

## The Scope of Pharmacy Technician Practice

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The speaker has no actual or potential conflicts of interest as it relates to this presentation.

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## Objectives

- Discuss the scope of practice of a pharmacy technician and how this differs from a student pharmacist
- Outline the requirements for becoming a certified pharmacy technician in the state of Illinois
- Describe the Pharmacy Practice Model Initiative (PPMI)
- Explain how tech-check-tech falls within the law and expands the practice of pharmacy through PPMI

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## Pharmacy Technician

- Pharmacy technician is person who can assist in the practice of pharmacy under the supervision of the pharmacist
- In order to register and obtain a license
  - 16 years or older
  - “not engaged in conduct or behavior determined to be grounds for discipline”
  - Enrolled in or graduated from high school or comparable institution or received a high school equivalency certificate

225 ILCS 85- Pharmacy Practice Act

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## Role of a Technician

- Assisting in the practice of pharmacy, which includes:
  - Monitoring, evaluation and implementation of medication orders
  - Dispensing of medication orders
  - Drug selection and administration
  - Drug regimen review and counseling
  - Compounding and labeling of medications
- Functions of a technician:
  - Dispensing process
  - Offer to counsel
  - Receiving verbal prescription orders
  - Medication order clarification with the prescriber

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## Technician Training

- Responsibility of pharmacy and pharmacist in charge to ensure the proper training of each pharmacy technician within 6 months of employment
  - Duties and responsibilities of both technician and pharmacist
  - Policies and procedures
  - Tasks required and ability to complete technical skills
  - Compounding, packaging, labeling and storage of medications
  - Record keeping that is necessary
  - Medical and pharmaceutical technology
  - Perform and apply arithmetic equations
- Keep a record of completed training

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## Certification Requirements

- Starting January 1, 2010
  - Registered technicians must become certified within two years
  - Must successfully pass the Pharmacy Technician Certification Board (PTCB) exam or another technician exam approved by the board
    - Does not apply to technicians registered before January 1, 2008
- Must be at least 18 and of good moral character
- Must have completed training

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## PTCB

- 2 hour exam with 90 multiple choice questions
  - 80 scored and 10 unscored
- Exam is organized into 9 knowledge domains
  - Each domain covers a number of knowledge areas
- Applications and testing fees = \$130
- Passing scaled score of 1400 (range 1000-1600)

www.ptcb.org

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## Patient Counseling

- Communication between the pharmacist or student pharmacist and the patient about a medication or device in order to ensure proper use
  - Medication history
  - Allergies
  - Understanding of intended use of each medication
  - How to properly administer the medication
  - Side effects associated with the medication
  - Food-drug interactions
  - Importance of Adherence

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## What can technicians do?

- Technicians can perform any aspect that does not require clinical interpretation
  - Medication history
  - Obtaining patient allergies and health conditions
  - Offer the receive counseling by a pharmacist or student pharmacist

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## Student Pharmacist

- A registered technician who is enrolled in a school or college of pharmacy program
  - This also includes those who have graduated from a program in the last 18 months
- Excluded from the requirement of becoming certified
- May assist in all practices of pharmacy as designated by the pharmacist

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## Self Assessment Question 1

Which of the follow activities does the law allow a student pharmacist to complete, but not a pharmacy technician?

- Collection of a patient's allergies
- Counseling on how atorvastatin works
- Taking a medication history
- Filling a medication order

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## Self Assessment Question 2

Susan became a registered pharmacy technician in May of 2013, which of the following must be true in order for her to become certified?

- 18 years of age
- Apply for and pass the PTCB exam
- Enrolled in a college of pharmacy program
- A & B
- All of the above

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## Pharmacy Practice Model Initiative

- “The goal of this initiative is 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.”
- Demand for high quality, safer care at a lower cost
- New practice model that is adapting with health care reform

<http://www.ashpmedia.org/ppmi/rationale.html>

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## PPMI

Determination of what areas of practice need to evolve:

- Medication-use policies and the products being used
- Medication distribution
- Technology
- Clinical pharmacy practice
- Pharmacy technician roles
- Pharmacists’ roles as organizational leaders
- Adherence to standards-based practice
- Medication-use safety quality and safety movements that are occurring across the nation

<http://www.ashpmedia.org/ppmi/rationale.html>

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## PPMI Objectives

<http://www.ashpmedia.org/ppmi/objectives.html>

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### Transforming how pharmacists care for patients

PPMI is a profession-led initiative that is empowering the pharmacy team to take responsibility for patient outcomes.

