


## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health



# Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health

Thursday, July 18, 2024

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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health

### Q&A

You may use the Q&A tool on your screen to submit questions to the presenters.

After each presentation, our host will read the questions out loud  
in the order they are received.

Our presenters will also answer questions via the Q&A tool.

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## Evolution of Pharmacy Technician Product Verification

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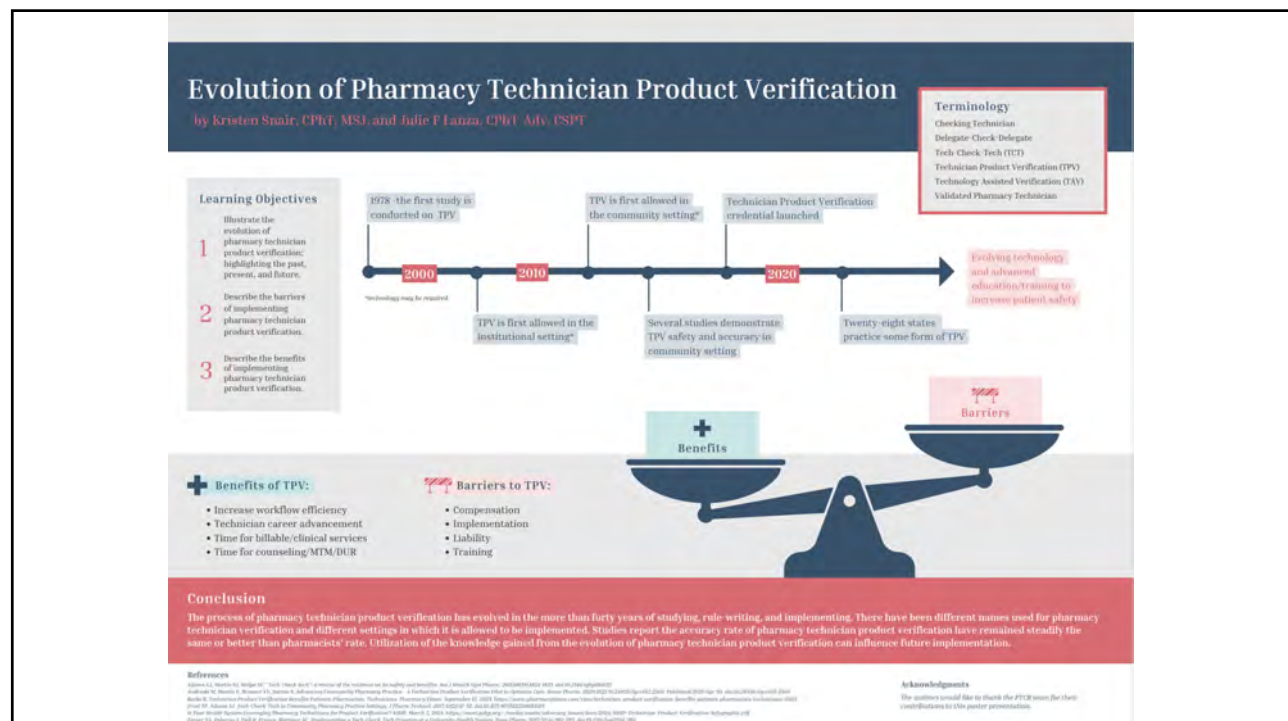
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### Disclosures

- Julie Lanza has the following relevant financial relationship to disclose – Beth Israel Deaconess Medical Center
- Kristen Snair has the following relevant financial relationship to disclose – Evernorth and Arizona State Board of Pharmacy

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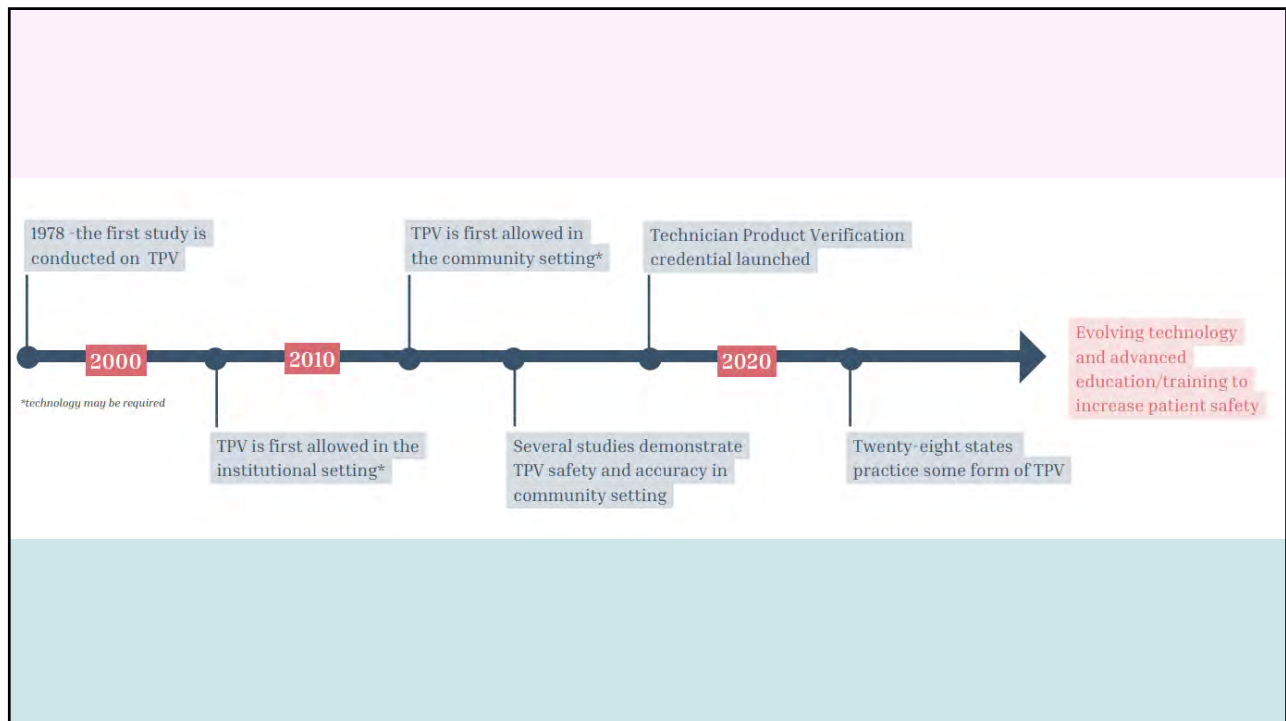


