

The Value of Residency Training and Vision for the Future

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Education is learning what you didn't even know you didn't know.

—Daniel J. Boorstin

QUESTIONS TO PONDER

1. How are pharmacy residencies different from advanced pharmacy practice experiences?
 2. Why is experience necessary to become a proficient clinical practitioner?
 3. Who benefits from residency training?
 4. What are the rewards of a residency program?
 5. Is residency training consistent with the vision of pharmacy organizations?
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EDUCATION WITHOUT APPLICATION IS A WASTE

Pharmacy education and the pharmacy profession continue to change to meet the needs of the healthcare system. Most recently, the PharmD was decided upon as the required education path for aspiring pharmacists entering pharmacy school in the 2000 to 2001 school year.¹ Pharmacy schools bear the responsibility of graduating practitioners with the competency to

ensure optimal patient safety and medication use outcomes in any setting.¹ Indeed, this is a tall order, and great effort is placed in professional curricula to expose students to a vast amount of information. Students begin to realize complete application of this information during advanced pharmacy practice experiences (APPEs), but the initial application may begin as early as the introductory pharmacy practice experiences (IPPEs) in the community and institutional settings. During these experiences, students begin to apply what they have learned to advance the care of patients. The rotations are designed to provide exposure to different types of pharmacy practice. By graduation, therefore, students have been exposed to a great volume of didactic knowledge that has been only partly applied in patient care activities. Examinations are necessary assessment tools in the classroom setting; however, there is not an immediate effect on patient care, and they may not be a true test of application even when simulated. Pharmacy practice experiences require that students apply their knowledge daily, making these experiences the most important assessment tool.

The number one factor influencing students to pursue a pharmacy residency is a desire to gain knowledge and experience. Application of knowledge incorporates attitudes, therapeutic knowledge, problem solving, and social skills to ensure optimal patient care. At best, students are novices at pulling all of these pieces together, not because of lack of knowledge, but because of lack of experience. The application of knowledge in everyday situations provides meaning and perspective to the knowledge students have gained in the classroom. Both knowledge and patient care experiences are required to hone clinical skills. Many recent graduates may not believe pharmacy school has prepared them to provide direct patient care independently with confidence. The number one factor influencing students to pursue a pharmacy residency is a desire to gain knowledge and experience.²

Acquiring clinical skills for physicians has been described as “see one, do one, and teach one.”³ Though a simplified view, at its core are lessons that can be learned if we change “one” to “many.” Introductory and advanced pharmacy practice experiences provide students with the opportunity to see a variety of pharmacists, settings, patient populations, and disease types. This exposure will allow students to identify knowledge gaps or opportunities to deepen understanding, even when the experiences may be more observation than action.

The second most cited reason for pursuing a residency is to build confidence. The second most cited reason for pursuing a residency is to build confidence.² One way to build confidence is by taking care of many patients through direct patient care. Residency experiences allow for the practice of pharmacy with appropriate mentoring and assessment that expand the learners’ clinical repertoire. A residency also allows one to discern when clinical situations are beyond the expertise of the resident.⁴ An effective preceptor can model clinical skills and provide valuable teaching opportunities for the resident. Pharmacists who have completed a residency have provided direct patient care to many individuals. They have moved from

“see many” to “do many” in their postgraduate year one (PGY1) residency and are prepared to provide direct patient care independently or to pursue specialized training via a postgraduate year two (PGY2) residency or fellowship (see Chapter 7, “Postgraduate Year Two (PGY2) Residency Programs,” for further discussion). This stage does not stop with residency training, but it continues throughout one’s professional career. Through residency training, these pharmacists have gained the experience necessary to provide direct patient care. They are able to incorporate new knowledge into the provision of optimal patient care to future patients.

Pharmacists, by the nature of the profession, are teachers. They teach patients, caregivers, healthcare professionals at all levels, students, residents, and other pharmacists. Oftentimes, residents have their first teaching opportunities during postgraduate training programs. They may help precept student pharmacists completing IPPEs or APPEs, or provide more structured education in a classroom setting. Some residency programs also provide teaching certificate programs, which allow for the development of effective teaching and learning strategies.⁵ They may teach students participating in introductory or advanced practice experiences, provide didactic lectures, deliver continuing education programs, or offer community service activities to the public (e.g., health screenings and brown bag events). Teaching is a skill that must be practiced to be effective. Residency training affords opportunities to begin learning and practicing teaching techniques in a variety of settings.

NO SUBSTITUTE FOR EXPERIENCE

A clinical pharmacist’s proficiency in the practice of pharmacy requires formal training and experience beyond pharmacy school.⁴ PGY1 residency programs accredited by the American Society of Health-System Pharmacists (ASHP) requires residents to take an active role in the medication use process by providing optimal pharmaceutical care; developing leadership and management skills; educating patients, healthcare professionals, and student pharmacists; and effectively using information technology in the care of patients.⁶ The resident is clearly expected to take an active role in patient care and serve essential functions within the institution. When these outcomes are realized, the resident has gained a unique set of skills through the rigor and structure of a residency program. Residents learn the organizational structure and flow of the healthcare system and discover the impact pharmacists make on patient care within the institution. Concepts and procedures that were foreign before residency training become clear as residents practice pharmacy and grow as professionals. These foundational concepts and skills become part of the fabric of the practitioner’s expertise and serve as a point of reference for future challenges.

