Supporting Optimal Pharmacy Practice Models

Opportunities and Challenges for Pharmacy Technicians

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Objectives

- Discuss PPMI recommendations regarding pharmacy technician roles in the medication use process.
- Discuss benefits of expanding technician roles in the medication use process.
- Identify potential risks of expanding technician roles and discuss ways to mitigate those risks.
- Identify opportunities and challenges for expanding technician roles.

Goal:

Develop and disseminate a futuristic practice model that supports the effective use of pharmacists as direct patient care providers

www.ashp.org/PPMI

Objectives for the Pharmacy Practice Model Initiative

- Describe optimal pharmacy practice models that ensure safe, effective, efficient and accountable medication-related care for patients.
- Identify patient-care-related services
- Foster understanding of and support for optimal pharmacy practice models by key groups

Objectives for the Pharmacy Practice Model Initiative Continued:

- Identify existing and future technologies required to support optimal pharmacy practice models in health-systems
- Identify specific actions that pharmacists should take to implement optimal practice models
- Determine the tools and resources need to implement optimal practice models

What is a “Practice Model”?

- Describes how pharmacy department resources are deployed to provide patient care services
- Includes:
  - How pharmacists practice and provide care to patients;
  - How technicians are involved to support care; and
  - Use of automation/technology in the medication use system

AHP 2010;67:542
Examples of Various Practice Models

- Drug-Distribution-Centered Model
- Clinical Pharmacist-Centered Model
- Patient-Centered Integrated Model

Factors Driving Practice Change

- US health care system faces challenges to improve health care quality and deliver cost-effective service
- Only half of eligible patients receive care
- Contributor to shortfalls is lack of time/expertise
- Pharmacists can fill the gap in health care provision

Facilitating Practice Change: Historical Perspectives

- ASHP Hilton Head Conference, 1985
- Pharmacy in the 21st Century Conference, 1989
- Implementing Pharmaceutical Care, 1993

Factors Driving Practice Change

- Health care reform
- Drug therapy is becoming more complex and riskier
- Recognition of pharmacists among interdisciplinary peers as experts on drug therapy and medication-use processes
- Patients will be better served if pharmacists take control of their professional destiny

Initiative and Summit

- Invitational Summit
- Social Marketing Campaign
- Raise awareness
- Stimulate discussion
- Disseminate the findings
- Initiative Grants
5 PPMI Focus Areas

1. Create a Framework
2. Determine Services
3. Identify Emerging Technologies
4. Develop a Template Model
5. Implement Change

PPMI Summit:
Nov. 7-9, 2010
- Framework developed under the guidance of an expert advisory committee
- Two-day invitational event that included approximately 150 pharmacist participants
- Issue Briefings commissioned
- Plenary presentations and work groups followed by a consensus process to address key outcomes to develop a new pharmacy practice model

Perspectives for Summit Attendees
- Be Bold, Be Urgent
- Face the previously “untouchable” issues
  - Embrace our common commitment to the best interest of our patient
  - Move away from our “pharmacy-centric” perspectives to identify & resolve those previously “untouchable” issues with courage
  - Be courageous meaning owned accountability for patients’ positive outcomes

Perspectives for Summit Attendees
- Envision a residency-trained and appropriately credentialed and privileged pharmacist workforce
- Identify current technology and how it is incorporated into pharmacy work flow. Efficiencies and improved coordination of patient care should be accomplished with the implementation of technology
- Envision a technician workforce composed of individuals who are graduates of accredited technician training programs and certified by PTCB

PPMI Pre-Summit Survey Results

Divided into Sections:
1. Overarching Principles
2. Services
3. Technology
4. Technicians
5. Implementing Change and Responding to Challenges

Section 1: Overarching Principles
- Consensus on the following principles:
  ✓ Opportunity to advance the health and well being of patients by changing the practice model
  ✓ Financial pressures will force changes in how resources are used
  ✓ Every pharmacy department should identify drug-therapy management services provided consistently by pharmacists
  ✓ Investments in technology will be required to fully achieve optimal deployment of pharmacy resources
Section 2: Consensus on Services

Pharmacy departments should:
- Play a critical role in medication-related national quality indicators and evidence based practice guidelines
- Track and trend adverse drug events and treatment failures
- Manage prospective and retrospective med-use evaluation programs
- Track and trend pharmacist interventions

Essential Services include:
- Essential elements of a pharmacy practice model can be developed for use in all hospital and health-system departments of pharmacy
- All patients deserve the care of a pharmacist. It is recognized that resources will need to be allocated according to the complexity of patients and organizational needs.