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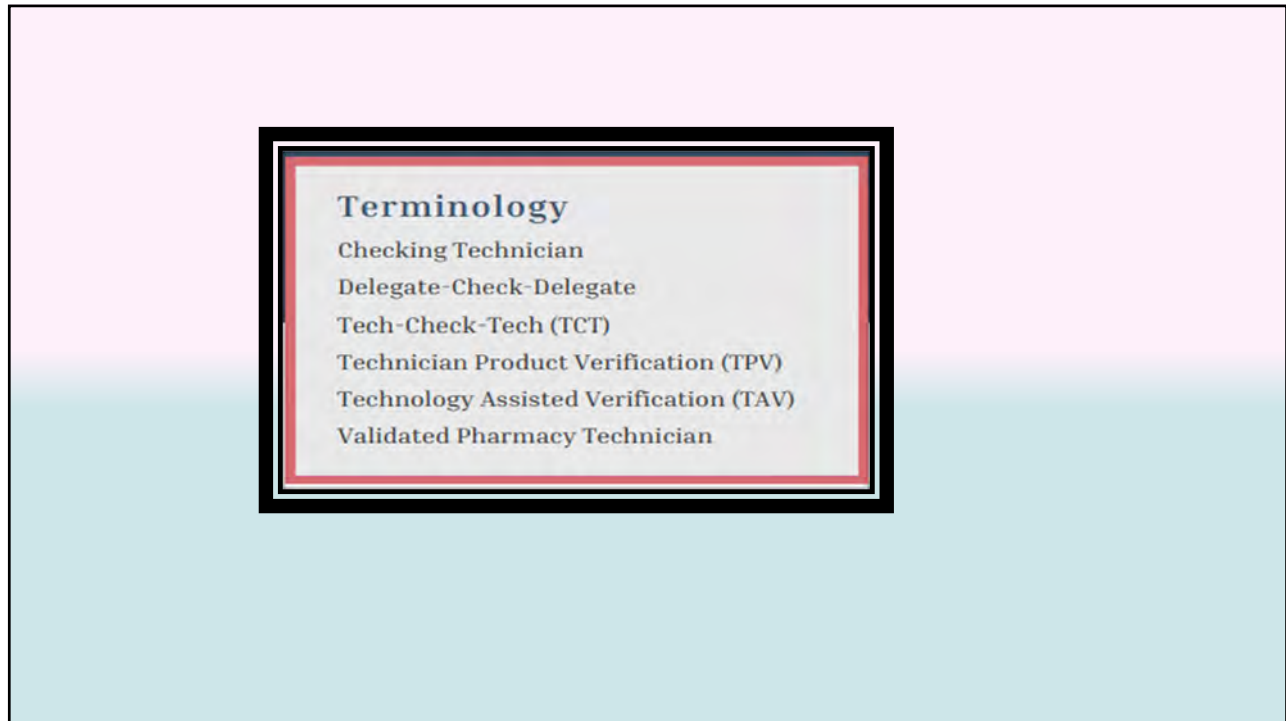
### Learning Objectives

- 1** **Explain** the evolution of pharmacy technician product verification; highlighting the past, present, and future.
- 2** **Describe** the barriers of implementing pharmacy technician product verification.
- 3** **Describe** the benefits of implementing pharmacy technician product verification.

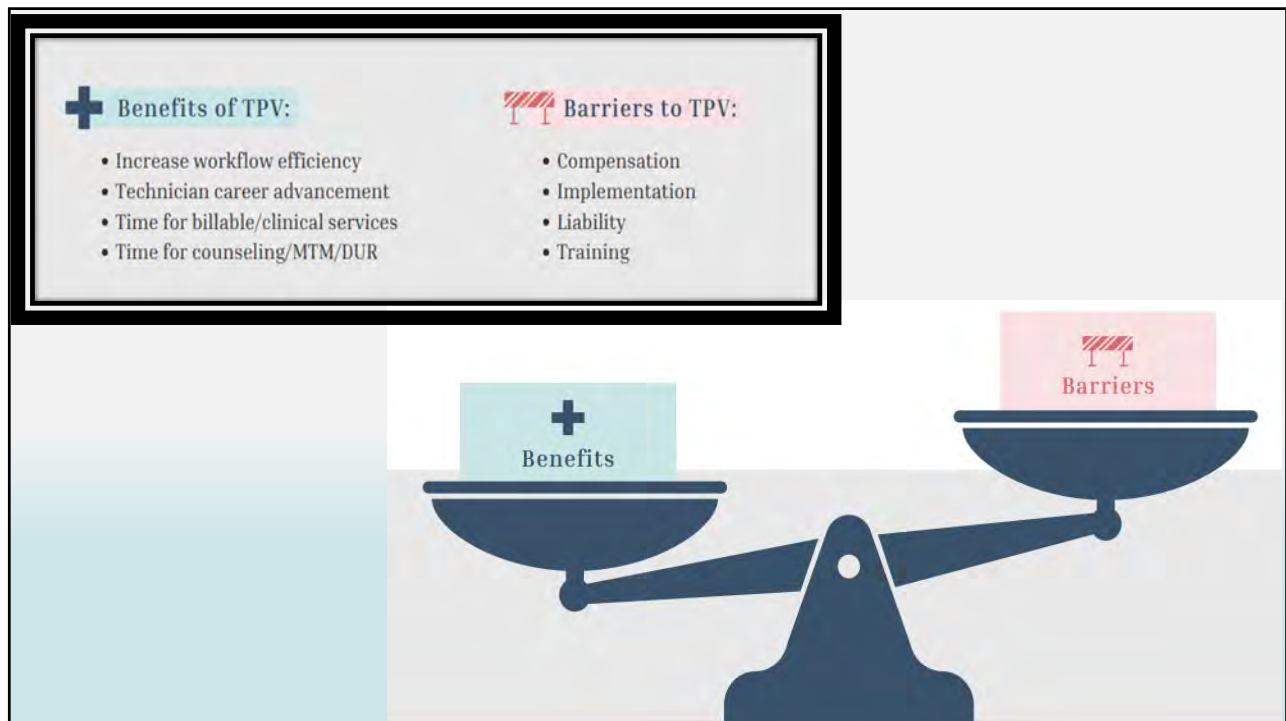
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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health

- The process of pharmacy technician product verification (TPV) has evolved in the more than forty years of studying, rule-writing, and implementing. There have been different names used for pharmacy technician product verification and different settings in which it is allowed to be implemented. Studies report that the accuracy rate of pharmacy technicians performing TPV has been the same or better than pharmacists' accuracy rate. Utilization of the knowledge gained from the evolution of TPV can influence future implementation.

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### Acknowledgments


The authors would like to thank the PTCR team for their contributions to this poster presentation.

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### Self-Assessment Questions

1. From the options listed, **which 2** are barriers to pharmacy technician product verification as stated in the poster presentation?
  - A. Cost of training
  - B. Lack of staff
  - C. Not enough studies to support it
  - D. Will add time to filling process
2. From the options listed, **which 2** are benefits of implementing technician product verification as stated in the poster presentation?
  - A. Less staff needed
  - B. Technician vs. Pharmacist error rates are the same or better
  - C. Training opportunities
  - D. More time for clinical services
3. Technician Product Verification has been called (Circle all that apply)
  - A. Tech-Check-Tech (TCT)
  - B. Technology-Assisted Verification (TAV)
  - C. Tech Assisted Checking (TAC)
  - D. Technician Product Verification (TPV)
4. When did the initial studies of Technician Product Verification begin?
  - A. 1994
  - B. 2012
  - C. 1978
  - D. 1983

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## Improving Patient Access to Primary Care

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## Improving Patient Access to Primary Care

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## Financial Disclosures

Mikayla Antonson and Zachary Rosko declare that they do not have any current financial disclosures.

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## Objectives

- Describe the potential health outcomes associated with improved primary care access
- Describe the integration model of pharmacists in primary care and their role in expanding patient access through medication management.
- Examine regulatory frameworks that enhance pharmacists' autonomy and their impact on integrating pharmacists into primary care.

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## Summary

- Pharmacists expand access to care through post-diagnosis medication management services
- Regulatory frameworks can grant pharmacists greater autonomy, enabling primary care facilities to integrate pharmacists more effectively
- Integrating pharmacists reduces patient wait times and improves health care delivery, especially in underserved areas



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**Idaho State University**

### Improving Patient Access to Primary Care

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#### Background Information


- Enhanced primary care access is linked to improved health outcomes.
  - reduced hospitalizations
  - broader healthcare service access
  - better adherence to care guidelines
  - improved quality of care
  - early detection and management of diseases
  - decreased need for specialist consultations
- Primary care provider shortages and extensive demand often make it challenging for patients to establish care and receive timely appointments

#### Why Pharmacists?

- 80% of all chronic diseases are primarily managed with pharmacotherapy\*
- As medication experts, pharmacists can provide comprehensive post-diagnostic medication management across a wide variety of areas
- Pharmacists are increasingly recognized as non-physician providers (NPPs) by state and commercial health plans, delivering care within their defined scope as the "rendering provider" on medical billing claims.

