

Pharmacy Technician Training: Strides and Prospects

By Della Ata Khoury, CphT, BS, BA, MA
Pharmacy Technician Instructor at LARE Institute
PTEC, MSHP

Disclosure

- ▶ This knowledge based activity is accredited for 1.0 contact hour
- ▶ Target audience: Certified Pharmacy Technicians (CPhT)
- ▶ No relevant financial relationships to disclose

Learning Objectives

- ▶ Describe how the pharmacy technician position evolved
- ▶ Identify requirements for educational training programs as recommended by ASHP
- ▶ Recognize the requirements for the PTCE and the ExCPT national certifications
- ▶ Recognize the outcome of the PTCB C.R.E.S.T summit and its implications
- ▶ Identify developments in the pharmacy technician field
- ▶ Recognize the importance of education and training in saving lives

Pharmacy Technician Education & Training

- ▶ **1930s:** Medics enlisted in the military served as pharmacy technicians
- ▶ **1958:** Training programs introduced by the military
- ▶ **1970s:** Training programs proliferated
- ▶ **1975:** Training guidelines were created by ASHP for hospital support personnel

Who were the early pharmacy technicians?

- a) Military personnel
- b) Relatives of pharmacists
- c) Nurses
- d) Apothecaries

Pharmacy Technician Education & Training

- ▶ **1979:** Massachusetts College of Pharmacy established a pharmacy technician training program
- ▶ **1982:** Standards for pharmacy technician training programs were created by ASHP
- ▶ **1983:** ASHP accredits the 1st technician training program in Pennsylvania
- ▶ **2002:** ~247 training programs in 42 states

The counting and pouring now often alleged to be the pharmacist's chief occupation will in time be done by technicians and eventually by automation. The pharmacist of tomorrow will function by reason of what he knows, increasing the efficiency and safety of drug therapy and working as a specialist in his own right. It is in this direction that pharmaceutical education must evolve without delay.

—Linwood F. Tice, D.Sc.,
Dean, Philadelphia College of Pharmacy and
Science (1966)

Key Developments

- ▶ **1987**: ASHP council on educational affairs recommended a national voluntary certification program
- ▶ **1993**: ASHP approves a resolution supporting registration and certification
- ▶ **1995**: PTCB created
- ▶ **1996**: White paper on pharmacy technicians developed (updated in 2002, needed changes can no longer wait)

Key Developments

- ▶ **2001**: Increase in number of states requiring registration; 24 states required registration and 5 required licensure (registration) versus 14 states in 1996
- ▶ **2008**: ExCPT was granted accreditation by National commission for Certifying Agencies (NCCA)

Change in Terminology

- ▶ **1996–1997**: 11 terms used to refer to pharmacy technicians, only 24 states used the term “pharmacy technician”
 - Pharmacy supportive personnel
 - Pharmacy aide
 - Pharmacy clerk
 - Pharmacy assistant
 - Pharmacy helper
- ▶ **2001**: 38 states adopted the designation

Who is a Pharmacy Technician?

“Pharmacy technicians assist licensed pharmacists by performing duties that do not require the professional skills and judgment of a licensed pharmacist and assisting in those duties that require the expertise of a pharmacist.” – White Paper, 2002

ASHP Requirements for Pharmacy Technician Programs

- ▶ Minimum of 600 hours extending over 15 weeks or more
- ▶ Didactic training (~160 hours)
 - Pharmacology
 - Pharmacy Law & Ethics
 - Medication Calculation
 - Medical terminology
 - Pharmacy software management
- ▶ Simulated experience (~80 hours)
- ▶ Experiential training (~160 hours) in at least 2 different pharmacy settings

Which of the following is not part of the ASHP requirements for educational training programs?

