ACCP COMMENTARY

Postgraduate Year One Pharmacy Residency Program Equivalency

American College of Clinical Pharmacy
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In 2006, the American College of Clinical Pharmacy (ACCP) charged the Task Force on Residency Equivalency to define the professional experience expected of a clinically mature practitioner that would meet or exceed the knowledge and skills of an accredited postgraduate year one residency–trained pharmacist. In this commentary, the Task Force discusses both the qualitative and quantitative components of documentation by means of a residency equivalency portfolio. The potential roles of academia, pharmacy professional organizations, and employers and the possible barriers to an equivalency process are addressed. This commentary lays the foundation for establishing a residency equivalency process that could promote the growth and development of existing and future residency programs and allow qualified practitioners to demonstrate their capabilities. The ACCP implores invested stakeholders to take an active part in this collaborative effort as the profession transitions toward residency training as a prerequisite for all pharmacists providing direct patient care by 2020.
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In ACCP's strategic plan, critical issue 6 asks, "How can ACCP assist in assuring an appropriately educated and skilled clinical pharmacy workforce?"[1] The College recognizes that a significant number of practitioners possess professional experience at least equal to that obtained in a formalized postgraduate residency training program. Although ACCP continues to strongly advocate the importance of these postgraduate training programs in preparing a competent clinician, nontraditional approaches to evaluate the abilities of seasoned pharmacists who have not completed residency training are needed. Hence, in 2006, the Task Force on Residency Equivalency was created and charged to (1) define the professional experience that should serve as "postgraduate year one (PGY1) residency equivalency," (2) determine qualitatively and quantitatively the experience that practitioners could document by a "residency equivalency portfolio," and (3) identify mechanisms for filling the gaps that exist between a practitioner's experience and the existing standard for PGY1 pharmacy residency programs.

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The Task Force, consisting of clinical pharmacists from diverse practice settings and training backgrounds, developed this commentary on the ways and means of establishing a formal residency equivalency process.

Background

During the past 30 years, there has been a demonstrable shift in the pharmacist's scope of practice from drug preparation and distribution toward direct patient care activities.[2] With this continuing trend toward increased clinical responsibilities, professional organizations including ACCP and the American Society of Health-System Pharmacists (ASHP), academia, health care systems, and other stakeholders have increased their expectations with respect to the amount of training required to produce an entry-level pharmacist.[3] This led to a groundswell of support for postgraduate training to further impart the knowledge, skills, and attitudes increasingly seen as necessary for the provision of direct patient care and spawned the 2006 ACCP Position Statement that sets a goal for postgraduate residency training to be a prerequisite by 2020 for all pharmacists who provide direct patient care.[4] This position, also endorsed by ASHP, has engendered substantial dialogue as well as controversy within some sectors of the profession.

However, it is widely acknowledged that direct patient care requires the development of clinical judgment and that postgraduate training—specifically accredited PGY1 residency training—is critical to accomplishing this objective. Many believe there should be some mechanism to certify pharmacists who have achieved a level of training and experience equal to or exceeding what one would receive in an accredited PGY1 residency program. Indeed, in many cases, these are the pharmacists who, through their dedication, perseverance, and skills, have been instrumental in furthering the expansion of clinical pharmacy practice. Such pharmacists, without residency training, have developed into "clinically mature" practitioners who possess abilities that meet or exceed those acquired through formal postgraduate training.[5] In addition, given the continued clinical pharmacist workforce shortage and increase in the number of pharmacists who do not work full-time, it is unlikely that many of these practitioners would choose to abandon a successful practice to complete a PGY1 residency program.[6] In fact, data from the 2009 ASHP Resident Matching Program show that 184 pre-2009 graduates sought PGY1 residency programs, suggesting that only 7.3% of Resident Matching participants were current practitioners.[7]