#### How Can Pharmacists Improve Access to Primary Care?

- Offering post-diagnosis medication management services\*
- Increasing availability and capacity for patient visits with clinic providers\*
- Reduced clinic appointment wait times\*
- Expanded range of medication management services, allowing a broader array of medications to be managed directly in the clinic without specialist referrals\*
- Strengthening the overall capacity of the healthcare system, particularly in rural and underserved communities\*




#### Current Barriers



- Traditional mindsets, outdated practices, and unfamiliarity with the embedded model in private practice
- Limited recognition of pharmacists as independent healthcare providers
- Collaborative practice agreements (CPAs) restrictive and inefficient
- Lack of policies granting pharmacists the ability to independently prescribe and interpret laboratory tests

#### Role of Regulatory Board

- State regulations can facilitate pharmacist integration by:
  - Converting to a "Standard of Care" regulatory model
  - Adopting policies that grant greater independence to pharmacists
  - Moving beyond collaborative practice agreements
  - Allowing independent prescribing and the ability to order and interpret laboratory tests



#### Primary Care Pharmacist

#### Discussion


- Integrating pharmacists into primary care teams can:
  - Increase capacity for physician appointments and expand panel
  - Shorten patient wait times
  - Provide direct access to comprehensive medication management services
  - Reduce the need for specialist referrals
  - Improve health outcomes and strengthen the healthcare system, especially in rural and underserved areas

#### Conclusion


- Fully integrating pharmacists into primary care teams supports the mission of protecting public health by:
  - Expanding timely and comprehensive primary care access
  - Improving health outcomes
  - Bridging existing gaps in care

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## Background Information

- Enhanced primary care access is linked to improved health outcomes.<sup>1</sup>
  - reduced hospitalizations
  - broader health care service access
  - better adherence to care guidelines
  - improved quality of care
  - early detection and management of diseases
  - decreased need for specialist consultations
- Primary care provider shortages and extreme demand often make it challenging for patients to establish care and receive timely appointments







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## Why Pharmacists?



- 80% of all chronic diseases are primarily managed with pharmacotherapy<sup>2</sup>
- As medication experts, pharmacists can provide comprehensive post-diagnostic medication management across a wide variety of areas
- Pharmacists are increasingly recognized as non-physician providers (NPPs) by state and commercial health plans, delivering care within their defined scope as the 'rendering provider' on medical billing claims.



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## How Can Pharmacists Improve Care?

Pt. Drug Education


Drug Regimen Review

Adherence Persistence

Problem Intervention


Advanced Disease state MTM

Comprehensive Medication Management




Low

CMRs/  
Medication  
Reconciliation



Moderate




High

Optimized  
Clinical  
Outcomes

- Offering post-diagnosis medication management services<sup>3</sup>
- Increasing availability and capacity for patient visits with clinic providers<sup>4</sup>
- Reduced clinic appointment wait times<sup>4</sup>

- Expanded range of medication management services, allowing a broader array of medications to be managed directly in the clinic without specialist referrals<sup>5</sup>
- Strengthening the overall capacity of the health care system, particularly in rural and underserved communities<sup>4</sup>



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## Current Barriers

- Traditional mindsets, outdated practices, and unfamiliarity with the embedded model in private practice
- Limited recognition of pharmacists as independent health care providers
- Collaborative practice agreements (CPAs) serve as an entry and regulatory barrier, imposing unnecessary restrictions compared to independent prescriptive authority
- Lack of policies granting pharmacists the ability to independently prescribe and interpret laboratory tests

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## Role of Regulatory Board

- State regulations can facilitate pharmacist integration by:
  - Converting to a “Standard of Care” regulatory model
  - Adopting policies that grant greater independence to pharmacists
  - Moving beyond collaborative practice agreements
  - Allowing independent prescribing and the ability to order and interpret laboratory tests

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## Discussion

Integrating pharmacists into primary care teams can:

- Increase capacity for physician appointments and expand panel size
- Shorten patient wait times
- Provide direct access to comprehensive medication management services
- Reduce the need for specialist referrals
- Improve health outcomes and strengthen the health care system, especially in rural and underserved areas

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## Conclusion

- Fully integrating pharmacists into primary care teams supports the mission of protecting public health by:
  - Expanding timely and comprehensive primary care access
  - Improving health outcomes
  - Bridging existing gaps in care

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## Question 1

Which of the following is a potential health outcome associated with improved primary care access?

- A. Increased hospital readmissions
- B. Decreased patient satisfaction
- C. Reduced health care costs
- D. Longer patient wait times

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## Question 2

What is the primary role of pharmacists in the integration model within the primary care setting?

- A. Performing surgical procedures
- B. Conducting primary health assessments
- C. Providing post-diagnosis medication management services
- D. Offering psychological counseling

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## Contact Information

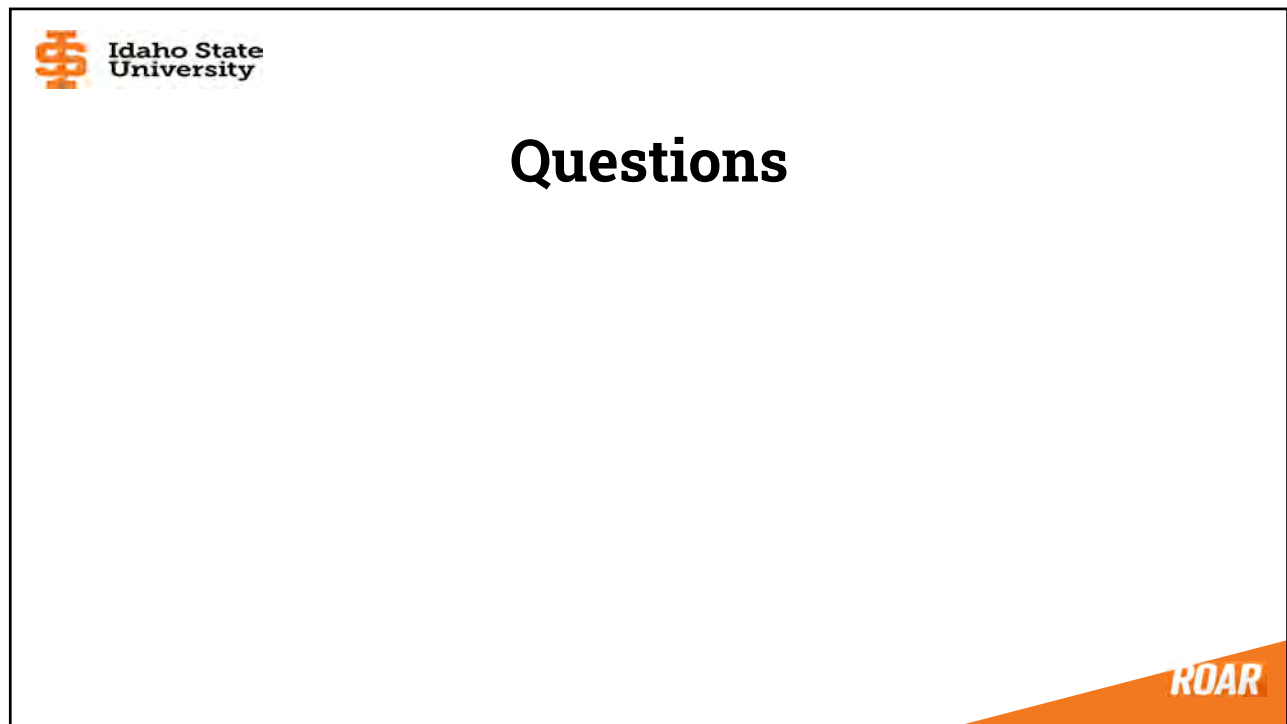
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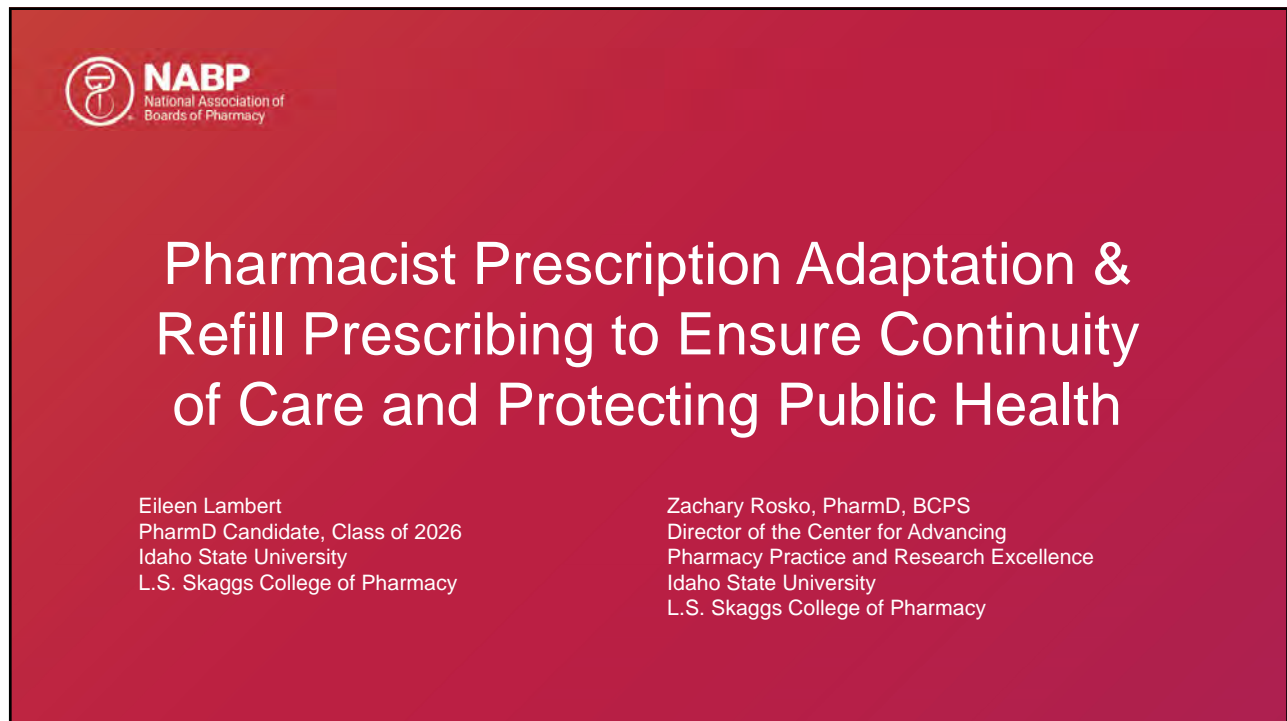
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# Pharmacist Prescription Adaptation & Refill Prescribing to Ensure Continuity of Care and Protecting Public Health


