Report of the 2015-2016 Academic Affairs Standing Committee

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COMMITTEE CHARGE

The Bylaws of the American Association of Colleges of Pharmacy state that the Academic Affairs Committee shall consider:

> *the intellectual, social, and personal aspects of pharmaceutical education. It is expected to identify practices, procedures, and guidelines that will aid faculties in developing students to their maximum potential.*

The Center for the Advancement of Pharmacy Education (CAPE) panel generated the CAPE 2013 Educational Outcomes which are now included as Standards 1-4 in the Accreditation Council for Pharmacy Education (ACPE) Standards.[1-2] The 2014-15 Professional Affairs Committee examined the concepts of readiness to practice and a patient-centered pharmacy practice model. In addition, the Association of American Medical Colleges (AAMC) released a set of "entrustable professional activities" (EPAs) to guide medical education. The 13 EPAs describe activities medical school graduates should be able to perform without direct supervision the first week of residency training.[3]

Based on these factors, President Cynthia Boyle charged the 2015-16 AACP Academic Affairs Standing Committee with the following:

Identify the EPAs for pharmacy graduates as they transition from completion of Advanced Pharmacy Practice Experiences into practice and post-graduate opportunities such as residency training.

BACKGROUND

As pharmacists seek to become recognized providers under State and Federal law, it is increasingly important that pharmacy graduates possess both the knowledge and skills required to contribute as valued members of each patient's healthcare team. Knowledge and theory related to the pharmaceutical sciences and pharmacy practice have served as the cornerstone of pharmacy education for many years. While the factual knowledge and theory that are the foundation of pharmacy practice are important and will continue to differentiate pharmacists from other health professionals and the lay public, access to information is now readily available real-time using various online resources. To be valued contributors to the healthcare team, pharmacists must engage in a range of professional activities and tasks that are recognizable to stakeholders, including other health professionals, patients, and the lay public. Colleges and schools of pharmacy, which have traditionally measured student achievement using objectives to assess knowledge and progression toward competencies and outcomes, must now also validate that each graduate is able to perform the entrustable professional activities (EPAs) that represent what pharmacists do on a day-to-day basis as a part of the healthcare team.

The CAPE 2013 Educational Outcomes and the Pharmacists' Patient Care Process delineate outcomes and processes that have established a clear direction for pharmacy education and the practice of pharmacy.[1,4] Colleges and schools have developed curricula that are based on these competencies. However, operationalizing and measuring competencies is difficult and has led to confusion.[5-7]

In Standards 2016, ACPE made clear that all pharmacy graduates should be "practice-ready" and "team ready."[2] However, individuals and professional organizations disagree on what constitutes a practice- and team-ready graduate. The AACP Academic Affairs Standing Committee believes that pharmacy students should be practice- and team- ready at the time of licensure. Unlike medicine, where

graduate medical education (i.e., residency training) is required for practice, pharmacists may enter practice after earning the professional degree and passing the North American Pharmacists Licensure Examination (NAPLEX) and Multistate Pharmacy Jurisprudence Examination (MPJE). The national pass rate for both of these exams is high, and neither includes a demonstration of skills that the Committee believes validates a graduate's practice- and team-readiness. The Committee believes a set of core activities, that all pharmacy graduates must be able to perform at the time of graduation, are necessary.

In medical education similar issues and challenges led the AAMC to convene a drafting panel that, in 2014, developed the Core Entrustable Professional Activities for Entering Residency.[3] The goal of AAMC's project was to develop a clear, concise list of what graduating medical students should be entrusted to do without direct supervision on day one of residency. EPAs bridge the theory to practice gap by providing a strategy for defining and assessing units of professional practice within clinical settings and confirming the competencies, knowledge, skills and attitudes necessary for professional clinical practice in the workplace.[8-9] The AAMC developed 13 Core EPAs for entering residency.

The primary motive for any health profession to develop a set of EPAs should be to improve patient care and meet the health needs of the public. Successful accomplishment of EPAs may also increase student confidence as they enter practice. To be clear, EPAs are tasks or descriptors of work that all graduates should be able to do prior to entering practice. The Core EPAs for New Pharmacy Graduates serve as a baseline, not as a ceiling. It is likely and the Committee's hope that most pharmacy graduates will be able to perform tasks that go beyond the Core EPAs.

