AACP REPORT

The Report of the 2020-2021 Professional Affairs Standing Committee: Pharmacists Unique Role and Integration in Healthcare Settings

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EXECUTIVE SUMMARY

The 2020-21 Professional Affairs Committee was charged to (1) Read all six reports from the 2019-20 AACCP standing committees to identify elements of these reports that are relevant to the committee's work this year; (2) Identify opportunities and models of integration of pharmacist care services in physician and other health provider practices beyond primary care; (3) Differentiate and make the case for the integration of pharmacist care services from that of other mid-level providers; and (4) From the work on the aforementioned charges, identify salient activities for the Center To Accelerate Pharmacy Practice Transformation and Academic Innovation (CTAP) for consideration by the AACCP Strategic Planning Committee and AACCP staff. This report provides information on the committee's process to address the committee charges, describes the rationale for and the results from a call to colleges and schools of pharmacy to provide information on their integrating pharmacist care services in physician and other health provider practices beyond primary care practice, and discusses how pharmacist-provided patient care services differ from those provided by other healthcare providers. The committee offers a revision to a current association policy statement, a proposed policy statement as well as recommendations to CTAP and AACCP and suggestions to colleges and schools of pharmacy pertaining to the committee charges.

Keywords: clinical pharmacists, interdisciplinary patient care, interprofessional education, interprofessional practice, patient care, pharmacy practice, practice advancement

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- Alexis Caronis, AACCP Advanced Pharmacy Practice Experience (APPE) Student Pharmacist, 2021 University of South Carolina College of Pharmacy Graduate, who assisted the committee with research pertaining to the charges.
- Thomas Maggio, AACCP Staff, who created and maintained the online collection of patient care services provided by pharmacists in non-primary care settings.
- The following colleges and schools of pharmacy provided detailed information regarding models of pharmacist integration in non-primary care settings: Butler University; Campbell University; Cedarville University; Florida A&M University; Idaho State University; Loma Linda University; Long Island University; Marshall University; North Dakota State University; Nova Southeastern University; Pacific University Oregon; Rutgers University; South Dakota State University; Temple University; Texas A&M University; Texas Tech University; The Ohio State University; The University of Arizona; The University of Iowa; The University of Kansas; The University of Mississippi; The University of New Mexico; The University of Oklahoma; The University of Texas at Austin; Touro College of Pharmacy-New York; University of California, San Francisco; University of Colorado; University of Connecticut; University of Florida; University of Illinois at Chicago; University of Kentucky;

INTRODUCTION AND COMMITTEE CHARGES

According to the Bylaws of the American Association of Colleges of Pharmacy (AACP), the Professional Affairs Committee (PAC) is to study issues associated with professional practice as they relate to pharmaceutical education, and to establish and improve working relationships with all other organizations in the field of health affairs. The Committee is also encouraged to address related agenda items relevant to its Bylaws charge and to identify issues for consideration by subsequent committees, task forces, commissions, or other groups.

AACP President Anne Lin's focus for the 2020-2021 AACP standing committees was centered on education and practice transformation.¹ The 2020-21 Professional Affairs Committee was charged to:

1. Read all six reports from the 2019-20 AACP standing committees to identify elements of these reports that are relevant to your committee's work this year.
2. Identify opportunities and models of integration of pharmacist care services in physician and other health provider practices beyond primary care.
3. Differentiate and make the case for the integration of pharmacist care services from that of other mid-level providers.
4. From your work on this year's charges, identify salient activities for the Center to Accelerate Pharmacy Practice Transformation and Academic Innovation (CTAP) for consideration by the AACP Strategic Planning Committee and AACP staff.

Members of the 2020-2021 PAC include faculty representing multiple disciplines from various colleges and schools of pharmacy and professional staff representation from the American Pharmacists Association (APhA), the American Society of Health-Systems Pharmacists (ASHP) and the National Community Pharmacists Association (NCPA). The PAC also had a nurse who is a faculty member at a school of nursing.

