AACP Curriculum Outcomes and Entrustable Professional Activities (COEPA) 2022

Report of the 2022-2023 Academic Affairs Standing Committee: Revising the Center for the Advancement of Pharmacy Education (CAPE) Educational Outcomes and Entrustable Professional Activities

Melissa S. Medina, Ed.D. University of Oklahoma College of Pharmacy, Oklahoma City, Oklahoma

Michelle Z. Farland, PharmD; University of Florida College of Pharmacy

Daniel R. Malcom, PharmD, Sullivan University College of Pharmacy and Health Sciences

Dawn Kashelle Lockman, PharmD; MA, University of Iowa College of Pharmacy

Edith Mirzaian, PharmD; University of Southern California School of Pharmacy

Nicole Culhane, PharmD; Notre Dame of Maryland University School of Pharmacy

Deepti Vyas, PharmD; University of the Pacific School of Pharmacy

Daniel R. Kennedy, PhD; Western New England College of Pharmacy and Health Sciences

John M. Conry, PharmD; St. John's University College of Pharmacy and Health Sciences

Kelly R. Ragucci, PharmD; American Association of Colleges of Pharmacy

Miranda Steinkopf, PharmD; American Association of Colleges of Pharmacy

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PREAMBLE

The American Association of Colleges of Pharmacy (AACP) Curricular Outcomes and Entrustable Professional Activities (COEPA, pronounced *COPA*) 2022 document represents the fifth version (preceded by AACP Academic Affairs panels in 1994, 1998, 2004 and 2013) of the Center for the Advancement of Pharmacy Education (CAPE) educational outcomes (EO).[1] EOs are statements that describe what a learner should be able to do at the end of a program.[1] EOs represent the knowledge, skills, and attitudes (KSAs) of pharmacists that all students should demonstrate upon graduation.[2] The EOs were created to facilitate curricular discussions with faculty and preceptors within the Academy and to guide curriculum planning, delivery, and assessment within pharmacy programs.

The Entrustable Professional Activities (EPAs) 2022 document represents the second version. EPAs for new pharmacy graduates were originally established in 2016 by the AACP Academic Affairs Committee to translate the CAPE educational outcomes into practice activities.[3,4] The EPAs describe the work of pharmacists as workplace tasks and responsibilities that all students are entrusted to do in the experiential setting with direct or distant supervision.[5,6] It is important to note that EPAs are activities and are broad tasks or groups of tasks.[5] These activities become the focus of an assessment when an individual is observed performing the activity. As such, preceptors assess the level of supervision a student needs to perform or execute the clinical activity/task using an entrustment decision scale.[3-7]

The 2021-2023 AACP Academic Affairs Committees was charged by the AACP Board of Directors (BOD) to review and revise the CAPE Educational Outcomes and EPAs to ensure that they are relevant and consistent with emerging scientific and clinical developments and practitioner roles. Since CAPE and EPAs were in two separate documents previously,[1,3] the process of revising both at the same time and streamlining them into one document led the Committee to rename them COEPA. The AACP BOD selected Scott K. Stolte, Pharm.D. to chair the panel, Melissa S. Medina Ed.D. to serve as vice-chair (and later appointed as chair), Michelle Farland, Pharm.D. to serve as vice-chair, and Kelly Ragucci, Pharm.D., to serve as the AACP staff liaison. The AACP BOD also invited ten pharmacy faculty to serve on the Committee who represented diversity through their institution type and year established, geographic location, discipline, practice type, and appointment, role at their institution, opinions, and perspectives. The Committee's primary charge was to review and revise the CAPE EOs and the EPAs for new pharmacy graduates. Since the Committee was revising the EOs and EPAs, it renamed them as the Curricular Outcomes and Entrustable Professional Activities (COEPA) for New Pharmacy Graduates to reduce confusion and emphasize the relationship between EOs and EPAs.

