Global Evolution of Clinical Pharmacy Practice:
Strategies to Increase the Pace

Representing Pharmacists Who Serve as Patient Care Providers in Acute and Ambulatory Settings

ASHP represents pharmacists who serve as patient care providers in acute and ambulatory settings. The organization’s nearly 58,000 members include pharmacists, student pharmacists, and pharmacy technicians. For more than 75 years, ASHP has been at the forefront of efforts to improve medication use and enhance patient safety.
ASHP Global Leadership Team

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Clinical Pharmacy Defined

- An area of pharmacy concerned with the science and practice of rational medication use.
- As a discipline, clinical pharmacy also has an obligation to contribute to the generation of new knowledge that advances health and quality of life.
- This implies we as clinical pharmacists should possess pharmacotherapy knowledge, master skills to apply the knowledge in patient’s care, and take leadership roles to advance pharmacy practice and healthcare.
Clinical Pharmacist Competencies

• Direct patient care
• Pharmacotherapy knowledge
• Systems-based care and population health
• Communication
• Professionalism
• Continuing professional development

ACCP Guideline - Clinical Pharmacist Competencies - 2017

Historical Perspective in the US

• 1960 – University of Michigan
• 1966 – Ninth-floor Project – University of California San Francisco
• 1970s-1980s – Significant growth of hospital staff pharmacy (2X)
• 1985 - Directions for Clinical Practice in Pharmacy - Hilton Head Conference
• 1989 - Pharmacy in the 21st Century Conference
• 1993 - Implementing Pharmaceutical Care
• 2010 - Pharmacy Practice Model Summit
• 2014 - Ambulatory Care Summit
• 2021 - Specialty Pharmacy Summit
Historical Perspective Globally

- Asia
- Middle East, North Africa and Greater Arabia
- Europe
- North America
- Central America and the Caribbean
- South America
- Sub-Saharan Africa
- Australia and Oceania

Pharmacy Education and Practice in the Arab World

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**COMMENTARY**

_A Call to Action to Transform Pharmacy Education and Practice in the Arab World_

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Globally, pharmacy education is evolving to reflect a more patient-centered, interprofessional approach to clinical practice. In the 22 countries of the Arab world, advancements in regulatory support for pharmacy practice and changes to the health care system have been slower than in Europe, Asia, and the Americas. Significant cultural, logistical, and legal barriers exist in many countries, and a consensus approach to accreditation, educational outcomes, and curricula design is lacking. This commentary briefly examines the current state of both pharmacy education and practice in the Arab world, and it highlights recent reports of curricular reform and innovation. Additionally, it provides potential strategies for improving the quality of education and for expanding pharmacy practice to ensure graduates and practitioners have adequate experiential opportunities and institutional support.

Keywords: international education, Arab world, curricula reform, clinical pharmacy
Barriers to Clinical Pharmacy Practice

- Sufficient experiential training
- Sufficient educators with training in clinical disciplines
- Clinical preceptors with advanced training
- Consistent standards for services
- Standardized educational outcomes at sites
- Regulatory and institutional support

Strategies

- Develop and implement competency-based pharmacy education to better prepare pharmacists for their role as a part of the health care system
- Define new, improved learning outcomes for clinical pharmacy education and reassess the teaching methods and learning environment
- Strengthen experiential and interprofessional education (IPE) through strategic planning and leveraging resources
- Develop and implement quality continuous professional development (CPD) programs as part of licensure renewal
- Develop accreditation standards and quality assurance guidelines locally and regionally to address and standardize pharmacy education and practice
- Create job opportunities for new graduates aligned with their new knowledge and skills sets
Clinical Pharmacy Practice

Foundation of Pharmaceutical Care (Pharmacy Service)

- To identify and resolve Drug-Related Problems

Drug-Related Problems

An event or circumstance involving drug therapy that actually or potentially interferes with desired health outcomes
Pharmacologic Exam (Pharmacotherapy Workup)

Pharmacist Patient Care Process

Figure 1: Pharmacists' patient care process

Pharmacists' Patient Care Process
Pharmacists use a patient-centered approach in collaboration with other providers on the health care team to optimize patient health and medication outcomes.

Using principles of evidence-based practice, pharmacists:

- Collect
  The pharmacist ensures the collection of the necessary subjective and objective information about the patient in order to understand the relevant medical history and clinical status of the patient.

- Assess
  The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals to identify and prioritize problems and achieve optimal care.

- Plan
  The pharmacist develops an individualized patient-centered care plan, in collaboration with other health care professionals and the patient or caregiver, that is evidence-based and cost-effective.

