Credentialing and Advancing Staff Knowledge and Training

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Disclosure

I have no actual or potential financial or nonfinancial conflicts of interest to disclose regarding the content of this presentation.

Any discussion of a private entity is for educational purposes only, and does not reflect an endorsement by myself or my employer.
Learning Objectives – Pharmacist

1. Describe the ASHP Practice Advancement Initiative (PAI) as it relates to staff education and training
2. Compare the CT, NJ, and NY state education and training requirements for pharmacists and pharmacy technicians
3. Discuss education and training opportunities for pharmacists and pharmacy technicians, including pharmacist credentialing
4. Utilize a pharmacy technician training program to apply concepts learned in this session
1. Define the ASHP Practice Advancement Initiative (PAI) as it relates to staff education and training
2. Compare the CT, NJ, and NY state education and training requirements for pharmacists and pharmacy technicians
3. Describe education and training opportunities for pharmacists and pharmacy technicians, including pharmacy technician certification
4. Utilize a pharmacy technician training program to identify concepts learned in this session
Early Pharmacist Education and Training

- Largely apprentice-based

- Philadelphia College of Pharmacy established in 1821
  - Local apothecaries sought to establish training standards
  - Improve scientific standards
  - Develop more competent students
  - Enhance the profession
Early Pharmacy Technician Education

- On-the-job training in a place of employment
  - Continues to be the norm in most states
  - No uniform national education standard

- Currently in beginning stages of development

- Similar trajectory as evolution of pharmacist education?
Practice Advancement Initiative (PAI)

- Goal: “To significantly advance the health and well being of patients by supporting futuristic practice models that support the most effective use of pharmacists as direct patient care providers”

- Born from a rapidly changing US healthcare system:
  - Healthcare shift toward cost-effective, value-based care (pay-for-performance)
  - Efficient use of resources to drive patient outcomes
  - Leverage pharmacists to fill gaps left by shortage of physicians and LIPs
  - Shift toward pharmacists managing medication use across the entire continuum of care
**Overview. Practice Advancement Initiative. ASHP. 2017**

Transforming how pharmacists in acute and ambulatory settings care for patients

The Practice Advancement Initiative (PAI) is a **profession-led** initiative that is **empowering pharmacists** to take responsibility for **patient outcomes** in acute and ambulatory care settings.

<table>
<thead>
<tr>
<th>Care Team Integration</th>
<th>Leveraging Pharmacy Technicians</th>
<th>Pharmacist Credentialing &amp; Training</th>
<th>Technology</th>
<th>Leadership in Medication Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotes a team-based approach to health care</td>
<td>Empowers the pharmacy team to ensure that pharmacy technicians perform all traditional preparation and distribution activities</td>
<td>Elevates the reputation of the pharmacy team</td>
<td>Evaluates the available technologies to support patient safety and quality of care</td>
<td>Empowers pharmacists to take responsibility for patient outcomes</td>
</tr>
<tr>
<td>Shifts the roles of the healthcare team to enable pharmacists to optimize their time with patients across the continuum of care</td>
<td>Urges technicians to handle non-traditional and advanced responsibilities and activities to allow pharmacists to take greater responsibility for direct patient care</td>
<td>Ensures pharmacists, residents, and students have the training and credentials for activities performed within their scope of practice now and in the future</td>
<td>Encourages use of available automation and technology to improve patient safety, quality, and efficiency, while also reducing costs</td>
<td>Positions pharmacists to promote health and wellness, optimize therapeutic outcomes, and prevent adverse medication events</td>
</tr>
<tr>
<td>Enhances the relationship between pharmacists and patients by positioning pharmacists as healthcare providers</td>
<td>Promotes technician training and certification requirements, such as the need for uniform standards for advanced technician roles</td>
<td>Promotes the use of credentials to provide services at the top of the scope of practice</td>
<td>Identifies emerging technologies to improve pharmacypactice</td>
<td>Emphasizes that given their extensive education and training, pharmacists are integral to achieving the best outcomes</td>
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</table>
Education and Training