Care Team Integration	Leveraging Pharmacy Technicians	Pharmacist Credentialing & Training	Technology	Leadership in Medication Use
<ul style="list-style-type: none"> <li>• Promotes a team-based approach to healthcare</li> <li>• Expands the role of the health care team to include pharmacists, nurses, and other healthcare professionals</li> <li>• Encourages the pharmacist to work with patients across the continuum of care</li> <li>• Encourages the pharmacist to work with patients across the continuum of care</li> </ul>	<ul style="list-style-type: none"> <li>• Empowers the pharmacy team to ensure that pharmacists and technicians perform all additional dispensing and clinical activities</li> <li>• Urges technicians to handle non-traditional and advanced responsibilities and activities</li> <li>• Encourages the pharmacist to take greater responsibility for direct patient care</li> <li>• Promotes technician as dispensing administration responsibilities, such as the need for uniform standards for pharmacist technician roles</li> </ul>	<ul style="list-style-type: none"> <li>• Elevates the reputation of the pharmacy team</li> <li>• Reviews pharmacy policies and standards based on the activities performed with their scope of practice and in the future</li> <li>• Promotes the need for credentialing in the scope of practice</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluates the available technologies to support safety and quality of care</li> <li>• Encourages use of available technology and innovation to improve patient safety, quality and efficiency, while protecting costs</li> </ul>	<ul style="list-style-type: none"> <li>• Empowers pharmacists to take responsibility for patient outcomes</li> <li>• Positions pharmacists to provide leadership in their respective areas of practice, and prevent adverse medication events</li> <li>• Encourages the pharmacist to plan their continued education and training, address barriers to practice, and achieve best outcomes</li> </ul>

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## Self Assessment Question 3

As hospitals look to implement PPMI into practice, in which of the following ways can we advance the practice of pharmacy technicians?

- Creation of standard for training and certification
- Utilization of technicians in all roles that do not require a pharmacist
- Training of technicians in non-traditional or advanced roles
- All of the above

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## WHAT ARE THE ADVANCEMENTS IN THE SCOPE OF TECHNICIAN PRACTICE?

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## Advanced Technician Roles

- Allows for pharmacists to practice at the top of their license, by allowing more time for clinical activities
- In order to do this we NEED:
  - Resources to invest in technician training and competency
  - Pharmacists who are committed to the development of technicians to succeed in these advanced roles
- Technicians should be equipped to perform any drug distribution function that does not require clinical judgment

Shane, R. Am J Health-Syst Pharm. 2011;68(19):1834-35

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Technician training standard

Tech – Check – Tech

Medication Histories

Identification of patients who would benefit from pharmacist intervention

Pharmacy Informatics

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## Technician Training Standard

- There is currently no national standard by which technicians are educated, trained and certified
- Increased demands on pharmacists in patient care means increased need for well-trained technicians in many areas of practice
- American Society of Health-System Pharmacists and the American Pharmacy Associate are advocating for a single standard used nation-wide
  - Necessary for the practice of pharmacy to continue to advance
- If a national standard is created, programs can become accredited and technicians credentialing will become more uniform.

Manasse Jr HR and Menghan TE. Am J Health-Syst Pharm. 2010;67:348-49.  
Manasse Jr HR and Menghan TE. Am J Health-Syst Pharm. 2011;68(10):869-870.

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## ASHP Standards

Administration	Program Faculty	Education/Training
Accredited when applicable by the appropriate agency  Strategic plan reviewed annually  Advisory Committee •Curriculum •Admission criteria •Successful completion	Director must be a pharmacist or technician with 5 years experience  Instructors must have 3 yrs experience	Prepare for entry level pharmacy technician position  600 hours over 15 weeks •Didactic •Simulated •Experiential  Set of goals for required knowledge and skills

Accreditation Standards for Pharmacy Technician Education and Training Programs. [www.ashp.org](http://www.ashp.org) 2013.  
New ASHP Accreditation Standards for Pharmacy Technician Education and Training Programs Webinar. [www.ashp.org](http://www.ashp.org)