- Implement
  The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver.

- Follow-up: Monitor and Evaluate
  The pharmacist monitors and evaluates the effectiveness of the care plan and modifies the plan in collaboration with other health care professionals and the patient or caregiver as needed.
Communication with Patients - Therapeutic Relationship

- Therapeutic Relationship
  - A partnership or alliance between the practitioner and the patient formed for the purpose of optimizing the patient’s medication experience

![Therapeutic Relationship Diagram]

Communication with Team Members - Collaborator

![Collaborator in Healthcare Diagram]
Drug-Therapy Problems (Drug-Related Problems)

1. Needs additional drug therapy
2. Unnecessary drug therapy
3. Dosage too low
4. Dosage too high
5. Ineffective drug
6. Adverse drug reaction
7. Nonadherence

Indication → Drug product → Dosage regimen → Outcomes

Clinical Pharmacists – Key Members of the Health Care Team

• Deployed to inpatient care units and clinics
• Helps choose right drug, right dose
• Focus on high risk therapies, highly complex patients
• Pharmacist serves as drug knowledge expert:
  - Provides drug information
  - Pharmacist monitors response to drug therapy
  - Improves safety of medication use system
  - Improves outcomes from medication therapy
  - Lowers cost of therapy
How is Clinical Pharmacy Practice Evolving?

Allocation of Pharmacist Time

- Past: Safe Preparation and Dispensing
- Present: Clinical Patient Management
- Future: Further change in allocation
Clinical Services

- Comprehensive medication management
- Pharmacotherapy consults
- Disease management coach/support
- Pharmacogenomics applications
- Anticoagulation management
- Transitions of care
- Medication safety surveillance
- Health, wellness and public health
- Immunization
Pharmacist Participation in Ambulatory Clinics
(For Those That Have Clinics)

Any Ambulatory or Primary Care Clinics

Transitions of Care

“The movement patients make between health care practitioners and settings as their condition and care needs change during the course of a chronic or acute illness…”

60% of all medication errors occur during times of care transition

Future of Pharmacy Practice

• Pharmacist is essential member of every healthcare team
• Focus on complete spectrum of acute and chronic therapy in all sites in and across all sites of care
• Outcomes driven and cost-effective drug therapy
• Sophisticated automation and advanced clinical information systems
• Majority of all pharmacist time spent in direct patient care
• Expanding roles for pharmacists: prescribing, health and wellness

Why is This so Important?  

1. Quality of services and care is linked to well lead and managed clinically focused pharmacy departments
2. Literature illustrates how patient outcomes are improved when a pharmacist is an integral member of the team
3. Services are more innovative, efficient
4. Interdisciplinary interactions are more collaborative and productive
Professional Certificates

Online, self-guided learning modules for pharmacy professionals

Our certificates provide high-quality, manageable and practical professional development opportunities for practitioners and pharmacy personnel.
Current Certificate Programs

- Medication Reconciliation
- Compound Sterile Preparation
- Emergency Medicine
- Pharmacokinetics
- Medication Safety
- EMERGENCY MEDICINE
- Nutrition Support
- Sterile Product Preparations PTCB-recognized
- Sterile Product Preparations BCSPP Prep
- Pharmacy Informatics
- Pharmacogenomics
- Pain Management

New Certificates

- Diabetes Management Certificate
  Available Nov. 4, 2020
  - 31 CE hrs
- Pediatric Certificate
  Coming in FALL 2020
- Anticoagulation Certificate
  Coming in early 2021
- Crisis and Pandemic Management Certificate
  Coming in 2021
- Well-Being and Resilience Certificate
  Coming in 2021
Core Contents of the Clinical Skills Certificate (17 Modules)

1. Pharmacotherapy Knowledge
   - Pharmacokinetics
   - Infectious Disease/Cardiovascular
   - Gastrointestinal Diseases
   - Diabetes/Pulmonary
   - Neurological/Pain
   - Special Population
   - Fluids and Electrolytes
   - Rheumatology/Coping with Chemotherapy

2. Practice Skills
   - Orientation to Clinical Pharmacy Practice
   - Pharmacists as Caregivers
   - Evidence-Based Medicine for Clinical Decision Making

3. Leadership Development
   - Pharmacists' Roles in Transitions of Care
   - Clinical Pharmacist Mindset: I am a Leader
How to Study the Clinical Skills Certificate?

• Self-Study
  • Listen to Audio Recordings
  • Review Lecture Slides
  • Read Supplemental Materials
  • Take Assessment Exams

How to Study the Clinical Skills Certificate?

