Pharmacy Residency Training in the Future: A Stakeholders' Roundtable Discussion

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As health care challenges grow—including an aging population, practitioner shortages, and more complex treatments—residencies are vital for developing "clinical maturity" in pharmacy practitioners, pharmacy leaders agreed at a January 2005 invitational conference convened by ASHP and other key pharmacy groups. The one-and-a-half-day forum in Scottsdale, Arizona, brought together 43 participants from major pharmacy organizations to create a shared vision for the future of postgraduate residency training.

After hearing keynote addresses and meeting in small groups to explore pressing issues, attendees reached consensus in many areas, including the following:

- Practitioners need the clinical maturity that residency training fosters so that they are prepared to influence patient care management and work effectively with health care teams.
- To ensure the quality of residencies, all residencies must be accredited.
- The number of community-based pharmacy residency programs must grow significantly by 2015. Today, community pharmacy residencies account for only about 8% of programs. Because community pharmacists are so accessible to the public, they have a huge opportunity to make a positive impact on patient care. Current community pharmacy residency programs are pioneering many direct patient care services that can help improve people's health.
- Residency training and terminology must be clearly defined and endorsed by the entire profession so that the concepts of generalist and specialist are readily understood.
- The proposal by ASHP's Commission on Credentialing (COC) designating residency years as PGY1 (postgraduate year 1) and PGY2 (postgraduate year 2) is well-founded.

Changes ahead in credentialing

During introductory comments, Janet Teeters, ASHP's director of accreditation services, highlighted standards proposed by ASHP's COC in 2004 and explained that the accreditation standards undergo key changes every 10 to 20 years to reflect new developments in pharmacy. It is once again time for a significant change in the standards, she said; thus the PGY1 and PGY2 proposal.

ASHP, which recommends accreditation standards and administers the accreditation process, has proposed that, before undertaking an "advanced focused" residency (PGY2), pharmacists must first complete a general pharmacy residency (PGY1). PGY1 programs can be done in a variety of settings and can have various emphases, as long as the core outcomes of the PGY1 standard are achieved.

Among the reasons Teeters cited for the need for changes in residencies:

- The Institute of Medicine has asserted that health care and interdisciplinary education must be improved.
- New skills are needed in the work force in light of changing patient demographics (older patients, more chronic diseases) and more complex health care systems.
- As of 2004, the pharmacy profession has moved to all-Pharm.D. education (eliminating the B.S. in pharmacy),

Highlights from the Pharmacy Residency Training in the Future: A Stakeholders' Roundtable Discussion, held January 23–24, 2005, in Scottsdale, AZ.

The conference was coordinated by Janet L. Teeters, Director of Accreditation Services, American Society of Health-System Pharmacists, in conjunction with Mark Brueckl, Academy of Managed Care Pharmacy; Anne Burns, American Pharmacists Association; Arlene Flynn, American Association of Colleges of Pharmacy; and Edwin Webb, American College of Clinical Pharmacy.

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Relevant Work Force Issues

To acquaint attendees with work force issues in pharmacy, Katherine Knapp, dean of Touro University College of Pharmacy, offered an hour-long keynote with statistics and projections. She noted that

- The distribution of today's pharmacy work force by setting is about 65% in community practice sites, 25% in institutions, 5% in miscellaneous patient care sites (long-term-care facilities, independent clinics, etc.), and 5% in settings not involving direct patient care (education, research, industry, etc.).
- The shortage of pharmacists will continue, primarily because the use of prescription medications is increasing. The shortage may be exacerbated by the large numbers of women entering the profession, some of whom will choose part-time work when raising families.
- Enrollment in pharmacy schools is increasing, but not at a rate that matches the demand for more pharmacists.
- Enrollment is growing, not only in established pharmacy schools but in new schools as well.
- In Europe, community pharmacists are playing a greater role in caring for patients with chronic conditions; this suggests where U.S. pharmacists should be heading.
- Residents are valuable and have a major impact on the level of services pharmacy provides.

