

Education for Clinical Roles in a Global Context

Education in the USA

美国的教育

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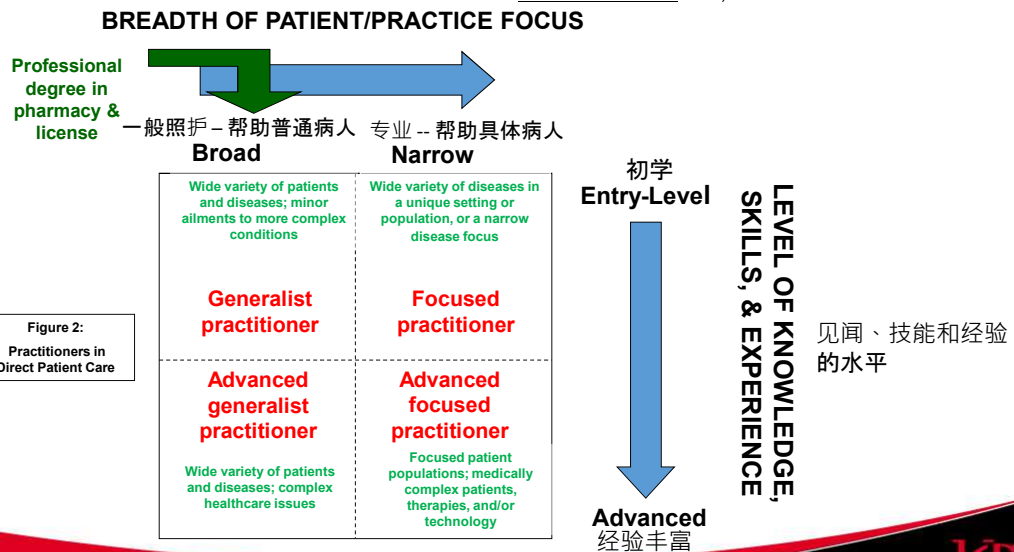
University of Cincinnati

James L. Winkle College of Pharmacy



Council on Credentialing in Pharmacy: Scope of contemporary pharmacy practice roles, responsibilities, and functions of pharmacists and pharmacy technicians.

J Am Pharm Assoc 2010;50e35-62



Pharmacy Education for Clinical Roles in the USA

(为了临床工作者的美国药学教育)

- Core Education of All Pharmacists – PharmD degree
- Advanced Education (Residencies) for Clinical Practice
 - PGY1 and PGY1
- Credentialing for Specialty Practice
 - BPS Credentialing
- Certificate Programs for Additional Education

Core Education of All Pharmacists for a Role in Patient Care - USA

(在美国 -- 基本教育, 药剂师都知道很重要, 所以照顾病人很成功。)

- ▶ Doctor of Pharmacy (PharmD) education is the minimum requirement for pharmacy practice.
 - Pre-professional coursework of at least two years.
 - Final four years of pharmacy education MUST be attained in a college/school of pharmacy.
 - *Year 4 is spent in Advanced Pharmacy Practice Experiences (APPE)*

cape Center for the Advancement of
Pharmacy Education

AACP - 2013 Educational Outcomes for Pharmacy Graduates

- Domain 1 – Foundational Knowledge
- Domain 2 – Essentials for Practice and Care
- Domain 3 – Approach to Practice and Care
- Domain 4 - Personal and Professional Development

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Pharmacy Education

AACP - 2013 Educational Outcomes for Graduates

- Domain 2 – Essentials for Practice and Care
 - Patient Centered Care (Caregiver) 医护工作者
 - Health & Wellness (Promoter) 医药促销者
 - Population-based care (Provider) 医药提供者
- Domain 3 – Approach to Practice and Care
 - Problem Solving (Problem Solver) 问题解决者
 - Educator (Educator) 教育者
 - Patient Advocacy (Advocate) 提倡者
 - Interprofessional collaboration (Collaborator) 合作者
 - Cultural Sensitivity (Includer) 联系人
 - Communication (Communicator) 传话人

New ACPE Standards for Accreditation - 2016

Practice Ready, Team-Ready for Patient-Centered Care

- Domains 1-4 were included in the Standards
- Std 10: Curriculum design, delivery and oversight
 - Assessment and competency benchmarks (考试)
- Std 11: Interprofessional Education
 - Learning team based patient care in experiences with other health professionals. (作业班)