Since the last publication of the 2013 CAPE EOs, new models and strategies to describe the pharmacist's roles have emerged including the Pharmacist Patient Care Process[8], the introduction of EPAs[3,4,7] and updates to the Oath of a Pharmacist.[9] Pharmacists' scope of practice also evolved to meet the needs of the public in the COVID-19 pandemic, reflecting pharmacists' education and expertise. Additional factors that influenced the current EO and

EPA revisions arose from various sources and events such as the societal awakening to strive for health equity, cultural humility, and social justice; advancements in technology-assisted learning approaches and healthcare delivery; the NAPLEX blueprint revision;[10] and adjustments to the Interprofessional Education Collaborative Core Competencies for Interprofessional Collaborative Practice,[11] to name a few. These influences are addressed throughout the revised document.

To initiate and guide their work, the Committee sought frequent input about the existing 2013 EOs[1] and 2016 EPAs[3,4] as well as draft versions the current committee proposed. The Committee solicited their feedback during July 2021 through October 2022 from all AACP members through surveys, virtual town hall meetings, targeted interviews, individual queries, AACP task force consultations, focus groups, open comment periods, and structured feedback sessions at the AACP 2022 Interim and Annual meetings. The Committee also sought input regarding the revision from the members of other national pharmacy organizations via multiple invitations distributed through the Joint Commission of Pharmacy Practitioners (JCPP). Through these feedback efforts, general themes and suggestions emerged that have helped shape the revision process. The Committee summarized, quantified, vetted, and addressed all stakeholder feedback and made modifications to the EOs and EPAs as needed.

Specifically, the majority of feedback to the EOs called for: 1) an expansion of Domain 1 (knowledge); 2) incorporation of topics related to digital health; 3) revision of language in Domain 2 (skills) to reinforce person-centered care and align terminology with the Pharmacist's Patient Care Process; 4) expansion of the cultural sensitivity definition, with additional clarity of terminology and expected outcomes; 5) clarification of advocacy for patients and the profession; 6) expansion of the emphasis on teamwork skills; 7) incorporation of professional identity formation (PIF).[12-14] The Committee also received feedback that pharmacy program's curricula were already overloaded, so careful attention was given to simplify where possible and avoid significant content additions.

The feedback received regarding the EPAs related to: 1) include a general scope of practice available across practice settings; 2) reflect common activities completed by pharmacists in practice at an entry-level in a variety of practice settings; 3) remove EPAs that are not workplace activities that can be directly observed; 4) avoid language that is specific to immunization administration; instead update to include testing, treating, and administering medications; 5) ensure EPA assessments measure trust of the pharmacist observer and that these levels of entrustment are not tied to grades.

Once initial feedback was collected, the Committee then outlined **the overarching core values and guiding principles** that serve as the foundation for pharmacists and underpin knowledge, skills, attitudes, and behaviors required across the entire profession. These core values include but are not limited to compassion, empathy, inclusiveness, integrity, justice, responsibility, and trustworthiness. Without these values, which are derived from and consistent with the recently updated Oath of a Pharmacist, the individual will not be able to meet the needs of the public to serve as an effective pharmacist.[9] In addition, pharmacists are called to enter into a non-

reciprocal covenantal relationship with patients which encompasses advocating for patients who cannot or may not be able to advocate for themselves and to also advocate for the profession in order to advance pharmacy practice. Through this relationship, it is expected that pharmacists be cognizant of ethical issues/concerns as well as diversity, equity, inclusion, and accessibility factors that may impact patient care. Another guiding principle is for pharmacy programs to foster students' PIF, which is defined as the transformative process of identifying and internalizing the ways of being and relating within a professional role.[12-14] It is how students learn to think, act and feel like a member of the pharmacy community and it influences how a professional perceives, explains, presents and conducts themselves.[12-14] After the core values were established, the Committee started the revision process by acknowledging that EOs and EPAs are applicable across multiple practice settings that pharmacists commonly work in at entry into the profession and it is intended that graduates should continue developing these throughout one's career.