EPA DEVELOPMENT - METHODOLOGY

The EPA development process initially involved four iterative rounds conducted by the Committee to identify the core activities that all pharmacist graduates should be able to perform with minimal or reactive supervision at the time of graduation. During the first round, committee members worked in pairs to brainstorm as many EPA statements as possible. These statements were grounded in

the CAPE 2013 Educational Outcome Statements, the JCPP Pharmacists' Patient Care Process, and the National Associations of Boards of Pharmacy (NABP) NAPLEX Blueprint.[1,4,10] A total of 151 statements were generated.

During the second round, working in pairs, committee members reviewed each statement drafted in Round 1 to determine if the statement was a discrete task or activity that could be assigned and observed. The purpose of this round was to limit the EPAs to statements of discrete work tasks and to eliminate general competency statements from further consideration. If a statement was believed to be specific, assignable, and observable, it was marked in green. If a statement was not deemed specific, assignable, or observable, it was marked in red. If a statement required some refinement to make it specific, assignable, and observable, it was marked in yellow. The analyses made by the paired committee members were then collated and compared. Statements that were deemed specific, assignable, and observable (green statements) by at least 3 pairs were moved to Round 3. Statements that were considered NOT specific, assignable, or observable (red statements) by 3 or more pairs were removed from further consideration. Those statements that were marked in yellow and those that did not achieve consensus were discussed, refined, and moved to either green or red status. A total of 111 statements were moved to Round 3.

Statements were then grouped together by themes (e.g., patient education, self-care, medication therapy decision making, etc) and assigned to two committee members to review, consolidate, parse, and refine. Each pair was asked to review each statement, determine the specific, discrete, and observable task/activity that could be assigned to a pharmacist, and draft a refined EPA statement. In some cases, several draft statements described a similar task. In these cases, the statements were consolidated together to create a single EPA statement. In other cases, statements were parsed apart to create two or more specific, discrete, and observable task or activity statements. The refined statements were written in a manner such that a supervisor could say to the pharmacist, "I would like you to [insert EPA statement]. When you are done, please report back to me about the outcome." At this point the Committee did not limit the EPA statements to tasks or activities performed in a specific context or setting. A total of 51

statements were moved forward to Round 4. During the fourth and final round, the draft EPA statements were classified into one of two categories:

- Essential EPA (all pharmacists must be able to carry out this function/task/activity)
- Supporting EPA/Task (closely associated with an essential EPA; a task or activity that is typically done in order to accomplish an essential EPA)

It was recognized that some of the tasks might be entrustable to new graduates only under specific conditions (e.g., non-complex patients within non-complex practice environments). A figure was created representing the situational complexity under which EPAs would be performed. One axis of the figure represented the complexity of the practice environment/setting and the other axis representing the complexity of the patient or population, defined as follows:

- Environment/Setting: Volume, pace, access to resources/sources, staffing, collegial support, available technology, decisional autonomy, scope of practice
- Patient/Population: acuity/stability, urgency, number of medications, health literacy, social support, age, number and nature of comorbid conditions

A classification scheme was developed to indicate which activities/tasks should be performed in any environment or context (e.g., context independent) and those activities/tasks where it would be unreasonable for all graduates to be able to perform the task without supervision unless they had additional training and experience beyond graduation.

In Round 4, a statement was deleted if either of the following conditions were met: a) the EPA was a specialized professional activity or task that only some pharmacists would carry out; or b) the task could not be reasonably entrusted to a new graduate without direct supervision. A total of 46 statements (Essential EPA statements = 28 and Supporting Tasks = 18) were moved forward for stakeholder feedback.

Stakeholder Feedback and Revisions

From January to April 2016, several stakeholder groups were asked to review and provide feedback regarding the draft EPA statements for new pharmacy graduates. Stakeholder groups were invited to participate in several listening sessions. During these sessions, a brief tutorial regarding the definition and purpose EPAs was presented, the draft list of EPAs was distributed, and a series of feedback questions were posed. Listening sessions were held in face-to-face as well as online using a Webinar tool (Adobe Connect, Adobe Systems Inc, San Jose, CA). Written feedback was also collected using an online survey tool (SurveyMonkey®, SurveyMonkey Inc, Palo Alto, CA). Feedback was sought and reviewed from following forums and groups:

- AACP Institutional Research Advisory Committee (IRAC) - January 12, 2016
- Joint Commission of Pharmacy Practitioners (JCPP) - January 13, 2016
- AACP Interim Meeting - Town Hall - February 21, 2016
- AACP Council of Faculties - Open Forum - February 21, 2016
- American Pharmacists Association Annual Meeting - Open Forum - March 5, 2016
- ASHP Commission on Credentialing - March 12, 2016
- New Graduate Webinar - March 15, 2016
- Residency Program Directors Webinar - March 15, 2016
- Employer/Supervisor Webinar - April 6, 2016

In addition to feedback received from stakeholders during listening sessions, written feedback was invited. The American College of Clinical Pharmacy (ACCP), ACPE, the Academy of Managed Care Pharmacy (AMCP), The Institute of Safe Medication Practices (ISMP), NABP, the ASHP Section of Inpatient Practitioners, the ASHP Section of Ambulatory Care Practitioners, as well as several individuals submitted written comments.

The Committee collated and reviewed the extensive feedback received from these stakeholders. The Committee had lengthy discussions regarding recommended changes to the draft EPA statements, levels of supervision (i.e., the entrustability scale), and the proposed figure. Extensive revisions were made including reducing the number of "essential" EPAs and renaming them "core" EPAs, updating the figure, as well as adding and deleting several tasks statements based on stakeholder feedback. A total of 77 statements, consisting of 15 Core EPA statements and 62 supporting task statements, were endorsed by the Committee for submission to the AACP Board of Directors and are included in this report in Appendix 1.

CORE EPAs FOR NEW PHARMACY GRADUATES

The Core EPAs for New Pharmacy Graduates delineated in this report are the essential activities and tasks that all new pharmacy graduates must be able to perform without direct supervision. Thus, all new pharmacy graduates should have had sufficient experience during their educational program performing these tasks in a variety of practice settings. The Core EPAs fall under six key professional roles or domains: 1) Patient Care Provider, 2) Interprofessional Team Member, 3) Population Health Promoter, 4) Information Master, 5) Practice Manager, and 6) Self-Developer. However, it should be noted that the Core EPAs and supporting tasks are interrelated. Although an EPA or supporting task may be listed under a specific domain, it does not imply that it is performed in isolation from other EPAs, supporting tasks, or roles. For example, the Patient Care Provider EPAs and supporting tasks are often performed as an Interprofessional Team Member and concurrently with Practice Manager responsibilities.

The Core EPAs and supporting tasks represented in this document are the essential responsibilities that all pharmacists should be entrusted to perform without direct supervision. This list is not exhaustive and does not include all activities, tasks, functions, or roles that pharmacists can and do perform today. Indeed, many colleges and schools of pharmacy will undoubtedly supplement this list with additional EPAs they believe their graduates should be able to perform. Likewise, specialized areas of pharmacy practice will likely develop additional EPA statements that reflect the essential activities and

tasks performed by specialists who have training and experience beyond that of the entry-level practitioner.

All new pharmacy graduates should be *entrusted* to perform the Core EPAs and the supporting tasks. During advanced pharmacy practice experiences and following licensure, preceptors and supervisors decide when and what tasks they entrust trainees and new practitioners to assume. The level to which learners can be entrusted to perform the Core EPAs and supporting tasks develops over time and should be based on the depth and maturity of each trainee's knowledge, skills, and attitudes as described in Table 1 and shown graphically in Figure 1. At the lowest level of entrustability, trainees with very limited knowledge and experience must first observe exemplary performances before attempting to perform the Core EPAs and the supporting tasks (Level I). As their knowledge and skills evolve, students should then be entrusted to perform these tasks under direct observation with immediate feedback (Level II). Direct supervision requires the preceptor or supervisor to be present, usually face-to-face, to observe the trainee. With feedback and additional practice, trainees should be able to move from direct supervision to reactive supervision (Level III). Under reactive supervision, the preceptor or supervisor entrusts the trainee to perform the task independently but remains readily available to assist with cases or circumstances that the trainee perceives to be unusual, difficult, or too complex. Feedback is provided to the student after the completion of the task or activity. With additional practice, the student can then be entrusted to perform a series of assigned Core EPAs and supporting tasks with only intermittent supervision (Level IV). With intermittent supervision, trainees meet with the preceptor or supervisor at periodic intervals, typically at the end of a day, to review their performance on the assigned tasks. At the highest level of entrustability, the student is given significant latitude to prioritize the work based on broad professional expectations and organizational goals (Level V). In addition, the student may, when it is legal to do so, direct and supervise the work of technical staff. The trainee meets with the preceptor or supervisor at periodic intervals, typically after several days, to review overall performance.