One of the first steps the Task Force considered in addressing its charges was determining the minimal credentials of pharmacists interested in demonstrating PGY1 residency equivalence. Credentialing is a common process used in the health professions to validate professional licensure, clinical experience, and preparation for specialty practice.[8] In fact, a reason cited for why pharmacists may choose to seek residency equivalence is to obtain clinical privileges. Obviously, any system purporting to validate residency equivalency should have formal criteria to assess and evaluate each candidate seeking equivalency. The use of activity-based criteria to assess a learner's performance has been formalized and endorsed by ASHP in its Residency Learning System. Documents published by pharmacy organizations can serve as a general guide to developing these criteria. At a minimum, practitioners who have completed a PGY1 residency program or who have residency-equivalent experience would be expected to[9]:

- Operate successfully in the organizational environment of their health system;
- Practice in an environment that allows the provision of clinical pharmacy care to individual patients;
- Aid in teaching medical professionals, including resident physicians, students, and resident pharmacists, in an academic health care environment (if practicing at a site where these opportunities exist);
- Function effectively as a member of an interdisciplinary health care team;
- Understand and apply the concepts and practice of quality improvement using both internal and external standards of quality;
- Routinely measure and document the metrics of success necessary for the management of medications in health systems; and
- Tailor practice management to ensure optimal quality.

These and other qualities would be expected of those who wish to pursue certification of PGY1 residency equivalency.

Minimum Qualifications for PGY1 Residency Equivalency

It is worth noting that an active clinical pharmacy practice is not the sole criterion on which to base an equivalency process. PGY1 residency programs focus on all aspects of health systems practice, including management, quality improvement, drug informatics and information, and all aspects of the medication-use process, including order fulfillment. Well-rounded individuals who are active in all aspects of delivering quality pharmaceutical care best represent candidates for a residency equivalency certification process. Minimum credentials for eligibility should include the following:

- Academic credentials (Pharm.D. or B.S. degree) from an Accreditation Council for Pharmacy Education (ACPE)-accredited program[9];
- Valid pharmacist license[9];
- Verification of at least 5 years of professional experience demonstrating both direct patient care activities and practice management activities; and
- Residency equivalency portfolio.

Guide for Residency Equivalency Portfolio Development

"A portfolio is a systematic collection of information documenting expertise in an area, usually incorporating multiple sources of information collected over time to demonstrate excellence."[10] Documenting proof of competencies through portfolio development is a concept adopted by other health care providers, including the medical and nursing professions. These professions have incorporated portfolios as an assessment tool for one's progress toward achieving desired outcomes such as securing provider status and other clinical privileges. ACPE provides guidelines for documenting competencies in a portfolio format for students during their academic education. In the pharmacy profession, board-certified pharmacotherapy specialists seeking added qualifications in cardiology or infectious disease use this type of documentation system to submit evidence of skills in a focused area of practice.[11]

In assembling a portfolio, each item for inclusion should be associated with a specific competency and be representative of recognized professional standards. Materials should be organized with sufficient quantitative supporting evidence to demonstrate proficiency in areas of practice.[12] Candidates should include items that reflect growth and maturity in their practice. In addition to following best practices for patient care, portfolios should address specific competencies and methods for self-assessment as well as ongoing feedback and evaluation by qualified peers, organizations, and regulatory agencies.

The portfolio should include three essential components: a personal statement, accomplishments and activities, and verification of the success of those activities through supporting documents and feedback from colleagues.[13] The personal statement should include a self-assessment, personal goals and objectives for the future, and reasons for pursuing residency equivalency certification. Normally, a well-constructed, professional portfolio would also contain documentation of one's education, work experience, licensure status, publications, and any other relevant personal statements.

Considering that such a standard portfolio is unlikely to provide fully adequate documentation of residency equivalency, the Task Force selected the six ASHP-required educational outcomes (listed in Appendix 1), goals, objectives, and instructional objectives for PGY1 pharmacy residency programs as the template for developing experience criteria.[14] The Task Force also suggested documents (see Appendix 2) that provide evidence of competency in the following areas of practice: medication-use processes, patient-centered medication therapy management (MTM), practice management, project management, practice-related education or training, and use of medical informatics. Further guidance regarding PGY1 outcomes, goals, and objectives can be accessed online at *www.ashp.org*.