BACKGROUND

The PAC conducted its work via teleconference and other electronic means to address its charges. Charge one was addressed at the outset of the committee's work and proved to be very beneficial as it provided germane information (eg, Professional Identify Formation, Implementation Science) that was discussed and considered throughout the course of the committee's work. The committee addressed charges two and three as two separate subcommittees, with each keeping the other informed during monthly all-committee conference calls. The work generated to address charges two and three serve the basis for the recommendations to address charge 4.

Table 1 provides a listing of the current AACP policy statements that pertain to the PAC charges. The PAC recommends that the following policy statement be revised to reflect a greater set of healthcare practice settings:

- AACP encourages all colleges and schools of pharmacy to create awareness of and incorporate faculty, pharmacy residents and student pharmacists in models of patient care in primary care practices. (Source: 2020 Professional Affairs Committee) be revised to
 - AACP encourages all colleges and schools of pharmacy to create awareness of and incorporate faculty, pharmacy residents and student pharmacists in models of patient care in primary care **and other healthcare practice settings**.

This remainder of this report has the following purposes: (1) to identify opportunities and models of integration of pharmacist care services in physician and other health provider practices beyond primary care practice; and (2) to differentiate and make the case for the integration of pharmacist care services from that of other mid-level providers.

Pharmacist care services opportunities and models integration in healthcare settings beyond primary care practice.

The need for and value of pharmacist care services being integrated in primary care practices has been documented.^{2,3,4,5} The PAC conducted an environmental scan of the literature, resources, and tools pertaining to pharmacists being integrated in practice settings providing patient care in non-primary care settings. Information obtained documented the integration of pharmacist-provided patient care services in accountable care organizations affiliated with various health care settings,^{6,7,8} ambulatory care specialty clinics,^{9,10} home health care settings,^{11,12,13,14} hospitals/health-systems,^{15,16,17} and community-based pharmacy settings,^{18,19,20} including practices participating in the Community

Pharmacy Enhanced Services Network (CPESN).²¹ Patient care services provided by pharmacists in non-primary care settings include acute care management (eg, rapid diagnostic tests),¹⁸ comprehensive medication management,^{6,16,18} disease state management,^{6,10,18,22} drug cost management,^{7,8} medication reconciliation,^{7,8,13,15,18,20,23} medication therapy management,^{7,8,9,14,17,18,20,24,25} pharmacist consultation services,^{11,12} health care provider education,⁷ patient-centered medical homes,²⁵ patient education,^{7,8,13,18,23} population health services (eg, telehealth),¹⁸ transitions of care services,^{7,20} and wellness and prevention services (eg, clinical screenings, immunizations, risk assessment).¹⁸ These services have been provided in many ways including in-person, electronically, and telephonically. Studies have indicated positive outcomes generated from patient care services provided by pharmacists in non-primary care settings including healthcare team satisfaction,^{8,10} drug cost savings,^{7,14,17,24} identification of medication discrepancies,⁷ improvement in patient clinical outcomes,^{9,14,20} improvement in patient medication adherence,^{13,20} patient satisfaction,¹⁷ reduction in hospital readmissions,^{6,13} and that payers are open to reimbursing for clinical services provided by pharmacists in community-based settings.²⁶ There are resources available to pharmacists with information to integrate and contribute to patient care in non-primary care settings, including appointment-based model resources,²⁷ billing and payment resources,²⁸ diversified revenue opportunities,²⁹ and pharmacist consulting services.³⁰ These services and outcomes generated assist in demonstrating and justifying the pharmacist's role in team-based models of patient care.

The PAC addressed its second charge by investigating the types of models integrating patient care services provided by pharmacist faculty members from colleges and schools of pharmacy. An online submission collection form was developed to gather the information pertaining to pharmacist services provided in non-primary care settings. Information included on the online submission form included:

- Type of practice setting
- Type(s) of pharmacist integration
- Type(s) of pharmacist communication/interaction to provide patient care services
- Type(s) of services provided by the pharmacist
- Other disciplines that practice at the site
- Total Number of Pharmacist Full-Time Equivalents [FTEs] at the Site
- How is the cost of the pharmacist(s) providing the patient care service(s) covered?
- Is there any current or anticipated revenue from the pharmacist-provided service(s) going back to the college or school of pharmacy? If so, please explain.
- Is there a Collaborative Practice Agreement (CPA) or other disease management agreement (eg, DTM) active at this practice site?
- Does the site offer training for student pharmacists?
- Does the site offer training for pharmacy residents?
- What differentiates pharmacist-provided services at this site from the other mid-level provider(s) at this site?
- Outcomes that are being measured at the practice site
- Successes from the pharmacist integration at the practice site
- Challenges from the pharmacist integration at the practice site
- Any additional information regarding the pharmacist services or the integration of these services