At a minimum, all pharmacy graduates should be able to perform *all* Core EPAs and the supporting tasks with reactive (Level III) supervision. This is not to imply that this is the desired level of

performance and many colleges and schools will likely require their graduates to perform many of these tasks with intermittent (Level IV) supervision. While some extraordinary students with extensive work experience will likely be able to perform many EPAs with general direction (Level V), it is unreasonable to expect most new pharmacy graduates to perform at this level. However, new graduates should *no longer require direct supervision* for any Core EPA or supporting task. The level of entrustability for the Core EPAs is also contingent on the context in which the activity or task is performed. Pharmacy practice has become increasingly specialized and there is a clear need for additional training and experience beyond the credentials required to enter practice when performing the Core EPAs in complex settings of care and with complex patient populations (see Figure 1). None-the-less, all pharmacy graduates should be able to independently perform all Core EPAs under circumstances of low complexity.

USING THE CORE EPAs TO ADVANCE PHARMACY EDUCATION AND PRACTICE

ACPE Standards 2016 call for pharmacy graduates to be "practice ready" and "team ready."[2] Moreover, the CAPE 2013 Educational Outcomes provide guidance for developing "practice ready" and "team ready" graduates.[1] However, standards and guidance documents are oftentimes viewed as abstract and fail to articulate the essential activities and tasks that all graduates should be able to perform. The Core EPAs for new pharmacy graduates articulated in this document are intended to translate the knowledge, skill, and attitudinal competencies as defined by the CAPE 2013 Educational Outcomes, the JCPP Patient Care Process, and the NAPLEX Blueprint into practice.[1,4,10] The EPAs do not exist separately from competencies but are discrete, measurable descriptors of work typically requiring multiple competencies to be demonstrated in an integrative, holistic manner.[11] The core EPAs for new pharmacy graduates delineate more precisely and tangibly what it means to be "practice ready" and "team ready"—that is, what *all* new pharmacy graduates should be entrusted to do upon completion of the Doctor of Pharmacy degree as they transition into practice or postgraduate training.

Integration of knowledge, skills, and attitudes from multiple competency domains are needed to practice pharmacy.[12] To meet these requirements in pharmacy education, many schools have moved

toward competency or outcomes-based approaches to curricular design, development, and assessment. Most colleges/schools of pharmacy now have, or are in the process of developing, programmatic outcome or competency statements that are foundationally based on ACPE Standards and the CAPE 2013 Educational Outcomes.[1-2] Many have found that these competency statements are difficult to operationalize. As discrete, measurable activities that pharmacists perform, EPAs are conceptually easier to understand and many institutions may find them easier to use to guide curricular development and student assessment. EPA statements help educators "start with the end in mind".[13] EPAs should be mapped to college and school competency and/or outcome statements to provide students, faculty, and preceptors with a clear understanding of how EPAs stem from and operationalize program outcomes. Each college and school should also state where and when the Core EPAs will be practiced and assessed throughout the curriculum.[3] As the Core EPAs are activities that are easily recognized and understood by faculty, students, preceptors, other health professionals, and the lay public, EPAs can lend clarity and meaningfulness to the college or school's program outcomes and make assessment of student achievement of program outcomes more practical.[3]

There are many considerations related to how the Core EPAs can or should be used in curriculum development and assessment. First, it is important to note that the Core EPAs presented in this report represent the *minimum baseline* set of activities *all* new pharmacy graduates should be capable of fulfilling without direct supervision at the time of entry into practice or postgraduate training. They are not meant to represent the ceiling. Colleges and schools may set a requisite level of performance (i.e., level of entrustability and situational complexity) for each Core EPA higher than reactive supervision (Level III). Likewise, the list of Core EPAs is not meant to be limiting. Colleges and schools of pharmacy are encouraged to expand the list to meet their own institutional missions.