Ultimately, candidates should be evaluated on their role in affecting operational and patient outcomes. Acceptable estimates of reliability

Appendix 1. ASHP-Required Educational Outcomes for PGY1 Pharmacy Residency Programs.

Manage and improve the medication-use process.
Provide evidence-based, patient-centered medication therapy management with interdisciplinary teams.
Exercise leadership and practice management skills.
Demonstrate project management skills.
Provide medication and practice-related education/training.
Use medical informatics.

ASHP = American Society of Health-System Pharmacists; PGY1 = postgraduate year one.

Appendix 2. Recommended Supporting Documentation For the Residency Equivalency Portfolio, Organized by Outcome.[14]

Outcome I: Manage and Improve the Medication-Use Process
- Medication-use evaluation
- Drug monograph or comparative review
- Adverse drug event reporting (detection, internal/external reporting, analysis)
- Committee participation (Medication Safety, P&T, JCAHO, etc.)
- Literature evaluation (drug information question response samples/process, formal journal club presentations, journal publications)
- Guideline or protocol development
- Policy and procedure (development, implementation, ongoing evaluations)
- Employee competencies or performance evaluations (copies of annual departmental records demonstrating competency in distributive duties)

Outcome II: Provide Evidence-Based, Patient-Centered Medication Therapy Management with Interdisciplinary Teams
- Narrative summary of your role in working with interdisciplinary teams
- Documentation of collaborative practice agreements (if applicable)
- Documentation of board certification (if applicable)
- Documentation of disease state management certifications (if applicable)
- Samples of patient care notes documenting drug therapy management and associated outcomes

Outcome III: Exercise Leadership and Practice Management Skills
- Documentation of personal skills of a practice leader
  - Evidence of active participation in a professional organization
  - Verification of good standing with the state Board of Pharmacy and institution of practice
  - Record of leadership and/or time-management training through seminars, workshops, conferences, or other available programs
- Documentation of departmental leadership and management activities
  - Narrative summary and supporting documents of the applicant's role in departmental planning and quality improvement activities
  - Verification of applicant's leadership roles from supervisors, administration, or others with direct observation of the applicant's leadership skills
  - Narrative summary of the applicant's role in regulatory processes within his/her site of practice
  - Evidence of understanding and/or participation in budgeting/financial management
  - Performance evaluations that may address leadership qualities
- Documentation of practice leadership
  - Narrative summary of leadership roles
  - Narrative summary of effective current or past leadership techniques and/or roles

Outcome IV: Demonstrate Project Management Skills
- Certificate of completion for an online course on *The Protection of Human Subjects*
- Narrative summary of the pharmacist's role in a practice-related investigation
- Project proposal (including IRB or institutional processes)
- Documentation of project approval (including IRB if required)
- Project meeting minutes
- Study protocol and/or project timeline
- Project write-up (newsletter, presentation, journal manuscript, etc.)
- Supporting letter from colleague(s) with direct knowledge of project management skills

Outcome V: Provide Medication and Practice-Related Education/Training
- Narrative description of the applicant's education/training in providing educational activities (as applicable)
  - Certificate of completion/record of attendance for a teaching certificate program or teaching workshop/program
  - Certificate of completion/record of attendance for a course on effective public speaking
  - Certificate of completion/record of attendance for a course on preparing quality presentations (PowerPoint, etc.)
- Narrative description of education/training provided by the pharmacist
  - Representative samples of formal presentations (ACPE format) developed and provided by the applicant (slide kits, objectives, handouts/syllabus, self-assessment questions, evaluations)
  - Representative samples of different types of presentations/in-services to allied health (nurses, physicians, etc.), community/general public, departmental in-services, and case-based presentations
- Documentation of preceptor involvement
  - Preceptor training (may be institutional, college of pharmacy, or association sponsored)
  - Formal affiliations and appointments with any schools/colleges of pharmacy
  - Level of training and number of residents/students per year (verified by institution or schools/colleges of pharmacy)
  - Type of training/education provided (course or rotation information)
  - Didactic presentations/lectures
  - Copies of evaluations from students or schools/colleges of pharmacy
- Documentation of ongoing formative and self-evaluations to improve one's ability to provide medication and practice-related education/training

Appendix 2. continued

Outcome VI: Use Medical Informatics
Provide a narrative summary of the security, ethical, and legal aspects of information technology used at your site of practice.
Provide documentation of completion of HIPAA training at your site of practice.
Describe your experience with data analysis software.
Provide a narrative summary of how internal/external databases and the Internet are incorporated in your decision-making in providing direct patient care and practice management. Please address the advantages and limitations commonly encountered.