- Success of the PAI depends on the ability for pharmacists and pharmacy technician to meet the demands
- Cannot advance other PAI goals without foundation of advanced credentialing, education, and training

Overview. Practice Advancement Initiative. ASHP. 2017
Leveraging Pharmacy Technicians

- 58% of ambulatory care systems utilize pharmacy technicians or other supportive personnel to support pharmacist patient care services

- 68% of hospitals have all distributive functions that do not require a pharmacist’s clinical judgement assigned to pharmacy technicians

- 42% of medication preparation and distribution tasks are fully assigned to pharmacy technicians
Credentialing and Training

- 54% of pharmacists who provide patient care services in ambulatory settings are included in organization-based credentialing and privileging processes.

- 58% of hospitals have pharmacy technicians certified by the Pharmacy Technician Certification Board (PTCB).

- 60% of hospitals offer residency training compared to 30% in 2011.

- 68% of hospitals train pharmacy students on transitions of care in the medication-use-process.
Education, Training, and Credentialing Opportunities
# Key Definitions

<table>
<thead>
<tr>
<th>Registration</th>
<th>License</th>
<th>Certificate</th>
<th>Credential</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Enrollment on a list</td>
<td>• Permission to engage in an occupation</td>
<td>• Recognition of meeting specific qualifications</td>
<td>• Documented evidence of qualifications</td>
</tr>
<tr>
<td>• Tracking purposes</td>
<td>• Government-granted</td>
<td>• Non-government agency</td>
<td></td>
</tr>
</tbody>
</table>
Examples of Credentials

- Academic degrees
- State licensure
- Residency certificate
- Training certificate
- Statements of CE credit
- Board certifications

- A registration is NOT a credential
  - Does not provide evidence of qualifications
  - Only contains information about identity and work area
Credentialing

- One of two processes:
  1. Granting a credential
  2. Verification or assessment of an individual’s qualifications

- Credentialing as a verification of qualifications
  - Common in the medical profession
  - Ensures that the individual can perform to a certain level

- Signals an advanced level of practice
Credentialing ≠ Privileging

**Credentialing**
- Serves to document achievement of qualifications by an individual
- Demonstrate that the individual is able to provide patient care services in a particular setting

**Privileging**
- Provides assurance that the individual has the specific competencies and experience needed to practice at a specific institution
- “Privilege” is permission granted by an institution to an individual to practice

Traditional Entry-Level Credentials

- Pharmacists
  - Academic degree
  - State Licensure

- Pharmacy Technicians
  - None
Pharmacist Credentialing Opportunities

- Advanced Certification
  - Board of Pharmaceutical Specialties
  - Commission for Certification in Geriatric Pharmacy (Certified Geriatric Pharmacist)

- Multidisciplinary Certifications

- Professional Certificate Programs
Board of Pharmacy Specialties (BPS)

- Approximately 21,000 BPS certified pharmacists worldwide
- Pharmacotherapy Specialist (BCPS)
- Ambulatory Care (BCACP)
- Critical Care (BCCCP)
- Geriatric Pharmacy (BCGP)
- Nuclear Pharmacy (BCNP)
- Nutrition Support (BCNSP)
- Oncology (BCOP)
- Pediatric Pharmacy (BCPPS)
- Psychiatry (BCPP)
- Added Qualification (AQ)
  - Cardiology
  - Infectious Diseases
Pharmacist – Multidisciplinary Certifications

- Often offered by non-pharmacy professional organization
- Benefit of sharing credential with non-pharmacy colleagues
- Available in a variety of practice areas:
  - Anticoagulation
  - ACLS/PALS
  - Diabetes Management/Education
  - Health Information Technology
  - Nutrition Support
  - Pain Management/Education
  - Poison Information/Toxicology
  - Others