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Eileen Lambert and Zachary Rosko declare that they do not have any current financial disclosures.




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## Learning Outcomes

- Discuss the significance of "running out" of medications as a major factor for medication regimen nonadherence and its impact on public safety.
- Identify the role of pharmacists in mitigating nonadherence through proactive measures such as refill extensions and prescription adaptations.
- Recognize the importance of state regulations in facilitating pharmacist-led interventions to ensure continuity in medication adherence.
- Review the benefits of pharmacist-led refill extensions and prescription adaptations in enhancing access to medication, especially in underserved areas.



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## What is a refill extension?

A refill extension refers to the continuation of a prescription by adding available refills to the current prescription beyond the initially specified quantity.

## What is a prescription adaptation?

The process where a pharmacist modifies an **existing prescription** to better suit the patient's needs or circumstances without a new prescription from the health care provider.

## Why Pharmacists?

Pharmacists are highly accessible health care providers, naturally positioned to proactively address and mitigate therapy gaps during the prescription refill process.

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## Idaho BOP has already instituted regulations and rule changes:

**03. Refill Authorization.** A prescription drug order may be refilled when permitted by state and federal law and as specifically authorized by the prescriber. A pharmacist may also refill a prescription for a non-controlled drug to ensure continuity of care. (3-28-23)

**403. FILLING PRESCRIPTION DRUG ORDERS: ADAPTATION.** A pharmacist may adapt drugs as specified in this rule. (3-28-23)

**01. Change Quantity.** A pharmacist may change the quantity of medication prescribed if: (3-28-23)

**a.** The prescribed quantity or package size is not commercially available; (3-28-23)

**b.** The change in quantity is related to a change in dosage form, strength, or therapeutic interchange; (3-28-23)

**c.** The change is intended to dispense up to the total amount authorized by the prescriber including refills; or (3-28-23)

**d.** The change extends a maintenance drug for the limited quantity necessary to coordinate a patient's refills in a medication synchronization program. (3-28-23)


**02. Change Dosage Form.** A pharmacist may change the dosage form of the prescription if it is in the best interest of patient care, so long as the prescriber's directions are also modified to equate to an equivalent amount of drug dispensed as prescribed. (3-28-23)

**03. Complete Missing Information.** A pharmacist may complete missing information on a prescription if there is evidence to support the change. (3-28-23)

**04. Documentation.** The adaption must be documented in the patient's record. (3-28-23)

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## Discussion & Conclusion

- Refill extensions and adaptations can aid in maintaining care continuity, especially during transitions of care and long appointment wait times.
- Dispensing pharmacists can effectively bridge therapy gaps by quickly and affordably adjusting or extending prescriptions based on patient needs, leveraging their accessibility and medication expertise.
- This proactive and simple strategy reduces the risk of harm due to undertreatment or absence of treatment. By adopting pharmacist-led refill extensions and prescription adaptations, state boards can significantly minimize these frequent interruptions in patient care.



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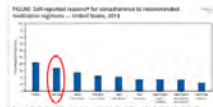
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### Pharmacist Prescription Adaptation & Refill Prescribing to Ensure Continuity of Care and Protecting Public Health

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#### Background Information

- The under-coverage of the medication refill process often negatively impacts access to medication therapy.
- When patients cannot obtain refills, it often leads to preventable drug-related adverse events resulting from discontinuance.
- "Thinning out" refills around as the self-reported reasons for medication regimen discontinuance.



Source: Data from the National Survey of Prescription Drug Use and Patterns (NSDP) - United States, 2018

#### What is a Refill Extension?

- A refill extension refers to the continuation of a prescription by adding available refills to the current prescription beyond the actually specified quantity.
- Refill extensions are applied to non-controlled drugs allowing patients to continue receiving their medication without the need for a new prescription, ensuring continuity of care.

#### What is a Prescription Adaptation?

- The process where a pharmacist modifies an existing prescription to better suit the patient's needs in circumstances without a new prescription from the health care provider.

#### Adaptation could involve:

- Quantity
- Formulation
- Medication strength
- Therapeutic dose change
- Missing Prescription Information

#### Why Pharmacists?


- Pharmacists are highly accessible health care providers, naturally positioned to proactively address and mitigate therapy gaps during the prescription refill process.
- As medication experts with an established patient relationship, pharmacists can best assess patient-specific circumstances of medication discontinuance.
- The dispensing pharmacist is best positioned to make adjustments to medications based on patient-specific barriers in a practical, timely, and cost-effective manner to mitigate critical gaps in medication therapy.

#### Role of Regulatory Board

- State regulations can facilitate this solution through regulatory and rule changes.
- Independence, refill extension and prescription adaptations.

Item	Refill Extension / Adaptation	Refill Extension / Adaptation
1. The pharmacist is authorized to extend the quantity of a controlled substance prescription.	1. The pharmacist is authorized to extend the quantity of a controlled substance prescription.	1. The pharmacist is authorized to extend the quantity of a controlled substance prescription.
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#### Protocol & Best Practices



#### Discussion

- Refill extensions and adaptations can aid in maintaining care continuity especially during transitions of care and long appointment wait times.
- Practically building refill gaps can allow unnecessary and costly encounters with an emergency care visit.
- Dispensing pharmacists can effectively bridge therapy gaps by quickly and affordably adjusting or extending prescriptions based on patient needs, leveraging their accessibility and medication expertise.

#### Conclusion

- This proactive and simple strategy reduces the risk of harm due to undertreatment or absence of treatment. By adopting pharmacist-led refill extensions and prescription adaptations, state boards can significantly minimize these frequent interruptions in patient care.

