ACCP POSITION STATEMENT

Educational Outcomes Necessary to Enter Pharmacy Residency Training

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It is the position of the American College of Clinical Pharmacy (ACCP) that formal postgraduate residency training, or equivalent experience, is required to enter direct patient care practice. Therefore, it is important to align professional degree educational outcomes with the knowledge, skills, and attitudes needed to enter residency training. This position statement addresses the outcomes necessary in the professional degree program curriculum to ensure the ability of pharmacy graduates to transition effectively into postgraduate year one residency training. Five key outcome areas are identified: communication, direct patient care, professionalism, research, and practice management. The position statement examines how performance in each of the five outcome areas should be addressed by professional degree programs. The ACCP believes that for the student to achieve the clinical proficiency necessary to enter residency training, the professional degree program should emphasize, assess, and provide adequate opportunities for students to practice: communication with patients, caregivers, and members of the health care team in direct patient care environments; provision of direct patient care in a wide variety of practice settings, especially those involving patient-centered, team-based care; professionalism under the supervision and guidance of faculty and preceptors who model and teach the traits of a health care professional; application of principles of research that engender an appreciation for the role of research and scholarship in one's professional development; and application of practice management, including documentation of direct patient care activities that affect drug-related outcomes.

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The American College of Clinical Pharmacy (ACCP) supports the advancement of clinical pharmacists in their roles as patient care providers, educators, and researchers. In advocating for the appropriate credentialing and privileging of clinical pharmacists, the College believes that formal postgraduate residency training, or equivalent experience, is required to enter direct patient care practice.¹ Hence, alignment should exist between professional degree outcomes and the knowledge, skills, and attitudes needed to enter postgraduate residency training. For pharmacy graduates to become competent and proficient patient care providers, abilities must be demonstrated in communication, direct patient care, professionalism, research, and practice management at the levels necessary to enter postgraduate residency training.

To achieve these levels of ability performance, students must be provided sufficient

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opportunities to apply their knowledge, skills, and attitudes to direct patient care in progressively complex settings. Such efforts, coupled with continuous ability and competency assessments, are necessary to produce the desired level of educational preparation for residency training. This position paper presents ACCP's view of the educational outcomes that must be achieved during the professional degree program for graduates to enter postgraduate year one (PGY1) residency training.

Communication

Direct patient care opportunities that involve verbal communication with patients and other members of the health care team, as well as written communications with these audiences, are essential for graduates entering residency training. Continuity of these activities from introductory pharmacy practice experiences (IP-PEs) through advanced pharmacy practice expeadequate (APPEs) should ensure riences repetition for the student's continued growth and proficiency in communication abilities across the curriculum. Repeated assessments of student pharmacists' performance of these abilities are needed to provide ongoing feedback.

Student pharmacists must be able to advise patients on the safe and effective use of drugs and educate them about anticipated health outcomes. Students' opportunities to practice verbal and written communication directly with patients and other members of the health care team, coupled with mentor feedback, should begin in the first professional year. Students should practice written and verbal communication with other health care professionals to develop their ability to establish professional credibility and collaborative working relationships. Also of importance is the honing of one's writing skills to effectively convey the purpose and relevance of therapeutic assessments and recommendations. Students should develop and deliver verbal and written educational materials to both laypersons and health care professionals.

Engaging students in sufficient direct patient care interactions that involve rendering professional advice is integral to empowering them to be confident, competent, and efficient communicators.² Clinical pharmacist role models who observe student performance and provide immediate feedback are necessary to develop students' communication abilities in clinical settings. To supplement early patient experiences, using standardized patients, employing peer observation techniques (in person or through the use of video recordings), and incorporating simulated patient care experiences can be beneficial.^{3, 4} In addition, implementing longitudinal interprofessional learning opportunities in varied health care settings that actively engage students in patient care activities and require verbal and written communication (e.g., drug histories, discussions on rounds, progress notes) is recommended.