- a) Didactic training in pharmacology
- b) Nine 4-week rotations of experiential training
- c) Simulated experience
- d) Knowledge of medical terminology

National Variations

- ▶ Requirements for entry into the workforce
- ▶ Education and training
- ▶ Registration and certification
- ▶ Titles and functions performed
- ▶ Knowledge and skills

White Paper on Pharmacy Technicians – 2002

“It is ironic that persons in certain other occupations whose services have far less impact on public safety than do those of pharmacy technicians (e.g., barbers and cosmetologists) have training programs that, on average, are longer and less diverse than are pharmacy technician programs”

Driving force of change

- ▶ Pharmacist shortage
- ▶ Emphasis on pharmaceutical care
- ▶ Safe medication use
- ▶ Reducing workload pressures
- ▶ Allowing pharmacists time for counseling
- ▶ Technicians increasing in number
- ▶ Responsibilities expanding
- ▶ Greater acceptance from pharmacists
- ▶ Greater recognition in state pharmacy practice acts

Variation in Training of Technical personnel

Hours	Pharmacy Technician	Dental Assistant	Medical Assistant	Veterinary Technician	Barbering & Styling	Cosmetology & Styling
Range	540-2145	720-1266	720-1290	1080-1968	1080-2160	1000-2100
Average	1110	1078	870	1590	1481	1380
Median	970	795	840	1650	1500	1245
Range Factor	4.0	1.75	1.79	1.8	2.0	2.1

Source: ACPE analysis of Accrediting Commission of Career Schools & Colleges (ACCSC) directory (2003)

Variation in Training of Technical personnel

	Pharmacy Technician	Dental Assistant	Medical Assistant	Veterinary Technician	Barbering & Cosmetology
Training length	Up to 1 year	1-2 years	1-2 years	2-4 years	Minimum of 9 months
Workforce entry requirements	High School diploma	Post secondary non-degree award	High School diploma	Associate degree	High School Diploma + State licensed program
Degree awarded	Certificate/ Diploma/ Associate	Certificate/ Diploma	Certificate/ Diploma/ Associate	Associate degree/ Bachelors	Associate degree

Source: Bureau of Labor Statistics (2012)

Importance of Certification

- ▶ Demonstrate knowledge and skills
- ▶ Gain Trust of pharmacists and public
- ▶ Verify competency
 - ▶ Skilled workforce
- ▶ Reduce Medication Errors
- ▶ Improve patient outcome

PTCE vs ExCPT

	PTCE	ExCPT
Organization	PTCB (1995)	NHA (2005)
Type of organization	Non-profit governed by: ASHP, APhA, NABP, Michigan Pharmacists Association, & Illinois Council of Health-System Pharmacists	Private organization (administers variety of allied health certifications); governed by the Institute for Certification of Pharmacy Technicians (ICPT)
Cost	\$129	\$105 /\$115
Length	2 hours, 90 Qs (10 pretest)	2 hours, 100 Qs (20 pretest)
Testing Requirements	<ul style="list-style-type: none"> •H.S. Diploma •No drug related felonies •No felonies of any kind in the last 5 years 	<ul style="list-style-type: none"> •18 years of age •H.S. Diploma/GED •No drug felonies •If have non-drug related felony more than 7 years old, may petition ICPT to take test

PTCE vs ExCPT

	PTCE	ExCPT
Passing Score	1000-1600 (1400 Passing)	200-500 (390 Passing)
Recertification Requirements	Every 2 years (no grace period) 20 hours CE required include 2 hours pharmacy law Cost: \$40 online or \$50 paper	Every 2 years (with 90 day grace period) 20 hours CE required include 1 hour pharmacy law Cost: \$40 online or \$50 paper
Revocation	For false statements, cheating, conviction of a crime or felony or moral turpitude (incl. but not limited to drug-related crimes), documented gross negligence, intentional misconduct or deficiency in knowledge base	For false statements, cheating, conviction of a drug-related felony, revocation of registration/licensure by a state, documented violation of ICPT Code of Ethics

Which of the following is not a requirement to qualify for PTCE and ExCPT testing?

