



## ASHP Practice Advancement Initiative (PAI) 2030: Leading Change to Transform Pharmacy Practice

Eric M. Maroyka, Pharm.D., BCPS  
Senior Director, Center on Pharmacy Practice Advancement



# Disclosures

No one in control of the content of this activity has a relevant financial relationship (RFR) with an ineligible company.

# Learning Objectives

- Discuss current trends and opportunities in pharmacy practice
- Recognize major themes associated with the PAI 2030 recommendations
- Explain PAI 2030 focused initiatives as indicators of progress toward adoption and implementation of the PAI 2030 recommendations
- Review results of Illinois PAI 2030 Self-Assessment Tool completions to date

# Current Trends in Pharmacy Practice

- COVID-19 had a substantial impact on pharmacy practice during the year 2020; some practice changes may persist beyond the pandemic:
  - Supply chain
  - Pharmacy operations
  - Personnel and staffing
  - Telehealth/telepharmacy
- 21% of hospitals empower pharmacists to independently prescribe medications, pursuant to a diagnosis
- Documenting the value of pharmacist interventions occurs in two-thirds of hospitals
- In 10% of hospitals, pharmacists recommend testing, drug therapy regimens, provide patient education, and/or serve as a consultant for a pharmacogenomics service
- Health-system pharmacists assume a leading role in addressing the opioid crisis

# Current Trends in Pharmacy Practice

- 20% of hospitals have adopted use of IV workflow management software
- Use of autoverification is increasing in hospitals but parameters are being applied to be more selective in which orders autoverify.
- About half of hospitals customize drug warning content, primarily through oversight of a hospital Pharmacy & Therapeutics or other health-system committee
- The majority of pharmacists (58% of respondents) are using mobile devices (e.g., tablets, smartphones) as part of providing patient care services

# Current Trends in Pharmacy Practice

- Hospital-based outpatient infusion services are common regardless of the size of the institution
- Specialty pharmacy continues to grow in health-systems
- Outpatient pharmacy relationships
- Hospitals utilizing pharmacy technicians in advanced roles
  - 54% Controlled substance system management
  - 45% IT system management
  - 37% Pharmacy technician supervision
  - 32% Obtaining medication histories
  - 31% Tech-check-tech
  - 23% Medication assistance program management

Pedersen CA, Schneider PJ, Ganio MC, Scheckelhoff DJ. ASHP national survey of pharmacy practice in hospital settings: Prescribing and transcribing—2019. *Amer J Health-Syst Pharm.* 2020;77:1026-1050.  
<https://doi.org/10.1093/ajhp/zxaa104>

Pedersen CA, Schneider PJ, Ganio MC, Scheckelhoff DJ. ASHP national survey of pharmacy practice in hospital settings: Dispensing and administration—2020. *Amer J Health-Syst Pharm.* 2021; (ahead of print).  
<https://doi.org/10.1093/ajhp/zxab120>

# WHAT IS PAI 2030?



**59 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

# PAI 2030

---

1. Many recommendations in PAI have been achieved
2. Healthcare landscape changes and disruptive trends
3. Expansion of services and practice opportunities
4. Technology enablers and population health



WHY?



The ASHP Pharmacy Practice Model and Ambulatory Care Summit consensus statements serve as a foundation for the ASHP PAI 2030.

**A** True

**B** False

## PAI 2030 THEMES FOR PRACTICE CHANGE



Optimize care via pharmacist-provided comprehensive medication management



Integrate pharmacy enterprise for convenient and cost-effective care



Increase public health opportunities in social determinants, chronic illness, and addiction



Adopt personalized, targeted therapies



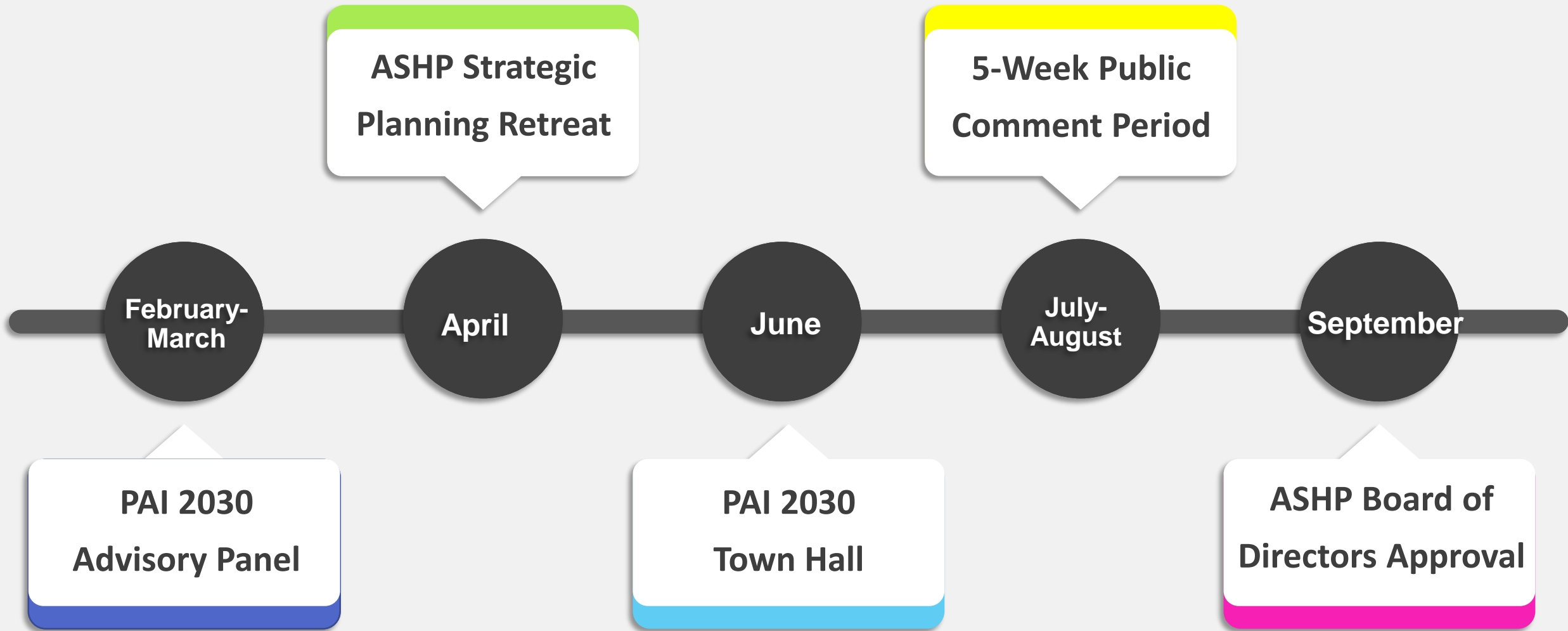
Harness data to improve patient health



Advance pharmacy technician roles






PAI 2030  
Themes

# PAI 2030 Development Timeline



The revision of the PAI recommendations was informed by a process engaging leaders, key member constituents, and broader public comment.