The initial communication to submit models to the online submission form was sent via email to all the CEO Deans with the request that they forward the email to their administrators, faculty and/or staff with oversight of external contracts or service agreements at their college or school of pharmacy. Each individual contract or service agreement that involved a pharmacist providing patient care services was encouraged to be submitted to the online form. Additional communications regarding this form and its purpose were made via other AACP communication channels (eg, bi-weekly electronic newsletter, online member networking platform). The online form was available for submissions from early November 2020 through mid-January 2021. The PAC is very grateful for the tremendous response to the call for information regarding pharmacist provided services in non-primary care settings. Unfortunately, all of the information collected cannot be described and discussed in this report. The PAC will discuss how to provide more detailed information (eg, manuscript, white paper, poster or podium presentation) to the profession and other stakeholders pursuant to this report.

There were 124 submissions from 37 colleges and schools of pharmacy from the online request for information regarding pharmacists providing patient care services. In addition, information for 49 models of patient care services provided by pharmacist faculty in non-primary care settings was received from the University of Chicago of Illinois and several PAC members held a conference call with their pharmacy practice chair and other administrators in mid-February 2021 to gather more insight into their contributions in non-primary care sites. Table 2 provides information on the practice site demographics provided from the 173 submissions. The two most cited practice settings were specialty clinics (44%)

and hospitals/health systems (31%). Specialty clinics described were diverse in nature including Anticoagulation, Behavioral Health, Cardiology, Cystic Fibrosis, Dialysis, Endocrinology/Diabetes, Geriatrics, Hematology/Oncology, HIV/Infectious Disease, Neurology, Organ Transplant, Pain Management, Pediatrics, Pharmacogenomics, Psychiatry, Sickle Cell, and Substance Use Disorder. The majority of the submissions indicated that pharmacists are embedded physically at the practice site within the practice setting (89%) and over half of the submissions indicated that the pharmacist provides patient care services both face-to-face (92%) and via telephone (70%). The most cited patient care services provided by the pharmacist included drug consultation/drug information (80%), disease state management (65%), disease state education (58%), and comprehensive medication management (41%). Most submissions (91%) indicated at least one other healthcare provider or discipline working at the health care setting. Other providers practicing at the site included the following: behavioral health specialists, dentists, dietitians, nurses, nurse practitioners, pharmacy technicians, physical therapists, physician assistants, physicians, and social workers as well other providers such as audiologists, case managers, community health workers, genetic counselors, laboratory science professionals, occupational therapists, respiratory therapists, and speech therapists. Forty-six percent of the submissions (N=79) indicated that a collaborative practice agreement was present at the practice site, while the majority of sites serve as educational locations for student pharmacists (95%) and pharmacy residents (82%).

There were significant benefits to pharmacist integration reported in the submissions. Various successes cited included many benefits to patients, providers, the practice site, as well as unique educational and research-related opportunities. Many of the sites specifically focused on the impact on patient outcomes—not just numbers such as Healthcare Effectiveness Data and Information Set (HEDIS) scores, but improvements in patient satisfaction and experience. Patients were able to gain greater access to specialty medications as a result of the involvement of the pharmacist. Healthcare providers benefited from developing strong, longitudinal relationships which resulted with increased referrals to pharmacists for patient care services as well as many pharmacists serving as a resource for the entire interdisciplinary team. Other examples of benefits to the practice site include the expansion of new patient care services such as the Diabetes Self-Management Education and Support (DSMES) accreditation, 340B access, and an overall increase in the number of patients receiving care in a specialty clinic. Multiple sites shared an increase in research funding as well as improvements in the number of faculty and students who contribute to clinic services while learning in experiential settings.

