Pharmacy Technicians in Long Term Care: An Update

Please Logon to: ascp.com/qa and Find the Session Title to Ask your Questions

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Disclosure

Dr. Sarah M. Lawrence has nothing to disclose.
Learning Objectives for Both Pharmacists and Pharmacy Technicians

1. Describe current issues relating to pharmacy technicians in Long Term Care pharmacy.
2. Explain recent and upcoming changes in the Pharmacy Technician Certification Exam and list other pathways to pharmacy technician certification.
3. Examine currently available advanced certifications for technicians and new advanced certifications.
4. Discuss pharmacy technician workforce conditions including the pharmacy technician shortage and potential advanced roles for pharmacy technicians in Long Term Care and other sectors of pharmacy.

Describe current issues relating to pharmacy technicians in Long Term Care pharmacy.
Pharmacy Technician Regulation

Only five states do not regulate pharmacy technicians:
- Colorado*
- Hawaii
- New York*
- Pennsylvania
- Wisconsin

Upcoming Pharmacy Technician Regulation

- New York – mandatory certification for hospital and health system technicians
- Colorado – mandatory registration and national certification  
  - March 2020
Pharmacy Technician Representation

Only 11 states have pharmacy technician representation on the Board of Pharmacy:

- Washington
- Montana
- North Dakota
- Wyoming
- Utah *
- Arizona
- Texas
- Iowa *
- Michigan
- Rhode Island *
- Massachusetts

Technician Administered Immunizations

- In March 2017, Idaho became the first state to enable pharmacy technicians to administer vaccines under the supervision of an immunizing pharmacist.
  - Technician must hold a national certification from the Pharmacy Technician Certification Board or National Healthcareer Association.
  - Technician must have successfully completed a course on appropriate vaccine administration techniques by an Accreditation Council for Pharmacy Education (ACPE) accredited provider.
  - Must hold a current certification in basic life support.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6306786/
Technicians Administering Immunizations

• In October 2018, Rhode Island granted permission for pharmacy technicians to immunize under the direct supervision of an immunizing pharmacist.
  • Technician must complete a recognized certificate training course on appropriate immunization administration technique and
  • Must hold a current basic cardiopulmonary resuscitation (CPR) training certificate.
• Utah is considering allowing technicians to immunize

Technicians Dispensing Naloxone

• In Idaho, any health professional licensed or registered by the state, which includes technicians, acting in good faith and exercising reasonable care, may prescribe and dispense an opioid antagonist
• House Bill 12 – signed into law by Gov. Brad Little
  • Effective July 1, 2019
Advanced Pharmacy Technician

- Recently passed state House and Senate in New Hampshire
  - May perform all functions allowed by federal or state law and approved by the board, except for the interpretation and evaluation of a prescription order, verification of compounded drugs, and counseling or advising individuals related to clinical use of a medication.
  - Allowed to do product verification, process refills, verify repackaging of drugs, and other pharmacist tasks not required to be completed by a licensed pharmacist.

Self-Assessment Question #1

Which state allows pharmacy technicians to dispense naloxone?
  A. Rhode Island
  B. Idaho
  C. Iowa
  D. New Hampshire
Self-Assessment Question #1

Which state allows pharmacy technicians to dispense naloxone?
A. Rhode Island
B. Idaho
C. Iowa
D. New Hampshire

Explain recent and upcoming changes in the Pharmacy Technician Certification Exam and list other pathways to pharmacy technician certification.
Background

1995   Pharmacy Technician Certification Board established
2013   Certification exam updated (PTCE 2.0); PTCB 2020 requirement of accredited technician education announced
2017   PTCB 2020 suspended; PTCB Stakeholders Conference held; PTCB launches new Compounded Sterile Products Technician certification
2018   New Pharmacy Technician Certification Exam blueprint and requirements announced and public comment invited
2020   New requirements will be effective (January 1)

Summary of Key Changes

• Reduced number of domains
  • PTCB 2.0 – 9 domains/58 knowledge areas
  • PTCB 3.0 – 4 domains/26 knowledge areas
• Candidates must qualify for the exam by:
  • Completion of a PTCB recognized technician education program, or
  • Supervisor attestation of job related skills
    • Minimum 500 hours of work experience
• No requirement for ASHP/ACPE accredited training
Comparison of Current and New Exam