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## Question 1

How can pharmacists utilize their medication expertise to proactively address and mitigate gaps in therapy during refill requests?

- A. Pharmacists may ensure patients receive appropriate medications, dosages, and instructions.
- B. Pharmacists can only provide general medication information during refill requests and lack the authority to address therapy gaps effectively.
- C. Pharmacists' medication expertise is limited to dispensing medications and does not extend to identifying or mitigating therapy gaps during refill requests.

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## Question 2

What regulatory and rule changes can state regulations implement to support pharmacist-led initiatives for refill extensions and prescription adaptations?

- A. State regulations can authorize pharmacists to independently extend refills and adapt prescriptions, streamlining access to medications and reducing adverse events.
- B. State regulations may maintain current practices for pharmacist-led initiatives to avoid unnecessary changes.
- C. Concerns over patient safety and legal liabilities may restrict state regulations from allowing pharmacist-led refill extensions and prescription adaptations.

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## How to Implement a “Standard of Care” Regulatory Model for Pharmacy

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# How to Implement a “Standard of Care” Regulatory Model for Pharmacy

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# Financial Disclosures

- Presenter Kiera Martin and authors Brittney Patton, Tom Wadsworth, Nicole Chopski, and Ashley Schaber have no financial relationships to disclose related to subject matter of this poster.
- Author Dr Jennifer Adams has received grant funding from the Mercatus Center at George Mason University related to pharmacy regulatory innovation within the past 24 months.



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## Learning Objectives

1. Define bright line regulation and standard of care regulation.
2. Identify the five essential steps involved in implementing a standard of care regulatory model.
3. Describe how the implementation of standard of care regulation enables pharmacists to contribute to the protection of public health.

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## Standard of Care Regulatory Model

- Clinical ability and education of pharmacists have undergone significant evolution over the past several decades.
- Despite this evolution and advancements in knowledge, bright line pharmacy regulations often create a ceiling, or “top of a pharmacist’s license,” that does not align with the clinical ability of the majority of graduates.


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## Bright Line vs Standard of Care

- Bright line regulatory models fall short of allowing some pharmacists to practice at the top of their clinical ability and conversely may allow pharmacists with less clinical ability to practice above their abilities, potentially putting patients at risk.
- Standard of care regulatory model is a dynamic, practice-based approach to regulation – it has the flexibility to adapt to different circumstances, practice settings, and clinical abilities of the individual practitioner.<sup>1</sup>




Most Restrictive      Least Restrictive

**Figure 1.** Regulatory Model Continuum<sup>1</sup>

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## Five Steps to Implementation

1. Adopt a Broad Definition of “Practice of Pharmacy”

54.1705(46) “Practice of pharmacy” means the safe interpretation, evaluation, compounding, **administration**, and dispensing of prescription drug orders, patient counseling, **collaborative pharmacy practice**, provision of **pharmaceutical care services**, proper storage of drugs and devices, and **prescribing of drugs and devices** as may be further defined in this chapter.<sup>3</sup>

ROAR

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## Five Steps to Implementation

### 2. Allow Elasticity for Scope of Practice Advancement Over Time

- Is the act expressly prohibited?
- Is the act consistent with licensee education, training, and experience?
- Does performing this act fall within the accepted standard of care that would be provided in a similar setting by another licensed individual with the same education, training, and experience?

ROAR

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## Five Steps to Implementation

3. Decide Which Limited Instances Still Necessitate Prescriptive Regulation
4. Eliminate All Remaining Unnecessary Regulations
5. Strengthen Accountability Mechanisms and Oversight

**IDAPA 24.36.01.104.16 Standard of Care.** Acts or omissions within the practice of pharmacy which fail to meet the standard provided by other qualified licensees or registrants in the same or similar setting.<sup>3</sup>


ROAR

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**Idaho State University**

## Discussion


- States wishing to adopt a standard of care regulatory model can follow this five-step process to enhance patient care and mitigate the lag that is otherwise constant between laws and practice.<sup>2</sup>
- States that have adopted a standard of care regulatory model include Idaho, Alaska, and Iowa.



**Figure 2.** States With Standard of Care Pharmacy Regulatory Models




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**Idaho State University**

## Conclusion

- This regulatory model empowers pharmacists by regulating them similarly to other health professions, such as nursing and medicine, providing regulatory consistency across the health care system.
- The incorporation of the standard of care model into pharmacy practice regulation presents an exciting opportunity to leverage pharmacists' clinical ability in safeguarding public health through patient access to quality care.



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## Self-Assessment Question

Which of the following is the first step of implementing a Standard of Care regulatory model?

- A. Adopt a broad definition of “Practice of Pharmacy”
- B. Eliminate all remaining unnecessary regulations
- C. Strengthen accountability mechanisms and oversight
- D. Decide which instances necessitate the need for prescriptive regulation

ROAR

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## References

1. Adams JL, O'Connor S, Seignemartin B, et al. Battling professional self-sabotage: Embracing standard of care as the future of pharmacy regulation. J Am Pharm Assoc (2023). 2023;63(6):1685-1688.e1. doi:10.1016/j.japh.2023.08.015
2. Adams AJ, Chopski NL, Adams JA. How to Implement a “Standard of Care” Regulatory Model for Pharmacists. J Am Pharm Assoc (2003). Published online February 12, 2024. doi:10.1016/j.japh.2024.02.007
3. Idaho Administrative Code. Rules of the Idaho State Board of Pharmacy. Rule 11.02. Pharmaceutical Care Services. Available from: <https://adminrules.idaho.gov/rules/current/24/243601.pdf>
4. Adams AJ, Weaver KK, Adams JA. Revisiting the continuum of pharmacist prescriptive authority. J Am Pharm Assoc (2003). 2023;63(5):1508-1514. doi:10.1016/j.japh.2023.06.025


ROAR

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**Thank You!**

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**The Pharmacist's Role in Supporting  
the Care of People Using  
Overdose Prevention Centers**

Nicole Famiglietti PharmD Candidate, Class of 2025 University of Rhode Island College of Pharmacy	Jeffrey Bratberg, PharmD, FAPhA Clinical Professor of Pharmacy Practice and Clinical Research University of Rhode Island College of Pharmacy
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## The Pharmacist's Role in Supporting the Care of People Using Overdose Prevention Centers

NABP Virtual Educational Poster Session, July 18, 2024

**Presenter:** Nicole Famiglietti, PharmD Candidate, Class of 2025, University of Rhode Island College of Pharmacy

**Advisor:** Jeffrey Bratberg, PharmD, FAPhA, Clinical Professor of Pharmacy Practice and Clinical Research, University of Rhode Island College of Pharmacy



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## Disclosures

- Nicole Famiglietti, PharmD Candidate, has no financial conflicts to disclose.
- Jeffrey Bratberg, PharmD, FAPhA, has no financial conflicts to disclose.

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## Learning Objectives

Describe the roles pharmacists and pharmacy technicians play in harm reduction in community pharmacies.

Recognize the role overdose prevention centers (OPCs) play in harm reduction, treatment coordination, and connection to social services.

Describe the regulations implementing OPCs in Rhode Island and the services they provide to people who use drugs.

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## What Are Overdose Prevention Centers?