Residents are expected to provide optimal pharmaceutical care. The first step in this process is accomplished by taking responsibility for patient care. This responsibility becomes a driving force for learning. To attain a high level of patient care proficiency, direction must be given by someone more

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experienced.³ Structured residency programs provide opportunities to practice pharmacy within a network of skilled preceptors. Effective precepting guides learning and proficiency in the care of patients and allows the resident to model the preceptor's effective clinical skills.

During the minimum 12-month experience as a resident, there may be opportunities to appreciate aspects of the healthcare system beyond traditional pharmacy services. The general atmosphere supports learning. This is a time when the budding professional can appreciate the contribution of other healthcare professionals to the care of patients. The resident can experience firsthand the medication use process and see how patients are ultimately affected at the bedside. There may be opportunities to observe surgeries, diagnostic or interventional procedures, therapeutic techniques, and general patient care. These experiences add to residents' understanding of the complete care of patients and how medications fit into this paradigm of patient care.

BENEFIT IS MORE THAN RESIDENT DEEP

Graduates of a pharmacy residency program reap numerous benefits as they gain experience in direct patient care, education, and leadership, and as they develop an understanding of how the healthcare system functions. Employers desire or, in some cases, require residency-trained clinical pharmacists for entry-level positions. If the resident wants to pursue a specialized focus and complete a PGY2, the completion of a PGY1 is a prerequisite. Residency training includes experiences that take years to attain outside of a structured program, if they are attained at all. Beyond value to the resident, there are also benefits to patients, the profession of pharmacy, and the host institution. These benefits are detailed in the American College of Clinical Pharmacy (ACCP) white paper dedicated to this topic.⁵

The direct benefit to the institution that hosts a residency program is expanded staffing capacity. The program allows added flexibility and capacity for the operations manager to schedule personnel within the pharmacy or the hospital to support clinical endeavors. Residents may also aid in the expansion of clinical services by piloting new services or by extending existing services. Other benefits are related to direct or indirect revenue generation. Examples of direct revenues are financial support from higher education institutions to train doctor of pharmacy students during pharmacy practice experiences, Medicare pass-through funds for training residents, and the generation of billable services (e.g., clinical trial recruitment, contractual work). Indirect revenue is realized with reduced training costs if residents continue employment at their place of residency and improved pay-for-performance benchmarks because of clinical interventions made by residents. Residents may also contribute by conducting medication use evaluations, research projects, and by developing policies, procedures, or standardized order sets.

Patients also benefit from residency programs. Patients equate encountering trained professionals with increased capacity to deliver excellent care. Patients also benefit directly because of an institution's increased capacity to provide pharmacy services, either directly or indirectly by residents. Patients benefit when interventions and recommendations made by residents improve their care.⁵ Residents may also participate in community service activities, such as health fairs or brown bag events, which are highly visible benefits to patients.

Residency programs also benefit the profession as a whole. Residency graduates have the skills and expertise that enable them to provide direct patient care, measure and demonstrate important research metrics, and work within an interdisciplinary team in complex environments. All of these benefits are consistent with the vision that having a pharmacist license will not be sufficient to hospital and health-system pharmacy practice in the future.^{6,7}

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VISION FOR THE FUTURE

Both the ACCP and the ASHP have published long-term visions for pharmacy practice.^{6,7} By the year 2020, all entry-level positions with direct patient care responsibilities may require residency training.^{7,8}

• American College of Clinical Pharmacy's Vision

The ACCP Task Force on Residencies cites a number of reasons for requiring residency training for all pharmacists who provide direct patient care.⁷ Pharmacy school graduates may not have sufficient ability to manage complex drug therapy. Additionally, payers and regulatory bodies may require advanced training for privileging and payment (similar to the medical model). Lastly, direct patient care provided by pharmacists is anticipated to become the standard of care by 2020. Benefits of completing a residency include clinical skill development, expanded marketability as an employee, diverse practice experiences, networking, an increased role of pharmacists in new and emerging areas, and educational opportunities. In addition, pharmacists with postgraduate training are more involved in their profession, submitting scholarly contributions, assuming leadership roles within pharmacy organizations, and becoming lifelong learners. The ACCP task force believes that residency training is the most efficient mechanism to move student pharmacists from merely competent to highly proficient practitioners.

• American Society of Health-System Pharmacists' Vision

The ASHP House of Delegates passed a resolution to support the position to require pharmacy residency training by the year 2020.⁸ In its vision for the pharmacy work force, licensure alone will no longer be sufficient to practice in the hospital or health-system setting.⁶ Residencies are

intense, practice-based training opportunities. Clinical skills are developed through mentoring and holding the resident accountable, so that he or she is better prepared to accept an entry-level position. The enriched experiences that develop expertise in graduates of pharmacy residency programs empower them to provide direct patient care in a complex interdisciplinary environment and to demonstrate their effectiveness using relevant objectives.

KEY POINTS

- The role of the pharmacist is clearly changing within the complex healthcare system, and pharmacy school graduates need advanced training to provide efficient direct patient care.
- Experience is a cornerstone to the development of a practitioner and, when guided by a knowledgeable preceptor during residency training, the resident's value and growth will be optimized.
- Residency training benefits residents, patients, the institution hosting the residency program, and the profession of pharmacy.
- The ultimate benefits of residency training include a better-prepared clinical work force able to meet the challenges within the complex healthcare system.
- Major pharmacy organizations have called for residency training to be a minimum standard for direct patient care by the year 2020.

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