Expanding the Role of Pharmacy Technicians

Jenni Buu, PharmD
PGY2 Ambulatory Care Resident
Boise VA Medical Center
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Objectives

- Review historical changes in the pharmacy technician profession in the United States

- Discuss expanding roles and importance of new pharmacy technician responsibilities

- Evaluate examples of clinical pharmacy technician positions including tech-check-tech, medication reconciliation, and leadership roles

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Pharmacy Technician

- "An individual who has been trained to assist in pharmacy activities that **do not require the judgment of a pharmacist** and who performs those activities under the supervision of a licensed pharmacist"

Myers. *Am J Health-Syst Pharm*. 2011;68:1128-36.

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Responsibilities

- Historically, role is to assist with dispensing of prescriptions

- Preparation of medications for dispensing, order entry, insurance claims, customer service

- In past, community pharmacy opposed use of technicians for patient safety concerns

Rouse. *Am J Health-Syst Pharm*. 2003;60:37-51.

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History and Training

- 1940s: Formal training programs introduced

- 1950s: American Society of Health-System Pharmacists (ASHP) advocates for use of pharmacy technicians and developing training programs

- 1970s: ↑ in training programs to meet need

- 1980s: ASHP issues training guidelines for hospital pharmacies to develop training programs
  - Recommended minimum entry requirements and competency evaluations

Cassano. *Pharmacy Purchasing and Products*. 2012;9(4):28.
Rouse. *Am J Health-Syst Pharm*. 2003;60:37-51.

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Current Practice

- 2014: Many ASHP-accredited pharmacy technician training programs
  - Associate degrees, diplomas, certificates
  - Programs vary in length, requirements, qualifications

- Bureau of Labor and Statistics
  - Employment for technicians expected to ↑ by 20% from 2012-2022
  - 355,000 technicians in 2012

- 72% of work force work in community settings

ACCP Position Statement: Pharmacy technician education, training, and certification. 2007.
BLS. Occupational Outlook Handbook, 2014-15 Edition.
Rouse et al. *Am J Health-Syst Pharm*. 2003;60:37-51.

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Active PTCB Certified Pharmacy Technicians
as of December 31, 2013

KEY

- States that regulate pharmacy technicians
- States that do not regulate pharmacy technicians

IDAHO
1419

Since 1995, the Pharmacy Technician Certification Board has certified the exam and transfer process. This map represents the 280,459 plus.

*Source: 2013 National Association of Boards of Pharmacy Survey of.

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http://www.ptcb.org/who-we-serve/pharmacy-technicians/by-state

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Accreditation of Training Programs

• ASHP: accreditation body for pharmacy technician programs
  • 2013: 258 programs in accreditation process

• 2014: ASHP and Accreditation Council for Pharmacy Education (ACPE) will collaborate to accredit pharmacy technician training programs

• Standardization of pharmacy technician varies by state
  • Education, certification, responsibilities
  • Without standardized roles, delivery of clinical pharmacy services will be difficult to achieve

ASHP Pharmacy Technician Accreditation Website.
Rouse et al. *Am J Health-Syst Pharm.* 2003;60:37-51.

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Pharmacy Technicians in Idaho

• Certified pharmacy technician registration
  • Age ≥ 18 years
  • High school graduate or GED
  • Be of good moral character and temperate habits
  • Certification
    • Certified pharmacy technician (CPhT)
      • Pharmacy Technician Certification Board (PTCB)
      • Institute for Certification of Pharmacy Technicians (ICPT)
      • Unless qualified for exemption

• Technician-in-training prior to certification

Rules of the Idaho State Board of Pharmacy. *IDAPA 27.01.01 041 and 042.*

Idaho Scope of Practice

- Pharmacy technician may NOT:
  - Receive verbal prescription drug orders
  - Consult with prescriber prior to filling order if clarification needed
  - Perform prospective drug utilization review or interpret clinical data in a patient's medical record
  - Perform professional consultation
  - Supervise packaging of drugs and check completed order (except for tech-check-tech)
  - Provide patient consultation for prescription and OTC products
  - Supervise activities of student pharmacists or technicians