The Committee then revised the EOs and reduced the previous four domains into three domains by merging the previous two skills domains (domain two and three) into one skills domain.[1] The three new domains are knowledge, skills, and attitudes, which reflects a simplification and realignment with a recognized educational framework.[2,15] The subdomains were also revised from 15 into 12 subdomains. Each subdomain includes a one-word descriptor, an outcome description, and references to the literature as needed. The knowledge subdomain was aligned with the ACPE Appendix 1 and informed by the NAPLEX blueprint.[10,16] The skills subdomain (domain 2) was then reordered to reflects the skills needed to fulfill a pharmacist's role followed by skills needed to fulfill one's role on a team. The EO domains, subdomains, one-word descriptors, and outcome descriptions are provided in Table 1.

Next, the EPAs, which are designed as experiential/workplace activities (or tasks) were revised and reduced from 15 to 13 activities.[3-7] Each EPA requires a learner to acquire foundational knowledge, skills, and attitudes in the classroom setting before they can be entrusted with a task in the experiential setting.[3-7] The revised EPAs are in Table 2. The revised EPAs 1-10 are aligned with the Pharmacist's Patient Care Process and are mapped and designated accordingly (see Figure 1).[8] Bolded words in Tables 1 and 2 are listed in a glossary of terms and definitions along with references to the literature, in order to encourage a shared understanding of the key words (see Table 3).

Following the EPA revisions, the Committee then reviewed the original EPA levels of entrustment scale (see Table 4).[3] The original pharmacy entrustment decision scale was based on medical education's Ottawa scale,[17] which used five levels of supervision for the activity, ranging from observation only, even with direct supervision; perform with direct supervision; perform with reactive supervision (help is on request and quickly available, the preceptor trusts that the learner will ask for help); intermittent supervision (supervise at a distance and/or post hoc, learner can independently perform the task); to level 5 supervise more junior colleagues.[3-7] The Ottawa scale was designed for medical residents and then was extrapolated for use within undergraduate medical education.[17] This continuum of entrustment, starting with observation of activities through supervising colleagues is directly applicable to medicine's spectrum of

education and training. However, in pharmacy education, post-graduate training is not mandatory, therefore consistent achievement in an educational environment can be challenging to assess.

In the original Core EPAs for PharmD Graduates, five levels of entrustment were reported, though new graduates were only expected to reach the third level (reactive supervision) by PharmD graduation.[3,4] The five-level scale, including aspects of independent practice, would apply across a pharmacist's education and career, including post-graduate training and practice. The purpose of this Academic Affairs Committee report is to establish the expected entrustment level at graduation from a PharmD program, which aligns with the original Academic Affairs Committee 2015-16 EPA report as "reactive supervision."[3] It is recognized that logistical limitations such as pharmacy practice laws restrict the activities that student pharmacists are allowed to perform independently, which was a major focus of the 2015-2016 scales' fourth and fifth levels of entrustment supervision.[3] In operationalizing the EPAs in PharmD programs, the current Academic Affairs Committee removed the numeric levels of the entrustment framework to allow people to focus instead on the description of the levels (see Table 4). Regardless of the specific assessment tool schools and colleges of pharmacy may choose to use, reactive supervision remains the goal for PharmD graduates.

The Committee recommends that the entrustment level assessment focuses on the description of supervision versus on the numeric level as previously described.[3-7] The assessment of the students should be conducted prospectively.[18] The performance expectation within pharmacy programs should range from observation only (referred to preceptor modeling), to direct supervision (proactive supervision, doing EPAs with the preceptor), to indirect supervision (reactive supervision) during the scope of the PharmD program. Early learners may benefit from feedback that is more detailed. If programs find this level of feedback is needed, other entrustability scales that include additional sub-level descriptors have also been published.[18,19]

Once the Committee finished all the core EO and EPA-related revisions as the result of several rounds of feedback from the Academy, they presented the final draft of the COEPA document to the AACP BOD in October 2022.The BOD, on behalf of the AACP members, unanimously voted to accept and adopt the document as submitted in November 2022. The final document will be circulated to the Academy in the American Journal of Pharmaceutical Education (AJPE) and on the AACP website.