ACPE Standards 2016

Experiential Components with Preceptors (经验)

- Std 12: Pre-APPE Curriculum
 - Introductory Pharmacy Practice Experience(IPPE)
 - no less than 300 hours of experience.
 - 60 hours may be in simulated models.
- Std 13 – APPE (Advanced Pharmacy Practice Experience) Curriculum
 - No less than 36 weeks (1440 hours)
 - 4 required settings: Community, Ambulatory, Hospital, Inpatient General Medicine
 - Elective APPEs

Joint Commission of Pharmacy Practitioners (JCPP) *
Vision for Pharmacists' Practice
 (adopted by JCPP November 2013)

Patients achieve optimal health and medication outcomes with pharmacists as essential and accountable providers within patient-centered, team-based healthcare.

*JCPP Members are: AMCP, AACP, ACA, ACCP, ACPE, APhA, ASCP, ASHP, NABP, NCPA, and NASPA.

JCPP Pharmacists' Patient Care Process

Providing **consistency for patients and health care**
Applies to all patient care services delivered by pharmacists
in any practice setting

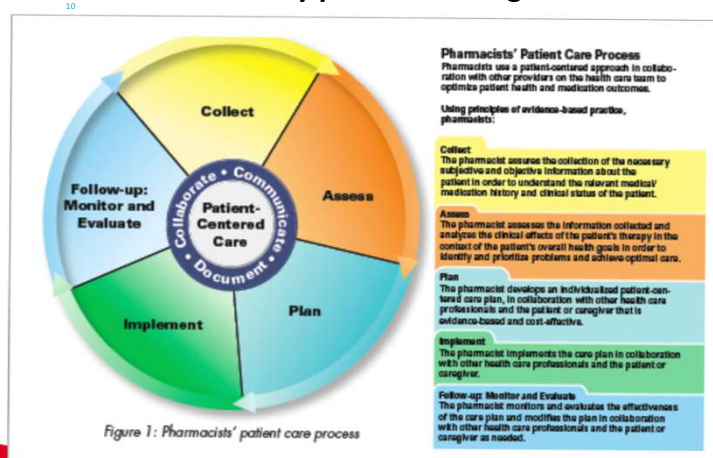


Figure 1: Pharmacists' patient care process

Medication Therapy Management (MTM) Core Elements

- Medication Therapy Review (MTR)
- Personal Medication Record (PML)
- Medication Action Plan (MAP)
 - Engages patient in their own care management.
- Intervention and Referral – (assessment and triage).
- Documentation and Follow up

Assessments (考试) in Patient Care “Are they Ready for Practice??”

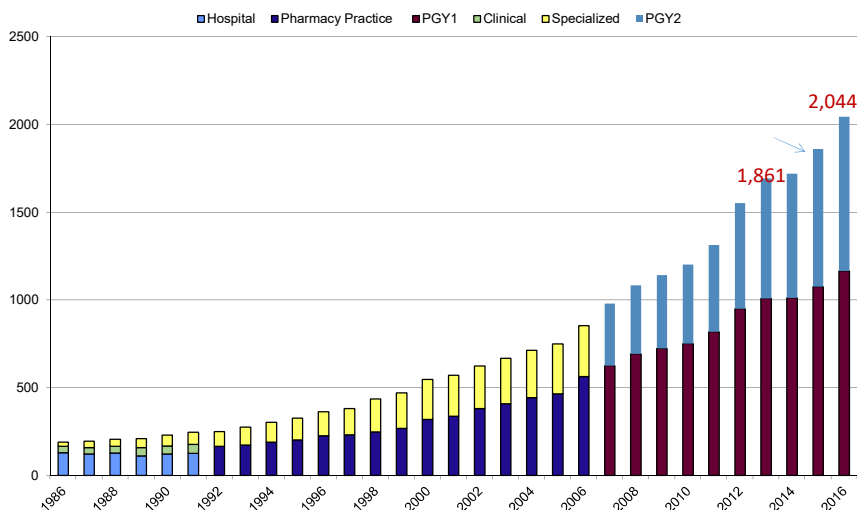
- Interprofessional Preparedness (Team Ready)
- Competency Assessments
 - Objective Structured Clinical Examinations (OSCEs)
 - High Hurdle Benchmarks
- Assessment of:
 - Clinical Reasoning skills – across patient’s lifespan
 - Patient Assessment Skills
 - Communication Skills
 - With Patients to Assess, make recommendations with plan, and educate
 - With recommendations/referrals to other health care professionals
 - Attitude – Empathy, patient advocate?
 - Documentation Skills