Planning Ahead for the Future of Residency Training

A keynote presentation by Max Ray, dean of Western University of Health Sciences College of Pharmacy, gave insights into the profession's future needs, activities residents must be prepared for, and issues to consider in planning. Because residency training is a bridge between formal education and actual practice, residencies must change so they remain a workable link between the two. Residents must be readied to focus on patients and their unique needs, he said.

According to Ray, the fundamental purpose of residency training should be to develop clinical maturity. Clinical maturity involves

- Developing clinical and professional competence,
- Assuming personal responsibility and accountability,
- Solving problems effectively,
- Knowing how to communicate well with patients, health care professionals, and payers,
- Exhibiting self-confidence and suppressing one's ego, and
- Knowing when to lead and when to follow.

Functions that residents must be prepared for include

- Helping patients avoid medication-related problems and resolving those that occur,
- Emphasizing the safe and effective use of medications,
- Basing decisions on predetermined therapeutic outcomes, and
- Adhering to evidence-based practices in the use of medications.

Ray suggested that pharmacy may want to consider emulating the medical model, which requires earning a B.S. degree before enrolling in medical school and completing a residency after graduating from medical school. A key difference between medical and pharmacy residencies, he said, is that pharmacy residencies encompass both practice management and clinical skills, whereas medicine focuses only on the latter. This combined focus could be seen as a plus for pharmacy residents, but it could also detract from residents' opportunities to mature clinically. The longstanding emphasis on preparing pharmacists to function in a specific type of environment will need to change if they are to take responsibility for personalized patient services; ideally, Ray said, pharmacists should acquire the necessary skills in any setting and transport them to other types of practices.

which changes the educational level of residents.

- Specialized residencies and the depth of training they provide are not consistent. There is a lack of consensus in the profession about specialization in general.
- Many new graduates are going directly into specialized residencies.
- The pharmacy profession needs a model for residency training that everyone supports.

Recommendations

Leaders from six of the foremost pharmacy organizations, with interests in residency training, discussed their visions for residency training before attendees broke into groups to grapple with three salient areas: work-force needs and their probable impact on residency training, the challenges of residency growth and advancement, and maintaining quality standards for the profession through residency accreditation. On the second day of the conference, each group presented its ideas to all attendees. Below is a summary of the key recommendations.

- "Push the envelope" in residencies to bring pharmacists to a higher level of skills and responsibilities. By 2015, pharmacists will routinely provide more direct patient care, including medication management, patient counseling, and assessment of uncomplicated patients. However, pharmacists will need residency training to acquire skills that allow them to take responsibility for more complex patients.
- Promote a common vision for pharmacy residency practice, which will mean supporting a common model, defining terminology, and developing professionwide expectations for pharmacists with residency training. Pharmacy organizations must endorse and support the vision and actively promote residencies.
- Differentiate and clearly define competencies required of entry-level pharmacists, generalists, and specialists. What do we expect pharmacists to be able to do straight out of school? What areas of knowledge and practice require advanced residency training at either a PGY1 or PGY2 level? Criteria and prerequisites must be developed to define who can go directly into PGY2 programs without completing a PGY1 residency. The final model must be able to withstand scrutiny from other health care professionals.

Stakeholders and Attendees

The Pharmacy Residency Training in the Future roundtable was convened by ASHP in conjunction with the American Association of Colleges of Pharmacy (AACP), the American College of Clinical Pharmacy (ACCP), the Academy of Managed Care Pharmacy (AMCP), and the American Pharmacists Association (APhA). Representatives from the Accreditation Council for Pharmacy Education (ACPE), the National Community Pharmacists Association (NCPA), and the Department of Veterans Affairs (VA) also took part. Invitees from the National Association of Chain Drug Stores and the American Society of Consultant Pharmacists were unable to attend.