Pharmacist – Professional Certificate Programs

- Offered by a variety of professional organizations

- Areas for certification include:
  - Teaching Certificate
  - Pharmacy-Based Immunization Delivery
  - Pharmacy Informatics
  - Sterile Products
  - Medication Safety
  - Medication Therapy Management
  - Others
Pharmacy Technician – Training and Education

- On-the-job training
  - Offered by the employer
  - Typically 3-12 months

- Formal training and education program
  - Offered by a variety of organizations
  - Typically 6 months-2 years
  - Classroom and laboratory work
  - Broad range of subjects

- Online courses
  - Not recommended as a competitive option
  - Missing key hands-on learning component
Training Program Accreditation

- Offered by ASHP in collaboration with the Accreditation Council for Pharmacy Education (ACPE)

- Accrediting programs since 1982

- Programs must meet minimum standards
  - Minimum of 600 hours, over 15 weeks or longer
  - Requires didactic, laboratory, and live hands-on components
  - Quality, relevant content

- Provides assurance to prospective candidates and other stakeholders of program quality
Pharmacy Technician – Training and Education

- 265 ASHP accredited/candidate pharmacy technician training programs
Technician Credentialing

- 2009 – Council on Credentialing in Pharmacy
  - Published the “Pharmacy Technician Credentialing Framework”
  - Goal for all stakeholders to adopt framework by 2015

- Framework directives
  1. National task-analysis on which to base all technician education, training, examination, and certification
  2. Model curriculum that includes both didactic and experiential learning components
  3. National accreditation system based on established standards
  4. State requirements for education, training, examination
  5. “Pharmacy technician in training” designation at the state level
  6. State requirement for CPE
  7. System for reciprocity for pharmacy technicians

Technician Credentialing Opportunities

- National Certification
- Specialized Certification Programs
Pharmacy Technician – National Certification

- Exam for the Certification of Pharmacy Technicians (ExCPT)
  - Offered by the National Healthcareer Association (NHA)
  - Grants CPhT designation
  - 19,297 active ExCPT certified technicians as of December 2016

- Pharmacy Technician Certification Exam (PTCE)
  - Offered by the Pharmacy Technician Certification Board (PTCB)
  - Grants CPhT designation
  - Since 1995, 618,408 total certifications granted
  - 283,267 active PTCB certified pharmacy technicians as of December 2016
Active PTCB Certified Technicians
Pharmacy Technician – Specialized Credentialing

- Offered by variety of professional organizations

- Variety of options based on interest/practice area
  - Informatics
  - Medication Safety
  - Sterile Products
  - Nuclear Pharmacy
  - Pharmacogenomics
  - Nuclear Pharmacy Technician (NPT)
  - Others
Continuing Professional Education

- Offered by a number of national, state, and local organizations
  - Professional pharmacy organizations
  - Schools of Pharmacy

- Varying in quality, content, and target audience

- Accrediting body = ACPE
Regulatory Requirements for Education and Training
State Requirements for Pharmacists

- Basic requirements consistent state-to-state
- NAPLEX plus MPJE or other state-specific law exam
  - Graduation from an accredited college of pharmacy required to apply for NAPLEX

<table>
<thead>
<tr>
<th></th>
<th>Training/Education</th>
<th>NAPLEX</th>
<th>MPJE</th>
<th>Other Examination</th>
<th>PPE Hour Requirement</th>
<th>CPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>1,500</td>
<td>15 hr/1 yr</td>
</tr>
<tr>
<td>NJ</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>1,440</td>
<td>30 hr/2 yr</td>
</tr>
<tr>
<td>NY</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y*</td>
<td>1,040</td>
<td>45 hr/3 yr</td>
</tr>
</tbody>
</table>

*Practical examination
State Requirements for Pharmacy Technicians

- Little consistency from state-to-state
- Requirement for formal education and/or training is rare
- 45 states require registration for pharmacy technicians
  - 23 states plus DC include examination in regulations
- Few states require certification