ACPE = Accreditation Council for Pharmacy Education; HIPAA = Health Insurance Portability and Accountability Act of 1996; IRB = institutional review board; JCAHO = Joint Commission on Accreditation of Healthcare Organizations; P&T = Pharmacy and Therapeutics (Committee).

with interrater variations are a concern with reflective portfolios. However, setting rigid assessment criteria may limit the documentation of contributors' accomplishments.[12] Therefore, a combination of quantitative (scoring system) and qualitative assessment methods may be required to maximize the portfolio's usefulness as a tool for documenting competency.

Portfolio Elements for Establishing PGY1 Residency Equivalency

The following documents are suggested as requirements for all applicants. Materials should be organized in the following order:

- Table of contents.
- Academic credentials.
- Documentation of valid licensure.
- Current curriculum vitae (do not list activities here in lieu of providing supporting documents).
- Personal statement indicating reasons for pursuing residency equivalency certification as well as reasons for not pursuing a PGY1 residency program. Board-certified pharmacotherapy specialists should explain how this type of certification has influenced their practice in terms of PGY1 equivalency.
- Record of evidence supporting the achievement of the six required outcomes for PGY1 residents listed in Appendix 1. To ensure that an applicant's practice is up-to-date, all documented activities should be limited to the 7 years before this application, conducted as a licensed pharmacist, and clearly marked for the specific outcome(s). See Appendix 2 for suggested supporting documents.[14] Candidates may include other materials pertinent to specific outcomes that are not included in this document.
- List of individuals able to attest to the candidate's eligibility. References should have directly observed the activities included in the supporting documents, where applicable. Interviews may be required to obtain additional information.

Bridging the Gap: Identifying Mechanisms for Filling the Gaps That Exist Between a Practitioner's Experience and Existing PGY1 Standards

For successful implementation of a PGY1 residency equivalency certification process, all individuals or groups with a stake in the pharmacy profession will have to take action in identifying, evaluating, and filling the gaps in training or experiences needed for pharmacists to achieve PGY1 residency equivalence. This section proposes approaches for such stakeholders to bridge the gap between a practitioner's experience and the existing standard.

Academic Institutions

When entry-level Pharm.D. programs emerged, academic institutions played an instrumental role in taking the necessary steps to ensure that existing practitioners with baccalaureate degrees in pharmacy would have the opportunity to continue working and obtain nontraditional Pharm.D. degrees. Today, similar circumstances require identifying mechanisms for defining, implementing, and evaluating the documentation of residency equivalency.

Academic-sponsored continuing education programs or formalized teaching certificate programs should update their curricula to include competencies geared to the expectations of residency outcomes. Specifically, academic institutions should focus on ways to address required outcome 5 on providing medication and practice-related education and training. Colleges of pharmacy and affiliated universities offer a

pool of experts in effective educational methods to facilitate this process. They serve as excellent resources for enhancing teaching skills, providing precepting opportunities, and developing relationships between general practitioners and mentors with specialized areas of practice. Because portfolios are a commonly used documentation system in this environment, academic institutions also could provide valuable insight on the preparation and assembly of residency equivalency portfolios.

Professional Organizations

Focusing on the need to document the qualifications of pharmacy practitioners to deliver health care to meet the public's needs, the Task Force believes it imperative that pharmacy professional organizations work together to develop a system for enabling a practitioner to obtain residency equivalency certification. The Task Force strongly recommends that a collaborative effort between organizations address this issue and generate discussion on how such an equivalency process can be accomplished. The designation of residency equivalency must be universally accepted and approved by the major organizations that will be defining and requiring residency experience.