The challenges with integrating pharmacist's services into other healthcare provider practices can be described by a few general categories as gathered from the online collected data. First and foremost, the financial justification for these services can be difficult. Oftentimes the referral sources can be challenging and therefore the sustainability can be difficult. There are often competing demands for the time and resources by the various stakeholders (ie, colleges and schools of pharmacy, hospitals and clinics, etc.) leading to continuity of patient care service issues. The many regulatory barriers to providing pharmacist driven services continues to hold the pharmacy profession from practicing at the top of their license. Pharmacists have battled for Provider Status on the Federal level for years and are still sitting on the outside looking in.³¹ Even with collaborative practice agreements being used across the country, some states still place restrictions on their use. Lastly, there are still times when the egos and turf battles become a barrier to allowing pharmacists to practice up to their capabilities and scope of practice. There is also a considerable knowledge gap when it comes to other providers knowing what pharmacists can do and the synergies that can be tapped into. While the challenges can be numerous, the integration of pharmacists into the healthcare model continues to expand and the profession needs to continue to facilitate overcoming these barriers.

Revenue generation is important for the practice site as well as colleges and schools of pharmacy. As reported from the online submissions, the services provided by faculty delineated by type of practice included academia, managed care, services provided by consultant pharmacists as well as college and school of pharmacy involvement with community-based practices, hospitals and health-systems, health centers, and specialty clinics. Revenue generation was returned to the college through direct payment for individual consults and clinical pharmacy services, funding of residency programs, and/or grant support. Funds generated are used to support pharmacy departmental needs including travel, equipment and other support. For hospitals and health-systems, patient care generated revenue is returned to the college; however, the amount of revenue generated does not fully fund the faculty member's salary and site-based costs. Revenue generation and demonstration of cost-savings are key to receiving external financial support.

Involvement of faculty from colleges and schools of pharmacy has a significant impact on the patient, provider, the practice site, and education and research. Faculty interventions have contributed to cost-savings, positive advancement in patient clinical outcomes, reduction in number of medications prescribed, reduction in patient readmissions, and improved patient adherence. Providers have benefitted from faculty interventions including the acceptance of clinical recommendations and accessing drug information. Sites have benefitted through a positive impact on quality measures including CMS STAR ratings, HEDIS measures as well as a positive impact on tracked site-based metrics, cost-savings,

and revenue generated by services performed by faculty. Patient and provider satisfaction are positive outcomes through this form of college and school of pharmacy involvement. This type of collaboration also has a significant impact on the education programs for pharmacy students and residents and potential collaborative research between the college and practice site.

Recommendation 1: The AACP Center To Accelerate Pharmacy Practice Transformation and Academic Innovation (CTAP) should develop a methodology to collect, update, and promote academic pharmacy's contributions to pharmacist care services integration in all healthcare settings.

Recommendation 2: AACP should strongly encourage the Joint Commission of Pharmacy Practitioners (JCPP) to include the development and communication of clear and consistent messaging regarding the unique and essential role(s) and contribution(s) of pharmacists in healthcare as part of the JCPP 2021-2025 Strategic Plan.

Suggestion 1: Colleges and schools of pharmacy should educate and communicate their contributions to pharmacist care services integration in all healthcare settings to administrators, faculty, staff, students, alumni and other stakeholder groups.

Suggestion 2: Colleges and schools of pharmacy should continue to develop and expand financially sustainable models to support their pharmacist care services integration in healthcare settings.

The integration of pharmacist care services: What makes this different and necessary from other healthcare provider services?

The case for differentiating pharmacist provided patient care services from that of other healthcare professionals is key to the provision and sustainability of those services. Pharmacist salaries are often higher than that of nurse practitioners and physician assistants, yet pharmacists are limited in terms of their ability to independently bill for clinical services. Depending on practice laws in various states, nurse practitioners and physician assistants may also practice and bill independent of a physician. While the pharmacy profession addresses those barriers through legislation and advocacy, we must educate ourselves and our colleagues on the unique training and skill set pharmacists bring to patient care.