<table>
<thead>
<tr>
<th>PTCE 2013</th>
<th>PTCE 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacology for Technicians (13.75%)</td>
<td>Medications (40%)</td>
</tr>
<tr>
<td>Pharmacy Law and Regulations (12.5%)</td>
<td>Federal Requirements (12.5%)</td>
</tr>
<tr>
<td>Sterile and Non-Sterile Compounding (8.75%)</td>
<td></td>
</tr>
<tr>
<td>Medication Safety (12.5%)</td>
<td>Patient Safety and Quality Assurance (26.25%)</td>
</tr>
<tr>
<td>Pharmacy Quality Assurance (7.5%)</td>
<td></td>
</tr>
<tr>
<td>Medication Order Entry and Fill Process (17.5%)</td>
<td>Order Entry and Processing (21.25%)</td>
</tr>
<tr>
<td>Pharmacy Inventory Management (8.75%)</td>
<td></td>
</tr>
<tr>
<td>Pharmacy Billing and Reimbursement (8.75%)</td>
<td></td>
</tr>
<tr>
<td>Pharmacy Information System Usage and Application (10%)</td>
<td></td>
</tr>
</tbody>
</table>

PTCE 2020 Domains

**Medications (40%)**

1.1 - Generic names, brand names, and classifications of medications
1.2 - Therapeutic equivalence
1.3 - Common and life-threatening drug interactions and contraindications (drug-drug/disease/dietary/laboratory/nutrient)
1.4* - Strengths/dose, dosage forms, routes of admin, special handling and administration instructions, and duration of drug therapy
1.5 - Common and severe medication side effects, adverse effects, and allergies
1.6 - Indications of medications and dietary supplements
1.7* - Drug stability (e.g., oral suspensions, insulin, reconstitutables, injectables, vaccinations)
1.8 - Narrow therapeutic index (NTI) medications
1.9 - Physical and chemical incompatibilities related to non-sterile compounding and reconstitution
1.10 - Proper storage of medications (e.g., temperature ranges, light sensitivity, restricted access)

* Some or all of this section requires calculation based knowledge

PTCE 2020 Domains

Federal Requirements (12.5%)
2.1 - Federal requirements for handling and disposal of non-hazardous, hazardous, and pharmaceutical substances and waste
2.2* - Federal requirements for controlled substance prescriptions and DEA controlled substance schedules
2.3 - Federal requirements for controlled substances (i.e., receiving, storing, ordering, labeling, dispensing, reverse distribution, take-back programs, loss or theft of, and destroying)
2.4* - Federal requirements for restricted drug programs and related medication processing (e.g., pseudoephedrine, REMS)
2.5 - FDA recall requirements (e.g., medications, devices, supplies, supplements, classifications)

* Some or all of this section requires calculation based knowledge

Patient Safety and Quality Assurance (26.25%)
3.1 - High-alert/risk medications and look-alike/sound-alike (LASA) medications
3.2 - Error prevention strategies (e.g., prescription or medication order to correct patient, tall man lettering, separating inventory, leading and trailing zeros, bar code usage, limit use of error-prone abbreviations)
3.3* - Issues that require pharmacist intervention (e.g., drug utilization review (DUR), adverse drug event, OTC recommendation, therapeutic substitution, misuse, adherence, post-immunization follow up, allergies, drug interactions)
3.4 - Event reporting procedures (e.g., medication errors, adverse effects, and product integrity, MedWatch, near miss, root-cause analysis [RCA])
3.5* - Types of prescription errors (e.g., abnormal doses, early refill, incorrect quantity, incorrect patient, incorrect drug)
3.6 - Hygiene and cleaning standards (e.g., handwashing, PPE, cleaning counting trays, countertop, and equipment)

* Some or all of this section requires calculation based knowledge
PTCE 2020 Domains

Order Entry and Processing (21.25%)

4.1* - Procedures to compound non-sterile products (e.g., ointments, mixtures, liquids, emulsions, suppositories, enemas)
4.2* - Formulas, calculations, ratios, proportions, alligations, conversions, sig codes (including roman numerals), abbreviations, medical terminology, and symbols for day supply, quantity, dose, concentration, dilutions
4.3* - Equipment/supplies required for drug administration (e.g., package size, unit dose, diabetic supplies, spacers, oral and injectable syringes)
4.4* - Lot numbers, expiration dates, and National Drug Code (NDC) numbers
4.5 - Procedures for identifying and returning dispensable, non-dispensable, and expired medications and supplies (e.g., credit return, return to stock, reverse distribution)

* Some or all of this section requires calculation based knowledge

Educational Concepts Removed

Items on current PTCE that have been removed from new blueprint:

• 2.5 Formula to verify the validity of prescribers DEA number
• 2.8 Professional standards related to data integrity, security, and confidentiality (HIPAA, backing up and archiving)
• 2.9 Requirements for consultation (OBRA'90)
• 2.12 Record keeping for repackage and recalled products and supplies
• 2.13 Professional standards regarding the roles and responsibilities of pharmacist, pharmacy technicians, and other pharmacy employees.
• 2.14 Reconciliation between state and federal laws and regulations
• 2.15 Facility, equipment, and supply requirements
• 3.3 Documentation (e.g., batch preparation, compounding record)
Educational Concepts Removed