- A** True
- B** False

<b>Patient-Centered Care</b> 	<b>Pharmacist Role, Education, and Training</b> 	<b>Technology and Data Science</b> 	<b>Pharmacy Technician Role, Education, and Training</b> 	<b>Leadership in Medication Use and Safety</b> 
<ul style="list-style-type: none"> <li>■ Shift from patient advocacy to patient and family activation</li> <li>■ Integrate pharmacy enterprise for convenient and cost-effective care</li> <li>■ Optimize care via pharmacist-provided comprehensive medication management</li> </ul>	<ul style="list-style-type: none"> <li>■ Increase in the credentialing and privileging of pharmacists in health systems</li> <li>■ Proliferation of board certification in many practice areas</li> <li>■ Building of workforce skills in population health management and mental/behavioral health</li> </ul>	<ul style="list-style-type: none"> <li>■ Harness data analytics to improve patient health</li> <li>■ Augmented intelligence is an important developing technology that will impact operations and practice</li> <li>■ Assessing patient care technologies to support optimal medication-use outcomes</li> </ul>	<ul style="list-style-type: none"> <li>■ Foster development of professional career paths for pharmacy technicians</li> <li>■ Achieve a recognized scope of practice</li> <li>■ Advance pharmacy technician roles to improve patient care access</li> </ul>	<ul style="list-style-type: none"> <li>■ Advance use of pharmacogenomics information and lead medication stewardship activities</li> <li>■ Increase public health opportunities to address social determinants, chronic illness, and addiction</li> <li>■ Support the well-being and resiliency of pharmacy workforce</li> </ul>

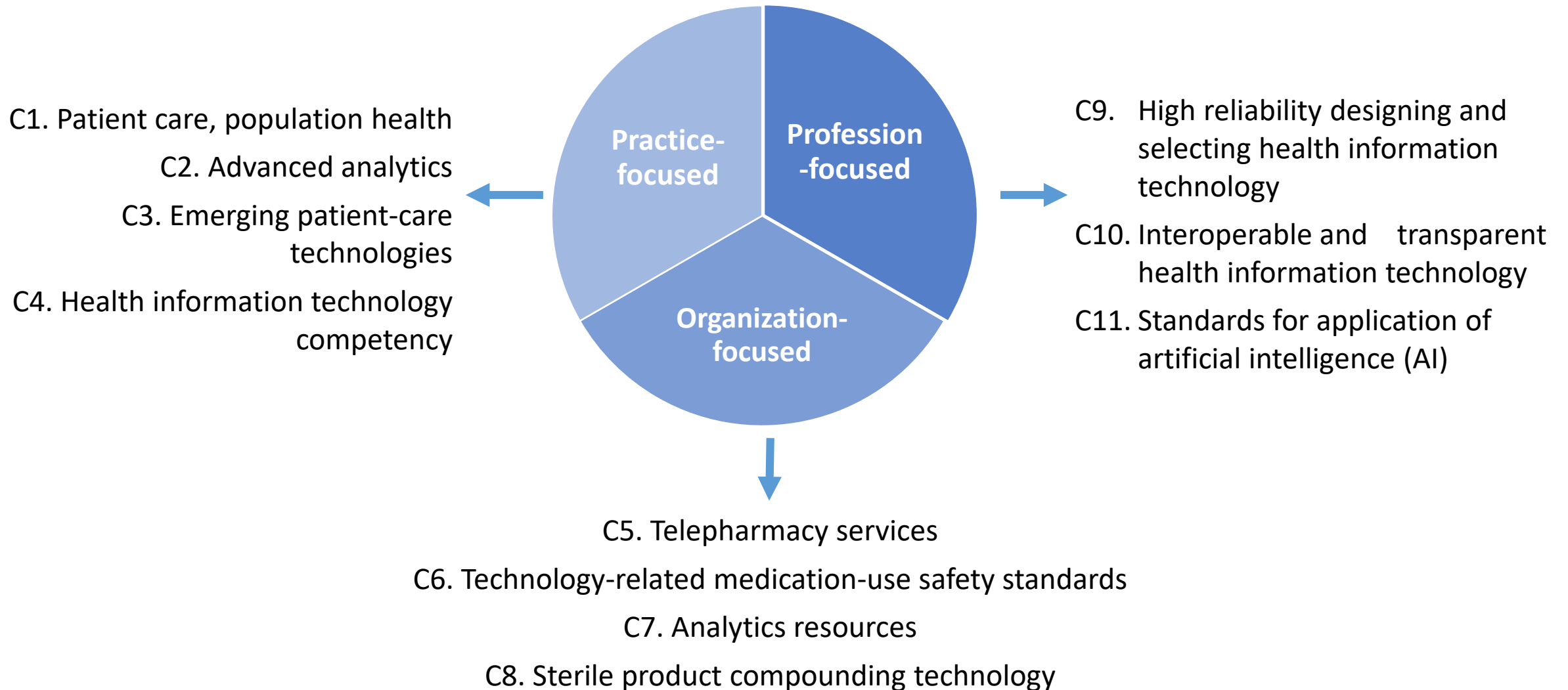
***The ASHP Practice Advancement Initiative (PAI) 2030 includes 59 recommendations to promote optimal, safe, and effective medication use; expand pharmacist and technician roles; and implement the latest technologies.***

# Some themes associated with the PAI 2030 recommendations include:

- A** Optimize care via pharmacist-provided CMM
- B** Integrate pharmacy enterprise for convenient and cost-effective care
- C** Harness data to improve patient health
- D** All of the above

# Subdomains of PAI 2030 Recommendations

(Example: Technology and Data Science Domain)





**Patient-Centered Care**

A1. Pharmacists should collaborate with patients, families, and caregivers to ensure that treatment plans respect patients' beliefs, values, autonomy, and agency.

---

A2. The pharmacy workforce should lead medication reconciliation processes during care transitions (e.g., emergency department, upon admission and discharge, ambulatory care setting, community pharmacy, long term care).

---

A3. The pharmacy workforce should collaborate with patients, caregivers, payers, and healthcare professionals to establish consistent and sustainable models for seamless transitions of care.

---

A4. Pharmacist documentation related to patient care must be available to all members of the healthcare team, including patients, in all care settings.

---

A5. The pharmacy workforce should partner with patients and the interprofessional care team to identify, assess, and resolve barriers to medication access, adherence, and health literacy.

---

A6. Patients must have access to a pharmacist in all settings of care.

---



**Pharmacist Role, Education, & Training**

B1. All pharmacists should have an individualized continuing professional development plan.

---

B2. Pharmacists should leverage and expand their scope of practice, including prescribing, to optimize patient care.

---

B3. Pharmacists should participate in and assume key roles on emergency response teams.

---



**Technology & Data Science**

C1. Pharmacists should use health information technologies to advance their role in patient care and population health.

---

C2. Pharmacy practice leaders should foster the development and application of advanced analytics (e.g., machine learning and artificial intelligence) in activities such as risk assessment, monitoring performance metrics, identifying patients in need of pharmacist care, optimizing medication use, and business management.