Specific attendees, in alphabetical order:

Daniel Ashby, Johns Hopkins Hospital
Michelle Belsey, Rite Aid Corporation
Marialice Bennett, The Ohio State University
Richard Bertin, Executive Director, Board of Pharmaceutical Specialties
Mark Brueckl, AMCP, Planning Committee
Anne Burns, American Pharmacists Association, Planning Committee
Judith Cahill, Executive Director, Academy of Managed Care Pharmacy
Bruce Canaday, North Carolina Coastal AHEC, APhA Presidential Officer
Louis Cobuzzi, VA
Carey Cotterell, Kaiser Permanente
JoLaine Draugalis, University of Arizona, AACP President
Arlene Flynn, AACP, Planning Committee
Raulo Frear, Express Scripts, Inc.
John Gans, Executive Vice President and Chief Executive Officer, APhA
Harold Godwin, University of Kansas College of Pharmacy
Stuart Haines, University of Maryland School of Medicine
Marianne Ivey, Health Alliance
Katherine Knapp, Touro University College of Pharmacy
Roger Lander, McWhorter School of Pharmacy
Mary Lee, Midwestern University of Chicago
Donald Letendre, University of Rhode Island College of Pharmacy
Michael Maddux, Executive Director, ACCP
Lucinda Maine, Executive Vice President, AACP
Henri Manasse, Jr., Executive Vice President and Chief Executive Officer, ASHP
Jill Martin, University of Cincinnati College of Pharmacy
Denny McCallian, NCPA
Jean Nappi, Medical University of South Carolina College of Pharmacy
Lydia Nesemann, Midwestern University
Matt Osterhaus, Osterhaus Pharmacy
John Pieper, University of New Mexico
Jane Pruemer, University of Cincinnati College of Pharmacy, ASHP COC Chair
Max Ray, Western University of Health Sciences
Mike Rouse, ACPE
Joseph Saseen, University of Colorado Health Sciences Center
Rita Shane, Cedars-Sinai Medical Center
Kelly Smith, University of Kentucky Medical Center, ASHP COC Vice Chair
Marilyn Speedie, University of Minnesota
Janet Teeters, ASHP, Planning Committee
Peter Vlasses, Executive Director, ACPE
Edwin Webb, ACCP, Planning Committee
Barbara Wells, University of Mississippi School of Pharmacy, ACCP President
Thomas Woller, Aurora Health Care
Mark Woods, Saint Lukes Hospital, ASHP President

Titles and appointments of attendees were accurate at the time of this roundtable discussion; some designations may have since changed.

Next Steps

In April 2005, ASHP set forth definitions for new graduates, PGY1 residency, and PGY2 residency, as well as a vision for residency training in 2015. In May 2005, the Council on Credentialing in Pharmacy (CCP), representing 13 pharmacy organizations that provide information and help coordinate the profession's voluntary credentialing programs to maintain quality within the profession, endorsed the definitions.

CCP has been working on a model articulating how different levels of residency training fit into pharmacy practice, which it will detail in a paper to be released by January 2006. The paper will describe the current practice of pharmacy, clarify terminology, and define how various credentials—including residency training—help individuals in their roles.

Stakeholder organizations that took part in the January 2005 roundtable conference (AACP, ACCP, AMCP, APhA, ASHP) will work together to address issues that were identified, with a common goal of developing quality accredited residency training programs for future practitioners in pharmacy.

- Increase the number of preceptors and residency sites by expanding into new geographic areas, developing multiple residency positions at sites, joining pharmacy and medical residencies in partnership arrangements, targeting teaching hospitals and academic health centers, and reaching out to corporate executives to explore opportunities in chain drugstore, managed care, and ambulatory care settings.
- Demonstrate the value of residency training to training sites, prospective residents, health care providers, patients, employers, and payers. For example, conduct more research on the effect of residencies on patient care and safety to demonstrate that, like medical residents, pharmacy residents provide an important service.
- Help students better understand the benefits of residency training, including clinical maturity, socialization, mentoring, career enhancement, meeting prerequisites for positions or specialty credentials, and expanding the scope of practice according to requirements set by states or practice settings (such as the Department of Veterans Affairs).
- Educate deans, students, and others about the value of accreditation as the profession moves toward recognizing accredited residencies only.
- Find creative ways of funding residency programs, such as collaborating with medicine for state and private

New Definitions and Vision for Residencies

Below are the definitions approved by ASHP in April 2005 and endorsed by the Council on Credentialing in Pharmacy in May 2005. These definitions provide a framework for new residency standards to be released by ASHP later in 2005.