Section 3: Technology

Technology is a tool that will enable pharmacists to better interact with patients and care givers if implemented into the workflow correctly.
Technology will allow for rapid access to patient information and variables, which will facilitate pharmacist development of a drug therapy management plan for individual patients.

Technology priority order of importance:
- Electronic medical record systems
- Use of barcode technology during medication administration
- Real-time monitoring systems that provide a work queue of patients needing review and possible intervention

Section 4: Technicians

- Pharmacy technicians who have appropriate education, training, and credentials should be used to free pharmacists from drug distribution activities
- Assigning medication distribution tasks to technicians would make it possible to deploy pharmacists to drug-therapy management services
- Uniform national standards should apply to the education and training of pharmacy technicians
- To support optimal pharmacy practice models, technicians must be licensed by state boards of pharmacy

Section 5: Change and Challenges

Critical components of change implementation
- Support from medical staff leadership
- Department of pharmacy administrative leadership
- Pharmacist electronic access to complete patient-specific data
- Support from health care executives
- Clinical pharmacy leadership
Key Points of Consensus

- Move the pharmacist closer to the patient
- Greatly expand the role of a qualified technician workforce and the use of technology
- Pharmacy departments are accountable for the development and implementation of medication use policy to ensure safe and effective use of medications
- Pharmacists are accountable for patient outcomes

What bold new actions do we need from ASHP and others?

- Clear, inspiring vision for practice
- An assertive program to pursue the vision
- Completion of accredited technician training as requirement for PTCB certification
- Exercising your role as ambassador, leader, mentor

Translating Recommendations Into Practice

- AJHP publication of proceedings
- Midyear Clinical Meeting and Summer Meeting programs
- Creation of an Assessment Tool
- Demonstration Grants
- Local, Regional, and State Support of PPMI

Assessment Question

Which of the following is NOT a topic discussed at the PPMI Summit?

A. Overarching Principles
B. Services
C. Technology
D. Technicians
E. Nursing relations

Assessment Question

Which of the following statements reached consensus as a result of the pre-summit survey?

A. Pharmacy technicians who have appropriate education, training, and credentials should be used to free pharmacists from drug distribution activities
B. Assigning medication distribution tasks to technicians would make it possible to deploy pharmacists to drug-therapy management services
C. Uniform national standards should apply to the education and training of pharmacy technicians
D. To support optimal pharmacy practice models, technicians must be licensed by state boards of pharmacy
E. All of the above

Technician Roles in the Pharmacy Practice Model

- It will only be possible to redeploy pharmacists’ time to clinical activities IF pharmacy technicians are qualified to handle medication distribution.
- Well-trained, qualified technicians are essential to an effective pharmacy practice model.

“We cannot achieve our goals as patient care providers without advancing technician roles.” –Rita Shane, PharmD, FASHP
Benefits of Expanding Technician Roles

- Allows redeployment of pharmacists' time to direct patient care.
- Enables successful implementation of a “patient centered” model rather than a “product centered” model
- Greater satisfaction for technicians involved in expanded roles.