---

C3. Pharmacy practice leaders should be engaged in assessing emerging patient care technologies (e.g., mobile applications, monitoring devices, digital wearables or ingestibles, blockchain technology) to support optimal medication-use outcomes.

---

C4. The pharmacy workforce should be competent in health information technology (including but not limited to analytics, automation, and clinical applications of technology) with ongoing education and training embedded at all stages of career development.

---



**Pharmacy Technician Role, Education, & Training**

D1. Pharmacy technicians should participate in advanced roles in all practice settings to promote efficiency and improve access to patient care.

---

D2. Pharmacy technicians should have complete responsibility for advanced technical and supporting activities (e.g., order fulfillment, tech-check-tech, regulatory compliance, supply chain management, diversion prevention, revenue cycle management, patient assistance programs).

---



**Leadership in Medication Use & Safety**

E1. Pharmacists should advance the use of pharmacogenomic information for personalized medication treatment.

---

E2. Pharmacists should assume leadership roles in medication stewardship activities at the local, state, and national levels.

---



# Audience Discussion

## (Advancing the Role of Pharmacy Technicians)

With each state having different “scopes of practice” for all professionals, what is the solution for national advancement of technicians?



**Patient-Centered Care**

A7. The pharmacy workforce, in all care settings, must have access to complete patient medical records and related health information.

A8. The pharmacy enterprise should be integrated and modeled to provide patient-centered care across the continuum (e.g., home and outpatient infusion, specialty pharmacy, community pharmacy, acute care).

A9. The pharmacy workforce should lead medication education for patients and caregivers that optimize outcomes, including in care transitions.

A10. Pharmacists should play an active role in ensuring that ethical principles drive clinical and business decisions related to medication use.

A11. Health systems must provide 24/7 pharmacy services with advanced clinical capability.

A12. Health systems should support innovative models for providing a safe and appropriate level of pharmacy services for small and rural hospitals or other alternative practice settings.

A13. Pharmacy departments should take responsibility for appropriate medication use in the structuring of external partnerships.



**Pharmacist Role, Education, & Training**

B4. Health systems should require completion of ASHP-accredited residency training as a minimum credential for new pharmacist practitioners.

B5. Pharmacists should participate in organization-based credentialing and privileging processes to ensure competency within their scope of practice.

B6. Pharmacy practice leaders should ensure that their workforce has the necessary knowledge and competency to adapt to emerging healthcare needs.

B7. Pharmacists practicing in specialty areas should be board-certified through the Board of Pharmacy Specialties or other appropriate body.



**Technology & Data Science**

C5. Virtual pharmacy services (e.g., telepharmacy) should be deployed to optimize operational and clinical services that extend patient care services and enhance continuity of care.

C6. The pharmacy enterprise must have sufficient resources to develop, implement, and maintain technology-related medication-use safety standards.

C7. Pharmacy departments should have access to an analytics resource, such as a data scientist, to collect, aggregate, measure, visualize, and disseminate data related to the financial and clinical performance of pharmacists.

C8. Pharmacy departments should use technology to ensure the safe compounding of sterile products.



**Pharmacy Technician Role, Education, & Training**

D3. All newly hired technicians should have completed an ASHP/ACPE-accredited technician education and training program.

D4. Health systems should require technicians to be certified by the Pharmacy Technician Certification Board.

D5. Pharmacy departments should foster the development of professional career paths for pharmacy technicians.



**Leadership in Medication Use & Safety**

E3. Pharmacy must be an active and accountable partner in the financial stewardship (e.g., minimizing waste, using cost-effective therapies, managing the supply chain) of care delivered in all settings.

E4. Pharmacy practice leaders should ensure evidence-based medication use by continually analyzing and reporting use patterns and outcomes.

E5. Health systems should support interprofessional innovation centers designed to pursue breakthroughs in areas such as patient experience, medication use, clinical outcomes, operational efficiency, technology, and revenue generation.

E6. Health systems should support the well-being and resiliency of their staffs.

E7. Pharmacy departments should strive to achieve equity, diversity, and inclusion in all technical, clinical, and leadership roles.

E8. The pharmacy enterprise should engage, employ, or develop expertise in areas such as finance, analytics, business management, quality assurance, informatics, human resources, payer relations, and supply chain management.

E9. Health systems should have a pharmacist executive leader, with a reporting structure consistent with other executive leaders, to oversee and influence enterprise-wide decision making related to medication use and technology.

E10. The pharmacy workforce should assess and mitigate risk in medication-use systems across all settings.

# Audience Reflection

Reflecting on the PAI 2030 recommendations, what do you feel are the greatest opportunities for the profession to improve patient care outcomes and advance practice?



---

## ASHP Practice Advancement Initiative 2030: Focused Initiatives



# PAI 2030 Focused Initiative 1

**Optimize medication-use and access through pharmacist prescribing.**

***Objective:***

*By 2024, increase authority for pharmacists to independently prescribe medications, pursuant to a diagnosis, by 20%.*

**Key results (examples):**

- # states that reimburse for prescribing authority
- % (or #) of states that allow for pharmacist prescribing
- # of organizations requiring credentialing & privileging to prescribe medications

# PAI 2030 Focused Initiative 2

**Leverage and utilize technology to optimize pharmacist provision of care to patients.**

***Objective:***

*By 2024, increase by 20% the number of health systems using analytics and technology to reduce the risk of adverse drug events or suboptimal outcomes.*

**Key results (examples):**

- % of hospitals with sterile compounding workflow technology implemented and optimized
- % (or #) pharmacies/health-systems utilizing telepharmacy/telehealth visits
- % (or #) of pharmacies using complexity scores to target pharmacist clinical activities

# PAI 2030 Focused Initiative 3

**Ensure all patients receive seamless and coordinated pharmacy services at all transitions of care.**

*Objective:*

*By 2024, increase the number of health systems with integrated pharmacy services to coordinate effective patient care transitions by 20%.*

**Key results (examples):**

- % (or #) of pharmacy FTEs dedicated to care transition activities
- % (or #) of health systems with programs to follow up with high-risk patients after discharge
- % of health systems that coordinate a patient hand-off to a community pharmacist

# Focused Initiatives → Indicators of Progress

- [Podcast: ASHP PAI 2030 Focused Initiatives](#)
- Survey of ASHP State Affiliates (highest priority – survey closed March 31<sup>st</sup>)
- Baseline for focused initiative #3 (care transitions)
  - 2020 ASHP National Survey of Pharmacy Practice
    - Care transitions question (n = 261)
    - 0.6% seamless integration
    - 30.6% not at all integrated
    - Smaller hospitals report lower levels of integration





# PAI 2030 Focused Initiative 4

**Improve patient access to pharmacist services in ambulatory care clinics.**

***Objective:***

*By the end of 2024, increase the number of pharmacists in ambulatory care clinics by 20%.*

**Key results (examples):**

- # pharmacist FTEs/hours practicing in ambulatory clinics/practice
- # (% growth) in PGY2 ambulatory care programs
- % of revenue (percent obtained vs. billed)

