

AACP REPORT

Report of the 2016-17 Academic Affairs Standing Committee: Entrustable Professional Activities Implementation Roadmap

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EXECUTIVE SUMMARY. The purpose of this report is to: 1) Identify linkages across the EPA statements, Center for the Advancement of Pharmacy Education 2013 Educational Outcomes (CAPE 2013) and the Joint Commission of Pharmacy Practitioners' Pharmacist Patient Care Process (PPCP); 2) Provide ways EPA statements can be used to communicate core skills that are part of the entry-level pharmacist identity; 3) Suggest a potential roadmap for AACP members on how to implement EPA statements.

KEY TERMS: Core EPAs, CAPE 2013, Pharmacist Patient Care Process

INTRODUCTION AND COMMITTEE CHARGES

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 2016-17 Academic Affairs Standing Committee was charged by President Joseph DiPiro with the following: 1) compiling comments and input from a broad range of stakeholders regarding the draft Entrustable Professional Activities (EPAs) from the 2015-16 Committee (including comments from District meetings) and complete final edits to the document for submission to the November 2017 AACP Board of Directors meeting; 2) develop potential uses and applications of EPA statements in pharmacy education; and 3) create a roadmap for implementation of EPAs across the member schools and colleges. Include in the plan a path to inform internal and external stakeholders regarding the EPAs and

educational opportunities that are presented. Identify components of the plan that could be implemented starting fall 2017.

As defined in the combined 2015-16 and 2016-17 Academic Affairs Standing Committee report, "EPAs are units of professional practice or descriptors of work, defined as specific tasks or responsibilities that trainees are entrusted to perform, without direct supervision, once they have attained sufficient competence. EPAs are independently executable, observable, and measurable in their process and outcome. Core EPAs for New Pharmacy Graduates (core EPAs) are discrete, essential activities and tasks that all new pharmacy graduates must be able to perform without direct supervision upon entering practice or postgraduate training."¹⁻³ The first charge for the 2016-17 Academic Affairs Standing Committee was to finalize the core EPA statements for new pharmacy graduates. This was completed with the AACP Board of Directors affirming the statements at the November 2016 meeting. The core EPAs for New Pharmacy Graduates is published in the Journal.¹ The remaining two charges are addressed in this report. The purpose of this report is to: 1) Identify linkages across the EPA statements, Center for the Advancement of Pharmacy Education 2013

Educational Outcomes (CAPE 2013) and the Joint Commission of Pharmacy Practitioners' Pharmacist Patient Care Process (PPCP); 2) Provide ways EPA statements can be used to communicate core skills that are part of the entry-level pharmacist identity; 3) Suggest a potential roadmap for AACP members on how to implement EPA statements.

Linkages across the EPA statements, CAPE 2013 and the Pharmacist Patient Care Process

As described in the 2015-16 Academic Affairs Committee Report, the CAPE 2013 and the PPCP both formed the foundation of the EPA statements.⁴⁻⁶ The EPA statements serve to operationalize the CAPE 2013 into discrete tasks that can be measured. The PPCP was developed after the CAPE 2013 and thus influenced development as well. EPAs are an emerging concept in the CAPE competency-based and PPCP-focused pharmacy education. Demonstration of an EPA requires proficiency in multiple competencies simultaneously.⁷ Each pharmacy setting has varying responsibilities that are entrusted to a pharmacist. Demonstration of these EPAs usually requires a pharmacist to integrate multiple competencies from several domains, such as fundamental scientific knowledge, expertise, skills in information integration, collaboration and communication with other health care professionals, as well as staff, time and resource management. All these elements are tied together such that the EPAs do not represent any new concepts but instead translate those concepts into measurable tasks. A map was developed to show the linkages between core EPAs, and the PPCP and CAPE 2013 (Appendix 1).

Strategies core EPAs can be used to communicate skills that are fundamental to the entry-level pharmacist identity

The Core EPAs for New Pharmacy Graduates delineate the skills and tasks that entry-level pharmacists must be able to perform, regardless of setting. In establishing these core EPAs, the profession can develop an identity message for media and other sources that attracts the "best fit" future pharmacy students, is motivating for current pharmacy students, engaging for current pharmacists, encouraging and reassuring for patients, and enlightening to the public.