- People can bring *previously obtained* substances to use in a safe, monitoring environment **under supervision of trained medical staff** who will intervene in the event of an overdose
- People have access to **services that provide treatment for substance use disorder (SUD)**, as well as other programs that impact social drivers of health (SDOH)



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## New York: First OPCs to Open in the US

First year statistics:

- Public drug use averted in **81%** of visits
- Staff intervened **636 times** to prevent overdoses
- 83% of opioid overdoses were resolved **without** naloxone, instead using **oxygenation & monitoring in their responses**
- 2,841 unique participants used the sites **48,533 times**
- EMS was called only **23 times**



[https://onpointnyc.org/wp-content/uploads/2023/12/ONPOINTNYC OPCREPORT\\_small-web1.pdf](https://onpointnyc.org/wp-content/uploads/2023/12/ONPOINTNYC OPCREPORT_small-web1.pdf)

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## What the Data Shows: New York OPCs

- **75% of OPC participants** accessed wrap-around services
- **1 in 5 participants** were referred to housing, treatment, primary care, or employment
- **100% of participants** who sought detoxification or inpatient substance use treatment were connected to outside providers
- **435,078 units** of hazardous waste were kept from public parks, streets, and buildings



[https://onpointnyc.org/wp-content/uploads/2023/12/ONPOINTNYC OPCREPORT\\_small-web1.pdf](https://onpointnyc.org/wp-content/uploads/2023/12/ONPOINTNYC OPCREPORT_small-web1.pdf)

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## RI: Health Care Professionals Are Present On Site

- **Medical Director**
- **Harm Reduction Center Director**
- **Other Qualified personnel**
  - Peer Recovery Support
  - Mental Health Counselors



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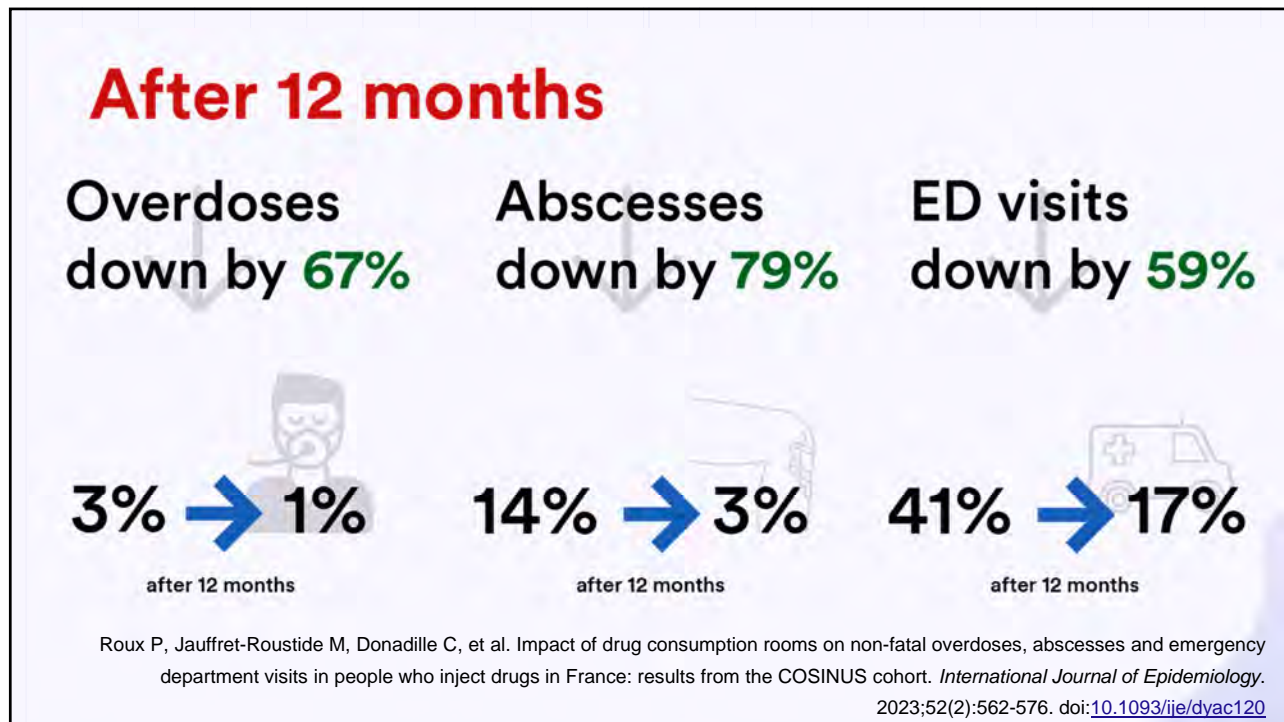
## OPCs Offer a Wide Range of Services

**Per Rhode Island regulations,** OPCs are required to provide the following services to people utilizing the center:

Offer safe spaces for drug consumption	Harm reduction education/training and supplies
Needle and syringe distribution and disposal	Information and referrals to community providers and organizations: clothing, food, housing, employment, legal services
Point-of-Care HIV and Hepatitis C testing	Drug checking/testing of pre-acquired substances

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## Identifying Need for and Referral to Wrap-Around Services

- Comprehensive set of services that people who use drugs (PWUD) need to augment their recovery journey
- They include, but are not limited to, the following:
  - Basic needs – clothing and food
  - Referral services – legal, housing, primary care, psychiatry, transportation, employment, co-pay programs, medication for opioid use disorder (MOUD)
  - HIV/HCV testing and treatment
  - Drug checking/testing, safer snorting, smoking, and injection supplies and education
  - Peer recovery support programs/resources
- **Pharmacy staff can connect and refer PWUD to these resources as well as OPCs**

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## Self-Assessment Question #1

T/F. Overdose Prevention Centers (OPCs) *decrease* public drug consumption and discarded drug paraphernalia.

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## Self-Assessment Question #2

Which of the following wrap-around services can community pharmacists and pharmacy technicians *most easily* provide to PWUD in most jurisdictions?

- A. Basic needs (eg, food, clothing)
- B. Referral to legal services
- C. Peer recovery specialists
- D. Safe, sterile injection equipment


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# Thanks!

## Questions?

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CREDITS: This presentation template was created by **Slidesgo**, including icons by **Flaticon** and infographics & images by **Freepik**

An illustration of a blister pack containing several yellow and blue capsules, with three individual capsules (one yellow and blue, one orange and white, and one blue and white) scattered below it. The background is a light blue gradient with a subtle grid pattern.

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**NABP**  
National Association of  
Boards of Pharmacy

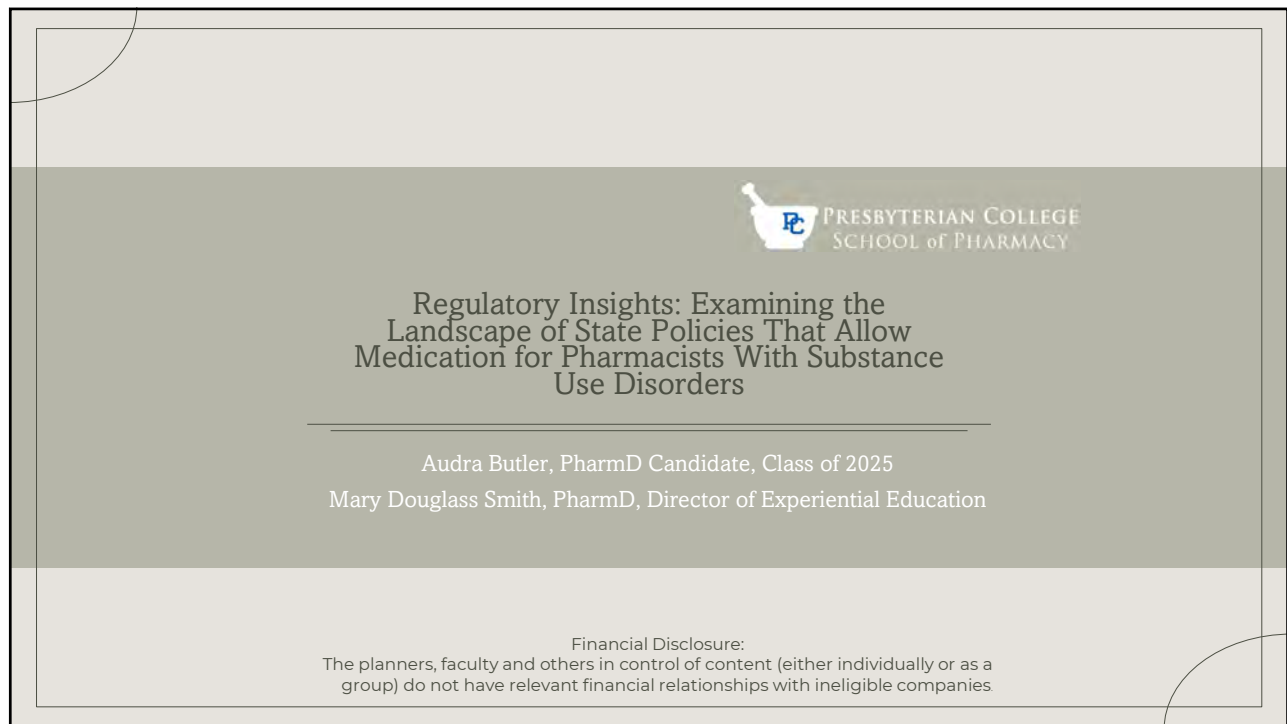
## Regulatory Insights: Examining the Landscape of State Policies That Allow Medication for Pharmacists With Substance Use Disorders