Issues of diversity and inconsistency in pharmacist credentialing during the past 10 years have been multiple. In addition to Board of Pharmaceutical Specialties (BPS) credentialing, a variety of certificate programs are available that focus on the pharmacotherapy of individual disease states; many pharmacists also participate in multidisciplinary credentialing programs (e.g., Certified Diabetes Educator, Certified Anticoagulation Provider). As clinical practice develops, it could become a baseline application requirement that pharmacists have PGY1-equivalent training for some of these credentialing programs. If so, it will be important to ensure that any residency equivalency program that may be established is recognized by accrediting or certifying organizations.

One of the barriers to a practicing pharmacist obtaining residency equivalence is acknowledged as the breadth of experience obtained during a PGY1 residency and the inability of most practicing professionals to be exposed to that broad spectrum of patient care pharmacy services. The Task Force is concerned that it would be common for most pharmacists to be able to satisfy residency equivalence for several of the patient care outcomes while not having enough experience in others (e.g., formulary development, management, regulatory issues, development of clinical guidelines) to satisfy accreditation requirements. In addition to practitioners themselves seeking opportunities in their work environments to gain additional experience, pharmacy organizations might eventually need to offer training programs to assist practitioners in obtaining training in and exposure to some of these areas. These programs would be especially helpful for those working in areas outside traditional health systems who are unable to fulfill part of the equivalency requirements in their workplace. However, didactic instruction alone will not achieve outcomes equivalent to PGY1 residency experience, in most cases. Therefore, such training programs should also include assessments that will allow participants to demonstrate the ability to apply didactic content in the pharmacy practice setting. In addition to providing programs for practitioners seeking residency equivalency, pharmacy organizations should focus on programs designed to educate managers or supervisors on how to provide advanced training opportunities and methods for standardized evaluation.

Employers

It is crucial that employers support and encourage pharmacists to meet the PGY1 residency outcomes, goals, and objectives through a process of equivalency assessment. This support begins with creating a culture that promotes continued professional growth and development. However, for employers to understand and appreciate what is necessary and valuable for assessing residency equivalency, they must also seek guidance and/or training in ways to improve such a credentialing process. This should include the identification of strategies for effective staff development within pharmacy departments and for developing collaborative agreements with other health care professionals.

Employers may contribute to portfolio development by documenting activities and giving performance evaluations as well as providing letters or interviews attesting to the applicant's level of knowledge and skills. Ideally, employers would use a comprehensive, standardized format for competency assessments that allows benchmarking with other practice sites in similar settings.

Currently, health systems and pharmacy departments encourage and require an assessment of competencies for many of their staff. Although state or national bodies (e.g., the Center for Medicare & Medicaid Services [CMS], Joint Commission) previously dictated these activities, they are now being required internally for several reasons. As pharmacist roles continue to expand, health systems are at increased "risk exposure" if they are unable to demonstrate a process to ensure quality and competency.[8] As payers have begun to use outcomes data from individual health systems to direct payment, many of these systems have established programs to continuously improve the medication-use process. In some of the larger health systems, a process exists that is dedicated to helping pharmacists continually improve and refine their skills through the funding of board certification, leadership or other training programs, and attendance at professional meetings; this process gives pharmacists the ability to better complete the goals of the department and the health system.

With pharmacists assuming more advanced practice roles, employers should take advantage of available resources within their health care organizations to reinforce a commitment to developing and maintaining competency in providing quality patient care. Monetary incentives and privileging are often key factors in motivating individuals to pursue a higher level of training. However, the reasons why individual pharmacists may pursue this residency equivalency process (and why their employers will support this effort) are as varied as the different types of health systems in which pharmacists practice. Sharing the vision for the future of pharmacy will help employers create opportunities for pharmacists to broaden their scope and depth of practice, enabling them to pursue residency equivalency. Completion of the residency equivalency process should be promoted to appropriate employee pharmacists as one opportunity for career advancement.