# PAI 2030 Focused Initiative 5

**Expand role of pharmacy technicians.**

***Objective:***

*By 2024, increase the number of health systems utilizing pharmacy technicians in advanced roles by 20%.*

**Key results (examples):**

- % (or #) of pharmacy technicians (FTEs or hours worked) that perform patient medication histories
- % hospitals with pharmacy technician career ladders
- # technicians obtaining their Advanced Certified Pharmacy Technician (CPhT-Adv) certification

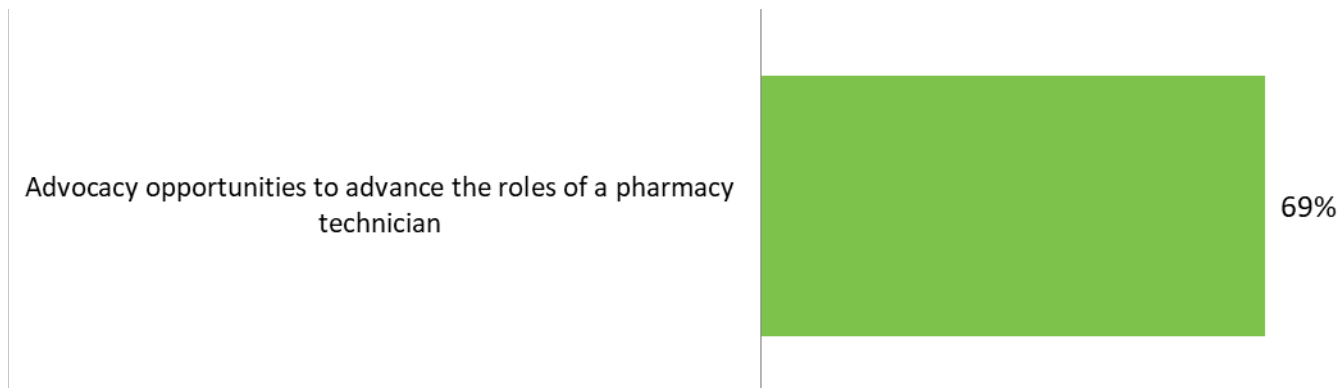
# 2021 ASHP Pharmacy Technician Survey (May 2021)

Q12. To what extent do you agree with the statements below? Since I joined ASHP, ASHP has provided me with...

	Do not agree at all 1	2	3	4	Highly agree 5
Advocacy on issues that allow me to practice in advanced roles	5%	8%	32%	32%	23%

Base: 387 (69 % of Respondents)

Q20. ASHP can help advance your career/professional goals by providing... Select all that apply.



Base: 342 (61 % of Respondents)

Note: Respondents could select multiple options.

# ASHP State Affiliate Quick Poll (PAI 2030 Focused Initiatives)

- March 2021
- ~60% response rate
- Order of priority:
  - FI 1 (pharmacist prescribing)
  - FI 3 (transitions of care)
  - FI 5 (expand role of pharmacy technicians)
  - FI 4 (pharmacists in ambulatory care clinics)
  - FI 2 (leverage technology)

The PAI 2030 focused initiatives are intended to serve as time-bound, indicators of progress for the adoption of best practices.

**A** True

**B** False



ASHP Practice Advancement Initiative 2030:

ASHP Advocacy



**Patient-Centered Care**

A14. Pharmacists should lead and advocate for comprehensive medication management in all healthcare settings.

---

**Pharmacist Role, Education, & Training**

B8. Pharmacy education, residency training, and continuing education should cover healthcare reimbursement, payment, and business management in all areas of practice.

---

B9. Pharmacists in all care settings should be included as integral members of the healthcare team and share accountability for patient outcomes and population health.

---

B10. The pharmacy workforce should be knowledgeable and have the resources to care for patients with behavioral and mental health disorders.

---

B11. Training and credentialing should exist to develop and recognize pharmacists who specialize in health information technology.

---

B12. Credentialed ambulatory-care pharmacists should be considered primary care providers.

---

B13. The profession should champion multi-state or national licensure for pharmacists.

---

B14. Pharmacists, in collaboration with other key stakeholders, must work to increase public, regulatory, and health professional understanding of pharmacists' roles and value.

---

**Technology & Data Science**

C9. Pharmacy should employ high-reliability principles when designing and selecting health information technology.

---

C10. Pharmacy should advocate for information technology that is interoperable and transparent with respect to usability, security, and functionality across the continuum of care.

---

C11. Pharmacy should establish standards for the application of artificial intelligence (AI) in the various steps of the medication-use process, including prescribing, reviewing medication orders, and assessing medication-use patterns in populations.

---

**Pharmacy Technician Role, Education, & Training**

D6. A scope of practice including core competencies should be developed and defined for pharmacy technicians in acute-care and ambulatory-care settings.

---

**Leadership in Medication Use & Safety**

E11. Pharmacists should lead the development, implementation, and evaluation of medication-related national quality indicators and accountability measures.

---

E12. Pharmacists should be leaders in federal and state legislative and regulatory policy development related to improving individual and population health outcomes.

---

E13. Pharmacy should partner with interprofessional organizations to define and delineate practice advances into state and federal laws and regulations to optimize patient care.

---

E14. Pharmacy should leverage healthcare models that acknowledge pharmacist value and align payment with quality of outcomes.

---

# ASHP Advocacy Efforts

- Asking HHS to use its PREP act authority for initiation of time-sensitive therapies
- Medications for opioid use disorder
- Protecting pharmacy residencies
- Drug supply chain recommendations
- Opposing payer-directed drug distribution models
- PAI 2030 recommendations (profession-focused sub-domain)





# Pathway to Pharmacist Provider Status

- Scope of practice
- Payment recognition
- Extending COVID-19 flexibilities
- Expand billing for medication management
- Enacting federal provider status legislation



# Audience Polling

## (Advancing the Role of Pharmacists)

Does the scope of practice in your state support provider status?

- A. Yes
- B. No
- C. I don't know

# Audience Polling

## (Advancing the Role of Pharmacists)

Have you or do you plan to build continuous professional development into performance review activities?

- A. Yes
- B. No
- C. I don't know

A woman with long braids and glasses, wearing blue scrubs, is sitting at a desk in a hospital or office environment, looking at a computer monitor. The background shows other computer monitors and a blurred office setting.