Colleges and schools should also think through how faculty, students, and preceptors will use the EPAs. EPAs can help articulate what the curriculum is trying to achieve. Faculty can use EPAs as a target to design curricula, courses, and course activities. Students can use EPAs to understand the core of what is expected of them by the time they graduate. Preceptors can use EPAs as a road map to understand the

program's core expectations and to evaluate student progression from low to higher levels of entrustable performance. Colleges and schools can also use EPAs as a foundation for preceptor development and to help market the pharmacy profession to applicants and the lay public.

The key benefit to using EPAs to guide educational activities lies in the fact that they are observable tasks. EPAs take competencies, in many cases, numerous competencies and package them into meaningful activities that make sense to students, faculty members, and the public. Assessment of EPAs is not easy and will likely require a multi-step assessment process consisting of repeated low stakes assessments leading to a summative assessment. However, the assessment of an activity or distinct task is easier than the assessment of a competency. For example, an EPA that states, "Collect a medical history from a patient, family member or caregiver." is observable activity that incorporates learning objectives from many of the CAPE outcomes.

Colleges and schools need to determine how EPAs will best fit into their curricula. Some colleges and schools have already started this work. For example, faculty at the University of Minnesota College of Pharmacy recently applied medicine's EPA model to develop EPAs for pharmacy practice and an assessment framework to be used across the college's APPE curriculum.[3,14] Given the newness of EPAs, best practices for integrating EPAs in pharmacy curricula have not been described. EPAs can be initially explored and practiced in didactic courses, pharmacy practice skills labs, and introductory pharmacy practice experiential (IPPE) courses. For example, the core EPA of "*Collect information to identify a patient's medication-related problems and health-related needs*" may be part of a pharmacotherapeutics didactic course, may be reinforced with practice opportunities for the student to interact with a simulated patient and medical record in a skills lab, and then further practiced in a community-based IPPE. During advanced pharmacy practice experiences (APPEs), the student might be expected to repeatedly perform this core EPA moving from lower to higher levels of entrustability at specified milestones.

Regardless of how EPAs are integrated into pharmacy curricula, students must have multiple opportunities to practice each EPA with formative assessments and feedback.[3] As all graduates should be capable of performing each Core EPA, *at a minimum*, with only reactive supervision (Level III) at the

time of entry into pharmacy practice or postgraduate training, colleges and schools may want to consider evaluation strategies such as Objective Structured Clinical Exams (OSCEs) or similar observable, documented skill-based assessments that provide each student an opportunity to demonstrate his/her ability to perform each core EPA without direct supervision.

Although some colleges and schools are already using EPAs within their programs, the best approach to incorporating EPAs into curriculum development and assessment is not known. Dissemination of successful approaches to incorporating EPAs into curricula are needed. Valid and reliable assessment and evaluation processes and tools for the Core EPAs are also needed.

SUGGESTIONS

Suggestion 1. Colleges/schools of pharmacy should adopt the Core Entrustable Professional Activities (EPAs) for New Pharmacy Graduates to ensure that graduates are practice-ready and team-ready.

Suggestion 2. Each college/school of pharmacy should deliver a curriculum that ensures that each graduate can perform the Core EPAs.

Suggestion 3. Colleges/schools of pharmacy should evaluate every student's ability to perform each Core EPA.

Suggestion 4. Colleges/schools of pharmacy should conduct and disseminate research related to the use of EPAs.

How AACP Can Support the Dissemination and Use of EPAs

Trust is central to patient care. Patients must trust their pharmacists. Moreover, healthcare providers must trust each other in a highly interdependent healthcare system.[11] Given the academy's desire to advance pharmacists as essential members of interprofessional healthcare teams, articulating a core set of professional activities is important to increase an awareness of the pharmacist's role. The lay public, employers, policy makers, or prospective students struggle to understand what pharmacists do beyond medication order fulfillment. The Core EPA statements can be used by the academy and the

profession as a way to describe the pharmacist's key responsibilities in a way that makes intuitive sense and represents their day-to-day work activities.[3]

As the concept of EPAs is still relatively new within health professional education, AACP should provide faculty development programming to foster a shared understanding regarding the Core EPAs, their purpose and benefits, and how to operationalize them in Doctor of Pharmacy curricula. Likewise, as there is a paucity of pharmacy education literature related to EPAs, AACP should encourage and support scholarly endeavors among colleges and schools to promote dissemination of practices and approaches to implementing EPAs in pharmacy curricula. AACP can play a key role in disseminating best practices to use EPAs for curricular design as well as valid and reliable evaluation approaches, tools, and criteria.