- a) H.S. diploma
- b) No drug related felonies
- c) Training certification from an ASHP accredited program
- d) 18 years of age

ExCPT Exam Content

- ▶ Three general areas
 - Regulations and technicians duties (~25%)
 - Drugs and drug products (~23%)
 - The dispensing process (~52%)

Current PTCB Blueprint

- ▶ Three functional areas
 - Assisting the pharmacist in serving patients (~66%)
 - Maintaining medication and inventory control systems (~22%)
 - Participating in the administration and management of pharmacy practice (~12%)

New PTCB Blueprint (mid-2013)

- ▶ Nine knowledge domains
 - Pharmacology for Technicians (~13.75%)
 - Pharmacy Law and Regulations (~12.5%)
 - Sterile and Non-sterile Compounding (~8.75%)
 - Medication Safety (~12.5%)
 - Pharmacy Quality Assurance (~7.5%)
 - Medication Order Entry and Fill Process (~17.5%)
 - Pharmacy Inventory Management (~8.75%)
 - Pharmacy Billing and Reimbursement (~8.75%)
 - Pharmacy Information Systems Usage and Application (~10%)



Current statistics

- ▶ 45 states regulate pharmacy technicians and require state registration
- ▶ 26 states require certification
- ▶ In 5 states, eligibility to work is dependent on passing the PTCE
- ▶ PTCE is approved in 45 states and ExCPT is approved in 26 states
- ▶ About 7200 certified through ExCPT and 587,536 through the PTCE

Consumer Awareness, Resources, Education, Sate Policy, and Testing (C.R.E.S.T) Summit

- ▶ Palm Beach, FL - Feb. 17-18, 2011
- ▶ Address current issues
- ▶ Discuss profession
- ▶ Discuss future directions
- ▶ Decide on resource development

C.R.E.S.T Summit Survey (> 17,000)

- ▶ **84%** - PTCB should create an advanced CPhT designation
- ▶ **83%** - Agreed that pharmacy technicians have involvement in the implementation of the JCPP 2015 vision
- ▶ **81%** - Identified pharmacy technicians as completing tasks to free up pharmacists time to dedicate to patient care and safety initiatives

C.R.E.S.T Summit Recommendations

- ▶ Innovative roles for pharmacy technicians
- ▶ Improve regulatory and statutory requirements
- ▶ Single standards for education, training, certification, and regulatory oversight
- ▶ Additional certification and recertification requirements
- ▶ Advanced CPhT credential

PTCB Requirements under consideration (Future Vision)

I- Certification

- ▶ 1. Minimum period of practical experience prior to testing
- ▶ 2. Criminal background check
- ▶ 3. Completion of ASHP- accredited training program (2015-2020 deadline)

PTCB Requirements under consideration (Future Vision)

II- Recertification

- ▶ 1. Accept only pharmacy technician targeted continuing education (C.E.)
- ▶ 2. Require at least 15 of the 20 C.E.s to come from state BOP, NABP, employer-accredited programs, or Accreditation Council for Pharmacy Education (ACPE) accredited programs
- ▶ Limit employer based education to 5 hours
- ▶ Mandate at least 1 hour of C.E. in medication/patient safety

PTCB Requirements under consideration (Future Vision)

III- New Certification Programs

- ▶ 1. Develop certification programs in the areas of sterile compounding, technology, medication safety, regulatory compliance, medication therapy management, inventory management, and/or medication reconciliation
- ▶ 2. Advanced CPhT credential

Joint Commission of Pharmacy Practitioners (JCPP) 2015 vision

- ▶ “Pharmacists will be the health care professionals responsible for providing patient care that ensures optimal medication therapy outcomes.”

Standardizing Education & Training

- ▶ ASHP advocates that pharmacy technicians must be certified by the PTCB as a prerequisite to state licensure.
- ▶ The National Association of Boards of Pharmacy (NABP) and ASHP advocate that pharmacy techs become certified by the PTCB before being licensed or registered by state boards.
- ▶ NABP encourages Boards of Pharmacy to Require as an Element of Pharmacy Technician Certification Completion of an Education and Training Program by 2015.