# ASHP Practice Advancement Initiative 2030: Tools and Resources



# PAI 2030 Tools & Resources

## PAI 2030 Self-Assessment Tool

Two tracks (Practitioner and Organization)

Identify gaps with the PAI 2030 recommendations

Create an action plan for adoption and implementation

## Case Studies, Podcasts, Webinars

Testimonials on where pharmacy departments and pharmacists are making an impact implementing the PAI 2030 recommendations

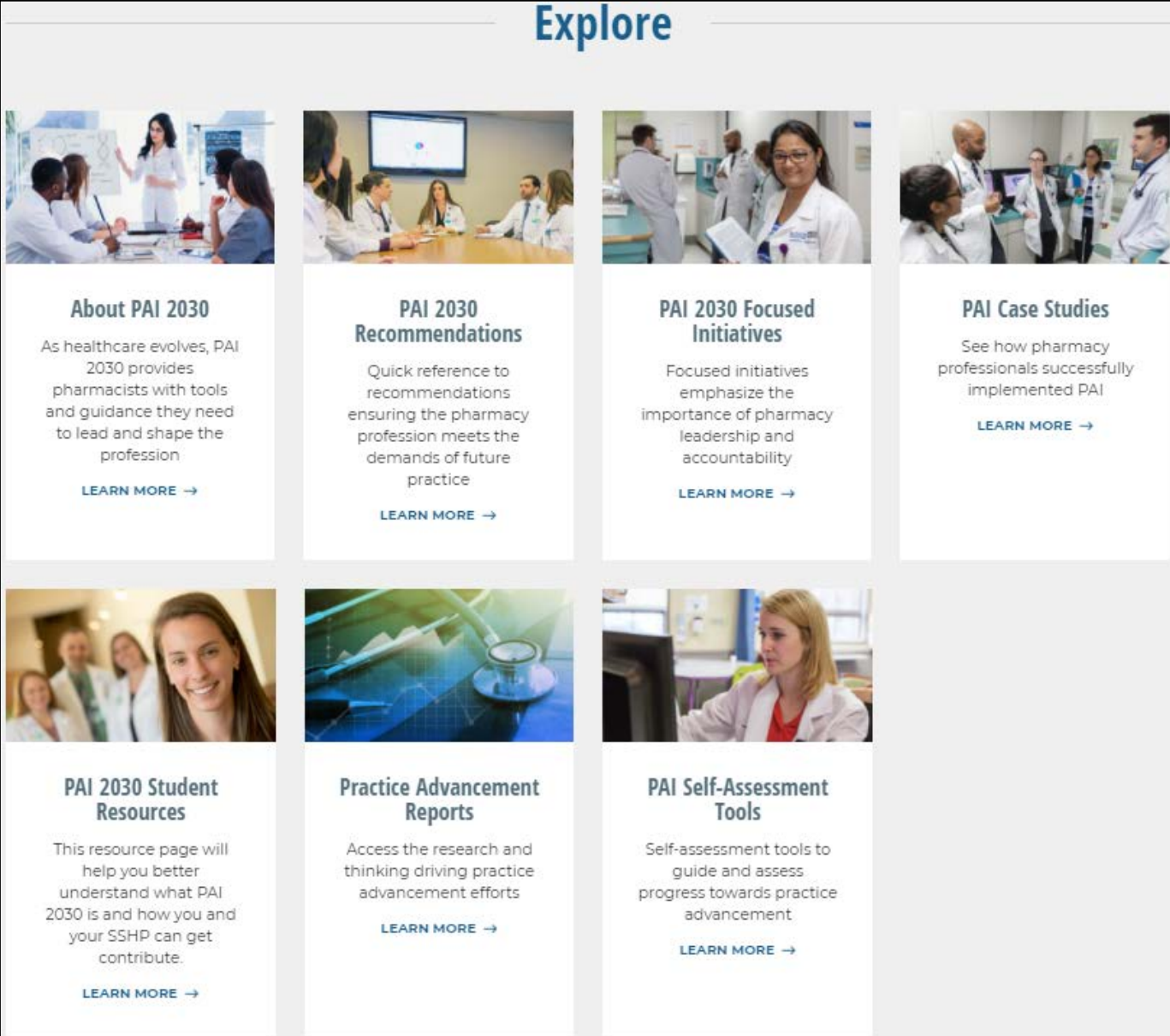
## Toolkits and Train-the-Trainer Approach

## Awards and Research

ASHP Best Practices Award

ASHP Student Leadership Award

ASHP Foundation Research Grants



The image shows a grid of seven resource cards under the heading "Explore". Each card features a photograph at the top, a title, a short description, and a "LEARN MORE" link with a right-pointing arrow.

- About PAI 2030**: As healthcare evolves, PAI 2030 provides pharmacists with tools and guidance they need to lead and shape the profession. [LEARN MORE →](#)
- PAI 2030 Recommendations**: Quick reference to recommendations ensuring the pharmacy profession meets the demands of future practice. [LEARN MORE →](#)
- PAI 2030 Focused Initiatives**: Focused initiatives emphasize the importance of pharmacy leadership and accountability. [LEARN MORE →](#)
- PAI Case Studies**: See how pharmacy professionals successfully implemented PAI. [LEARN MORE →](#)
- PAI 2030 Student Resources**: This resource page will help you better understand what PAI 2030 is and how you and your SSHP can get contribute. [LEARN MORE →](#)
- Practice Advancement Reports**: Access the research and thinking driving practice advancement efforts. [LEARN MORE →](#)
- PAI Self-Assessment Tools**: Self-assessment tools to guide and assess progress towards practice advancement. [LEARN MORE →](#)

# PAI 2030 Self-Assessment Tool

## ACCESS TO SELF-ASSESSMENT TOOL:

<https://pai2030tool.ashp.org/>

**ashp PAI 2030**  
Practice Advancement Initiative

**PAI 2030**  
SELF-ASSESSMENT TOOL

Home | FAQs | PAI 2030 Resource Center | Create Account | Login

Assessment Home

## Overview

ASHP's Practice Advancement Initiative 2030 (PAI 2030) provides pharmacy teams with guidance for advancing healthcare, patient outcomes, and pharmacy practice through 59 recommendations.

The PAI 2030 Self-Assessment Tool is designed to help you determine how well your practice setting aligns with the PAI 2030 recommendations. The tool identifies areas where the PAI 2030 recommendations could have the biggest impact on your practice setting.

The survey format is applicable to both institutional and ambulatory care pharmacy practice settings. Participants can complete the assessment, which takes about 45 minutes, from the perspective of a single practitioner or as an organization. The results will identify several areas for improvement. From there, a list of priorities for implementing change can be developed.

Please note that this assessment tool does NOT assist with therapeutic decision-making.

### Getting Started

Create Account

Login

Tiered Scoring by Domain & Action Plan



**Summary & Action Plan** Practitioner Focused

INSTITUTION	COMPLETED	ASSESSMENT TYPE	ASSESSMENT TRACK
Eric's Test Hospital	May 24, 2021	Personal	Practitioner

### Assessment Scores

Print Action Plan (PDF)

Legend: Tier 1 (Grey), Tier 2 (Orange), Tier 3 (Blue), Tier 4 (Green)

Part	Domain	Score
Part A	Patient-Centered Care	27%
Part B	Pharmacist Role, Education & Training	20%
Part C	Technology and Data Science	17%
Part D	Pharmacy Technician Role, Education, & Training	11%
Part E	Leadership in Medication Use & Safety	100%

### Navigation

- Summary & Action Plan
- My Assessment
- Comparison Report
- Resources
- Blank Assessment

### Action Plan

[Update Action Plan]

The items below are listed in highest to lowest priority. Please return in 6-12 months and repeat this assessment and get an updated Action Plan.