A literature review on the differentiation of the pharmacist's role from other healthcare disciplines was conducted. From its findings, the Centers of Disease Control and Prevention provides a pharmacist guide that highlights the unique roles and responsibilities of pharmacists within an interprofessional team to provide patient-centered care.³² The National Center for Integrative Primary Healthcare developed ten interprofessional and 22 pharmacy competencies that highlight how pharmacists can play a vital role in patient-centered care within an interprofessional team in different patient care settings.³³ The role and services that pharmacists provide within an interprofessional team in a diverse array of patient care settings is evident from the submissions received from the PAC's inquiry to colleges and schools of pharmacy (Table 2).

As previously referenced, one of the questions in the online submission form for colleges and schools of pharmacy was "What differentiates pharmacist-provided services at their site from the other mid-level provider(s) at their site?" Scope of practice, both legally and in terms of professional expertise, was the most commonly mentioned distinguisher. Pharmacists noted while they can operate under a collaborative practice agreement, they do not diagnose, do not have independent prescriptive authority, and may not be able to bill for services. However, pharmacists are recognized as medication therapy experts, providing a variety of services to optimize medication use including comprehensive medication management, specialty medication management, medication monitoring, transition of care services, immunizations, compounding, drug information consultation, and pharmacogenomics consultation. Pharmacists address complex medications issues related to dosing, drug interactions, adherence, cost, and access and are also involved in team education, formulary review, and policy development.

The basis for the expertise a pharmacist offers to a multidisciplinary team is often rooted in their education and training. Pharmacy graduates typically complete four years of post-graduate education after earning a bachelor's degree in sciences or pre-pharmacy course. A Doctor of Pharmacy program curriculum includes pharmaceutics, pharmacogenetics, medicinal chemistry, chemical and molecular pharmacology, pharmacokinetics, pharmacotherapy courses of organ systems (eg, cardiovascular, pulmonary, respiratory, neurology), pharmacy law, pharmacy safety, population health and pharmacy management. In addition, pharmacy graduates receive experiential education training to be able to apply their didactic curriculum learning in patient care settings. From 2007 to 2019, more than 25% (44,229 out of 172,266³⁴) of pharmacy school graduates have pursued Postgraduate Year 1 (PGY1) or Postgraduate Year 2 (PGY2) training to gain further expertise and specialization in various pharmacy setting, including but not limited to hospital/health systems,

specialty areas, ambulatory care, community practice and managed care. This percentage does not include the number of student graduates who pursue different industry, research, and association fellowships after receiving a Doctor of Pharmacy degree. ASHP Office of Accreditation Services data shows a 180% growth in residencies from 2007 to 2020, which averages about 8% growth in residency positions per year.³⁵ This demonstrates that the demand for residencies are increasing and student graduates are continuing to pursue post graduate training to provide unique roles as pharmacists in different patient care settings.

In order to differentiate the role of the pharmacist from that of other mid-level providers it is necessary to articulate that role clearly. Standard 11.2 of the Accreditation Council for Pharmacy Education Standards 2016 requires programs to include opportunities for students to learn about, from, and with other members of the interprofessional healthcare team.³⁶ However, there lacks a consistent approach to teaching the role of the pharmacist as a member of the interprofessional team that could be disseminated to other health professions. The committee recognized the value of developing a concise document that could be shared with other health professions. Table 3 provides information that should be included in a document that could be utilized and shared for interprofessional education curricula.

Several respondents to the question about differentiating pharmacists from other mid-level providers stated pharmacists should not be referred to as mid-level providers, which prompted members of the 2021 AACP Professional Affairs Committee to write a commentary on this issue and this has been submitted for publication. This commentary focuses on the legal classification of pharmacists as mid-level providers and how that classification is in stark contrast to the specialized education and training of pharmacists and the unique contributions that they make to the healthcare team and towards improving patient care. As discussed in the commentary, pharmacists are medication therapy experts with the unique ability to optimize the medication-related outcomes of patients and help to improve their overall health and quality of life. Further, pharmacists are best utilized when managing the pharmacotherapy of complex patients with multiple medications and disease states. The commentary authors additionally recognize that all healthcare providers bring unique knowledge, skills, abilities, and contributions to the healthcare team and to patient care and should be classified by these contributions instead of according to an outdated legal classification system. However, in order for pharmacy to achieve this level of recognition and status, the profession needs to communicate and demonstrate the added value provided by pharmacists and advocate for expanded pharmacist roles in all settings. Two such goals that the PAC has identified are achieving provider status in the Medicare Part B program and retaining the expanded roles that have been authorized to pharmacists by the Department of Health and Human Services as a result of the COVID-19 pandemic.