Current Pharmacy Technician Roles

- ▶ Inventory maintenance
- ▶ Computer data input
- ▶ Purchasing/inventory control
- ▶ Billing/insurance
- ▶ Assisting in prescription dispensing
- ▶ Prepackaging/repackaging
- ▶ Compounding non-sterile products
- ▶ Holding leadership roles/supervisory roles
- ▶ Compounding sterile products/I.V. admixtures
- ▶ Compounding radiopharmaceuticals

Which of the following is a current pharmacy technician role?

- a) Insurance billing
- b) Inventory maintenance
- c) Sterile compounding
- d) All of the above

Innovative Pharmacy Technician Roles

- ▶ Data Analysis
- ▶ Medication Therapy Management
- ▶ Clinical involvement
- ▶ Medication reconciliation
- ▶ Informatics
- ▶ Compliance /Regulatory Affairs
- ▶ Quality Assurance / Medication safety
- ▶ Tech-check-tech
- ▶ Program Director

Data Analyst Pharmacy Technician

- ▶ Chart Reviews
- ▶ Benchmarking surveys
- ▶ Financial impact analysis
- ▶ Initiative assessment
- ▶ Quality improvement reporting and graphing
- ▶ Patient risk assessment
- ▶ Data collection and interpretation
- ▶ Formulary enforcement
- ▶ Management of vaccination database

Medication Therapy Management

- ▶ Patient outreach after discharge
 - Home visits / telephone follow-up
- ▶ Pharmacists extenders
 - Obtain medication histories
 - Assist in medication reconciliation
 - Identify potential drug therapy problems
- ▶ Reinforce medication education

Clinical Pharmacy Technician

- ▶ Collect and document drug histories
- ▶ Identify patients requiring pharmaceutical input
- ▶ Identify and report adverse drug reactions
- ▶ Facilitate discharge planning
 - Communicate with community pharmacies regarding any medication changes
- ▶ Near patient testing using capillary blood sampling
- ▶ Calculating warfarin doses
- ▶ Identify and report warning symptoms (bruising, etc.)

Medication Reconciliation Pharmacy Technician

- ▶ Interview patients upon admission
- ▶ Collect accurate medication history
- ▶ Identify discrepancies
- ▶ Communicate with pharmacies and physician's offices
- ▶ Data entry
- ▶ Educate patients on services available to them
- ▶ Schedule patient home visits upon discharge
- ▶ Discrepancies evaluated by pharmacist
- ▶ Prepare compliance reports

Informatics Pharmacy Technician

- ▶ Maintain / optimize technology
- ▶ Support pharmacy Information Systems
- ▶ Identify and resolve operational issues related to pharmacy information systems
- ▶ Train and educate end-users
- ▶ Coordinate and perform drug catalog maintenance in pharmacy computer systems
- ▶ Serve as point of contact for nursing on issues related to automated dispensing devices

Compliance Pharmacy Technician

- ▶ Perform Medication management audits
- ▶ Document and oversee compliance with policies and procedures
- ▶ Disseminate new information or policies and procedures to staff
- ▶ Perform and address process control audits of pharmacy operations and systems
- ▶ Train clinicians on medication management (storage, handling, & administration)
- ▶ High risk medication testing and tracking

Quality Assurance Pharmacy Technician

- ▶ Perform environmental monitoring (air quality testing, media fill tests, glove tip testing, etc.)
- ▶ Document, train, and test staff
- ▶ Author and enforce cleanroom policies and cleaning procedures
- ▶ Understand USP regulations
- ▶ Generate monthly reports
- ▶ Track and analyze end product
- ▶ Quarantine program
- ▶ Coordinate recalls

Tech-Check-Tech Pharmacy Technician

- ▶ Authorized by pharmacy boards in at least 9 states
- ▶ Check the work of other technicians
- ▶ Drug order entry
- ▶ Perform order verification on medication refills
- ▶ Education and training required
- ▶ Ongoing quality assurance tests

Program Director Pharmacy Technician

- ▶ Develop and implement training program
- ▶ Manage and implement program budget
- ▶ Interview, train, develop, manage and lead faculty
- ▶ Ensure compliance with state and federal regulations
- ▶ Establish and maintain advisory committees
- ▶ Evaluate viability of new course requests and modification of existing courses