Advanced Education (Residencies) for Clinical Practice

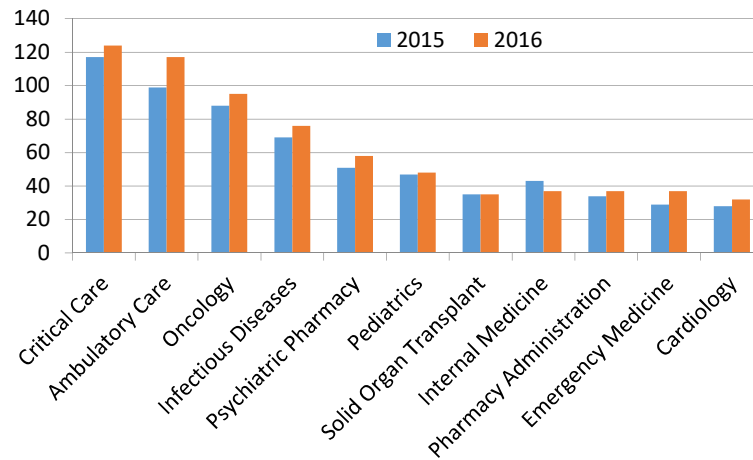
Residencies are organized, directed, postgraduate training program in a defined area of pharmacy practice.

- PGY1 – Year 1 Residency
 - Setting: Hospital, community, home care and long-term care facilities, ambulatory care settings, managed care facilities, and others
- PGY2 – Year 1 Specialty Residency
 - Setting: Specialty clinical practice areas

ASHP Accredited Pharmacy Residency Program Growth in Last 20 Years



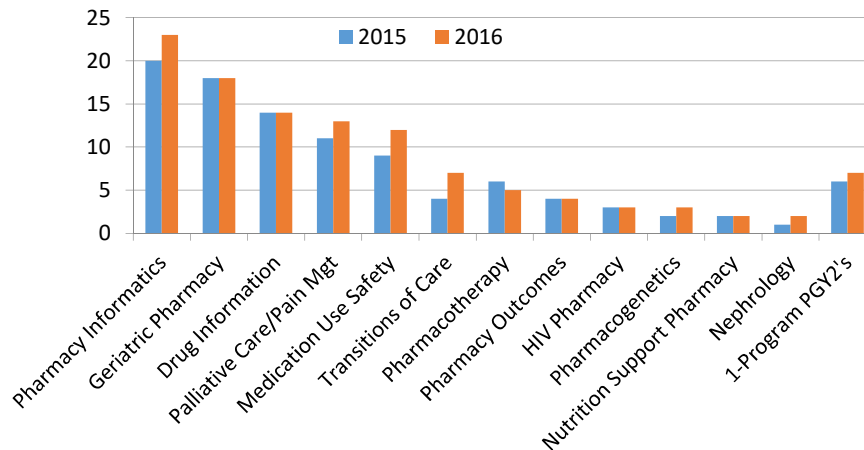
Top PGY2 Residency Programs by Number of Programs



Includes Accredited, Candidate Status, and Pre-Candidate Status Programs as of 4/15/2016



Other PGY2 Residency Programs



Includes Accredited, Candidate Status, and Pre-Candidate Status Programs as of 4/15/2016



Board Certification for Specialty Practice

- Board of Pharmaceutical Practice (**examinations**):
 - Evaluate the knowledge and skills of individual pharmacy specialists
 - Grant qualified pharmacists certification and recertification in recognized pharmacy practice specialties

BPS Specialties

BPS Approved Specialties

- Ambulatory Care Pharmacy
- Critical Care Pharmacy
- Nuclear Pharmacy
- Nutrition Support Pharmacy
- Oncology Pharmacy
- Pediatric Pharmacy
- Pharmacotherapy
- Psychiatric Pharmacy

