AACP REPORT

Revising the Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes and Entrustable Professional Activities (EPAs):
The Report of the 2021-2022 Academic Affairs Standing Committee

Melissa Medina, Scott Stolte, John Conry, Nicole Culhane, Michelle Z. Farland, Daniel R. Kennedy, Kashelle Lockman, Daniel R. Malcom, Edith Mirzaian, Deepti Vyas, Miranda Steinkopf, Kelly Ragucci

a The University of Oklahoma College of Pharmacy, Oklahoma
b Wilkes University Nesbitt School of Pharmacy, Pennsylvania
c St. John’s University College of Pharmacy, New York
d Notre Dame of Maryland College of Pharmacy, Maryland
e University of Florida College of Pharmacy, Florida
f Western New England College of Pharmacy, Massachusetts
g University of Iowa College of Pharmacy, Iowa
h Sullivan University College of Pharmacy and Health Sciences, Kentucky
i University of Southern California College of Pharmacy, California
j University of the Pacific College of Pharmacy, Washington
k American Association of Colleges of Pharmacy, Virginia

EXECUTIVE SUMMARY. The 2021-22 Academic Affairs Committee was charged to 1) Update the Center for the Advancement of Pharmacy Education (CAPE) Outcomes and Entrustable Professional Activity (EPA) statements for new pharmacy graduates; 2) Nominate at least one person for an elected AACP or Council Office; and 3) Consider ways that AACP can improve its financial health. This report primarily focuses on the process undertaken by the committee to revise the CAPE Educational Outcomes and EPAs. Proposed changes to the current outcomes are discussed and the reasoning behind these revisions are described. AACP members will have the opportunity to provide feedback prior to the final document being approved and published later this year.

Keywords: curriculum, pharmacy education, outcomes, professional, activities, methods

INTRODUCTION AND COMMITTEE CHARGES

The American Association of Colleges of Pharmacy (AACP) Center for the Advancement of Pharmaceutical Education (CAPE), Educational Outcomes were first developed and released in 1994 and then revised in 1998, 2004, and 2013.1-3 The CAPE Educational Outcomes (EOs) define the curricular priorities of Doctor of Pharmacy (PharmD) programs and inform other health professions of those priorities. In addition, the EOs inspire and guide curricular revision and innovation, function as a core component of a comprehensive assessment plan and serve as the target for curriculum review and mapping and to assure achievement of the outcomes by the end of the professional program.3 Overall, they are grounded in the knowledge, skills, and attitudes students should be able to demonstrate upon graduation and offer an overall definition of pharmacy practice. Previous CAPE revisions were in response to changes in both practice and higher education. For example, one goal of the 2013 CAPE revision was to include the affective domain (i.e., professionalism and self-awareness). The work of the 2013 CAPE committee resulted in 4 broad domains and 15 specific subdomains that included outcome statements and example learning objectives.3

Development of Entrustable Professional Activities (EPAs) for pharmacy graduates was inspired by the American Association of Medical Colleges (AAMC) when, in 2014, they published new guidelines that included 13 activities that all medical students should be able to perform upon residency.4 The AAMC chose the EPA framework to offer a practical approach to translating competence into actual clinical practice.4 EPAs were first formally introduced to
pharmacy education through the work of the 2015-2016 AACP Academic Affairs Committee.5-7 This committee aimed to delineate the units of work or tasks that practice-ready, team-ready pharmacy graduates, regardless of specialty, should be entrusted to complete upon graduation. Their work resulted in six domains, 15 EPAs, and example supporting tasks.7 EPAs are executable within a given timeframe and are most appropriately evaluated in the experiential/practice setting when students are engaged in the provision of health care.8

In Spring 2021, then-AACP President Stuart Haines appointed the 2021-22 Academic Affairs Standing Committee with consent of the AACP Board of Directors. President Haines charged the committee to revise the 2013 CAPE Educational Outcomes and 2016 Entrustable Professional Activities. The purpose of the Committee was to focus on the intellectual, social, and personal aspects of pharmacy education and to identify practices, procedures, and guidelines that aid faculties in developing students and preparing them for the workforce. The Committee received three charges which included:

1. Update the Center for the Advancement of Pharmacy Education (CAPE) Outcomes and Entrustable Professional Activity (EPA) statements for new pharmacy graduates; include guidance on how CAPE Outcome and EPA statements should be used by member institutions, faculty, preceptors, and students; make recommendations on how updated CAPE and EPA statements should be incorporated into the proposed updated ACPE standards and guidelines.
2. Nominate at least one person for an elected AACP or Council Office.
3. After completion of the committee’s charges, consider ways that AACP can improve its financial health. Based on the committee’s work, are there any potential revenue generating or cost saving opportunities that the Association should consider?