The Committee will also create and publish an implementation toolkit that includes resources to operationalize COEPA document for the Academy, including EO example learning objectives and EPA example tasks. This work will be offered to guide the delivery and assessment of the didactic and experiential curriculum and will be documented in a separate publication in AJPE. Each pharmacy program can utilize the example objectives and tasks as written, modify them, or create their own to fit the goals or strengths of their institution, as these are not designed to be prescriptive.

To provide additional guidance to the Academy, a third report will outline the relationship between EOs and EPAs across all learning settings, with anticipated publication in AJPE. The

Committee will map the 13 EPAs to the EO skills domain. The EPAs will not be mapped to the knowledge and attitudes domains since these domains are inherently required for all 13 EPAs.

Table 1: Revised 12 Educational Outcomes (Domains, Subdomains, One Word Descriptor and Outcome Description)*

Domain	Sub-Domain #	Sub-Domain	One Word Descriptor	Outcome Description
1 Knowledge	1.1	Scientific Thinking	Learner	Seek, analyze, integrate, and apply **foundational knowledge of medications and pharmacy practice** (**biomedical; pharmaceutical; social, behavioral, administrative; and clinical sciences**; drug classes; and **digital health**).[16,20]
2 Skills	2.1	Problem-solving Process	Problem-solver	Use **problem solving**[21] and **critical thinking** skills[22-23], along with an **innovative mindset**[24], to address challenges and to promote positive change.
	2.2	Communication	Communicator	Actively engage, listen, and **communicate**[25] verbally, nonverbally, and in writing when interacting with or **educating**[26] an individual, group, or organization.
	2.3	Cultural and Structural Humility[27,28]	Ally	Mitigate **health disparities**[29] by considering, recognizing, and **navigating**[30] cultural and **structural factors**[28,31] (e.g. **social determinants of health**[32], diversity, equity, inclusion, and accessibility) to improve access and health outcomes.
	2.4	Person-centered Care[33,34]	Provider	Provide **whole person care**[35] to individuals as the **medication specialist**[37] using the **Pharmacists' Patient Care Process**[8]
	2.5	Advocacy[38-40]	Advocate	Promote the best interests of patients and/or the pharmacy profession within healthcare settings and at the community, state, or national level.
	2.6	Medication-use Process Stewardship	Steward	**Optimize**[41-43] patient healthcare outcomes using human, financial, technological, and physical resources to improve the safety, efficacy, and environmental impact of **medication use systems**.[44]
	2.7	Interprofessional Collaboration	Collaborator	Actively engage and contribute as a healthcare team member by demonstrating core interprofessional competencies.[11]
	2.8	Population Health and Wellness	Promoter	Assess factors that influence the health and wellness of a **population** and develop strategies to address those factors.[45]
	2.9	Leadership[46,47]	Leader	Demonstrate the ability to influence and support the achievement of shared goals on a team, regardless of one's role.
3 Attitudes	3.1	Self-awareness	Self-aware	Examine, reflect on, and address personal and professional attributes (e.g., knowledge, **metacognition,**[48,49] skills, abilities, beliefs, biases, motivation, **help-seeking strategies**,[50] and **emotional intelligence**[51] that could enhance or limit growth, development, & **professional identity formation**.[12-14]
	3.2	Professionalism[52]	Professional	Exhibit attitudes and behaviors that embody a commitment to building and maintaining trust with patients, colleagues, other health care professionals, and society.[9]

*Bolded words are listed in Table 3 that includes a glossary of terms, definitions, and references.