During the COVID-19 pandemic, pharmacists from multiple patient care settings have showcased their expanded scope of practice by leading vaccination clinics, providing COVID-19 testing services and also providing chronic care management and preventative screenings for their patients and communities. Pharmacy educators at colleges and schools of pharmacy have collaborated nationwide to prepare student pharmacists to become healthcare leaders.^{37,38,39,40} Pharmacists have and will continue to play an important role on the healthcare team as medication therapy experts by providing comprehensive medication management and other medication-related services.

Proposed Policy Statement: AACP advocates for the permanent expanded roles of pharmacists granted by HHS as a result of the COVID-19 Pandemic, including pharmacist provided services via telehealth and securing reimbursement for such.

Recommendation 3: AACP should encourage the Accreditation Council for Pharmacy Education (ACPE) to require interprofessional education that encompasses students learning and practicing together throughout their respective curricula. Interprofessional education and activities should be viewed as a continuum versus stand-alone interprofessional events.

Recommendation 4: AACP should continue to work collaboratively with the Joint Commission of Pharmacy Practitioners (JCPP) member organizations to include pharmacists as providers under the Social Security Act.

Recommendation 5: AACP should continue its work with the Interprofessional Education Collaborative (IPEC) to develop a shared curriculum to ensure that the role of each health profession is taught in their curriculum and is also emphasized during interprofessional education programs and activities.

Suggestion 3: Colleges and schools of pharmacy should continue to develop and expand interprofessional activities for student pharmacists with other healthcare profession students.

CALL TO ACTION

The PAC identified a number of action items for the academy and profession as a whole. First, we must stop referring to pharmacists and any other healthcare practitioner as mid-level practitioners. Pharmacists are medication experts and there is nothing “mid-level” about our training and expertise in this area. We must also call upon colleges and pharmacy to engage in legislative advocacy. Pharmacists must be recognized as medication experts, able to practice autonomously, and be identified as important stakeholders on the healthcare team. Equitable reimbursement for pharmacists’ non-dispensing services must be allowed on a fee-for-service basis or through pharmacist incorporation as team members in value-based contracts. Pharmacy faculty are uniquely positioned to educate both the public and legislators on the contemporary role of pharmacists as they have both the credibility and expertise to do so.

PROPOSED POLICY STATEMENTS, RECOMMENDATIONS, AND SUGGESTIONS

Current Policy Statement Revision: AACP encourages all colleges and schools of pharmacy to create awareness of and incorporate faculty, pharmacy residents and student pharmacists in models of patient care in primary care practices.

(Source: 2020 Professional Affairs Committee) be revised to

AACP encourages all colleges and schools of pharmacy to create awareness of and incorporate faculty, pharmacy residents and student pharmacists in models of patient care in primary care **and other healthcare practice settings**.

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Table 1. AACP Policy Statements Related to the 2020-2021 Professional Affairs Committee Charges

Policies on Curriculum

AACP encourages timely transformation of educational models and a culture of change enabling responsiveness, flexibility, and effective assessment of the impact of leaders, faculty, staff, and students on healthcare delivery. (Source: 2019 Academic Affairs Committee)

AACP advocates that curricular modifications should occur such that competencies for leading change in pharmacy and health care are developed in all student pharmacists, using a consistent thread of didactic, experiential and co-curricular learning opportunities and takes into account the overall impact on faculty workload and balance. (Source: Academic Affairs Committee, 2018; Original Source: Argus Commission, 2009)

Policies on Experiential Education and Training

Pharmacy education has the major responsibility to assist the profession to accomplish its mission for society. In keeping with the transition of health care across the care continuum, pharmacy education must continue its efforts to encourage and assist the profession to provide clinical pharmacy services in all care settings. (Source: 2020 Professional Affairs Committee)