Audra Butler  
PharmD Candidate, Class of 2025  
Presbyterian College School of Pharmacy

Mary Douglass Smith, PharmD  
Director of Experiential Education  
Presbyterian College School of Pharmacy

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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health



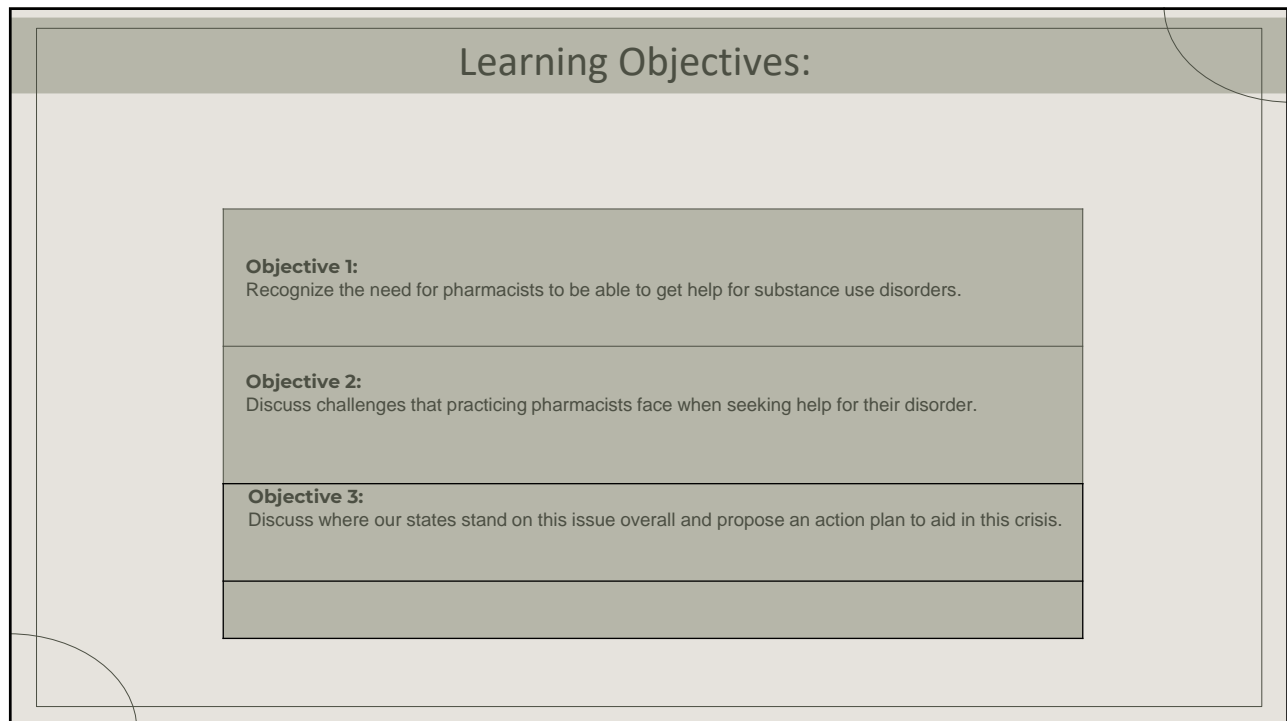
 PRESBYTERIAN COLLEGE  
SCHOOL of PHARMACY

**Regulatory Insights: Examining the  
Landscape of State Policies That Allow  
Medication for Pharmacists With Substance  
Use Disorders**

Audra Butler, PharmD Candidate, Class of 2025  
Mary Douglass Smith, PharmD, Director of Experiential Education

Financial Disclosure:  
The planners, faculty and others in control of content (either individually or as a group) do not have relevant financial relationships with ineligible companies

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**Learning Objectives:**

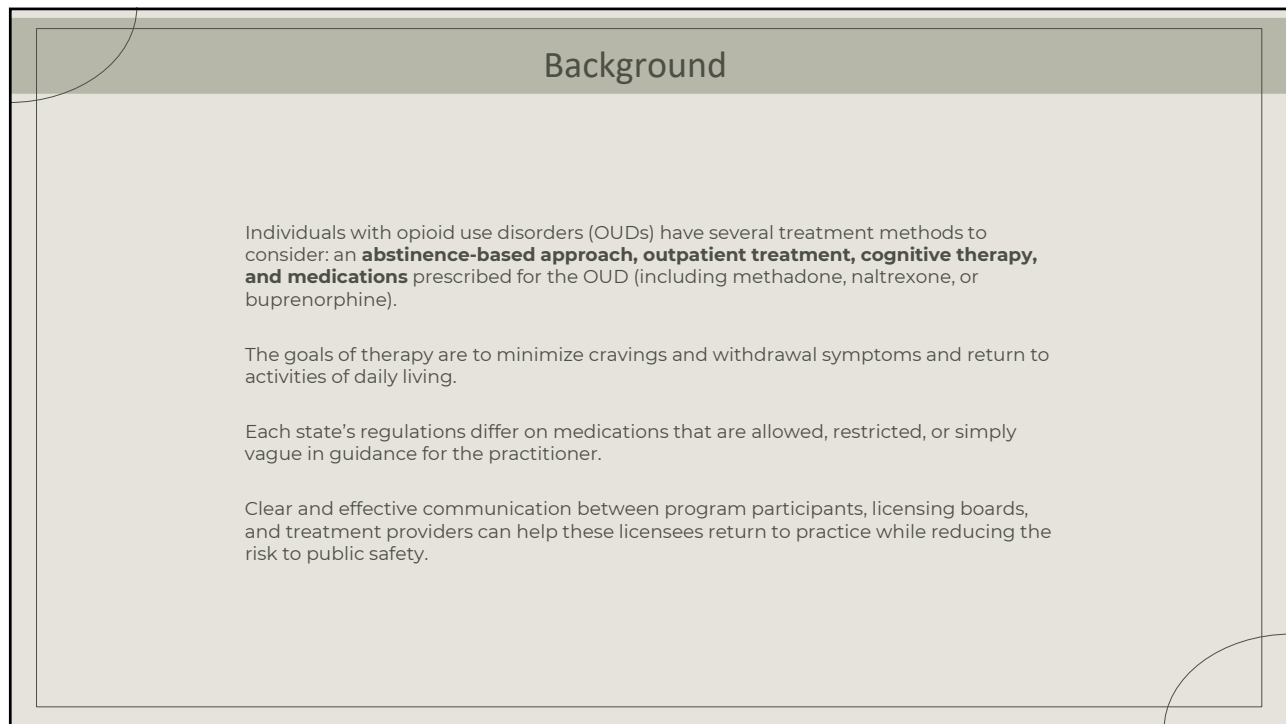
**Objective 1:**  
Recognize the need for pharmacists to be able to get help for substance use disorders.

**Objective 2:**  
Discuss challenges that practicing pharmacists face when seeking help for their disorder.

**Objective 3:**  
Discuss where our states stand on this issue overall and propose an action plan to aid in this crisis.

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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health



The slide is titled "Background" in a dark grey header bar. The main content area is light grey with a thin black border. It contains four paragraphs of text. The first paragraph mentions treatment methods for OUDs, with "abstinence-based approach, outpatient treatment, cognitive therapy, and medications" in bold. The second paragraph discusses therapy goals. The third paragraph mentions state regulations. The fourth paragraph discusses communication between participants, licensing boards, and treatment providers.