**Recommendation D2:** Pharmacy technicians should have complete responsibility for advanced technical and supporting activities (e.g., order fulfillment, tech-check-tech, regulatory compliance, supply chain management, diversion prevention, revenue cycle management, patient assistance programs).

Make pharmacy technicians completely responsible for supply chain management.

# Reports

- Custom groups
- Re-assessments
- Account holder reports (benchmark report)
- Administrator reports

# Assessment Report (Illinois)

- Official assessments completed (n = 15)
  - 13 organization
  - 2 practitioner
  - Range: 5/1/2021 – 9/10/2021
- Personal assessments completed (n = 2)
  - 2 organization



# Action Plan Trends Report (Organization) – Slide 1 of 2

- **Recommendation A2.** Pharmacy workforce (pharmacists, pharmacy technicians) leads medication reconciliation processes during care transitions: *Admitted to an inpatient ward*
- **Recommendation A2.** Pharmacy learners engage in medication reconciliation processes during care transitions: *Admitted to an inpatient ward*
- **Recommendation A2.** Pharmacy workforce (pharmacists, pharmacy technicians) leads medication reconciliation processes during care transitions: *In the emergency department*
- **Recommendation A2.** Pharmacy learners engage in medication reconciliation processes during care transitions: *In the emergency department*
- **Recommendation D1.** Expand use of pharmacy technicians in advanced roles to promote efficiency and improve access to patient care: *In the inpatient setting*

## Action Plan Trends Report (Organization) – Slide 2 of 2

- **Recommendation A7.** Improve access to complete patient medical records and related health information: *In the ambulatory care clinic*
- **Recommendation D2.** Make pharmacy technicians completely responsible for: *Supply chain management*
- **Recommendation C7.** Improve the access a pharmacy department has to analytics resources, *such as a data scientist*, to collect, aggregate, measure, visualize, and disseminate data related to financial and clinical performance of pharmacists
- **Recommendation A4.** Make documentation made by pharmacists related to patient care is available to: *Healthcare providers external to practice site*
- **Recommendation D2.** Make pharmacy technicians completely responsible for: *Automated dispensing cabinet management*

# Comparative Report Results (Organization)

(A2) The pharmacy workforce in my organization leads and/or engages in medication reconciliation processes during care transitions:

In the emergency department		
IL	ALL	
30.77%	65.79%	Pharmacist/Pharmacy Technician
7.69%	36.84%	Intern or Student Pharmacist
	2.63%	Practice setting not available at my facility
69.23%	31.58%	The pharmacy workforce is NOT involved with the medication reconciliation processes in this area
When admitted to an inpatient ward		
IL	ALL	
23.08%	63.16%	Pharmacist/Pharmacy Technician
15.38%	36.84%	Intern or Student Pharmacist
	2.63%	Practice setting not available at my facility
69.23%	31.58%	The pharmacy workforce is NOT involved with the medication reconciliation processes in this area



# Comparative Report Results (Organization)

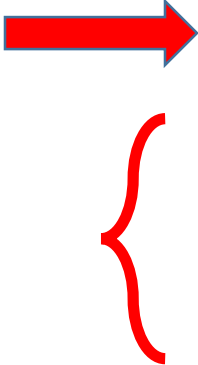
(D1) Expand use of pharmacy technicians in advanced roles to promote efficiency and improve access to patient care: *In the inpatient setting*

Inpatient Setting		
IL	ALL	
23.08%	28.95%	To the full extent legally allowed
38.46%	39.47%	Greatly, but not to the full extent legally allowed
15.38%	21.05%	Somewhat
23.08%	10.53%	Rarely or never



# Comparative Report Results (Organization)


(A7) Improve access to complete patient medical records and related health information:



Ambulatory Care Clinic		
IL	ALL	
23.08%	65.79%	Complete access
30.77%	15.79%	Mostly complete access, some aspects of the record are not available
7.69%	2.63%	Partial access, many aspects of the record are not available
15.38%	5.26%	Limited to pharmacy specific data only
23.08%	10.53%	Service(s) not available at my practice site

# Comparative Report Results (Organization)

(C7) Improve the access a pharmacy department has to analytics resources, *such as a data scientist*, to collect, aggregate, measure, visualize, and disseminate data related to financial and clinical performance of pharmacists:



IL	ALL	
15.38%	13.16%	Excellent, as much as we can currently utilize
53.85%	50%	Good, but more would be useful
7.69%	26.32%	Somewhat limited, we have significant challenges in this area
23.08%	10.53%	Extremely limited or none

# Comparative Report Results (Organization)

(D2) Make pharmacy technicians completely responsible for:

IL	ALL	
92.31%	89.47%	Order fulfillment
53.85%	36.84%	Tech-check-tech product verification
46.15%	42.11%	Regulatory compliance
76.92%	81.58%	<b>Supply chain management</b>
38.46%	63.16%	Controlled substance management
38.46%	44.74%	Diversion prevention
23.08%	23.68%	Revenue cycle management
15.38%	42.11%	Patient assistance programs
7.69%	36.84%	Obtaining medication history
38.46%	44.74%	Hazardous drug management
76.92%	81.58%	<b>Automated dispensing cabinet management</b>
23.08%	47.37%	Technician training program preceptor
61.54%	76.32%	Sterile processes training and testing



# Comparative Report Results (Organization)

(A4) Make documentation made by pharmacists related to patient care is available to:



IL	ALL	
100%	97.37%	Other members of the patients' healthcare team
84.62%	81.58%	The patient
61.54%	68.42%	Healthcare providers external to my practice site
7.69%	26.32%	Community pharmacies or other external pharmacy service providers
	2.63%	Pharmacists at my site do not document



# Action Plan Trend Report (Practitioner) – Slide 1 of 2

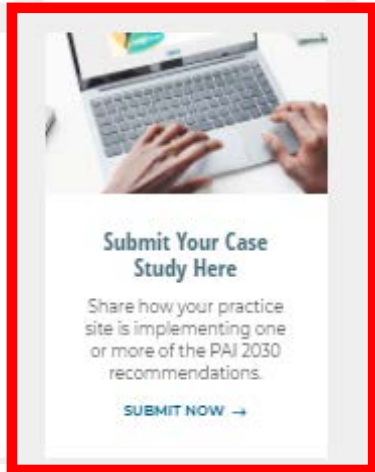
- **Recommendation A2.** Pharmacy workforce (pharmacists, pharmacy technicians) leads medication reconciliation processes during care transitions: *Discharged from an inpatient ward*
- **Recommendation A2.** Pharmacy learners engage in medication reconciliation processes during care transitions: *Admitted to an inpatient ward*
- **Recommendation D2.** Formulate plans to delegate and assign pharmacy technicians complete responsibility for advanced technical and supporting activities (e.g., order fulfillment, tech-check-tech, regulatory compliance, supply chain management, diversion prevention, revenue cycle management, patient assistance programs)
- **Recommendation E2.** Require pharmacists to participate in leadership roles for medication stewardship activities at the local, state, and/or national levels.
- **Recommendation A2.** Engage interns or student pharmacists as leaders in the medication reconciliation process during transitions of care when patients are: *Admitted to the inpatient ward*