In order for the core EPAs to be effective in this way, they will need to be communicated effectively to all stakeholders. These EPAs illustrate the role that pharmacists fill in the health care team. The EPAs will also help members of the Academy ensure that the education we provide to all entry-level pharmacists prepares them to be "practice ready" and valued in today's health care environment.⁸

The core EPAs update the identity of a new pharmacy graduate from the traditional dispensing perspective to a medication-related cognitive services focus. Core EPAs communicate this role to all stakeholders including other health care team members who can better understand what pharmacists contribute and the value they bring to the team. Another stakeholder audience is the patient who can understand what additional services a pharmacist can provide beyond medication distribution. The skill set that the core EPAs describe inform policy makers, for both regulatory and payers, why consistent inclusion of a pharmacist across care settings is necessary. For regulatory policymakers, such as elected officers and other government officials, the EPA statements could help define what is included as part of the scope of practice through state pharmacy practice acts and the associated regulations.

Core EPAs also help inform the profession itself. Having all members of the profession, from the newly enrolled pharmacy student to the most experienced pharmaceutical science faculty member, embrace a core, unified pharmacist identity will help guide the development of the next generation of pharmacists. Core EPA statements operationalize competency statements to allow colleges and schools of pharmacy to develop curricula and appropriate assessments to ensure a consistent ability of an entry-level licensed pharmacist across the spectrum of each unique pharmacy program. The basic pharmaceutical science core of the pharmacy professional curriculum is easily mapped to the EPA statements, further allowing EPA statements also serve as a mechanism to unify the professional identity across pharmacy disciplines. Table 1 contains examples of how core EPAs connect to basic or foundational sciences portions of the curriculum. A more detailed diagram of the use of core EPAs with the pharmaceutical sciences can be found on the AACP website under the CAPE Educational Outcomes portion of the website. It is important to remember that the core EPAs are a baseline expectation of proficiency in knowledge and skills and are not reflective of the advanced ability of a more seasoned practitioner. EPA statements can also help pharmacists adjust their self-directed learning as EPA statements may change as the profession continues to evolve. Pharmacists can use changes in EPA statements as one part of the strategy to remain current in the practice of pharmacy. Individual practice settings could use the EPA structure to establish career paths for pharmacists within an institution and allow pharmacists to pursue additional roles. Pharmacists can use setting specific EPAs to demonstrate maintenance of competency, continuous professional development, and better understand

Table 1. Two Examples of How EPAs Map to the Basic Science Portion of Pharmacy Curriculum

Example	Description
<p>EPA Patient Care Domain, Example Supporting Task 'Determining patients' experience with medication'</p>	<p>Within the EPA domain 'Patient Care,' an important example supporting task is 'Determining patients' experience with medication' which can be better understood when a drug delivery matrix developer (pharmaceutics faculty) and a practice faculty collaborate. In this scenario, the science faculty helps students visualize the structural transitions of the relevant excipients in the drug product, and the pharmacokinetic transformation of the active drug in light of bioavailability, onset, intensity, and duration of its effect. If communicating directly to a patient using active listening, the student learns to assess the success or modify the treatment option from the aspect of compliance issue or product technology issue. In contrast, the practice faculty trains the students on the best method to counsel patients to generate a positive patient outcome.</p>
<p>EPA Patient Care Domain, Example Supporting Task 'Interpret laboratory test results'</p>	<p>This example also provides a way to highlight the integration of basic and clinical content. Students learn the concept of acid base balance in drug delivery matrix design in the early part of the program and then apply this concept at an advanced level of the curriculum to address patients' metabolic or systemic acidosis or alkalosis by managing a simulated patient in a pharmacotherapy course. As students progress to the APPE rotation phase, they get access to the patient profile and lab values. They can identify abnormal anion gap, abnormal electrolyte (chloride or acetate) levels, carbon dioxide levels, etc. and spontaneously integrate fundamental science knowledge of acid – base balance. Together with the preceptor, the students review the existing treatment protocol and learn the EPA core statement 'Perform a comprehensive medication review (CMR) for their patients' and recommend addition of appropriate electrolytes for correction (eg, sodium acetate to correct acidosis or sodium chloride, for alkalosis). The integration of basic and clinical knowledge and skill is evident across the program through the EPA statements and helps to better communicate to external audiences the unique value of the pharmacist team member.</p>

what areas of additional training would be necessary if a career change within pharmacy was intended.⁸ A critical role in preparing students is also held by the pharmacy practice experience preceptors. It will be essential for our preceptors to understand the value of EPAs as part of the overall assessment of the students in their charge, as well as to invite them to use their knowledge of the professional activities they accomplish daily to design appropriate supporting tasks that allow students to demonstrate competency with each EPA.

