, interest and motivation are all personal qualities that are required. Students must possess the emotional health required for full use of their intellectual abilities; the exercise of good judgment; the prompt completion of all responsibilities attendant to the care of patients; and the development of mature, sensitive and effective relationships with patients and their caregivers

and partners. At times this requires the ability to be aware of and appropriately react to one's own immediate emotional responses and environment. For example, students must maintain a professional demeanor and organization in the face of long hours and personal fatigue, dissatisfied patients, and tired colleagues. Students must be able to develop professional relationships with patients and their caregivers and partners, providing comfort and reassurance when appropriate while protecting patient confidentiality. Students must possess adequate endurance to tolerate physically taxing workloads and to function effectively under stress or with distractions. All students are at times required to work for extended periods, occasionally with rotating shifts. Students must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Students must also develop the skills necessary to instruct and supervise technical personnel assisting with the delivery of pharmaceutical services. Students are expected to accept appropriate suggestions and criticism and if necessary, respond quickly, appropriately and cooperatively by modification of behavior.

Appendix 2. Revised Technical Standards – Doctor of Pharmacy Program
University of Kentucky College of Pharmacy
(Approved by Faculty – December 18, 2017)

The University of Kentucky College of Pharmacy (UKCOP) has a responsibility to educate competent pharmacists and prepare them to be "practice-ready." In this regard graduates must be able to directly contribute to patient care and be "team ready" in order to work in collaboration with other healthcare providers.[1] Strong foundational knowledge, astute clinical decision-making, and well-developed professional practice skills are the underpinnings of pharmacist competency. Accordingly, the UKCOP has established academic and technical standards that must be met by students to successfully progress in, and graduate from, its doctor of pharmacy degree program.

The UKCOP provides the following descriptions/examples to inform prospective and enrolled students of the technical standards required to complete the doctor of pharmacy curriculum and to achieve the educational outcomes deemed essential to the contemporary practice of pharmacy. The technical standards and example competencies described herein reflect the performance abilities and characteristics necessary to successfully complete the requirements of the UKCOP program and should not be viewed as all inclusive. Individuals interested in applying to the UKCOP should review the technical standards in order to develop a better understanding of the skills, abilities, and behaviors required to successfully complete the doctor of pharmacy degree program.

Technical standards in pharmacy at the UKCOP are derived from the 2016 Standards and Key Elements for professional programs in pharmacy leading to the doctor of pharmacy degree as put forth by the Accreditation Council for Pharmacy Education[2] and include abilities and skills in the following areas:

1) Acquiring foundational knowledge. (Standard 1)
2) Developing communication skills. (Standards 2-3)
3) Interpreting complex data in the context of patient-centered and population-based care. (Standards 2-3)
4) Integrating knowledge to establish and refine clinical judgement and professional practice skills. (Standards 2-3)
5) Incorporating appropriate professional attitudes and behaviors into pharmacy practice capabilities. (Standard 4)

The UKCOP wishes to ensure that access to its facilities, programs, and services is available to all students, including students with disabilities (as defined by Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990 and the ADA Amendments Act of 2008). The UKCOP provides reasonable accommodations to all students on a nondiscriminatory

[1] ACPE standards 2016, philosophy and emphasis.
[2] ACPE Standards 2016, standards and key elements

basis consistent with these legal requirements. A reasonable accommodation is a modification or adjustment to an instructional activity, equipment, facility, program or service that enables a qualified student with a disability to have an equal opportunity to fulfill the requirements necessary for graduation. To be eligible for accommodations, a student must have a documented disability of (1) a physical or mental impairment that substantially limits one or more major life activities of such individual; (2) a record of such impairment; or, (3) be regarded as having such a condition.

To be qualified for admission to and on-going progression within the UKCOP doctor of pharmacy program, individuals must be able to meet both our academic and technical standards, with or without reasonable accommodations. For further information regarding services and resources for students with disabilities and/or to request accommodations, please review the UKCOP Disability Accommodation Policy or contact the Director of Student Success and Career Development (Nicole Keenan nicole.keenan@uky.edu or 859-257-5266) in the Office of Academic and Student Affairs.

Requirements	**Technical Standards**	**Example Competencies**
Acquiring foundational knowledge	1. Ability to learn in diverse educational settings, including varied clinical practice environments 2. Ability to find and acquire knowledge from a variety of sources 3. Ability to be a life-long learner 4. Ability to cultivate innovative and adaptive thinking	• Acquire, conceptualize and use evidence-based information from discussions, demonstrations and experiences in the basic and clinical sciences, including but not limited to information conveyed through online coursework, lecture, small group activities and physical demonstrations • Plan and execute self-directed learning activities to acquire and apply foundational knowledge concepts • Develop solutions and responses to therapeutic problems beyond that which is rote or rule-based
Developing communication skills	1. Communication abilities for culturally sensitive and effective interaction with individual patients, groups or organizations 2. Communication abilities for effective interaction with the health care team 3. Ability to consider and make sense of elicited information	• Accurately elicit and interpret information, including medical history and other information to adequately and effectively evaluate a patient's condition • Accurately document and convey information using one or more means of communication (e.g., verbal, written, electronic) to patients and the health care team • Validate understanding of communication by eliciting feedback from patients and healthcare team members • Determine a deeper meaning or significance in what is being expressed by others to ensure accurate interpretation of elicited information

Interpreting complex data in the context of patient-centered and population-based care	1. Ability to collect, record and assess subjective and objective data to define health and medication-related problems at both the patient and population health level 2. Ability to develop computational thinking (e.g. problem-solving skills) 3. Ability to effectively manage cognitive load	• Obtain and interpret information from assessment maneuvers (e.g., respiratory and cardiac function, blood pressure, etc.) point-of-care testing (e.g., blood sugar, lipids, PT/INR, etc.) and other objective tests (e.g. Lab values, EKGs, radiographs, etc.) • Translate assessment data into abstract concepts to accurately assess the need for treatment and/or referral • Assess health status and needs of target populations and implement and evaluate interventions designed to improve the health of specific populations
Integrating knowledge to establish and refine clinical judgement and professional practice skills	1. Ability to apply principles of health and wellness to individuals and populations 2. Ability to think critically, solve problems and make decisions to assure safe and effective medication use across the health continuum and within the environments of care	• Design strategies to improve health and wellness of individuals and communities and provide/oversee the provision of preventive health services (e.g, immunizations, tobacco cessation, TB skin testing, etc.) • Identify and prioritize drug-related problems and develop, implement and evaluate plans of care in the management of acute and chronic diseases • Assure accurate preparation, labeling, dispensing/distribution and/or administration of medications in response to prescriptions and medication orders in a variety of practice settings
Incorporating appropriate professional attitudes and behaviors into pharmacy practice capabilities	1. Display characteristics of self-awareness, concern for others, integrity, ethical conduct, accountability, interest and motivation 2. Ability to develop social intelligence and cultivate interpersonal skills for professional interactions with a diverse population of individuals, healthcare team members and communities 3. Acquire the skills necessary to advocate for and promote change	• Make proper judgments regarding safe and effective care and professional practice • Effectively build and maintain mature and sensitive relationships with others to develop trust and foster collaboration and empowerment • Function effectively under stress and adapt to changing environments inherent in clinical practice