The purpose of this Report is to provide an overview of the process undertaken by the 2021-22 AACP Academic Affairs Committee to revise the CAPE Educational Outcomes and EPAs. The revised CAPE Educational Outcomes and EPAs themselves will be presented in their entirety in a future, separate publication in the Journal.

BACKGROUND: METHODOLOGY
A call for committee volunteers was sent to the AACP membership in Spring 2021, and in late Spring, letters of invitation were sent to each member to serve on the committee. The first meeting occurred on July 29, 2021, to discuss charge one and plan for an AACP membership survey to gather feedback about the strengths and areas of improvement of CAPE 2013 outcomes and the EPAs, which was distributed in August 2021 (Appendix 1). The committee reviewed the survey results to quantify responses and establish themes. An in-person committee meeting was held in September 2021 to discuss results from the AACP member survey, begin revisions based on feedback, and prepare for two virtual town halls. All AACP members were invited to the town halls to provide feedback about draft revisions. Through the Joint Commission of Pharmacy Practitioners (JCPP), national pharmacy organization members (e.g., ASHP, ACCP, APhA, etc.) were also invited to attend the town halls as well as provide more formal written feedback about the existing CAPE and EPAs. The two town halls were held virtually on October 4 and 5, 2021. The feedback received supported and validated the themes identified in the member survey as well as the committee discussions and draft revisions. This information also guided plans for additional CAPE/EPA revisions.

The major themes identified from the survey and town hall feedback related to the CAPE outcomes included: 1) merge the CAPE and EPA documents into one streamlined document; 2) weave elements of diversity, equity, inclusion, and anti-racism (DEIA) throughout curricula; 3) revise but not overhaul the existing outcomes while being mindful of curricular bloat or curricular hoarding9; 4) avoid practice-specific examples and instead emphasize skill sets common to all pharmacists; 5) allow programs flexibility so unique strengths can be emphasized; 6) emphasize professional identity formation (PIF); 7) avoid language specific to immunization and instead focus on broader pharmacist activities like administration of long-acting injectables or testing, treating, administering; 8) expand advocacy beyond patient advocacy to include the profession itself; 9) emphasize teamwork and team-training principles when discussing interprofessional education.

The major themes identified from feedback related to EPAs included: 1) establish “entry-level” expectations for pharmacists; 2) avoid explicitly duplicating medicine EPAs since pharmacists have a different training trajectory; 3) avoid being too prescriptive with EPAs since states have different scopes of practice for pharmacists; 4) reconsider the five levels of the entrustment and consider identifying the minimum level of attainment; 5) ensure that levels of entrustment are not tied to grades.

From November 2021 to January 2022, the committee met every two weeks for two hours to evaluate feedback received, make edits and changes to the CAPE domains, subdomains, outcome statements and example learning objectives for each subdomain and to identify the current literature supporting changes. The committee also
addressed charges two and three by providing information to the applicable AACP staff members. The committee’s progress was presented at the February 2022 AACP Interim Meeting and attendee feedback was obtained electronically using an audience response system. The majority of attendees supported the proposed revisions. From February 2022 through April 2022, the committee increased meeting frequency to twice weekly for two hours to continue making edits to the CAPE outcomes and EPAs, revise the preamble, update the glossary and literature references, create a guidance document, and prepare reports. The Outcomes will be presented for additional feedback at the AACP Annual meeting in July 2022 and the documents will be finalized in Fall 2022.