Rules of the Idaho State Board of Pharmacy. *IDAPA 27.01.01 400.*

Changes in Pharmacy Practice

Pharmacist shortages

Expansion of Technician Roles

Increasing workload

Improving care

Containing costs

Expansion of Pharmacist Roles

- Clinical services

- Less focus on prescription order processing

- Pharmacists as providers (for third-party billing)
  - Part of interprofessional teams

- Expansion of pharmacist roles into more direct patient care activities → expansion of technician responsibilities

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Pharmacy Practice Model Initiative (PPMI)

- Empowering pharmacy team to take initiative for patient outcomes

Leveraging Pharmacy Technicians
Empowers pharmacy team to ensure that pharmacy technicians perform all traditional preparation and distribution activities
Urges technicians to handle non-traditional and advanced responsibilities and activities to allow pharmacists to take greater responsibility for direct patient care
Promotes technician training and certification requirements, such as the need for uniform standards for advanced technician roles

http://www.ashpmedia.org/ppmi/overview.html

Pharmacy Technician Role Expansion

PPMI: Tasks that may be assigned to pharmacy technicians who have appropriate education and training	
Initiating medication reconciliation	Preparing clinical monitoring information for pharmacist review
Reviewing patient charts for medication allergies	Inspecting and replenishing medication storage devices
Checking dispensing by other technicians (tech-check-tech)	Managing controlled substances systems
Compounding routine sterile preparations	Managing medication assistance programs
Dispensing medications with remote supervision	Conducting aspects of quality-improvement programs
Scheduling outpatient clinic visits	Managing pharmacy IT systems
Criteria-based screening of medical records for interventions	Supervision of other technicians

The consensus of the Pharmacy Practice Model Summit. *Am J Health-Syst Pharm.* 2011; 68:e110-4.

Expanding Roles

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Tech-Check-Tech (TCT) Programs

- Checking of a pharmacy technician's order-filling accuracy by other technicians
  - Filling of floor and ward stock and unit dose distribution systems
    - Patients with refill orders

- TCT programs allowed in Idaho
  - Institutional pharmacies located within acute care hospitals

- Safeguards: barcode scanning, unit-dose packaging, dispensed to health professional (not patient)

Adams et al. *Am J Health-Syst Pharm.* 2011;68:1824-33.

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TCT Accuracy

- Adams et al. 2011 review of 11 studies:
  - Institutional settings
  - Accuracy of pharmacy technicians vs. pharmacists
    - Very similar (~99% accuracy rates for both groups)
    - Higher rates for technicians:
      - Possibly due to uninterrupted workflow, more time, novelty of new task, increased training

- Quality assurance necessary
  - Ongoing monitoring and evaluations

- Increases pharmacists' time: 10-30 hours per month in some studies

Adams et al. *Am J Health-Syst Pharm.* 2011;68:1824-33.

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Medication Reconciliation

- Medication history inaccuracies at admission → high rate of inpatient medication errors

- Pharmacy technician collects home medication list and history from patient and/or family
  - Verification with:
    - Pharmacy, skilled nursing/long-term care facility, preadmission medication lists in medical record

- Technician works in conjunction with supervising pharmacist

Sen et al. *Am J Health-Syst Pharm.* 2014;71(1):51-6.
Smith et al. *Hosp Pharm.* 2013;48(2):112-9.

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Medication Reconciliation

- Pharmacy technician med rec may identify errors
  - Medication omissions, dose errors, incorrect formulations, missing allergy information

- Higher rates of accuracy and reconciliation with pharmacy-based med recs vs. multidisciplinary processes

- Accurate medication list at admission → accurate medication list at discharge

Sen et al. *Am J Health-Syst Pharm.* 2014;71(1):51-6.
Smith et al. *Hosp Pharm.* 2013;48(2):112-9.