AACP should encourage member institutions, in concert with practitioners, to expand clinical pharmacy in the community so that experiential education in community practices will be more meaningful to students, and even inspirational, so that such practices will be emulated when they enter the profession. (Source: 2020 Professional Affairs Committee)

AACP encourages the development of strategic partnerships to accelerate access to value-based experiential education, especially within emerging health care settings. (Source: 2015 Professional Affairs Committee)

Policies on Faculty

AACP encourages colleges/schools of pharmacy to invest in and support community-based pharmacy practice faculty. (Source: Council of Deans)

AACP supports the measurement and evaluation of the practice-related activities of faculty with a practice component of their position during annual evaluations and tenure and promotion decisions. (Source: Council of Faculties, 2018)

AACP supports the teaching and clinical application of core competencies in primary care health services delivery which are community-based and fully interdisciplinary. (Source: Professional Affairs Committee, 1994)

Policies on Postgraduate Education and Training

AACP supports colleges and schools of pharmacy taking an active role in implementing innovative and novel approaches for the development of the current and future workforce. (Source: 2020 AACP Academic Affairs Committee)

AACP supports residencies, certificate programs and other post-graduate training opportunities that develop advanced clinical and administrative knowledge and skills in the delivery of comprehensive pharmacy services in all healthcare practice settings. (Source: 2020 Professional Affairs Committee)

AACP supports member schools and colleges in their efforts to invest in the expansion of postgraduate education and training programs that prepare pharmacists to be effective members of patient-centered health care teams. (Source: Professional Affairs Committee 2011)

Policies on Professional Affairs

AACP encourages all colleges and schools of pharmacy to create awareness of and incorporate faculty, pharmacy residents and student pharmacists in models of patient care in primary care practices.

(Source: 2020 Professional Affairs Committee)

Administrators, faculty members, preceptors and student pharmacists at all colleges and schools of pharmacy share responsibility for stimulating change in pharmacy practice consistent with the JCPP Vision for Pharmacy Practice and the Pharmacists' Patient Care Process. (Source: Professional Affairs Committee, 2015)

AACP supports efforts to develop and maintain strong, mutually beneficial community-campus partnerships that demonstrate and recognize the value of education and science scholarship and innovative practice models that improve the quality of individual and community health outcomes. (Source: Standing Committee on Advocacy, 2012)

AACP supports the efforts of schools and colleges of pharmacy working with health care entities to promote and advocate for the inclusion, reimbursement and sustainability of pharmacist services as a required element of patient-centered care in all settings. (Source: Professional Affairs Committee, 2011)

Table 2. Practice Site Demographic Information from the 2021 PAC Online Submissions of Pharmacists Integration in Non-Primary Healthcare Settings

Practice Setting	N
Academia	2
ACO/Population Health	3
Ambulatory Care	5
Community-Based Practice	9
Consultant Pharmacist	9
Health Center	2
Hospital/Health System	54
Long-Term Care	4
Managed Care	4
Other	5
Specialty Clinic	76
Type of Pharmacist Integration^a	
Administrative	7
Embedded (Physically at the Practice Site)	154
Virtual	86
Type of Pharmacist Communication/Interaction to Provide Patient Care Service*	
Audiovisual	37
Electronic (eg, email, text)	42
Face-to-Face (In-Person)	159
Telephonic	121
Visual	7
Pharmacist-Provided Patient Care Service*	
Comprehensive Medication Management (CMM)	71
Disease State Education (eg, DSMES)	100
Disease State Management	113
Drug Consultation/Drug Information	138
Hospice/Palliative Care	5
Immunizations	15
Long-acting Injections	8

Management of Specialty Drugs/Pharmaceuticals	34
Medication Synchronization	10
Medication Therapy Management	46
Other (eg, Medication Assisted Treatment; Clinical Trial Management)	9
Point-of-Care/CLIA Waived Test	11
Population Health Management	14
Specialty Pharmacy	6
Sterile and Non-Sterile Compounding	4
Transitions-of-Care Services	43
Source of Funding for Pharmacist-Provided Service(s)	
College/School of Pharmacy pays entirely	70
Cost-Share: College/School of Pharmacy and Practice Site pay equally	31
Cost-Share: College/School of Pharmacy pays more than Practice Site	10
Cost-Share: Practice Site pays more than College/School of Pharmacy	13
Practice Site pays entirely	46
Grant Funding	3