# Action Plan Trend Report (Practitioner) – Slide 2 of 2

- **Recommendation A2.** Engage pharmacy workforce and/or learners in the medication reconciliation process during transitions of care when patients are: *Discharged from an inpatient ward*
- **Recommendation C5.** Improve use of virtual pharmacy services (e.g., telehealth) to optimize operational and clinical services that extend patient care services and enhance continuity of care.
- **Recommendation D6.** Define pharmacy technicians' scope of practice, including core competencies, in both acute-care and ambulatory-care settings.
- **Recommendation A2.** Pharmacy workforce (pharmacists, pharmacy technicians) leads medication reconciliation processes during care transitions: *In the emergency department*
- **Recommendation A4.** Make documentation made by pharmacists related to patient care is available to: *The patient*

# PAI 2030 Case Studies

Submit a case study on line:




**Submit Your Case Study Here**

Share how your practice site is implementing one or more of the PAI 2030 recommendations.

**SUBMIT NOW →**





Thank you for sharing how your hospital or health system has implemented the PAI 2030 recommendations. Your experiences will be included in [ASHP's PAI 2030 Case Studies](#) to help hospitals, health systems, or other practice areas embark on similar initiatives.

We want to learn from you! Your testimonials will help us understand where pharmacy departments and pharmacists are making an impact by implementing PAI 2030 recommendations, as well as the challenges that these initiatives may present. As we review the content, we will follow-up with any additional questions and next steps

**Submitter Information:**

Name-Last	<input type="text"/>
Name- First	<input type="text"/>
Credentials	<input type="text"/>
E-mail	<input type="text"/>

**Lee Health**

**Pharmacy Technician Role, Education, and Training**  
Sub-Domain: Practice-Focused

**Geisinger Enterprise Pharmacy and Cancer Institute**

**Patient-Centered Care**  
Sub-Domain: Practice-Focused

**Selma Medical Associates**

**Patient-Centered Care**  
Sub-Domain: Practice-Focused

**Improving Diabetes Self-Management Via Pharmacist-Run Diabetes Education Group Classes**  
*Submitted by Nataliya Scheinberg, Pharm.D., BCPS, CDE*

**Case Overview**

Clinical pharmacy services were established at Selma Medical Associates in the 1990s and include medication management and drug information services. The pharmacy team has an established collaborative practice agreement with providers and offers one-on-one patient-centered appointments for various disease states. Clinical areas of focus include diabetes education and medication management.





At Selma Medical Associates, pharmacy team one-on-one diabetes care visits have consistently

**Therapy**

on various

Pharm.D.

roximately the periential training time



# PAI 2030 Case Study Outline

- Select domain and sub-domain
- Case overview
- Key elements
- Impact on patient outcomes
- Pharmacy and pharmacist roles
- Lessons learned
- Budget and resource allocation
- Future goals

**ashp** PAI 2030  
Practice Advancement Initiative


CASE STUDY  
**Los Angeles County + University of Southern California (LAC+USC) Medical Center Adult Primary Care Clinics**

**Patient-Centered Care**  
Sub-Domain: Practice-Focused

**Hemoglobin A1c Reductions with Pharmacist Visits at a Safety-Net Resident Physician Primary Care Clinic**  
*Submitted by Brian Ma, Pharm.D.*

**CASE OVERVIEW**

Primary care clinical pharmacists have integrated into Los Angeles County + University of Southern California (LAC+USC) Medical Center adult primary care clinics to improve diabetes quality metrics identified by LAC+USC Medical Center. There are two adult primary care clinics: East Clinic (resident physician based), and West Clinic (attending physician based). While each clinic has one full-time LAC+USC clinical pharmacist, only East Clinic collaborates with the University of Southern California (USC) School of Pharmacy where it deploys an additional 0.4 full time equivalent (FTE) clinical pharmacist with a 0.4 FTE pharmacy resident. Both clinics have similar referral processes where the physicians refer patients to clinical pharmacists.



This usually occurs when a patient's hemoglobin A1c is not controlled, when poor medication/self-management adherence is evident, or when they need frequent management with drug therapy adjustments and symptom control. Both clinics primarily get referrals for diabetes management, but patients can be referred for management of blood pressure, asthma, or heart failure medication optimization as well.

Regardless of the referral reason, clinical pharmacists provide comprehensive medication management where they review all medications that the patients are taking and provide medication adjustments within their scope of practice. Both clinics' clinical pharmacists have an open collaborative practice agreement with prescriptive authority except for controlled substance medications and antipsychotic/specialty medications.

[www.ashp.org/pai](https://www.ashp.org/pai)

© 2021 American Society of Health-System Pharmacists. All Rights Reserved.

# Policies, Programs, and Publications in Support of PAI 2030

1

Vizient HVPE framework<sup>1</sup>; ASHP Foundation Pharmacy Forecast<sup>2</sup>; and ASHP Specialty Pharmacy recommendations synergy