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## ASHP Standard continued

Students	Evaluation/Assessment	Graduation/Certificate
Policy stating •Financial obligations •Criminal record/background checks  Minimum qualifications •Attending high school •English competency •Math competency	Assessment in each component of the program  Ongoing performance evaluations  Preparation for certification  Ongoing faculty and program assessment	Documented graduation requirements  Certificates only to students who successfully complete all components of the program

Accreditation Standards for Pharmacy Technician Education and Training Programs. [www.ashp.org](http://www.ashp.org) 2013.  
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## 9 Knowledge Areas

- Personal/Interpersonal Knowledge & skills
- Foundation Professional Knowledge & skills
- Processing & Handling of Medication Orders
- Sterile & Non-Sterile Compounding
- Procurement, Billing, Reimbursement & Inventory Management
- Patient and Medication Safety
- Technology & Informatics
- Regulatory Issues
- Quality Assurance

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www.ashp.org 2013.  
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## Tech Check Tech Programs

- Use of a specially trained technician to final check medication doses that were filled by another technician
- Training will vary by each institution, but should include topics:
  - Understand of the medication use process
  - Medication dosage forms
  - Review of look alike, sound alike medications
  - Labeling and medication safety
- Documentation of understanding (written and/or visual exam)
- Training with a pharmacist
- Validation of skill
- Annual competency

Reed et al. Am J Health-Syst Pharm. 2011;68:1820-23  
Erickson AK. Pharmacy Today. 2012, Sept 1.

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## Validation

University of Wisconsin Hospitals and Clinics

- Ability of the technician to maintain 99.8% accuracy in checking >2500 consecutive doses
- Five separate audits occur over the course of 5 days
- The pharmacist will purposefully introduce at least 5 errors per 2500 doses
- All checked doses will be validated by the training pharmacist

Reed et al. Am J Health-Syst Pharm. 2011;68:1820-23

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## Ongoing validation

- Once technicians have been trained and validated, pharmacists continue to check at least 10% of the doses
  - Track accuracy rates by documentation of fill errors not detected by the technician
- At UWHC, implementation of a tech-check-tech program allowed for a daily reduction of 5 hours and 45 minutes of pharmacist time checking medication doses
- Of note: all doses being checked by a technician
  - Have already been verified by a pharmacist
  - Are subsequent doses in a regimen, the pharmacist checks all first fill medications

Reed et al. Am J Health-Syst Pharm. 2011;68:1820-23

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## How do you check a medication?

- Read the label
  - Medication name
    - Extended release vs. immediate release
    - 12 hour vs 24 hour sustained release
    - Tablet, chewable, oral disintegrating
  - Dose
- Check the medication label
  - Match medication name
  - Dose
- Are the correct number of tablets, size of container, etc present?
- Is the filled medication expired?

Cooper et al. Am J Health-Syst Pharm. 2014;71:1567-74

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## Self Assessment Activity

1. Find a partner
2. First person, choose one of the packaged medications in front of you
3. "Fill the medication" by matching it to the appropriate label
4. Second person, you are the tech-check-tech
5. Explain to your partner how you are checking the accuracy of the fill
6. Switch roles with a new medication

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## Medication Reconciliation

- Obtaining medication history from the patient
  - Getting the best possible and most up to date list of medications the patient is taking
- Challenges:
  - patient health literacy
  - knowledge of medications
  - time
- Accurate list of medication is necessary to complete medication reconciliation

Cooper et al. Am J Health-Syst Pharm. 2014;71:1567-74

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## Why is Med Rec important?

- There is no one healthcare professional that owns this task
  - Quality remains low
- Joint Commission has core measures for a number of disease states and compliance with these measures is linked to re-imbursement
- Proper medication reconciliation could have positive effects on reducing re-admissions

Cooper et al. Am J Health-Syst Pharm. 2014;71:1567-74

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## Success at Cone Health

Emergency Department

- Use of a blended model
  - Nurses for majority of histories
  - Pharmacy technicians for a double check if >10 meds
- Pharmacy technicians were given ownership of the process
- Creation of a standard form
  - Scheduled, as needed, short term and discontinued medications
- Currently have ~80 technicians who have completed the training and can conduct medication histories
- Improved compliance of physician med reconciliation at discharge

Cooper et al. Am J Health-Syst Pharm. 2014;71:1567-74

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## Technician Role

- Completion of a training program
  - Half day shadowing
  - 3-hour lecture
  - Half day of simulated medication histories with the pharmacist
  - 10 directly observed histories
- Trained technicians gather the medication list using
  - Structured patient interview
  - Standardized form
- Must have standardization and accountability on what meds to document

Cooper et al. Am J Health-Syst Pharm. 2014;71:1567-74

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### What are skills are necessary?