Table 2: Revised 13 ENTRUSTABLE PROFESSIONAL ACTIVITIES (EPAs)*^#

Activity
1. Collect information necessary to identify a patient's medication-related problems and health-related needs.
2. Assess collected information to determine a patient's medication-related problems and health-related needs.
3. Create a care plan in collaboration with the patient, others trusted by the patient, and other health professionals to **optimize** pharmacologic and nonpharmacologic treatment.[41-43]
4. Contribute patient specific medication-related expertise as part of an interprofessional care team.
5. Answer medication related questions using scientific literature.
6. Implement a care plan in collaboration with the patient, others trusted by the patient, and other health professionals.
7. Fulfill a medication order.
8. **Educate** the patient and others trusted by the patient regarding the appropriate use of a medication, device to administer a medication, or self-monitoring test.[26]
9. Monitor and evaluate the safety and effectiveness of a care plan.
10. Report adverse drug events and/or medication errors in accordance with site specific procedures.
11. Deliver medication or health-related **education** to health professionals or the public.[26]
12. Identify **populations** at risk for prevalent diseases and preventable adverse medication outcomes.[45]
13. Perform the technical, administrative, and supporting operations of a pharmacy practice site.

*EPAs are activities not assessments; EPAs delineate essential tasks of a pharmacist that a PharmD graduate can be entrusted with
^EPAs 1-10 are aligned with the **Pharmacist Patient Care Process** (PPCP) and colored according to the PPCP steps.[8] See Figure 1. EPA 1 aligns with Collect, EPA 2 aligns with Assess, EPAs 3-5 aligns with Plan, EPAs 6-8 align with Implement, and EPAs 9 and 10 are Monitor.[8]
#Bolded words are listed in Table 3 that includes a glossary of terms, definitions, and references.

Table 3 Glossary

1.1 Scientific Thinking (Learner) Definitions	• **Foundational knowledge** - outlined in ACPE Appendix 1 and include the biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences as they pertain to the practice of pharmacy.[16] • **Biomedical sciences** - the preprofessional sciences (e.g., chemistry, physics, biology) and biomedical (e.g., anatomy, physiology, biochemistry, immunology, biostatistics).[16] • **Pharmaceutical sciences** – The pharmaceutical sciences build on principles introduced in the preprofessional biomedical sciences including pharmaceutics/biopharmaceutics, pharmacokinetics, pharmacology, toxicology, pharmacogenomics, medicinal chemistry, clinical chemistry, pharmaceutical calculations, and pharmaceutical compounding, which are taught in the professional pharmacy curriculum and collectively explain drug and/or drug product formulation, delivery, stability and action.[16] • **Social, behavioral, administrative sciences** - the disciplines and concepts of public health, epidemiology, economics, financial management, health behavior, outcomes, research methods, law and ethics, healthcare administration, management, and operations, marketing, communications, medication distribution systems taught within the professional pharmacy curriculum.[16] • **Clinical sciences** - the areas of the professional pharmacy curriculum focused on the integration and application of the biomedical, pharmaceutical, and social/behavioral/ administrative sciences to improve the human condition through the safe and efficacious use of medications.[16] • **Digital health** –digital technologies that improve health and includes categories such as mobile health, health information technology, wearable devices, telehealth and telemedicine, personalized medicine, and tools such as mobile health apps and software.[20]
2.1 Problem Solving Process (Problem Solver) Definitions	• **Problem solving skills**: Identify define problems that have multiple considerations (and possibly more than one viable solution); explore and prioritize potential strategies; compare and contrast potential solutions; design and evaluate implemented solutions using evidence and/or rationale and anticipate and reflect on outcomes.[21] • **Critical thinking** - evaluating conclusions by systematically examining the problem, evidence, & solution. It includes 6 core skills including interpretation, analysis, evaluation, inference, explanation, and self-regulation.[22,23] • **Innovative mindset** – a set of beliefs that includes being forward thinking, creative, open to testing, comfortable making mistakes and trying again; collaborative and focused on progress that allows a person to generate creative or novel solutions to problems that result in improved performance.[24]
2.2 Communication (Communicator) **AND** **EPAs 8 and 11** Definitions	• **Communication**: Communication is the exchange of information between patients, health care providers and others that involves skills such listening, speaking, writing, observing nonverbal communication, decoding messages, giving and receiving feedback, and empathizing.[25] • **Educating**: Educating focuses how to package, deliver, coach and assess individuals to increase their ability to learn, retain, access and use knowledge. Educating involves teaching methods, instructional strategies, individual differences, and assessment techniques.[26]