Finally, EPAs can unify the vision of pharmacy-based organizations. Within AACP and its partner organizations a cohesive definition of New Pharmacy Graduate skill and abilities can allow them to better interface with each other as they advocate for the profession. This includes developing EPA statements in pharmacy postgraduate education, developing new continuing education programming at regional and national meetings, creating new certification programs among many other opportunities. Many roads lead from the Core EPA Statements for New Graduates, but this established common starting point will ensure continuity and coherence across the post-graduate paths.

Overall, core EPAs can be used to communicate to all the stakeholders (health care providers, patients, the Academy, and professional organizations) what a pharmacy graduate is capable of upon graduation. The EPAs also help ensure that faculty, staff, and preceptors in the Academy are able to assess students' achievement of each EPA and offer remediation where needed. This assessment and feedback will help all graduates, nationally, utilize a common skill set in the practice environments and should positively impact patient delivery and care, which is an effective way to show (versus tell) stakeholders the value of the profession.

Recommendation 1: AACP should work with APhA to link core EPA Statements for New Pharmacy Graduates into the APhA Career Pathways Program to better communicate how EPAs apply to various career paths.

Recommendation 2: AACP should encourage other organizations to use the series of three Academic Affairs Standing Committee Reports (including this report) to develop EPA statements for post-graduate specialized and advanced practice.^{1,4}

Recommendation 3: AACP should incorporate the Core EPA Statements for New Pharmacy Graduates into Priorities 1 and 2 in the AACP Strategic Plan 2016-2019.

Suggested Roadmap for Implementation of Core EPAs for New Graduates

While the academy provides the core EPAs that describe the core pharmacy practice tasks expected of a new

graduate from any of our programs and guidance for how to use EPAs, programs may also seek specific guidance about how to implement EPAs into their curricula. While not meant to be prescriptive, this roadmap offers a suggestion for how colleges and schools of pharmacy could implement the core EPAs. This is *only one way of approaching implementation* and not intended to be the single strategy to implement EPAs into the curriculum. The following 10 steps provide a roadmap schools can use to facilitate implementation. With this provided descriptive method, steps 1 through 6 can be implemented immediately and need to be completed prior to moving on steps to 7 through 10. Schools will need to create an implementation timeline once they arrive at steps 7 and 8. An example of a possible timeline is addressing steps 1 through 6 over one semester (reviewing, mapping, identifying, streamlining, leveling, calibrating, and defining), step 7 (piloting and revising) may last 1 semester to a year, and steps 8 through 10 (training) could take one an additional semester to a year.

Implementation Step 1: Identify a team who will lead the EPA implementation effort

The first step for all schools is to identify the people that will lead the EPA implementation process, which is a step that all schools can take immediately. One suggested group is an *ad hoc* committee of the Assessment and/or Curriculum Committees. The members of this *ad hoc* committee could be led by an administrator responsible for curriculum and/or assessment, such as an Assessment, Academic Affairs, Curriculum, Experiential, Accreditation, or Professional Affairs Dean. The committee members should include faculty who teach in the didactic curriculum (including pharmaceutical sciences, social and administrative sciences, and clinical faculty) and the experiential curriculum (including preceptors from community, ambulatory care and acute care experiences). To gain preceptor input without adding excessive workload burden, clinicians (eg, preceptors, residency program directors, district managers, clinical coordinators, employment recruiters, etc.) can be placed into the role of 'minute readers' to provide a double-check that decisions make sense and are realistic within the practice environment. This structure means clinicians would not need to find release time from practice to attend meetings, but would still provide critical application feedback, with the added benefit of ensuring documentation of meeting discussions and decisions are clearly communicated.

Implementation Step 2: Map Curriculum to EPAs

The second step is to conduct a curricular review of content to determine where in the curriculum each of the core EPAs (domain, core statement, and suggested

supporting task) is addressed. From this review, a curriculum map can be created to identify what program year (s) and course(s) address each EPA, if any EPAs are not addressed, and if and how the level of entrustability progresses/advances across the curriculum. Appendix 1 could be used in helping to map the curriculum.