New Graduate of a Doctor of Pharmacy Program

A graduate of the doctor of pharmacy program is a novice who possesses fundamental knowledge, skills, attitudes, and abilities to provide medication-related patient care but has limited practice experience.

PGY1 Pharmacy Residency

Postgraduate year 1 of pharmacy residency training is an organized, directed, accredited program that builds upon the knowledge, skills, attitudes, and abilities gained from an accredited professional pharmacy degree program. The first-year residency program enhances general competencies in managing medication-use systems and supports optimal medication therapy outcomes for patients with a broad range of disease states.

PGY2 Pharmacy Residency

Postgraduate year 2 of pharmacy residency training is an organized, directed, accredited program that builds upon the competencies established in postgraduate year one of residency training. The second-year residency program is focused on a specific area of practice. The PGY2 program increases the resident's depth of knowledge, skills, attitudes, and abilities to raise the resident's level of expertise in medication therapy management and clinical leadership in the area of focus. In those practice areas where board certification exists, graduates are prepared to pursue such certification.

Vision for Pharmacy Residency Training in 2015

The vision statement was approved by ASHP in April 2005. A pharmacy degree plus completion of an accredited residency is the profession's preferred pathway to achieving a pharmacist's full potential to improve medication therapy outcomes for patients served in all practice settings.

- All residency programs are accredited.
- Completion of a residency program is a necessity for new pharmacy graduates entering direct patient care roles.
- Significant growth has occurred in community care residency programs.
- Residencies continue the pattern of PGY1 as generalist training and PGY2 as training for an advanced level of differentiated practice.
- Residency-trained individuals are recognized among the health care professions as those who lead the advancement of pharmacy services that improve the health status of patients.

Survey Takes Participants' Pulse

Forty-one of 45 potential conference participants filled out a survey beforehand (91% response rate) that assessed their level of agreement in important areas. Statements with which more than 50% of participants agreed are listed here.

Statement	%
Accreditation should occur through a national body with a broad array of stakeholders.	97%
Residencies should be accredited by a nationally recognized body.	95%
There is a shortage of specialists with advanced residency training.	90%
Residencies are a way to develop new and innovative practices in areas of specialization.	90%
Experiential training is insufficient to work collaboratively in interdisciplinary teams.	88%
Residencies should continue to be developed in areas not involving direct patient care.	83%
Colleges provide an adequate knowledge base; however, residencies have become necessary to allow individuals to integrate their knowledge into actual practice.	80%
Fifty percent of new graduates should complete a residency by 2015.	80%
Residencies to prepare faculty should occur in a second year of residency training.	66%

funding, pursuing grants, exploring compensation for patient care activities, and making sure that all current sources of funding have been fully tapped.

- Identify opportunities for pharmacists to offer broader services by monitoring trends (such as keeping tabs on physician shortages).
- Quantify life experience to help determine equivalency, which will be important for pharmacists interested in PGY2 residency programs who did not complete a PGY1 residency.
- Take "capacity issues" into consideration to determine if each practice environment can accommodate increasing numbers of residents.
- Emphasize that residencies are change agents; they advance pharmacy practice, introduce new methods, promote safety and quality, and help procure compensation for advanced services. For example, residencies may play an important role in defining pharmacists' services under Medicare's new provision for medication therapy management services.
- Make the accreditation process flexible to allow for innovation and for evolution into new areas of practice.
- Streamline the accreditation process to lessen the burden on organizations running multiple residency programs.
- Encourage residency programs to do a better job of self-assessment so that the accreditation process is more efficient.
- Avoid fragmentation in the profession regarding accreditation. Only one national accrediting body should accredit all pharmacy residency programs. Prevent groups from moving in different directions when they do not like decisions by the accrediting body and partner organizations.
- Be accountable to future residents and the public. The profession must make sure all programs are accredited and that they meet the needs of residents and, ultimately, the public by bringing about improved patient care.