<table>
<thead>
<tr>
<th>State</th>
<th>Training/Education</th>
<th>Examination</th>
<th>CPE</th>
<th>Registration</th>
<th>Licensure</th>
<th>Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>Y*</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>NJ</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y*</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>NY</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

*On-the-job training by pharmacist in charge appropriate to technician’s role

State Requirements for Pharmacy Technicians

- Lack of robust, uniform state requirements for education and training
- Places burden of determining requirements on individual institutions and organizations
  - Results in varying requirements from employer to employer
  - Confusion for prospective candidates looking to advance
- No regulatory support for advanced education and training programs
Case Study: Development and Implementation of a Hospital-Based Pharmacy Technician Training Program
Identifying the Need

- 1,541-bed academic medical center
  - Rapid expansion of services → increased opportunities for advancement of current staff

- Recruitment challenges
  - High level of professionalism
  - PTCB or ExCPT certification required

- Employee Engagement
  - Increase opportunities for growth and career advancement within the organization

- No ASHP-accredited or hospital-based pharmacy technician training programs in the Northeast
Program Mission and Vision

- Mission:
  - Train qualified applicants to become pharmacy technicians, proficient in all areas of health system pharmacy services as an integral part of the healthcare team

- Vision:
  - Elevate the pharmacy technician profession through advanced training and education
  - Build a pharmacy technician workforce capable of meeting the demands of a changing healthcare landscape
Regulatory Landscape

- No formal education or training requirements for pharmacy technicians in the state of CT, beyond that of the institution or pharmacy where the individual has been hired

- Registration with the Department of Consumer Protection is required to practice as a pharmacy technician
  - Must present evidence of employment in a pharmacy

- CT DCP recognizes PTCB and ExCPT for certification (not required)
Curriculum Development

PTCE Blueprint

ASHP Accreditation Standards

Institutional Need
# PTCE Blueprint

<table>
<thead>
<tr>
<th>Knowledge Domain</th>
<th>% of PTCE Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Pharmacology for Technicians</td>
<td>13.75%</td>
</tr>
<tr>
<td>2) Pharmacy Law and Regulations</td>
<td>12.50%</td>
</tr>
<tr>
<td>3) Sterile and Non-Sterile Compounding</td>
<td>8.75%</td>
</tr>
<tr>
<td>4) Medication Safety</td>
<td>12.50%</td>
</tr>
<tr>
<td>5) Pharmacy Quality Assurance</td>
<td>7.50%</td>
</tr>
<tr>
<td>6) Medication Order Entry and Fill Process</td>
<td>17.50%</td>
</tr>
<tr>
<td>7) Pharmacy Inventory Management</td>
<td>8.75%</td>
</tr>
<tr>
<td>8) Pharmacy Billing and Reimbursement</td>
<td>8.75%</td>
</tr>
<tr>
<td>9) Pharmacy Information System Usage and Application</td>
<td>10.00%</td>
</tr>
<tr>
<td>Standard</td>
<td>General Requirements</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1) Administration</td>
<td>Strategic plan, Advisory committee, Program records</td>
</tr>
<tr>
<td>2) Program Faculty</td>
<td>Qualified program instructors and preceptors</td>
</tr>
<tr>
<td>3) Education and Training</td>
<td>Currency and appropriateness of content</td>
</tr>
<tr>
<td>4) Students</td>
<td>Recruitment, Acceptance, Enrollment</td>
</tr>
<tr>
<td>5) Evaluations and Assessments</td>
<td>Appropriateness of evaluations, Student feedback, Faculty and program evaluations</td>
</tr>
<tr>
<td>6) Graduation and Certificate</td>
<td>Graduation requirements and certificate</td>
</tr>
</tbody>
</table>
Additional Education and Training Needs