Traditional Roles for Pharmacy technicians

- Drug product acquisition
- Drug preparation
- Dispensing
- Drug distribution
- All under the direct, physical supervision of pharmacists

Novel Roles for Pharmacy Technicians

2008 ASHP Survey (unpublished)

- Purchase and contract for drug products (91.5%)
- Perform billing tasks (84.1%)
- Manage inventory for controlled substances (47.2%)
- Manage information technology (36.8%)
- Entering medication orders into computer (33.7%)
- Supervise other pharmacy technicians (32.3%)
- Check the work of other technicians (15.7%)

PPMI Recommendations for Technicians

The following tasks can be assigned to technicians with appropriate education and training:

- Initiation of medication reconciliation (including obtaining patients' medication information for pharmacist review)
- Reviewing patient charts to identify medication allergies that require pharmacist follow-up
- Checking dispensing by other technicians (i.e., “tech-check-tech”)
- Compounding routine sterile preparations in conformance with well-documented procedures
- Dispensing medications with remote video supervision by pharmacists
- Scheduling outpatient drug therapy management visits
PPMI Recommendations for Technicians

The following tasks can be assigned to pharmacy technicians who have appropriate education and training:

• Criteria-based screening of medical records to identify patients who may require pharmacist intervention
• Preparing clinical monitoring information (INRs) for pharmacist review
• Inspecting and replenishing medication storage devices
• Managing controlled substances systems
• Managing medication assistance programs
• Conducting aspects of quality-improvement programs
• Managing pharmacy department information technology systems, including routine management of databases
• Supervising other pharmacy technicians

PPMI Recommendations for Pharmacy Technicians

• ASHP should define a scope of practice, including core competencies, for hospital technicians
• Uniform national standards should apply to the education and training of pharmacy technicians
• To support optimal pharmacy practice models, technicians must be certified by the Pharmacy Technician Certification Board
• By 2015, the Pharmacy Technician Certification Board should require completion of an accredited training program before an individual may take the certification exam.
• To support optimal pharmacy practice models, technicians must be licensed by state boards of pharmacy
• All distributive functions that do not require clinical judgment should be assigned to technicians
• Opportunities for technician specialization should be developed.

Assessment Question

Which of the following statements is true?
A. Technician role expansion allows redeployment of pharmacists' time to direct patient care.
B. Technician role expansion enables successful implementation of a drug distribution model rather than a clinical pharmacist centered model.
C. Technician role expansion creates higher-paying jobs for technicians.

Assessment Question

According to the PPMI Consensus, what activities may be assigned to appropriately trained technicians?
A. Initiation of medication reconciliation
B. Checking dispensing by other technicians (“tech check tech”)
C. Preparing clinical monitoring information (INRs) for pharmacist review
D. All of the above

Assessment Question

PPMI Recommendations for Technicians include which of the following?
A. All distributive functions that do not require clinical judgment should be assigned to technicians
B. By 2015, the Pharmacy Technician Certification Board should require completion of an accredited training program before an individual may take the certification exam.
C. Uniform national standards should apply to the education and training of pharmacy technicians
D. All of the above

Risks of Expanding Technician Roles

• Pharmacists too far removed from medication distribution processes.
• Patient harm.
• Loss of pharmacist positions.
### Risks of Expanding Technician Roles

- Pharmacists too far removed from medication distribution processes
  - Link role expansions to the clinical work of the pharmacists.
  - PPMI Recommendation: “Proactive and ongoing assessments and risk mitigation of medication-use systems must be a primary responsibility of all pharmacists regardless of practice setting or role.”
  - “In optimal pharmacy practice models: Pharmacists must have oversight and responsibility for medication distribution.”

- Patient harm
  - Patients are harmed now. There is an urgent need for clinical pharmacy services.
  - Standardized, formal education and training.
  - Update standards of practice for health-system pharmacists and technicians.
  - Link role expansion to the clinical work of the pharmacist.
  - Utilize facility privileging and credentialing processes.
  - Formal quality assurance.
  - May have to seek health-system-specific state statutes and regulations.
  - Utilize technology (bedside bar-coding, automated dispensing cabinets, carousels, etc.) to increase accuracy.

- Loss of pharmacist positions
  - Must have a plan to redeploy pharmacists’ time to direct patient care.
  - Pharmacists must retain oversight and responsibility for medication distribution.
  - Link role expansion to clinical work of the pharmacist.