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Pharmacy Informatics

- Use of data, information, and technology in medication use process to improve health outcomes
- Pharmacy technician informaticists provide supportive role
  - Automation and technology system management (troubleshooting, consultative)
  - Project management
  - End-user training and education
  - Policy management
  - Customer service
  - Reporting
- Skills: knowledge of pharmacy workflow, IT systems, medications and terminology, clinical environment

ASHP statement. *Am J Health-Syst Pharm.* 2014;71(3):247-50.

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Telepharmacy

- Pharmacist in community pharmacy provides pharmacy services at another distant (remote) site using AV equipment
  - Pharmacy technician at remote site
  - May use automated drug dispensing systems

- Technician responsibilities:
  - Process and dispense prescriptions, facilitate videoconferencing between patient and pharmacist, complete medication transactions, generate reports

- Benefit for rural community pharmacies
  - Saves pharmacies that my otherwise close down

Friesner et al. *J AM Pharm Assoc.* 2011;51:58-590.
Yam et al. *J Am Pharm Assoc.* 2009;49:652-659.

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Telepharmacy Benefits

- Error rates not significantly different for telepharmacies vs. traditional community pharmacies

- Increases access to medications

- Increases patient counseling if required

- Relieves pharmacists in rural hospitals
  - Hospitals may only have one pharmacist

Friesner et al. *J AM Pharm Assoc.* 2011;51:58-590.
Yam et al. *J Am Pharm Assoc.* 2009;49:652-659.
Image: http://www.epiphan.com/solutions_new/?arid=1067

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Medication Safety

- Medication safety programs can include medication safety technicians
  - May work with medication safety officer

- Technician reviews reports, gathers data, and researches information

- Participates in prevention and resolution of medication errors in health systems

- Pharmacy technicians may also contribute to quality assurance measures including increasing regulation and compliance

Cassano. *Pharmacy Purchasing and Products.* 2012;9(4):28.

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Clinical Pharmacy Technicians

- Emergency department pharmacy technicians

- Decentralized pharmacy technicians
  - Monitoring of clinical lab values
  - Medication delivery
  - Maintaining unit-dispensing systems

- Chronic disease state management
  - Diabetes, hypertension, hyperlipidemia, anticoagulation

- Medication therapy management (MTM)
  - Patient scheduling, collecting patient data, quality assurance, outcome reporting

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Leadership Roles

- Leadership of team, project, day-to-day activities

- Supervision of other pharmacy technicians

- Leadership skills:
  - Vision
  - Motivation
  - Ability to inspire

- Management skills:
  - Strong communication skills
  - Organizational
  - Ability to delegate
  - Conflict management
  - Team-building

Webster. *Pharmacy Practice for Today's Pharmacy Technician*. 2014.

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The consensus of the Pharmacy Practice Model Summit. *Am J Health-Syst Pharm*. 2011; 68:e110-4.

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Challenges

- Quality-assurance and standardization

- Liability

- Patient safety (especially in non-institutional settings)

- Pharmacy Practice Act regulations and restrictions

- Pharmacist resistance (job security, less involvement)

- Education, training, certification

- Funding

Myers. *Am J Health-Syst Pharm*. 2011;68:1128-36.

4/3/2014

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Ways to Expand Your Role

- Become involved in committees and community pharmacy organizations

- Learn about upcoming pharmacy technician roles, certifications, and regulations

- Expand teamwork
skills

- Gain experience and
seek new positions if desired

Image: http://www.mum.edu/get-involved

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Advanced Certified Pharmacy Technician

- Specialty certification programs from PTCB

- Associate of Science Degree
  - North Carolina

- Future Bachelor's Degree?

Shane. *Am J Health-Syst Pharm.* 2011;68:1834-5.

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Summary

Changes in pharmacy and pharmacist roles have led to expanding roles for pharmacy technicians

Expanded pharmacy technician roles include tech-check-tech programs, medication reconciliation, informatics, telepharmacy, medication safety, and leadership roles

Anticipate further changes for pharmacy and pharmacy technicians to improve patient care

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Questions?