Step 2A. An additional action is needed in step 2 for schools that have already implemented EPAs in their curricula. Prior to reviewing and mapping the curricula, schools will need to compare their college or school program specific EPA statements and supporting tasks to the AACP core EPAs. Schools can create a cross-walk map to document the similarities and differences between the two sets of EPAs. Depending on the results, a school could adopt the AACP core EPAs as a whole and replace their existing EPAs or a school could leave their existing EPAs in place and share the cross-walk map during an accreditation self-study or site visit if asked. A third option is for schools to use the AACP core EPAs (or their program specific EPAs if similar enough to the core) as well as a selective (non-core) set of EPAs that are specific to that school. Schools could delineate these two sets of EPAs, making the distinctions clear. Since the core EPAs are focused on entry-level practice skills needed for all new graduates, the program specific set might highlight unique curricular features as appropriate.

Implementation Step 3: Identify Milestones for the each Core EPA Statement in the Curriculum

Using the map from step 2 the committee should next determine when they should measure the EPA skill progression to ensure that students are developing as expected. These time frames or cut points are referred to as milestones. Milestones are progression checkpoints to ensure that students are able to demonstrate ongoing skill development. Examples of milestone markers could be before the first IPPE, before APPE initiation, and prior to graduation - three milestone markers. Another example could be at the end of year one, two, three, and four – or having four milestone markers. The number of milestones and placement is decided by each program, since schools' curricular structures vary.

Implementation Step 4: Use existing curricular assessment activities for milestones

The implementation team should review the existing skills assessments and determine if the existing assessments within courses or in the didactic or experiential curricula could be modified to include, or be replaced with, milestone assessments. Since faculty and preceptors will be members of this committee, they can review IPPE and APPE assessments more intentionally. Select residency program directors and employers could also review their site-specific activities to help align expectations.

Because the supporting tasks are site specific, programs may want to include different or additional supporting tasks that reflect unique regional and practice setting realities. Overall, this step will help schools revise/prune existing assessments instead of having schools add additional assessments, therefore, reducing the assessment burden for faculty, preceptors, and students. For example, an OSCE assessment in a skills lab could be modified to assess and document the milestone progression. If an existing assessment cannot be modified, schools should identify when and where to add the new milestone assessment(s).

Implementation Step 5: Leveling and Calibrating Each EPA Core Statement at Milestones

Once a program has determined the number and placement of milestone markers for the EPA core statements in the curriculum, the next step is to level and calibrate the program's expectations for each EPA progression. The leveling process is required to determine what the expected level of entrustment is for each EPA at each milestone. One way to approach leveling is to gather faculty who teach at a given milestone point (eg during the first year) and ask them to identify the expected level of entrustment for students for that given milestone point in the curriculum (eg, at the end of the first year). Calibration is the next step that determines if the level of entrustment set at each milestone was accurate. To calibrate the milestone assessment, faculty should evaluate students at a given milestone point (eg, at the end of the first year) on the prescribed level of expected entrustability, determined by leveling, to see if the expectation for the level matches students' abilities at that time point. This calibration allows faculty to evaluate if they set the level of entrustability too high or too low for the given cut-point. The processes of leveling and calibration are complex and not fully described in this brief summary. This step will require the leadership of the evaluation and assessment individuals at each school. It may be helpful to participate in AACP EPA-focused Institutes that allow programs devoted time to work through these steps with guidance and as a pharmacy education community (Recommendation List).

Implementation Step 6: Determine adequate progress

Once the performance expectation (ie, level of entrustability) for each core EPA statement is established and calibrated, the ad hoc team must define the criteria that determine adequate progress (ie, what number or percentage of statements meeting the performance expectation for the given milestone would result in a student progressing to the next stage of the program). EPA core statements are meant to define pharmacy competency globally and it should be anticipated that students will

not meet expectation for all EPA statements at every milestone (except the final graduation milestone). What is acceptable for formative feedback and continued progression versus a halt of progression and remediation must be determined by each program and will be specific to program structure and milestone placements. There may be circumstances that would result in an automatic halt in progression if the expected entrustability level is not achieved. While schools are encouraged to offer formative assessments of EPAs early in the program, final criteria to determine if students are practice-ready upon graduation needs to be established.

Upon graduation, all students should be capable of performing each of the EPA core statements at the established level entrustability level of three (not requiring direct supervision) or greater entrustability level. Programs may set the entrustability level higher but not lower than a level three as the graduation standard. It is possible that the level of entrustability for some EPA statements will not increase across all milestone check points. For example, the expected level of entrustability for an EPA statement may remain at a level 2 across milestones 2 and 3, but be expected to increase to a level 3 at graduation.