- Good communication skills
- Strong work ethic
- Time management
- Computer skills

Cooper et al. Am J Health-Syst Pharm. 2014;71:1567-74

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### Postfracture Care

Kaiser Permanente Colorado

- As the areas in which a clinical pharmacist practices are increasing, we should be looking for ways to utilize technicians in these same areas
  - Allow for pharmacists to focus on clinical activities
- Quality of care is evaluated by the National Committee for Quality Assurance
  - Development of Healthcare Effectiveness Data and Information Set (HEDIS) for women ages 67 and older with a fracture within last 6 months
  - Patients who saw a clinical pharmacist post fracture were more likely to get a bone scan and start necessary medication

Irwin et al. Am J Health-Syst Pharm. 2014;71:2054-59

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### Role for Technicians

Kaiser Permanente Colorado

- Healthcare costs continue to rise, thus leaders have to be able to show increases in quality with expanded pharmacy services
- Under the supervision of a pharmacist, the technician
  - Assessed compliance with HEDIS measure and classify the patient into
    - In compliance (category 1)
    - Not in compliance, requires intervention (category 2)
    - Not in compliance, no intervention needed (category 3)
  - Reviewed and collected clinical information from the EHR
    - Completed subjective and objective information of a SOAP note

Irwin et al. Am J Health-Syst Pharm. 2014;71:2054-59

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### Endpoints

- Phase 1
  - Looking at accuracy of technician categorization and clinical information collected
  - Agreement with the pharmacist ~90% of the time
- Phase 2
  - Pharmacist time saved
  - Patients not requiring intervention
    - 5.0 vs 5.2 minutes
  - Patients requiring intervention
    - 13.5 vs. 18.2 min

Irwin et al. Am J Health-Syst Pharm. 2014;71:2054-59

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## Informatics

"Interdisciplinary study of the design, development, adoption and application of IT-based innovations in healthcare services delivery, management and planning"

Pharmacy Informatics is "the use and integration of data, information, knowledge, technology, and automation in the medication use process for the purpose of improving health outcomes."

- Use of information to improve clinical practice, individual and public healthcare and research
- Potential of health information technology (HIT) to improve outcomes

ASHP Statement on the pharmacy technician's role in pharmacy informatics. AHP: 2013; XX:18-20

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## Areas of practice

PTIs

- Automation and Systems Management
  - Understanding and assessment functionality
  - Maintenance and troubleshooting of machines
  - Resolve organizational and operational issues
- Project Management
  - Implementation and testing
- End-user Training
  - Education of staff on use of technology, promoting efficiency by integration into workflow

ASHP Statement on the pharmacy technician's role in pharmacy informatics. AHP: 2013; XX:18-20

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## Areas of Practice continued

PTIs

- Policy and Governance
  - Procedures for clinical data management
  - Compliance and best practice
- Customer Service
- Charge Integrity
  - Accuracy of patient and third-party billing
- Reporting

ASHP Statement on the pharmacy technician's role in pharmacy informatics. AHP: 2013; XX:18-20

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## Knowledge Requirements

Pharmacy Technicians as Informaticists

- Working under the supervision of a registered pharmacist, technicians will receive training and gain knowledge in:
- Information Technology Systems
  - Interfaces
  - Computer management
  - Problem resolution
  - Database maintenance
- Medication use and workflow
- Clinical practice at the institution, policies and procedures

ASHP Statement on the pharmacy technician's role in pharmacy informatics. AHP: 2013; XX:18-20

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## Conclusion

- Pharmacy technicians are an essential part of pharmacy practice
- The law allows technicians to assist in the practice of pharmacy
- The roles of technicians are expanding quickly!
- A need for standardization of programs and resources for technician training
- The opportunity for advanced training will continue to grow, as we strive to provide higher quality care for our patients

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## Wrap-up

How many of you would be willing to undergo further training to expand the roles you were able to fill as a technician?

How many of you would be willing to train other technicians in areas where you are proficient in order to increase the quality/knowledge base of our staff?

Are there areas of pharmacy that you would like to be a part of, different from your current role?

What advanced practice areas are available to technicians at your institution?

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