4

**AJHP theme issues**

Telehealth

Precision medicine

Substance use disorder

2

**ASHP Commission on Goals**

Impact of artificial intelligence on healthcare and pharmacy practice

Preparing the workforce for a digital future

Telehealth

5

**ASHP professional certificate programs**

3

**GTMRx Institute and RAPID Alliance Research Consortium alignment**

<https://gtmr.org/>

<https://www.rapidalliance.org/>

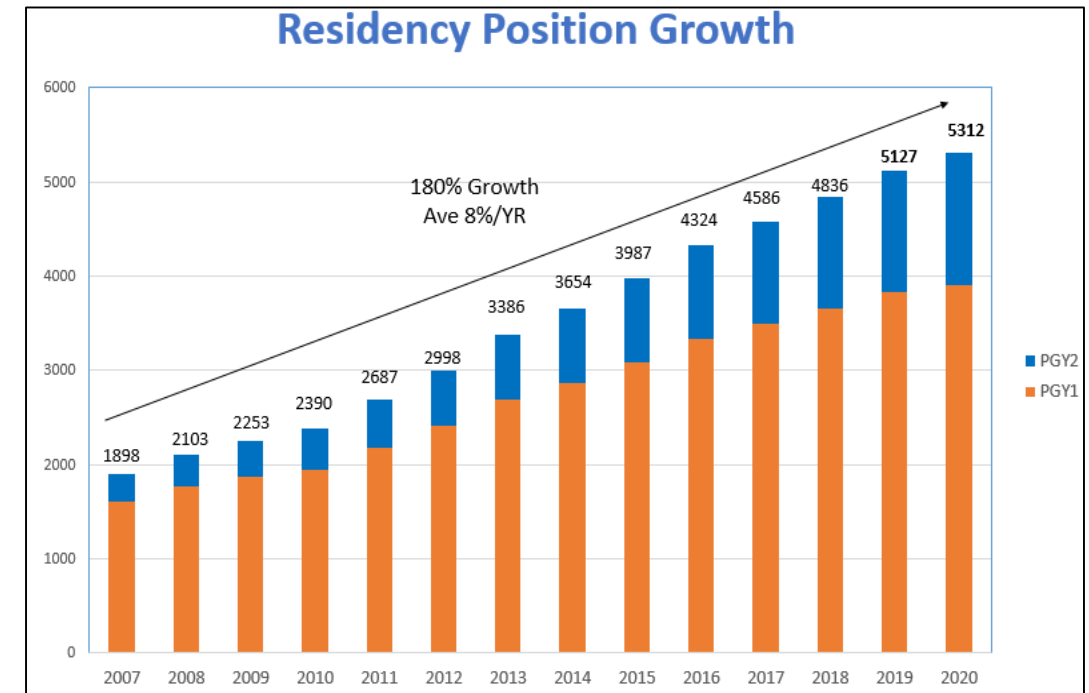
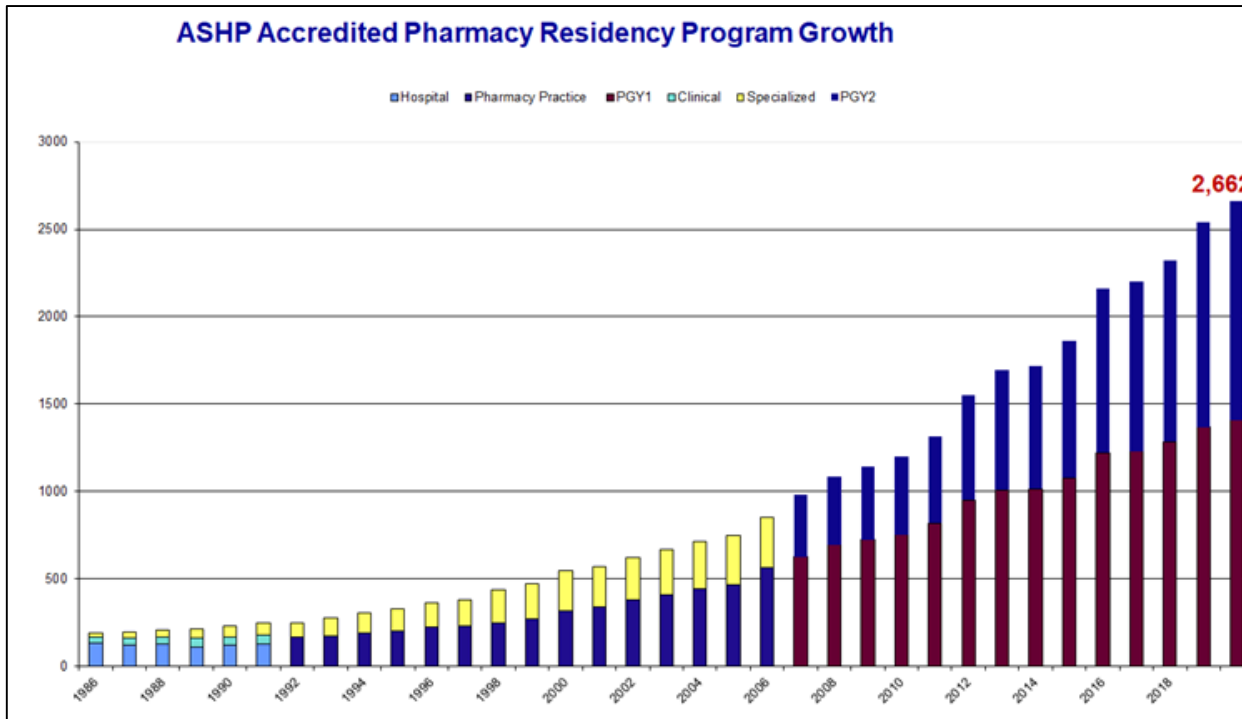
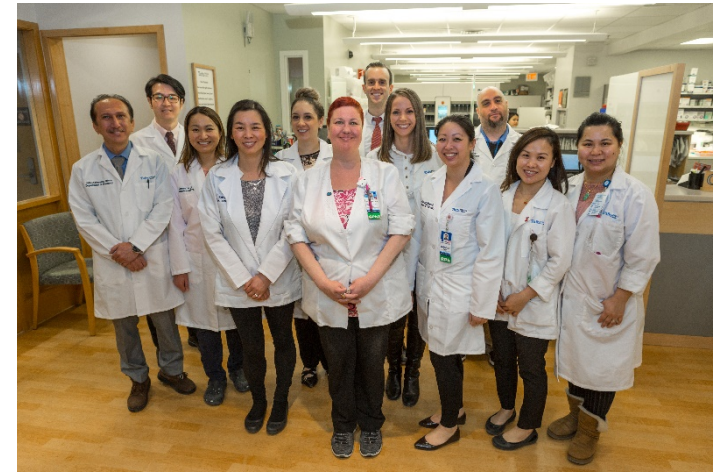
6

**Residency program expansion**

1. DiPiro JT, et al. Pharmacy forecast 2021: strategic planning advice for pharmacy departments in hospitals and health systems. *Am J Health-Syst Pharm.* 2021;78:472-497. <https://doi.org/10.1093/ajhp/zxaa429>

2. Rough S, Shane R, Armistead J, et al. The high-value pharmacy enterprise framework: advancing pharmacy practice in health systems through a consensus-based, strategic approach. *Am J Health-Syst Pharm.* 2021;78:498-501. <https://doi.org/10.1093/ajhp/zxaa431>

# Residency Program Expansion



# What is my role in PAI 2030?

## Study PAI 2030 Recommendations

- Visit PAI 2030 website and review relevant publications
- Attend educational programming during ASHP conferences
- Complete PAI 2030 Self-Assessment Tool

## Promote the PAI 2030 Initiative

- Engage in conversation with colleagues and leaders (e.g., ASHP Connect)
- Bring the initiative to your Affiliate meetings and discussions
- Participate in ASHP events, initiatives, and discussions of PAI 2030
- Tie to advocacy priorities within your state
- Partner with residents and student pharmacists

## Propose tools and resources

- Bring innovative projects and activities related to PAI 2030
- Exchange ideas with local leaders and nationwide colleagues
- Share your successes with ASHP and volunteer to develop resources (e.g., podcasts, case studies, toolkits, webinars)



# Key Takeaways

---

- 1.** PAI 2030 introduced 59 streamlined, contemporary recommendations that reflect changes and anticipate trends in the healthcare environment
- 2.** PAI 2030 focused initiatives correlate with each of the five domains to monitor progress toward achievement
- 3.** Use PAI 2030 Self-Assessment Tool to probe key components of a strategy and as a baseline for practice improvements







**ashp**<sup>®</sup> PAI 2030  
Practice Advancement Initiative

Alexandra Chassan, Pharm D  
Transplant Pharmacist