Role Delineation Studies Conducted

- Cardiology
- Infectious Disease
- Pain and Palliative Care
- Sterile Compounding
- Solid Organ Transplantation

Potential Role Delineation Studies

- Patient Safety
- Pharmacoinformatics
- Emergency Medicine

Pharmacists Certified by the Board of Pharmacy Specialties (n=26,457 - July 2016)



Continuous Learning – 不断学习

- To date, **BPS** certified more than 26,000 specialist pharmacists
- More than 280,000 pharmacists trained to administer vaccines



Supporting all of these are standards and guidelines influenced, supported or developed by APhA

Certificate Programs for Additional Education

额外教育 – 获得证明书的课程

Examples of Programs

- APhA Immunization Certificate Course
- Diabetes Certificate Course
- Medication Therapy Management (MTM) Certificate Course
- Travel Health Certificate Course
- Point-of-Care Testing Certificate Course

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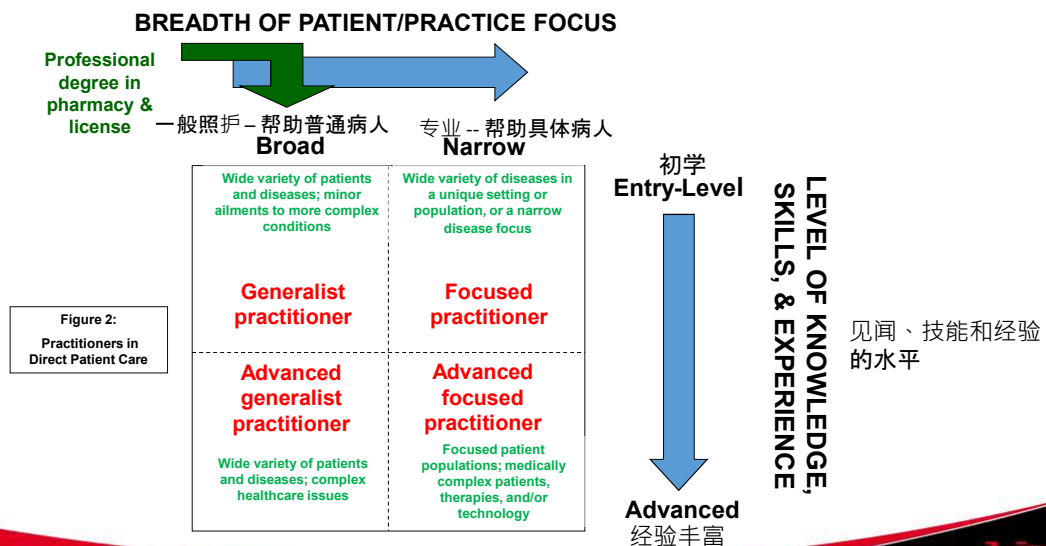


Figure 2:
Practitioners in Direct Patient Care

Council on Credentialing in Pharmacy. Scope of contemporary pharmacy practice roles, responsibilities, and functions of pharmacists and pharmacy technicians. *J Am Pharm Assoc 2010;50e35-62*

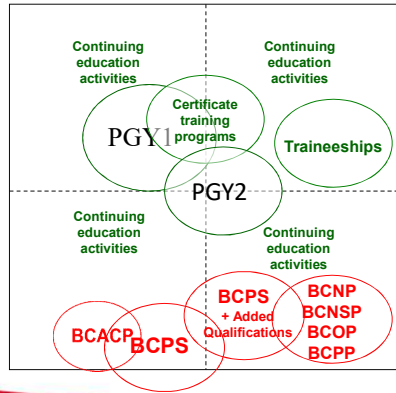
BREADTH OF PATIENT/PRACTICE FOCUS



一般照护 - 帮助普通病人 专业 - 帮助具体病人
Broad **Narrow**

Figure 6: Post-licensure education and training relative to pharmacy practice

Figure 7: Post-licensure certification relative to pharmacy practice focus



初学
Entry-Level

LEVEL OF KNOWLEDGE,
SKILLS, & EXPERIENCE

见闻、技能和经验的水平

Advanced
经验丰富



Thank You!
谢谢!