AACP should promote the potential benefits and uses of the Core EPAs to external stakeholders including pharmacy employers, pharmacy residency programs, other health professions, and the lay public. It is important to recognize that the Core EPAs for New Pharmacy Graduates are part of a continuum in pharmacy education and training, as depicted in Figure 1. New pharmacy graduates should be entrusted to perform the Core EPAs at the time of licensure in low complexity practice settings and with low complexity patients/populations. As the new pharmacist gains experience and completes postgraduate training, the pharmacist can perform the Core EPAs in increasingly complex practice settings and patient populations. Moreover, an expanded set of EPAs would be expected in areas of specialization. The Core EPA statements presented in this report should serve as the foundation for all post-graduate pharmacy residency training programs.

Finally, as the profession of pharmacy continues to evolve, the Core EPAs for New Pharmacy Graduates will also need to evolve. Periodic review of the Core EPAs will be needed to ensure relevancy, usefulness, and validity. Similar work done in medicine may help guide this evaluation. For example, Hauer et al. used a modified Delphi approach to confirm the content validity of EPAs used in internal medicine.[12] In August 2014, the AAMC initiated a five-year pilot project to test the implementation of its *Core EPAs for Entering Residency*, specifically related to curriculum development, assessment of competency using the EPA framework, the path to entrustment, and faculty development. A secondary

goal of the AAMC pilot project is to demonstrate improvement in the gap between performance and expectations for students entering residency who have been educated using the Core EPA model.[15]

RECOMMENDATIONS

Recommendation 1. AACP should educate the *Academy*, the lay public, and other stakeholders about the Core Entrustable Professional Activities (EPAs) for New Pharmacy Graduates including their purpose and benefits.

Recommendation 2. AACP should assist with sharing practices among colleges/schools of pharmacy regarding the design and delivery of curricula as well as evaluation tools and criteria related to the Core EPAs.

Recommendation 3. AACP should collaborate with ASHP to ensure that the Core EPAs for New Pharmacy Graduates are the foundation for the development of post-graduate pharmacy residency EPAs.

Recommendation 4. AACP should revisit the Core EPAs for New Pharmacy Graduates on a periodic basis (e.g. every 3 to 5 years) to ensure they reflect contemporary pharmacy practice.

CONCLUSIONS

The Core EPAs for New Pharmacy Graduates describe the essential work of pharmacists to ensure the safe and cost-effective use of medications. The Core EPAs can be used to inform external stakeholders — health professional colleagues, policy makers, and prospective pharmacy students — regarding the roles and responsibilities that pharmacists can be entrusted to assume. By adopting the Core EPAs, colleges/schools of pharmacy can ensure that each and every graduate is practice-ready and team-ready.

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Table 1. Levels of Entrustability

Level	Description
I. Observe Only	Learner is permitted to observe only. Even with direct supervision, learner is not entrusted to perform the activity or task.
II. 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.
III. Reactive Supervision	Learner is entrusted to perform the activity or task with indirect and reactive supervision. Learner can perform task without direct supervision but may request assistance. Supervising pharmacist is quickly available on site. Feedback is provided immediately after completion of activity or task.
IV. 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.
V. General Direction	Learner is entrusted to independently decide what activities and tasks need to be performed. Learner entrusted to direct and supervise the 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.

Figure 1. Continuum of EPA Development

Appendix 1. Draft Core Entrustable Professional Activities for New Pharmacy Graduates

Patient Care Provider Domain	Key Supporting Tasks
Collect information to identify a patient's medication-related problems and health-related needs.	• Collect a medical history from a patient or caregiver. • Collect a medication history from a patient or caregiver. • Determine a patient's medication adherence and other medication use behaviors. • Use health records to determine a patient's health-related needs relevant to setting of care and the purpose of the encounter.
Analyze information to determine the effects of medication therapy, identify medication-related problems, and prioritize health-related needs.	• Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral. • Measure an adult patient's vital signs and interpret the results (eg, body temperature, pulse rate, respiration rate, and blood pressure). • Select laboratory tests and interpret the results. • Identify drug interactions. • Perform a comprehensive medication review (CMR) for a patient. • Assess a patient's health literacy using a validated screening tool. • Compile a prioritized health-related problem list for a patient. • Evaluate an existing drug therapy regimen.