The committee made specific changes based upon the feedback obtained. One major change that has been made is to reduce the number of CAPE domains from four to three. Specifically, domains 2 and 3 from CAPE 2013 were combined to form a new domain 2 titled, “Essential Skills and Approaches for Pharmacists.” The rationale for this merger stemmed from confusion identified from the existing domain 2 which focused on skills unique to pharmacists and domain 3 that emphasized skills common to healthcare providers. Since many of these skills overlap and it is difficult to truly distinguish the difference with current practice standards and interprofessionalism being emphasized, the committee decided to merge them and outline the skills in a progressive order. Within the subdomains, some of the keyword identifiers have been renamed to better reflect edits made to the subdomain language. A specific example of this is manager (medication use systems manager) as steward (medication use process stewardship) in domain 2. In addition, domain 1 has more content areas added to mirror ACPE appendix 1.10. In domain 2, the “health and wellness” and “population-based care” subdomains have been merged to “population-based health and wellness”. In what is now domain 3, “entrepreneurship and innovation” has been revised to “innovative mindset”, to better emphasize risk taking, dealing with ambiguity, and creative thinking, and de-emphasize elements that are related primarily to starting a business venture. In response to the feedback received about weaving DEIA throughout the curricula, example learning objectives were edited or added to highlight these concepts throughout various subdomains. Edits to subdomain definitions and example learning objectives emphasized skill sets needed for all pharmacists, not only those in specific settings.

In addition to the revisions made to the CAPE domains listed above, the committee also worked to combine the CAPE domains and the EPAs into one streamlined document. This was done by adding a “Examples of Entrustable Professional Activities (EPA)” section under each CAPE subdomain. Preliminary work has begun on editing the existing 15 EPAs. Two examples of the Committee’s progress include deleting two EPAs and listing the remaining 13 EPAs under one or two CAPE subdomains. New EPAs were also created and added to relevant CAPE subdomains. The Committee also explored revising the existing entrustability assessment levels, but this change was not finalized.

The preamble has also been updated to provide insight about the background and intent of the revisions, the committee’s guiding principles, and a glossary to define key terms and increase clarity and consistency in interpretation of key terms. A few key foundational concepts have been added to the preamble, including professionalism, PIF, health equity/DEIA concepts, advocacy, and others, to emphasize the importance of these in relation to all domains. The intention of broadening the preamble to include these critical concepts (rather than having them as individual outcomes) was to emphasize that all the EOs should be used and assessed with these concepts in mind. For example, a learner who carries out patient care activities in an unprofessional manner could be considered to be failing to meet the expectations of the EO due to the lack of professionalism rather than only failing to meet the expectations of the specific professionalism subdomain in the previous version of the EOs. The preamble also re-emphasizes that learning objectives and EPAs are provided as examples only, in alignment with the committee’s goal to support programs in designing outcome-focused curricula without being overly prescriptive. Finally, the preamble has been updated to address the importance of writing measurable, evidence-based outcomes aimed at the level of an entry-level generalist pharmacist practitioner.

At this point, the committee’s revisions have not addressed competency-based pharmacy education (CBE), as there has not been enough widespread discussion and agreement among the academy on if and how to move forward with this. This will likely need to be revisited in the future, after information and suggestions from the AACP CBE Task Force are published and the Bridging Pharmacy Education to Practice Summit and Annual Meeting 2022 occurs.

CONCLUSION AND CALL TO ACTION

The CAPE Educational Outcomes and EPAs make it clear that a singular focus on preparation in any individual domain is not sufficient to educate pharmacists to understand their role as a pharmacist, practice in an inclusive manner, use evidence to support their decisions, function as part of an interprofessional team, advocate for patients and the profession, and practice at the highest level to improve patient outcomes. Upon graduation, pharmacists must continue to acquire knowledge, skills, and attitudes related to all these critical areas. Attention must be paid to
the skills needed to educate, collaborate, and communicate with diverse groups of individuals, as well as to the importance of leadership, self-awareness, professionalism, and professional identity. Changes in society and in the profession have necessitated both broad and specific updates to the existing CAPE outcomes and EPAs, including merging CAPE domains 2 and 3, updating CAPE and EPA language, and increasing flexibility with how the outcomes are used. The integrated CAPE domains and EPAs encourage a balanced and customizable approach for PharmD programs.

REFERENCES

Appendix 1. CAPE/EPA Revision Survey

1) In the current CAPE outcomes, what edits would you recommend (additions or deletions)?
2) In the current EPA statements, what edits would you recommend (additions or deletions)?
3) How do you currently use the CAPE outcomes in your program? (Select all that apply)
   Tag CAPE to assessments
   Tag CAPE to lecture content
   Tag CAPE to lecture objectives
   Use CAPE as program outcomes
4) How do you currently use the EPA statements in your program? (Select all that apply)
   Assess IPPE student performance on EPAs
   Assess APPE student performance on EPAs
   Use EPAs to map the curriculum
5) What plans do you have to use the CAPE outcomes in your program in the future?
6) What plans do you have to use the EPA statements in your program in the future?