2.3 Cultural and Structural Humility (Ally) Definitions	• **Cultural humility** – Ability to recognize one's own limitation in order to avoid making assumptions about other cultures, admitting that one does not know and is willing to learn from patients**/person/client/consumer/community** about their experiences, while being aware of one's own embeddedness in culture(s).[27] • **Structural humility** - The capacity of health care professionals to appreciate that their role is not to surmount oppressive structures but rather to understand knowledge and practice gaps vis-a` -vis structures, partner with other stakeholders to fill these gaps, and engage in self-reflection throughout these processes.[28] • **Health disparities** - preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.[29] • **Navigating –** strategies provided by individuals or teams that reduce barriers to care.[30] • **Structures** – The policies, economic systems, and other institutions (policing and judicial systems, schools, etc.) that have produced and maintain social inequities and health disparities, often along the lines of social categories such as race, class, gender, and sexuality.[28] • **Structural competency** – The trained ability to discern how a host of issues defined clinically as symptoms, attitudes, or diseases (e.g., depression, hypertension, obesity, smoking, medication "non-compliance", trauma, psychosis) also represent the downstream implications of several upstream decisions about such matters as health care and food delivery systems, zoning laws, urban and rural infrastructures, medicalization, or even about the very definitions of illness and health.[31] • **Social determinants of health** – conditions in the environments where people are born, live, work, play, age, and worship that affect a wide range of health, functioning, and quality of life outcomes and risks. There are 5 key domains: social and community context, education, neighborhood and built environment, health and health care, and economic stability.[32]

2.4 Person-Centered Care (Provider) Definitions	• **Person-centered care –** A holistic approach to use with patients to be more inclusive. A broadened definition of patient-centered care that extends the concept beyond clinical care where health-care providers are encouraged to partner with patients, families, and caregivers, to co-design and deliver personalized care, including prevention and promotion activities, that provides people with the high-quality care they need and improves health-care system efficiency and effectiveness.[33,34] • **Whole person care**- Whole person health involves looking at the whole person—not just separate organs or body systems—and considering multiple factors that promote either health or disease. It means helping and empowering individuals, families, communities, and populations to improve their health in multiple interconnected biological, behavioral, social, and environmental areas.[35] • **Patient** – An individual who interacts with a clinician either because of real or perceived illness, for health promotion and disease prevention and/or to meet social needs.[36] • **Medication Specialist –** During the PharmD program students develop specialized knowledge in the safe and effective use of medications. However, a PharmD curriculum does not provide sufficient deliberate practice with focused feedback to achieve expert-level performance. We expect they will continue to develop expertise after graduation.[37] • **Pharmacist's Patient Care Process (PPCP)** – a consistent process for the delivery of patient care across the profession that is applicable to any setting where pharmacists provide care and for any patient care service provided by pharmacists. The process includes collect, assess, plan, implement, and follow-up.[8] See Figure 1.