• Small Group Discussion
  • Study with Your Peers
  • Discuss the Following
    • What have I learned in pharmacotherapy knowledge?
    • What skills do I need to apply the knowledge in my practice?
    • How can I take a leadership role to advance my current practice OR implement new practice?

• Attend Expert-led Live Webinars
• Schedule In-depth Discussion
  • Clinical knowledge
  • Practice skills
  • Leadership development
Board Certification Resources

Products and Services

- Practice Advancement Initiative
- Practice Standards & Guidance Documents
- Clinical Drug Information and Other Drug References
- Books (Print & Electronic)
- American Journal of Health-System Pharmacy
- Pharmacy Competence Assessment Center
- eLearning Portal
- Online Resource Centers
Consulting Services

ASHP Consulting

Put ASHP's Experts to Work in Your Pharmacy

Our consultants are internationally recognized pharmacy practice experts with longstanding reputations for improving outcomes. Whether it's helping you develop and expand clinical practice, optimize your pharmacy operation and supply chain, expand your retail pharmacy services, or launch a telehealth program we take pride in assisting our clients with any practice challenge they present.
Consulting Services

- Comprehensive Pharmacy Review
- Advancing Clinical Practice
- Medication Safety and Pharmacovigilance
- Pharmacy Technician Training
- Pharmacy Operations Optimization
- Automation and Technology Transformation
- Sterile Product Compounding & USP Chapter <797> and <800> Compliance
- Supply Chain Optimization
- Retail and Specialty Pharmacy Optimization
- Pharmacy Leadership Search and Placement Service
- Residency Program Development

Accreditation Programs
Lynnae M. Maheney, BSPharm, MBA, FASHP
International Hospital Pharmacy Services Accreditation

**Purpose**

1. Provides formal recognition of high quality pharmacy services
2. Demonstrates commitment to excellence and quality improvement
3. Enhances credibility and value of pharmacy services – internally and externally

*Standards specific to international practice*
International Hospital Pharmacy Services Accreditation: Benefits

- Improved quality of care leading to improved patient outcomes
- Assurance policies and procedures are followed consistently throughout your organization
- Decreased variation in your processes and improved efficiencies
- Increased confidence of your pharmacy services internally
- External validation of your pharmacy services for your patients and community
- Risk management reduction
- A competitive advantage
- Formal recognition of accreditation with a certificate and ASHP website

International Hospital Pharmacy Services Accreditation

- Role of the ASHP International Accreditation Commission
  - Oversight of the international standards
    - International Hospital Pharmacy Services
    - International Pharmacy Practice Residency
  - Review and recommendation of accreditation for programs

- Global representation
- Three year accreditation
Accreditation Process

1. Proposal
   Based on bed size and number of pharmacies

2. Application

3. Document Assessment
   Checklist
   Document submission and review
   Document report

4. Survey
   On-site or remote
   Survey itinerary
   Multiple days

5. Survey Report
   Pharmacy response and action plan
   Surveyor review

6. Accreditation Recommendation
   International Accreditation Commission
   ASHP Board of Directors
   Three year accreditation – annual reports

Residency Accreditation
PGY1/PGY2
International Pharmacy Practice
Pharmacy Practice Residency

**Purpose**

1. Build on pharmacy education for the development of clinical pharmacists
2. Grow pharmacist delivered patient care services
3. Establish criteria for training pharmacists to achieve professional competence
4. Develop leadership role in advancing pharmacy practice in their country

**Accreditation**

1. Establishes criteria for training pharmacists to achieve professional competence in the delivery of patient-centered care and pharmacy services
2. Evaluates the training program and the pharmacy services
Accreditation for International Pharmacy Practice Residency

1. Oversight by the ASHP International Accreditation Commission

2. Three year accreditation

Accreditation Process

1. Application
2. Pre-Survey Documents
   - Self-assessment questionnaire
   - Checklist
   - Required Documents
3. Pre-Survey Meeting
   - Document review
4. Survey
   - On-site or remote
   - Survey itinerary
   - Multiple days
5. Survey Findings
   - Pharmacy response and action plan
   - Surveyor review
6. Accreditation Recommendation
   - International Accreditation Commission
   - ASHP Board of Directors
   - Three year accreditation – annual reports
Accreditation Preparation and Training
David J Warner, PharmD

Preparation for Accreditation

1. Readiness to offer a pharmacy residency program

2. Readiness/suitability to undergo accreditation of pharmacy department

3. Mock surveys for candidate programs and other customized programs
Training Programs

1. Residency Program Design and Conduct Workshop
2. Program Development
3. Preceptor Development
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Questions and Answers
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Dialogue with Dr. Nazer

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