Developing communications competence and efficiency requires repetition and sufficient direct patient care experiences; thus, these practice opportunities should be afforded to students throughout the professional degree program. Moreover, because students need structured, longitudinal experiences with feedback to gain adequate experience providing professional advice and addressing patient concerns, formal assessments of written and verbal communication must occur throughout the curriculum to ensure competency development.⁵ Preceptor training that facilitates improvement in students' communication abilities should be conducted to ensure the preceptor's common understanding of assessment rubrics, his or her expectations of student performance, and the importance of providing constructive feedback during IPPE and APPE activities.

Direct Patient Care

Interprofessional, team-based direct patient care experiences must also be part of the core professional curriculum. Critical to providing direct patient care are the development of patient-centered pharmacotherapy plans and evidence-based recommendations and the achievement of confident, effective, and efficient interactions with the interprofessional team. Integration of didactic and experiential education can speed the development of patient care skills. Bridging didactic coursework with direct patient care experiences enhances the application of knowledge to clinical practice.⁶ Experiential activities across the curriculum should afford students the opportunity to adopt a consistent process of care that allows them to systematically assess patients and their medical problems, evaluate drug therapy and identify drug-related problems, develop and implement plans of care, and perform follow-up and ongoing evaluations of patients to optimize their outcomes. Preceptor role-modeling, health

supervision, and feedback should assist students in gradually developing direct patient care skills and build confidence and competence. Both IPPE and APPE activities should provide each student with exposure to a sufficient number of patients with medically diverse health problems to create an adequate foundation on which the student can build during residency training.

Professionalism

The following traits of professionalism are essential for graduates entering residency training: responsibility, commitment to excellence, respect for others, honesty and integrity, and care and compassion.⁷ Students must be willing to accept professional responsibility for their patients' drug-related outcomes. Professional degree programs should consciously develop and assess student professionalism across the curriculum to ensure students' competency of these behaviors as they transition into direct patient care roles. Faculty and preceptors must teach and model professional behaviors during interactions with other health care professionals and patients. Formative and summative assessments should be conducted to both foster and document student professionalism.^{8–10}

Research

Student involvement in research is another important precursor to postgraduate residency training. Although the Accreditation Council for Pharmacy Education requires that components of research be taught in the professional curriculum, colleges and schools of pharmacy should engage students in additional and more in-depth research applications; for example, opportunities for experiences in outcomes analysis and project management would help prepare students for researchrelated objectives required during postgraduate year one training. These research opportunities could be incorporated into pharmacy curricula in numerous ways. Colleges and schools of pharmacy might consider offering more in-depth coursework on practice-related research through didactic research electives, independent study opportunities, elective research APPEs, or interprofessional collaborative research experiences. The APPE research experiences, in particular, could offer more structured research activities, including targeted data collection and analysis. These experiences could allow students to work on a project, develop a research presentation, and even present

or publish research results before graduation. Program effectiveness could be evaluated by student performance in research activities (elective or rotation) and, if applicable, project management. Such an approach has resulted in the acceptance of student research presentations regionally or nationally and has produced follow-up research publications. These outcomes provide a strong foundation on which trainees can build as they pursue required residency research projects.

Practice Management

Finally, ACCP believes that to be adequately prepared for residency training, graduates must understand key steps in practice management. These steps should include documenting and communicating the clinical pharmacist's patient care activities in team-based, collaborative care environments. In particular, students must acquire sufficient experience in the efficient and systematic documentation of their patient care activities.¹¹ They must gain firsthand experience processing prescriptions and drug orders, interacting with electronic medical records, executing electronic claims transmission, and coding direct patient care activities using current procedural terminology and other widely used codes that apply to pharmacists' clinical services. A continuum of progressively more complex practice management activities should be incorporated across the curriculum's experiential courses. Student performance should be evaluated and measured through simulation-based exercises and direct observation during IPPEs and APPEs.

Conclusion

ACCP believes that for graduates to achieve the clinical proficiency needed to enter residency training, the professional degree program should provide and assess adequate opportunities for students to practice communication with patients, caregivers, and members of the health care team in direct patient care environments; provision of direct patient care in a wide variety of practice settings, especially those involving patient-centered, team-based care; professionalism under the supervision and guidance of faculty and preceptors who model and teach the traits of a health care professional; application of principles of research that engender an appreciation for the role of research and scholarship in one's professional development; and application of practice management, including documentation of direct patient care activities that affect drug-related outcomes.

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