2.5 Advocacy (Advocate) Definitions	• **Advocacy** – The process by which the actions of individuals or groups attempt to bring about social and/or organizational change on behalf of a particular health goal, program, interest, or population.[38-40]
2.6 – Medication-use Process Stewardship (Steward) **AND** **EPA 3** Definitions	• **Optimize medications** - Occurs when there is a blend between: 1) developing an optimal medication regimen, that is appropriate for the patient, effective for the medical condition, evidence-based, cost effective, and safe for the patient to use; and 2) using shared decision making: a person-centered approach that incorporates the patient's needs, abilities, values, and beliefs, and taking steps to ensure the medication can be properly used in the setting it will be administered.[41-43] • **Medication Use System/Process** - A complex process comprised of medication prescribing, order processing, dispensing, administration, and effects monitoring (e.g., intended or unintended effects).[44]
2.7 Interprofessional Collaboration (Collaborator) Definitions	• **IPEC competencies** – There are four core competency domains: 1) values and ethics; 2) roles and responsibilities for collaborative practice; 3) interprofessional communication; and 4) teamwork and team-based care. The IPEC competencies address maintaining a climate of mutual respect and shared values; using knowledge of one's own role and those of other professions; communicating using a team approach; and appreciating team dynamics, relationship-building values, and teamwork principles.[11]
2.8 Population Health and Wellness (Promoter) **AND** **EPA 12** Definitions	• **Population-based care** - A comprehensive care approach where practitioners assess the health needs of a specific population, implement and evaluate interventions to improve the health of that population, and provide care for individual patients in the context of the culture, health status, and health needs of the populations of which that patient is a member.[45]
2.9 Leadership (Leader) Definitions	• **Leadership** - Leadership is a function of knowing yourself, creating a culture of trust and open communication, having a vision that is well communicated, empowering others, taking a broad view of situations, and forming strategic alliances.[46] Leaders are compared to managers where there are some subtle differences. **Managers** are responsible for identifying, implementing, and overseeing resources to effectively accomplish specific projects or processes.[47]
3.1 Self-awareness (Self-aware) Definitions	• **Metacognition** – a type of cognition that regulates thinking and learning and consists of 3 self-assessment skills including planning, monitoring, and evaluating.[48,49] • **Help seeking** - Assessing needs and finding assistance when a deficit is identified that is associated with academic success. Behaviors may include seeking professional counseling, meditating, exercising, or engaging in the arts.[50] • **Emotional intelligence -** The ability to identify and manage one's own emotions, as well as the emotions of others. It includes the skills of emotional awareness, or the ability to identify and name one's own emotions; the ability to harness those emotions and apply them to tasks like thinking and problem solving; and the ability to manage emotions, which includes both regulating one's own emotions when necessary and helping others to do the same.[51] • **Professional Identity Formation** - Involves internalizing and demonstrating the behavioral norms, standards, and values of a professional community, such that one comes to "think, act and feel" like a member of that community. Professional identity influences how a professional perceives, explains, presents and conducts themselves.[12-14]
3.2 Professionalism (Professional)	• **Professionalism –** Includes the elements of adherence to ethical principles, effective interactions with patients and with people who are important to those patients, effective interactions with other people working within the health system, reliability, and

Definition	commitment to autonomous maintenance and continuous improvement of competence and citizenship and professional engagement.[52,53] • **Oath of a Pharmacist** was revised in 2021.[9]

Table 4. Entrustment Scale for Entrustable Professional Activities[*]

Level	Description
Observe only	Learner is permitted to observe only. Even with direct supervision, learner is not entrusted to perform the activity or task.
Direct Supervision	Learner is entrusted to perform the activity or task with direct and proactive supervision. Learner must be observed performing task in order to provide immediate feedback.
Reactive Supervision	Learner is entrusted to perform the activity or task with indirect and reactive supervision. Learner can perform task without direct supervision by may request assistance. Supervising pharmacist is quickly available on site. Feedback is provided immediately after completion of activity or task.
Intermittent Supervision	Learner is entrusted to perform the activity or task with supervision at a distance. Learner can independently perform task. Learner meets with supervising pharmacist at periodic intervals. Feedback is provided regarding overall performance based on sample of work.
General Direction	Learner is entrusted to independently decide what activities and tasks need to be performed. Learner entrusted to direct and supervise activities of others. Learner meets with supervising pharmacist at periodic intervals. Feedback is provided regarding overall performance based on broad professional expectations and organizational goals.

*Table adapted from reference 3. The expected performance level upon graduation from a PharmD program should be reactive supervision. Example entrustment scales with sub-levels that can be used to provide early learners additional feedback can be found in references 18-19.[3,18,19]

Figure 1. The Pharmacists' Patient Care Process[8]

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