Items on current PTCE that have been removed from new blueprint:

• 3.6 Sterile compounding processes
• 5.5 Productivity, efficiency, and customer satisfaction measures
• 6.1 Order entry process
• 6.5 Labeling requirements (e.g. auxiliary and warning labels, expiration date, patient specific information)
• 6.7 Dispensing process (e.g. validation, documentation and distribution)
• 7.2 Formulary or approved/preferred product list
• 7.3 Ordering and receiving processes (e.g. maintain par levels, rotate stock)
Educational Concepts Added

Items on new PTCE blueprint that are not part of current PTCE:

• 1.8 Narrow therapeutic index (NTI) medications
• 3.5 Types of prescription errors (e.g. abnormal doses, early refill, incorrect quantity, incorrect patient, incorrect drug)

Self-Assessment Question #2

Which of the following concepts appears on the PTCE 2020?

A. HIPAA privacy considerations
B. Root cause analysis
C. Sterile Compounding
D. Third party reimbursement
Self-Assessment Question #2

Which of the following concepts appears on the PTCE 2020?

A. HIPAA privacy considerations
B. **Root cause analysis**
C. Sterile Compounding
D. Third party reimbursement

The ExCPT Exam

- Offered by the National Healthcareer Association
- Eligibility
  - High school diploma (or within 30 days)
  - Successful completion of a training program, military training, or relevant work experience (1200 hours within one of the last three years)
- Exam Content
  - Overview and Laws – 25%
  - Drugs and Drug Therapy – 15%
  - Dispensing Process – 45%
  - Medication Safety and Quality Assurance – 15%
Comparison of Technician Certification Exams

<table>
<thead>
<tr>
<th></th>
<th>PTCE</th>
<th>ExCPT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>1 hour and 50 minutes</td>
<td>2 hours and 10 minutes</td>
</tr>
<tr>
<td><strong>Questions</strong></td>
<td>90 (10 unscored)</td>
<td>120 (20 unscored)</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>$129</td>
<td>$115</td>
</tr>
<tr>
<td><strong>Testing Center</strong></td>
<td>Pearson VUE</td>
<td>PSI</td>
</tr>
<tr>
<td><strong>Official Study Materials?</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Practice Tests?</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Self-Assessment Question #3

Which of the following statements about the ExCPT exam is TRUE?

A. The exam certifies candidates only for community pharmacy
B. The exam is three hours long
C. The exam is accepted in the majority of states
D. The exam is taken at Pearson VUE testing centers
Self-Assessment Question #3

Which of the following statements about the ExCPT exam is TRUE?

A. The exam certifies candidates only for community pharmacy
B. The exam is three hours long
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D. The exam is taken at Pearson VUE testing centers

Examine currently available advanced certifications for technicians and new advanced certifications.
Compounded Sterile Products Technician

- New advanced certification program
  - Sterile Compounding (CSPT)
- Launched by PTCB in 2017
- Eligibility Requirements
  - Must be PTCB Certified Pharmacy Technician (CPhT) in good standing
  - Must qualify one of two ways:
    - Completion of a PTCB-recognized sterile compounding education/training program and one year of work experience in sterile compounding
    - Three years of work experience in sterile compounding

Compounded Sterile Products Technician

- Becoming CSPT Certified:
  - Pass the CSPT Exam
    - 75 questions
    - 2 hours
    - Submit the Competency Attestation Form (signed by supervisor)
- Maintaining Certification
  - Must recertify annually
  - 5 hours of sterile compounding CE required
  - Submit the Competency Attestation Form (signed by supervisor)
Compounded Sterile Products Technician

• Competency Attestation Form (signed by supervisor)
  • Required testing and training
  • Aseptic technique
  • Equipment cleaning
  • Use of Personal Protective Equipment (PPE)
  • Gloved fingertip and media fill tests