Implementation Step 7: Systematically pilot the assessment of select EPAs with students

The first iteration of implementation will likely require adjustments; creating a phased implementation timeline will help to minimize curricular disruption caused by necessary adjustments. Once the timeline is created, identify a pilot implementation group, perhaps a selected number of the school's full-time faculty and preceptors, to assess a small number of EPAs (starting with areas of strength within the curriculum) at the set milestone cut-points with the students using the entrustability rubric. Consider using faculty who are teaching or precepting award winners, teaching innovators, or curriculum/assessment committee members who can champion the process. Intentionally selecting faculty and assessing a small number of EPAs will allow for process and assessment modifications while minimizing frustration for students and adjunct or non-full time faculty. As more experience is attained, additional EPAs can be included until the program has reached its full implementation.

Implementation Step 8: Faculty Education and Training

After the core EPA assessments are pilot tested and revised as needed, all individuals responsible for the teaching and assessment of students (all full- and part-time faculty and preceptors from all departments at the school) should receive EPA training that specifically reviews the core EPAs, milestone markers, and the entrustability rubric. The process used to pilot the assessment of EPAs can be expanded to all of the faculty. Schools may

consider hosting a faculty retreat to launch the initiative and establish buy-in, field questions and then provide additional training as needed through AACP EPA webinars, locally created webinars or live training workshops. Quality checks should be put in place that allow all of the faculty to provide periodic feedback about their ability to assess the EPAs and lead to improvements in the evaluation can be made as needed. Training full-time school faculty first can be advantageous because they can champion the process. Programs may want to consider utilizing a train-the-trainer approach, employing faculty champions to help train preceptors and students.

One important implementation focus area should be on the integration of basic science faculty and clinical faculty to highlight the value of each group in the curriculum in relation to the reinforcement and assessment of EPAs as shown in Table 1.

Implementation Step 9: Preceptor Education and Training

Preceptors will also need to receive core EPA training. Preceptors serve as the link between many audiences as they are both internal and external stakeholders. This group has shared concerns about the variation in student abilities and in course evaluations among different schools—both areas where the Core EPA Statements could provide guidance. Another way to communicate essential skills is using the Core EPA Statements to standardize preceptor development. If all clinical APPEs nationally (community, ambulatory care, institution/hospital) used the Core Entrustable Activities for New Pharmacy Graduates as an evaluation tool there would be some consistency established through this integration alone. Because the example supporting tasks can be determined and created by each program, they allow for students to demonstrate entrustability based on setting and region. EPAs also allow for customization of entrustability level, based on placement of milestones and individuality of each program's curriculum. See Table 2 for two examples of how APPE evaluations could be structured based on EPA core statement 1 of "Collect information to identify a patient's medication-related problems and health-related needs."

Implementation Step 10: Student Education and Training

When faculty and preceptor training is completed, students can be informed on what the core EPAs are, what the expectations are for completing and documenting EPA progression, and how they will be assessed. Familiarizing students with the core EPAs, milestone markers, the EPA entrustability rubric, expectations, and assessment tools can reduce student anxiety and help them better understand what they will need to demonstrate across and at the end of the program. Students should receive formative assessment opportunities along with feedback

Table 2. Examples of How APPE Evaluations Could Be Structured Based on EPA Core Statement 1 of “Collect information to identify a patient’s medication-related problems and health-related needs.”

Scenario	Rating
<p>Example 1: Preceptors would rate the level of entrustment for the EPA statement with each level of entrustment defined with a description. Schools can determine what each level of entrustment ‘looks like’ for each EPA statement themselves.</p>	<p>Level of Entrustment With Description</p> <ul style="list-style-type: none"> ● Level 1 - I trust the learner, with specific direction and direct supervision, to gather preliminary data pertaining to a patient’s past medical history, medication history and experience, and allergy history. The learner requires significant correction for performance improvement. ● Level 2 - I trust the learner, with direct supervision and frequent correction, to assess the patient, considering the past medical history, medication history and experience, and allergy history. The learner accepts feedback for performance improvement. ● Level 3 - I trust the learner, with limited correction, to assess the patient considering the past medical history, medication history and experience, and allergy history. The learner is self-directed and seeks guidance as necessary. ● Level 4 - I trust the learner to completely and accurately assess the patient, integrating the patient’s past medical history, medication history and experience, and allergy history as an independent practitioner (upon licensure). ● Level 5 - I trust that the learner has mastered the ability to completely and accurately assess the patient integrating past medical history, medication history and experience, and allergy history (upon licensure). The learner is qualified to give meaningful feedback to other learners.
<p>Example 2: The evaluation form would simply list the description of the expected level of entrustment for whatever the milestone the rater is assessing. In this example, the expected level of entrustment is a 3.</p>	<p>I trust the learner, with limited correction, to assess the patient considering the past medical history, medication history and experience, and allergy history. The learner is self-directed and seeks guidance as necessary.</p> <ul style="list-style-type: none"> ● Does not meet this level of entrustment ● Meets this level of entrustment ● Exceeds this level of entrustment