- As a department, identified need for additional proficiency in:
  - Pharmacy technology and automation systems
  - Medication safety and high reliability principles
  - Professionalism and ethics
  - Understanding of advanced areas of pharmacy practice

- Effort to blend national standards with institutional needs
Program Structure

Didactic
- 160 hours
- Classroom-based lecture style

Simulation
- 100 hours
- Hands-on learning in a simulated environment

Experiential
- 400 hours
- Hands-on learning in a live practice environment

10 weeks 10 weeks
Didactic Learning

- Introduction to Pharmacy Practice
- Medication Dosage Forms and Routes of Administration
- Pharmacy Calculations
- Basic Biopharmaceutics
- Structure and Function of the Human Body
- Drug Classifications
- Professionalism and Ethics
- Nonsterile Compounding
- Sterile Compounding
- Outpatient Pharmacy
- CT and Federal Pharmacy Law
- Specialized Areas of Practice
- Pharmacy Purchasing and Billing
- Medication Safety
- Certification Exam Review
Simulation Lab

- Central Pharmacy Operations
- Community Pharmacy
- Nonsterile Compounding
- Sterile Compounding – Non-Hazardous
- Sterile Compounding – Hazardous
- Medication History
Experiential Rotations

- Core rotations (required)
  - Central Pharmacy Operations
  - Non-Sterile Compounding
  - Sterile Compounding
  - Hazardous Sterile Compounding
  - Outpatient Pharmacy

- Elective rotations
  - Operating Room
  - Purchasing and Inventory
  - Medication History
  - Medication Assistance Program
  - Specialty Pharmacy
Overcoming Regulatory Challenges

- State of CT requires that...

  - “no person shall act as a pharmacy technician unless registered with, or certified with, the department”

  - “the qualifications for registration as a pharmacy technician…shall be in accordance with…employment in any such pharmacy or institution”

  - “the department shall…certify as a pharmacy technician any person who meets the requirements for registration… and who holds a certification from the PTCB or any other equivalent pharmacy technician certification”
Overcoming Regulatory Challenges

- Obtained permission from Department of Consumer Protection that students enrolled in the training program are not required to register with the state, provided:

1. Students paired 1:1 with a registered and trained technician, who oversees all functions performed by the student
2. All dispensing activities performed are subject to checks by supervising pharmacist
3. Pharmacist to pharmacy technician ratio is maintained
4. Students are not actively participating in compounding of sterile and non-sterile products
Program Graduate Credentials

− Program graduates:
  − Are awarded a **Certificate of Completion**
  − Must take and pass the Pharmacy Technician Certification Exam (PTCE), earning the **CPhT** designation

− Signaling advanced level of qualifications
Program Outcomes

- **Fall 2016**
  - Graduated three students
  - All three students successfully passed the Pharmacy Technician Certification Exam (PTCE)

- **Spring 2017**
  - Graduated eight students
  - Four students successfully passed PTCE on the first attempt
Program Outcomes – Current Staff

- Opportunities for growth include:
  - Classroom instructor (didactics and/or simulation lab)
  - Experiential Rotation Preceptor
  - Experiential Rotation Site Coordinator
  - Project work

- Full-time program coordinator dedicated to teaching and overseeing the program
  - Current coordinator has > 10 years of pharmacy technician experience
Program Accreditation

- Assurance of program quality for prospective candidates and other stakeholders

- Currently awaiting ASHP/ACPE accreditation

- Initial accreditation visit scheduled for October 2017
Summary

- The ASHP PAI emphasizes pharmacist and pharmacy technician education and training as crucial to advancing the practice of pharmacy.
- State education and training requirements for pharmacists are generally uniform, with standardized expectations.
- State education and training requirements for pharmacy technicians are largely inconsistent, and insufficient to support advanced practice.
- Education, training, and credentialing opportunities are available to support advanced knowledge.
- Advanced training of pharmacy technicians can be achieved through a formal pharmacy technician training program.
Credentialing and Advancing Staff Knowledge and Training

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