### Opportunities

- Some requirements for expanding technician roles already exist.
  - Accredited training programs
  - Sound certification process
  - There is an opportunity to further standardize technician education and training.
  - Opportunities exist for more clarity and consistency in State Pharmacy Acts and Regulations

### Accredited Pharmacy Technician Training Programs

- ASHP is the accrediting body.
- 600 hours of didactic, laboratory, and experiential education and training
- At least 15 weeks
- 185 accredited training programs
- Half in vocational and technical colleges

### Non-Accredited Programs

- Over 600 programs label themselves as education or training programs for pharmacy technicians
- Varied format, content, duration, and rigor
- Difficult for employers and regulators to interpret the competence of their graduates
Pharmacy Technician Certification

• PTCB: Pharmacy Technician Certification Board
• 400,000 technicians certified by PTCB
• High school diploma (or equivalent) and an absence of criminal or regulatory violations required to take certification exam.
• Currently, one level of certification
• Opportunity: Add prerequisite of training and pharmacy experience to take the exam.
• Opportunity: Further certifications for advanced and specialized practice areas

State Pharmacy Acts and Regulations

• Highly varied over the years
• Greater consistency is emerging
• In 47 states, the term “pharmacy technician” is used in laws and regulations
• 38 states require either licensure or registration (but definitions vary)
• Opportunities:
  ▫ Clarify terminology
  ▫ License or register
  ▫ Accept PTCB certification
  ▫ Report disciplinary information centrally

Challenges

• PPMI “Optimal pharmacy practice models: Characteristics, requirements, and challenges”
  ▪ The following are barriers to the development of optimal pharmacy practice models:
    ▪ Lack of qualified technician staff
    ▪ State laws and regulations that require direct pharmacist supervision of medication distribution.

Challenges

• Changing the views about practice roles
• Measuring the impact
  ▪ How can we make the case for practice model change without ongoing metrics that prove the new models improve care?
• Quality-Assurance Processes
  ▪ An area where most pharmacists and technicians have little experience or training.
  ▪ Formal QA Processes will be essential to assuage concerns of policymakers and regulators.

Assessment Question

Which of the following are possible risks of expanding technician roles?
A. Pharmacists will become lazy.
B. Patient harm.
C. Shortage of technicians.
D. All of the above.

Assessment Question

Which of the following are methods to mitigate the risk of patient harm?
A. Standardized, formal education and training.
B. Link role expansion to the clinical work of the pharmacist.
C. Formal quality assurance.
D. Utilize technology (bedside bar-coding, automated dispensing cabinets, carousels, etc.) to increase accuracy.
E. All of the above.
Assessment Question
Which of the following requirements for expanding technician roles already exists?
A. Accredited Pharmacy Technician Training Programs
B. Sound Certification Process
C. Consistent State Pharmacy Acts and Regulations
D. A and B
E. All of the above

Take-Away Questions
Which of the following attributes regarding pharmacy technicians do you feel will need to be adapted or created to fit a new practice model?
A. State laws limiting pharmacy technician responsibilities
B. Scope of practice of a pharmacy technician
C. Mandatory PTCB certification for all pharmacy technicians
D. Mandatory state registration and CE of pharmacy technicians
E. None of the above
F. All of the above

Take-Away Questions
In your opinion, what should health-system pharmacists do in order to help change the role of the pharmacy technician?
A. Advocate for more automation within the medication distribution process
B. Work with institution leaders to change medication distribution process policies, increasing the responsibility of the pharmacy technician
C. Collaborate with state pharmacy associations to contact boards of pharmacy to change laws regarding pharmacy technicians
D. Encourage current and future pharmacy technicians to pursue a PTCB certification to allow for future role expansion
E. None of the above
F. All of the above

References
• “The consensus of the Pharmacy Practice Model Summit” Am J Health-Syst Pharm. 2011; 68:1148-52
• Manasse, Henri Jr; Menighan, Thomas. “Pharmacy technician education, training, and certification: Call for a single national standard and public accountability.” Am J Health-Syst Pharm. 2010; 67; 348-349.