PAI or PIA: What is Your Take?

Noelle RM Chapman, PharmD, BCPP, FASHP
VP Pharmacy Operations, Advocate Aurora Health

Bryan McCarthy, PharmD, MS, MI
Director, Adult Inpatient Pharmacy, University of Chicago Medicine

Brandon Barringer, PharmD, LSSGB
Director of Performance Management, Memorial Physician Services

Learning Objectives for Pharmacists and Technicians

1. Describe ASHP’s Practice Advancement Initiative 2030 and its history beginning with the PPMI.
2. Discuss the value of using student pharmacists on APPE rotations to expand technician scope of practice and support advanced technician roles.
3. Describe a mechanism that can be used to identify, plan and implement achievable goals at your institutions to improve patient care using the Practice Advancement Initiative 2030.
4. Identify ways in which the pharmacy enterprise can be leveraged to allow pharmacists and technicians to provide patient-centered care across the continuum of health care.
5. Identify opportunities for pharmacists to leverage health information technologies to advance their role in patient care and population health.

What is PAI 2030?

- ASHP’s Practice Advancement Initiative 2030
- A series of recommendations on providing optimal, safe, and effective medication use
- Aspirational guidance serving as a roadmap to pharmacy practice advancement
- Future-focused set of concepts looking beyond today’s barriers to change
What does “Practice Advancement” mean to you?

History of Clinical Pharmacy Practice

History of Clinical Pharmacy Practice
History of Clinical Pharmacy Practice

Practice Advancement Initiative

The Nemo Principle

• “To bring about change within a diverse profession such as pharmacy, one needs a large number of people pulling in the same direction. Before one can get folks pulling in the same direction, one needs general agreement about the best direction in which to move.”

  + William A. Zellmer
Which statement regarding the ASHP’s Practice Advancement Initiative 2030 is false?

A. The PAI is a series of recommendations on providing optimal, safe, and effective medication use.
B. The PAI should serve as aspirational guidance and a roadmap to pharmacy practice advancement.
C. The PAI 2030 is the first effort of ASHP to ever address practice advancement.
D. The PAI 2030 has 5 primary domains
Tech-check-tech Literature Conclusions

• Accuracy
• Economics
• Redeployed pharmacist time

University of Chicago Medicine

• 811 Licensed Inpatient Beds
• 2 Central Pharmacies
• 5 Medication Carousels
• Unionized Pharmacy Technicians
• >160 APPEs (~50 institutional)

“Intern-check-tech”

• According to Accreditation Council for Pharmacy Education, pharmacy students should engage in innovative activities to encourage personal and professional development
• Mention of pharmacy students in TCT literature is largely absent, perhaps due to TCT regulatory barriers and/or short-term nature of advanced pharmacy practice experiences (APPE).
• We performed a study to determine product verification accuracy rates of institutional APPE pharmacy students compared with pharmacists in an implemented “Intern-Check-Tech” (ICT) program
UChicago Medicine “Intern-check-tech”

- HSPAL resident = ICT program coordinator
- APPE institutional student = ICT student
  - Selected prior to experience start date
  - Practical training Day 1
  - Validation phase Day 2 (must achieve 99.8% accuracy rate)
- ICT student thereafter perform product verification for unit dose cart-fills and automated dispense cabinet (ADC) medication restocks
- For quality assurance, pharmacists verify 10% of the products verified by the ICT student

<table>
<thead>
<tr>
<th>Category</th>
<th>Pharmacists (N=3209)</th>
<th>ICT students (N=3436)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Errors</td>
<td>33 (1.03%)</td>
<td>14 (0.41%)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Total Major Errors</td>
<td>3 (0.09%)</td>
<td>1 (0.09%)</td>
<td>1</td>
</tr>
<tr>
<td>Wrong Medication</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Wrong Dose</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Expired Medication</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wrong Quantity</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Wrong Dosage Form</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Minor Errors</td>
<td>30 (0.93%)</td>
<td>11 (0.32%)</td>
<td>0.0005</td>
</tr>
<tr>
<td>Missing Auxiliary Label</td>
<td>28</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Unacceptable Presentation</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Advanced pharmacy practice experience students within an “Intern-Check-Tech” program had better product verification accuracy rates than pharmacists with more than six months of related experience.