^aMore than one option could be provided for each submitted model

Table 3. Pharmacist Roles and Competency Contributions to the Healthcare Team

Roles and Scope of Practice

Provider Status/Scope of Practice: Pharmacists are medication experts with the unique ability to optimize the medication related outcomes of patients. For a pharmacist to be practicing at the top of their license they may be participating in a broad spectrum of services which include managing chronic disease and medication management, conducting health and wellness visits, and providing preventative care services.¹

Core Entrustable Professional Activities for New Pharmacy Graduates

Core Entrustable Professional Activities (EPAs) for New Pharmacy Graduates are discrete, essential activities and tasks that all new pharmacy graduate must be able to perform without direct supervisor upon entering practice or postgraduate training.² Professionalism, self-awareness and communication skills are inherent within and essential to all EPA core domain statements.

Patient Care Provider Domain

- Collect information to identify a patient's medication-related problems and health-related needs.
- Analyze information to determine the effects of medication therapy, identify medication-related problems and prioritize health-related needs.
- Establish patient-centered goals and create a care plan for a patient, caregiver(s), and other health professionals that is evidence-based and cost-effective.

¹ American Pharmacists Association: Pharmacists Provide Care. <https://www.pharmacist.com/sites/default/files/files/APhA%20-%20PAPCC%20Scope%20of%20Services.pdf>. Accessed March 24, 2021.

² Haines, S. T., Pittenger, A. L., Stolte, S. K., Plaza, C. M., Gleason, B. L., Kantorovich, A., McCollum, M., Trujillo, J. M., Copeland, D. A., Lacroix, M. M., Masuda, Q. N., Mbi, P., Medina, M. S., & Miller, S. M. (2017). Core Entrustable Professional Activities for New Pharmacy Graduates. *American journal of pharmaceutical education*, 81(1), S2. <https://doi.org/10.5688/ajpe811S2>.

- Implement a care plan in collaboration with the patient, caregivers, and other health professionals.
- Follow-up and monitor a care plan.

Interprofessional Team Member Domain

- Collaborate as a member of an interprofessional team.

Population Health Promoter Domain

- Identify patients at risk for prevalent diseases in a population.
- Minimize adverse drug events and medication errors.
- Maximize the appropriate use of medications in a population.
- Ensure the patients have been immunized against vaccine-preventable diseases

Information Master Domain

- Educate patients and professional colleagues regarding the appropriate use of medications.
- Use evidence-based information to advance patient care.

Practice Manager Domain

- Oversee the pharmacy operations for an assigned work shift.
- Fulfill a medication order.

Self-Developer Domain

- Create a written plan for continuous professional development.

Pharmacists' Patient Care Process

The Pharmacists' Patient Care Process³ is a patient-centered approach in collaboration with other providers on the health care team to optimize patient health and medication outcomes. Using principles of evidence-based practice, pharmacists:

- **Collect:** The pharmacist assures the collection of necessary subjective and objective information about the patient in order to understand the relevant medical/medication history and clinical status of the patient.
- **Assess:** The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care.
- **Plan:** The pharmacist develops an individualized patient-centered care plan in collaboration with other health care professionals and the patient or caregiver that is evidence-based and cost effective.
- **Implement:** The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver.
- **Follow-up: Monitor and Evaluate:** The pharmacist monitors and evaluates the effectiveness of the care plan and modifies the plan in collaboration with other health care professionals and the patient or caregiver as needed.

Interprofessional Accreditation Standard

³ Joint Commission of Pharmacy Practitioners (JCPP): Pharmacists Patient Care Process. <https://jcphp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf>. Accessed March 24, 2021.

The Doctor of Pharmacy curricula prepares all pharmacy graduates to provide entry-level, patient-centered care in a variety of practice settings a contributing member of an interprofessional team. Interprofessional Education (IPE) is Standard 11 in the Pharmacy School Accreditation Standards.⁴ All student pharmacists must demonstrate competence in interprofessional team dynamics, interprofessional education, and interprofessional practice that position student pharmacist graduates to contribute as a member of the interprofessional patient care team.

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