Unfortunately, this support is lacking in some areas of health system practice. Employers unfamiliar with the benefits of residency-trained pharmacists in their health system should become familiar with the subject and learn to recognize the importance of this training (or the equivalent) when pharmacist credentialing or privileging issues arise. Because there is a lack of national consensus concerning this topic, individual employers are responsible for determining the degree of training that a pharmacist must have to meet today's patient care needs.

Identifying Other Barriers

Achieving residency equivalency is potentially a time-consuming process that requires significant effort on the part of the applicants, evaluators, and accreditors. National guidelines are needed to reduce subjectivity and focus on objective measures. Such guidelines should be structured enough to demonstrate a uniform approach within the profession but flexible enough to meet the individual needs of candidates and their health care organizations. Use of items and procedures such as standardized forms for applications, letters of reference, scoring, or evaluation forms may further streamline this process. Because portfolio development is retroactive, applicants would not be expected to repeat summative and formative evaluations already completed. However, applicants or evaluators may be required to provide supplemental information as well.

Unfortunately, processing the potential volume of paperwork that may be associated with such an endeavor and determining its validity may be two of the largest challenges for the organization or committee conducting the certification process. The Task Force recommends that an appropriately constituted interorganizational committee decide who will be responsible for educating employers, third-party payers, and academic institutions about residency equivalency. Roundtable discussions at pharmacy association meetings may generate additional ideas for consideration before a formal process is established. Certainly, unforeseen barriers to implementing a nationally recognized residency equivalency process will occur. To successfully address these barriers, the interorganizational committee should remain in place until the implementation and initial phases of this process are established. Presently, the Task Force is unable to estimate the number of applicants who would be interested in pursuing residency equivalency. However, if a residency equivalency process is implemented, steps should be taken to identify the levels of applicant and employer interest and develop mechanisms to track the outcomes of those who complete the process.

Discussion

There is an increased awareness of the

insufficient number of training sites to meet the growing demand for residency-trained pharmacists. Although many practitioners may argue that this proposal is just a means for individuals to bypass PGY1 training, the Task Force counters that this initiative may enhance existing programs and promote the development of future residency programs. Sites supporting a recognized residency equivalency process, particularly those not affiliated with academic institutions or other formalized training programs, may be better prepared and have more incentive to develop accredited residency programs.

As pharmacists continue to provide direct patient care, third-party payers will demand that pharmacists be credentialed in a manner similar to that of other health care. Steps toward achieving formal recognition of pharmacists as health care providers include the MTM component of the Medicare Part D benefit and the creation of Current Procedural Terminology (CPT) codes for pharmacists' clinical services. As mentioned previously, establishing a residency equivalency process will demonstrate to payers the profession's commitment to validating the competency of pharmacists who seek provider status. CMS recognized the importance of general postgraduate training for pharmacists when it reversed its decision to abolish PGY1 pass-through funding. This occurred because the concentrated efforts of many in the profession demonstrated to CMS that the industry norm for hospitals hiring pharmacists to provide direct patient care is to require postgraduate residency training.[15] Fewer data exist concerning the advantages and outcomes of training and credentialing pharmacists practicing in ambulatory care and community pharmacy settings. Although the efforts of this Task Force primarily focus on health system pharmacy, information regarding the ambulatory care and community pharmacy environments is urgently needed and should be a priority for the profession.

Conclusion

The ACCP Position Statement promoting postgraduate training by 2020 for all pharmacists who provide direct patient care has established an important goal for the profession. Employers and other stakeholders discussed above owe the pharmacists who possess significant clinical experience a means to demonstrate their ability to provide direct patient care. The Task Force maintains that only qualified and experienced individuals should pursue a residency equivalency process. New graduates should continue to be strongly encouraged to pursue an accredited PGY1 pharmacy residency program upon completion of the professional degree. Nevertheless, the Task Force believes that a residency equivalency process would help bridge the gap for existing practitioners who desire to demonstrate that they possess experience and skills equivalent to those gained through completion of a PGY1 residency program.

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