UChicago Medicine “Intern-check-tech”

- Achieved accuracy, economics, redeployed pharmacist time
- Enhanced central pharmacist and APPE institutional student employee engagement
  - Win-win-win!
- Implemented x3 APPE institutional rotations, then COVID!
Which of the following are published benefits of “tech-check-tech” programs?

A. Improved product verification accuracy rates  
B. Lower labor expenses  
C. Redeployed pharmacists to clinical activities  
D. All of the above

Memorial Physician Services  
Pharmacist Advancement Through Health Information Technologies and Population Health  
Brandon Barringer

https://www.ashp.org/Pharmacy-Practice/PAI/www.ashp.org/-/media/assets/pharmacy-practice/pai/docs/PAI%20Recommendations
Health Information Technologies (HIT)

- 2004 - The Office of the National Coordinator for Health Information Technology (ONC) was established
- 2009 - American Recovery and Reinvestment Act (ARRA) more commonly referred to as the “stimulus package” was passed
  - Within ARRA was the Health Information Technology for Economic and Clinical Health (HITECH) Act
  - Paved the way for changing from Electronic Medical Records (EMRs) to having Electronic Health Records (EHRs)
  - Established the buzzword of Meaningful Use (MU) through the MU-EHR Incentive Program

Merit-based Incentive Payment System (MIPS)

- January 1, 2017, providers and organizations who submit charges to CMS were required to start submitting yearly performance data
- Performance data for 2017 determined Medicare Part B reimbursement for 2019

MIPS Continued

- Standard MIPS scores are based on 4 weighted domains
  - Quality (45%)
  - Promoting Interoperability (25%)
  - Improvement Activities (15%)
  - Cost (15%)
- Organizations participating in an Advanced Payment Model (APM) do not have a cost domain requiring reweighting
  - Quality (50%)
  - Promoting Interoperability (30%)
  - Improvement Activities (20%)
Promoting Interoperability (PI)

- PI is the biggest opportunity area for pharmacists to help drive population health in HIT
- Areas of focus include:
  - e-Prescribing
  - PDMP querying
  - Improving continuity of care through care coordination
  - Referral loop closure
  - Improving patient access to their health data
  - Public health registry reporting

Next Steps

- Locate your organizations MIPS score to determine areas for improvement
- Determine if your organization participates in programs such as Patient Centered Medical Home (PCMH)
- Begin to become well versed in the 21st Century Cures Act

Organizations submitting a MIPS score as part of an APM or standard performance model, promoting interoperability is an area for pharmacist involvement.

A. True
B. False
Advocate Aurora Health
Leveraging the pharmacy enterprise
Noelle RM Chapman
Pharmacy Services in AAH

- Comprehensive Inpatient Services
- 70 Retail locations
- Ambulatory practice/Population health strategy
- Pharmacy Supply Chain
- Integrated Service Center

Leveraging the System

- Shared EHR
- System consistency
- Centralized packaging
- Communication platforms
  = Efficiency
Pharmacy Integrated Clinical Services (PICS)

- Pharmacists who work as a collective team to ensure safe, appropriate, complete, and timely review/verification of medication orders
  - Order verification
  - Consults
  - Medication management
  - General Medicine, Critical Care, Pediatrics
- Technicians who work remotely to complete medication histories
  - Particularly during off hours
Centralized order verification, remote medication history technicians, common communication platforms and integrated service centers are all ways to leverage a pharmacy enterprise to advance pharmacy services.

A. True
B. False

PAI or PIA: What is Your Take?

Noelle RM Chapman, PharmD, BCPS, FASHP
Advocate Aurora Health

Bryan McCarthy, PharmD, MS, JD
Director, Adult Inpatient Pharmacy, University of Chicago Medicine

Brandon Barringer, PharmD, LSSGB
Memorial Physician Services

Michael Ross, PharmD, BCPS, FASHP