Compounded Sterile Products Technician

APPENDIX D: CSPT™ EXAM CONTENT OUTLINE

<table>
<thead>
<tr>
<th>Knowledge Domains and Areas</th>
<th>% of CSPT Exam Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Medications and Components</td>
<td>17%</td>
</tr>
<tr>
<td>1.1 Types of high-alert/narrow therapeutic index (HIT) medications used in sterile compounding (e.g., insulin, heparin, concentrated electrolytes, chemotherapy)</td>
<td></td>
</tr>
<tr>
<td>1.2 Dosage (e.g., strength, dosage forms) and administration (e.g., routes, instructions) of compounded sterile preparations (CSPs)</td>
<td></td>
</tr>
<tr>
<td>1.3 Drug-specific factors affecting stability of compounded sterile preparations (CSPs) (e.g., containers, light, concentration, closure, temperature, agitation)</td>
<td></td>
</tr>
<tr>
<td>1.4 Type, purpose, and use of technical and clinical references for sterile compounding (e.g., packaging inserts, Safety Data Sheets [SDS])</td>
<td></td>
</tr>
<tr>
<td>1.5 Factors (e.g., temperature, microbial limits of sterility, storage time, complexity of preparation, location of preparation) that influence the assignment of beyond-use dates (BUD) for compounded sterile preparations (CSPs)</td>
<td></td>
</tr>
<tr>
<td>1.6 Physical and chemical compatibility criteria for components (e.g., medications, ingredients, base solutions, filters, tubing, closures)</td>
<td></td>
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</tbody>
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Compounded Sterile Products Technician

2019 ASCP Annual Meeting & Exhibition
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https://www.ptcb.org/get-certified/cspt

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Compounded Sterile Products Technician

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Self-Assessment Question #4

What is the minimum amount of work experience required to qualify for the Compounded Sterile Products Technician exam?

A. 6 months  
B. 1 year  
C. 2 years  
D. 3 years
Self-Assessment Question #4

What is the minimum amount of work experience required to qualify for the Compounded Sterile Products Technician exam?

A. 6 months  
B. 1 year  
C. 2 years  
D. 3 years

Upcoming Advanced Certifications

• March 2019 – PTCB announced new “Advanced Certified Pharmacy Technician” (CPhT-Adv) credential and five assessment-based certificate programs
Advanced Technician Certifications

• New certificate programs
  • Technician Product Verification (Tech-check-Tech)
  • Medication History
  • Controlled Substance Diversion Prevention
  • Billing and Reimbursement
  • Hazardous Drug Management

• Eligibility
  • Must be PTCB-certified CPhT
  • Must qualify via completion of educational program
  • May qualify via work experience (selected certificate programs)

CPhT-Adv Credential

• Eligibility criteria
  • Must be PTCB-certified CPhT
  • Complete at least four of the five certificate programs
  • Three years of work experience
• Launching mid-2020
Discuss pharmacy technician workforce conditions including the pharmacy technician shortage and potential advanced roles for pharmacy technicians in Long Term Care and other sectors of pharmacy.

Pharmacy Technician Workforce Conditions

- Median Salary (2018)
  - $32,700/year
  - $15.72/hour
- Number of jobs (2016)
  - 402,500
- Projected growth
  - 12% (faster than average)

https://www.bls.gov/ooh/healthcare/pharmacy-technicians.htm
Popular Employer Salaries for Certified Pharmacy Technician (CPHT)

<table>
<thead>
<tr>
<th>Company</th>
<th>Hourly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Omnicare, Inc</td>
<td>$14</td>
</tr>
<tr>
<td>CVS / Pharmacy</td>
<td>$12</td>
</tr>
<tr>
<td>Walgreen's Pharmacy</td>
<td>$13</td>
</tr>
<tr>
<td>Remedi Seniorcare</td>
<td>$18</td>
</tr>
<tr>
<td>Thrifty White Drug Stores</td>
<td>$18</td>
</tr>
<tr>
<td>Pharmerica Corporation</td>
<td>$15</td>
</tr>
</tbody>
</table>

Pharmacy Technician Employment

<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Pharmacy: Chain</td>
<td>38.70%</td>
</tr>
<tr>
<td>Community Pharmacy: Independent</td>
<td>10.44%</td>
</tr>
<tr>
<td>Educational Institution</td>
<td>1.03%</td>
</tr>
<tr>
<td>Federal/Military Pharmacy</td>
<td>1.86%</td>
</tr>
<tr>
<td>Home Health Care</td>
<td>1.10%</td>
</tr>
<tr>
<td>Hospital Pharmacy</td>
<td>22.40%</td>
</tr>
<tr>
<td>Long-Term Care</td>
<td>3.63%</td>
</tr>
<tr>
<td>Mail Order Service</td>
<td>3.97%</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>4.70%</td>
</tr>
<tr>
<td>Online Pharmacy</td>
<td>0.22%</td>
</tr>
<tr>
<td>Other</td>
<td>11.96%</td>
</tr>
</tbody>
</table>

Chart provided by Pharmacy Technician Certification Board
Pharmacy Technicians in Long Term Care

- Ongoing labor shortage
- Changing regulation and certification requirements
- Advanced roles and certifications
  - Sterile compounding
- Increasing salaries
- Other factors?

Advanced Roles in Long Term Care?
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