Innovative pharmacy technician roles include all of the following except:

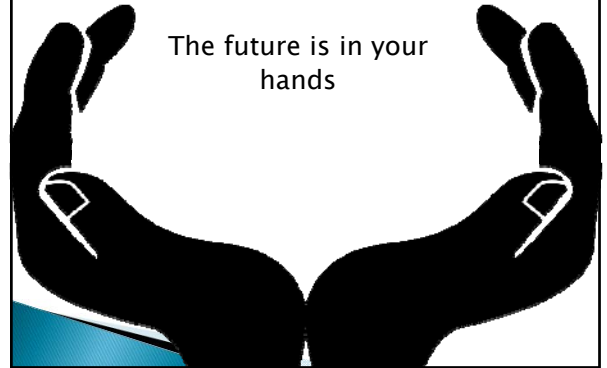
- a) Tech-check-tech
- b) Medication dispensing technician
- c) Medication safety management
- d) Medication reconciliation

Medication Safety

- ▶ Pharmacy technician education and training is important in saving lives
- ▶ Pharmacy technicians are the 2nd barrier to preventing medication errors in pharmacy
- ▶ Increasing job satisfaction and retention

Future Vision

The future is in your hands



Questions?

References

- ▶ History of ASHP activities for technicians: <http://www.ashp.org/menu/InformationFor/Technicians/History.aspx>
- ▶ White paper on pharmacy technician 2002: <https://www.acpe-accredit.org/pdf/whitePaper.pdf>
- ▶ ICPT Certification Exam Receives NCCA Accreditation: <http://www.pharmacytechnician.org/en/art/?255>
- ▶ PTCB C.R.E.S.T initiative: http://www.ptcb.org/AM/Template.cfm?Section=C_R_E_S_T_Initiative&Template=/CM/HTMLDisplay.cfm&ContentID=4734
- ▶ PTCB Considers Changes to Certification, Recertification: <http://www.ashp.org/menu/News/PharmacyNews/NewsArticle.aspx?id=3587>
- ▶ How to Become a Barber, Hairdresser, or Cosmetologist, Bureau of Labor Statistics: <http://www.bls.gov/ooh/Personal-Care-and-Service/Barbers-hairdressers-and-cosmetologists.htm#tab-4>

References

- ▶ Pharmacy technician Career Description, American Medical Association. <http://www.ama-assn.org/resources/doc/med-ed-products/pharm02-pharmacy-technician.pdf>
- ▶ ExCPT Candidate's Handbook: http://www.nhanow.com/Libraries/pdf/ExCPT_Candidate_Handbook_sflb.ashx
- ▶ PTCB Revocation of Certification, 2009: http://www.ptcb.org/AM/Template.cfm?Section=Apply_for_Recertification&Template=/CM/ContentDisplay.cfm&ContentID=3313
- ▶ PTCB C.R.E.S.T initiative: http://www.ptcb.org/AM/Template.cfm?Section=C_R_E_S_T_Initiative&Template=/CM/HTMLDisplay.cfm&ContentID=4734
- ▶ PTCB 2011 C.R.E.S.T Summit Proceedings: https://www.ptcb.org/AM/Template.cfm?Section=CREST_Summit&Template=/CM/ContentDisplay.cfm&ContentID=4231

References

- ▶ ASHP Statement on the roles of pharmacy technicians: <http://www.ashp.org/DocLibrary/BestPractices/ASHP-Statement-on-the-Roles-of-Pharmacy-Technicians.aspx>
- ▶ National Association of Boards of Pharmacy. Report of the Task Force on Standardized Pharmacy Technician Education and Training (September 2009). Available at: http://www.nabp.net/news/assets/08TF_Standard_Pharm_Tech_Educ_Training.pdf (accessed 2015 Sep 4).
- ▶ Pharmacy Technician Education Task Force: <http://www.nabp.net/news/assets/TF-PharmTechEduc.pdf>
- ▶ Data Analyst Technician: <http://www.medscape.com/viewarticle/407001>