Establish patient-centered goals and create a care plan for a patient in collaboration with the patient, caregiver(s), and other health professionals that is evidence-based and cost-effective.	• Follow an evidence-based disease management protocol. • Develop a treatment plan with a patient. • Manage drug interactions. • Select monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan. • Determine the appropriate time interval(s) to collect monitoring data. • Create a patient-specific education plan.
Implement a care plan in collaboration with the patient, caregivers, and other health professionals.	• Write a note that documents the findings, recommendations, and plan from a patient encounter. • Educate a patient regarding the appropriate use a new medication, device to administer a medication, or self-monitoring test. • Educate a patient on the use of medication adherence aids. • Assist a patient with behavior change (eg, use shared decision making and motivational strategies).
Follow-up and monitor a care plan.	• Collect monitoring data at the appropriate time interval(s). • Evaluate the selected monitoring parameters to determine the therapeutic and adverse effects related to the treatment plan.

	• Modify/adjust an existing medication therapy regimen based on patient response. • Communicate a patient case to a colleague to ensure an effective handoff or during a transition of care.

Interprofessional Team Member Domain	**Key Supporting Tasks**
Collaborate as a member of an interprofessional team.	• Contribute medication-related expertise to the team's work. • Explain to a patient, caregiver, or professional colleague each team member's role and responsibilities. • Communicate a patient's medication-related problem(s) to another health professional. • Communicate with respect. • Use attentive listening skills when communicating with team members. • Use consensus building strategies to develop a shared plan of action.

Population Health Promoter Domain	**Key Supporting Tasks**
Identify patients at risk for prevalent diseases in a population.	• Perform a screening assessment to identify patients at risk for prevalent diseases in a population (e.g. hypertension, diabetes, depression).

Minimize adverse drug events and medication errors.	• Assist in the identification of underlying system-associated causes of errors. • Report adverse drug events and medication errors to stakeholders.
Maximize the appropriate use of medications in a population.	• Perform a medication use evaluation.
Ensure that patients have been immunized against vaccine-preventable diseases.	• Determine whether a patient is eligible for and has received CDC recommended immunizations. • Administer and document CDC recommended immunizations to an adult patient. • Perform basic life support.

Information Master Domain	**Key Supporting Tasks**
Educate patients and professional colleagues regarding the appropriate use of medications.	• Lead a discussion regarding a recently published research manuscript and its application to patient care. • Develop and deliver a brief (less than 1 hour) educational program regarding medication therapy to health professional or lay audience.

Use evidence-based information to advance patient care.	• Retrieve and analyze scientific literature to make a patient-specific recommendation. • Retrieve and analyze scientific literature to answer a drug information question.

Practice Manager Domain	**Supporting Tasks**
Oversee the pharmacy operations for an assigned work shift.*	• Implement pharmacy policies and procedures. • Supervise and coordinate the activities of pharmacy technicians and other support staff. • Assist in training pharmacy technicians and other support staff. • Assist in the evaluation of pharmacy technicians and other support staff. • Identify pharmacy service problems and/or medication safety issues. • Maintain the pharmacy inventory. • Assist in the management of a pharmacy budget. • Measure pharmacy quality and productivity indicators for CQI purposes. • Assist in the preparation for regulatory visits and inspections.
Fulfill a medication order.*	• Enter patient-specific information into an electronic health or pharmacy record system.

	• Prepare commonly prescribed medications that require basic sterile compounding or basic non-sterile compounding prior to patient use. • Determine if a medication is contraindicated for a patient. • Identify and manage drug interactions. • Determine the acquisition cost and patient co-pay or price for a prescription. • Ensure that formulary preferred medications are used when clinically appropriate. • Obtain authorization for a non-preferred medication when clinically appropriate. • Assist a patient to acquire medication(s) through support programs.

Self-Developer Domain	**Supporting Tasks**
Create a written plan for continuous professional development.	• Create and update a curriculum vitae, resume, and/or professional portfolio. • Perform a self-evaluation to identify professional strengths and weaknesses.

**in compliance with federal, state and local laws and regulations*