in order to better demonstrate each EPA at each milestone. These example evaluations would require training with preceptors and understanding of how the EPA statements relate to the course objectives as well as the CAPE 2013 Educational Outcomes. Once fully implemented, the EPAs can serve as an important roadmap to both current and future potential students.

Recommendation 4: AACP should work with the Experiential Education Section and the AACP Master Preceptors to implement preceptor development related to the core EPAs (eg, webinar available to preceptors at any school).

Recommendation 5: AACP should work with other appropriate groups within the Association, identified through a peer review process, to develop on demand webinars for faculty, preceptors, and students on the core EPAs.

Recommendation 6: AACP should have an Institute to engage schools of pharmacy in developing their roadmap to core EPA implementation

Suggestion: Colleges/schools should identify which EPAs are addressed in each course and/or rotation syllabus using Appendix 1.

Other considerations Program Specific EPAs as a recruitment and differentiation strategy

Programs have unique features and allow students to focus in particular areas because of faculty and regional expertise. Because the core EPAs are a starting point, programs may choose to create program specific EPAs along with creating milestones for concentration areas or graduation standards that are used to differentiate a graduate from their program. Because the EPA statements will be widely distributed, students may select a pharmacy program based on differentiating EPAs. Once a student is enrolled in a program, documenting achievement of the EPA statements in a professional progressive portfolio will engage the student to begin

the self-directed learning expected to continue following licensure.

CONCLUSION

EPAs can be incorporated into an educational program in many different ways. Several examples of communication and implementation strategies are provided in this article. Next steps include investigation of EPAs as an assessment strategy across pharmacy programs, continued development of practice-specific EPAs to extend the definition of what a pharmacist is and does beyond the new graduate and improve the navigation of a clinician from one practice setting to another.

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Appendix 1. Mapping of the Core EPAs for New Pharmacy Graduates to the CAPE 2013 Educational Outcomes and the Pharmacists Patient Care Process^{1,5-6}

EPA Domains & Core Statements		(PPCP) Pharmacist Patient Care Process	CAPE Domains and Subdomains													
			1 Learner	2			3				4					
EPA Domain	EPA Core Statement	5 step PPCP Process (select 1 or more) Collect, Assess, Plan, Implement, Follow-Up: Monitor & Evaluate	Caregiver	Manager	Promotor	Provider	Problem Solver	Educator	Advocate	Collaborator	Includer	Communicator	Self-aware	Leader	Innovator	Professional
1	Patient Provider	Collect information to identify a patient's medication-related problems and health-related needs.		X	X	X		X				X	X			
		Analyze information to determine the effects of medication therapy, identify medication-related problems, and prioritize health-related needs.		X	X			X					X			
		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.		X	X	X				X		X				
		Implement a care plan in collaboration with the patient, caregivers, and other health professionals.			X	X		X	X							
		Follow-up and monitor a care plan.			X	X					X		X			
2	Interprofessional Team Member	Collaborate as a member of an interprofessional team.	X				X		X	X		X	X	X	X	
3	Population Health Promoter	Identify patients at risk for prevalent diseases in a population.			X	X		X		X	X	X				
		Minimize adverse drug events and medication errors.			X	X	X		X	X	X	X				
		Maximize the appropriate use of medications in a population.		X	X	X	X		X	X	X	X				
		Ensure that patients have been immunized against vaccine-preventable diseases.	X	X	X	X		X	X	X	X					
4	Information Master	Educate patients and professional colleagues regarding the appropriate use of medications.	X					X	X		X	X		X	X	
		Use evidence-based information to advance patient care.	X								X	X			X	
5	Practice Manager	Oversee the pharmacy operations for an assigned work shift.			X		X					X	X	X	X	
		Fulfill a medication order.			X		X					X				
6	Self-developer	Create a written plan for continuous professional development.											X		X	