### Background

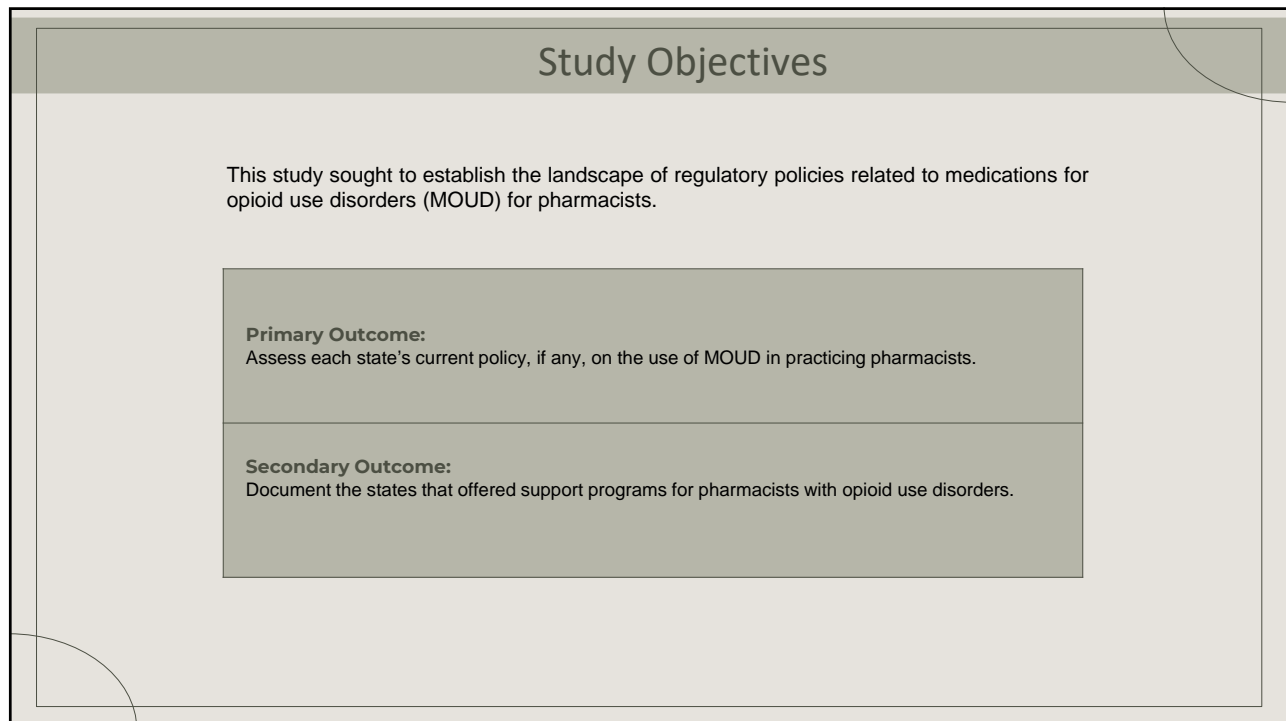
Individuals with opioid use disorders (OUDs) have several treatment methods to consider: an **abstinence-based approach, outpatient treatment, cognitive therapy, and medications** prescribed for the OUD (including methadone, naltrexone, or buprenorphine).

The goals of therapy are to minimize cravings and withdrawal symptoms and return to activities of daily living.

Each state's regulations differ on medications that are allowed, restricted, or simply vague in guidance for the practitioner.

Clear and effective communication between program participants, licensing boards, and treatment providers can help these licensees return to practice while reducing the risk to public safety.

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The slide is titled "Study Objectives" in a dark grey header bar. The main content area is light grey with a thin black border. It contains a paragraph about the study's purpose and two outcome sections. The "Primary Outcome" section is in a dark grey box, and the "Secondary Outcome" section is in a light grey box below it.

### Study Objectives

This study sought to establish the landscape of regulatory policies related to medications for opioid use disorders (MOUD) for pharmacists.

**Primary Outcome:**  
Assess each state's current policy, if any, on the use of MOUD in practicing pharmacists.

**Secondary Outcome:**  
Document the states that offered support programs for pharmacists with opioid use disorders.

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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health

### Data Collection

**Board Contact:**

Each board administrator's email address was obtained through the National Association of Boards of Pharmacy (NABP) website or the board's web page.

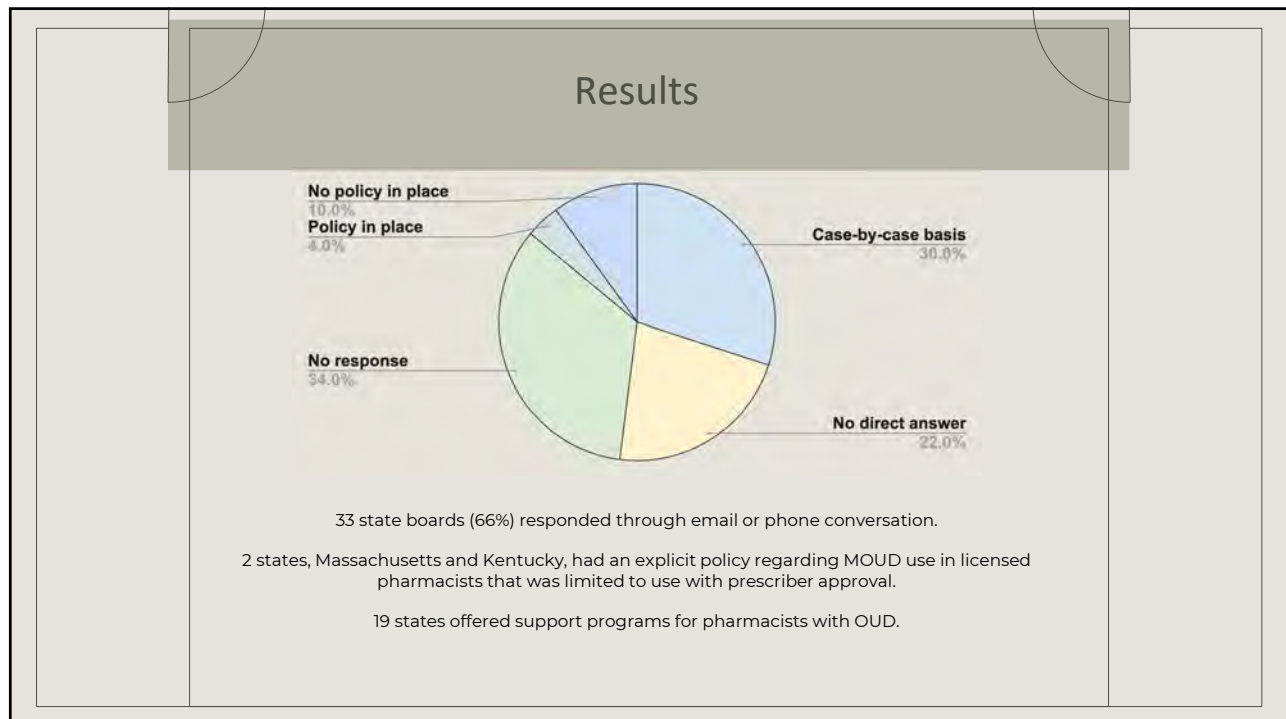
- If an email address was unavailable, the website chat/message feature (if available) or an associated phone number was utilized.

Standardized questions were presented to each board assessing the use of MOUD in practicing pharmacists as well as seeking information about recovery programs.

Each board was contacted three times to obtain the information.

The answers were coded into different categories and coded as: 1) policy in place, 2) case-by-case basis, 3) no policy in place, 4) no direct answer or unable to provide, or 5) no response.

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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health

### Conclusion

A pharmacist with OUD can feel overwhelmed when seeking help and finding ways to preserve their professional and personal identities.

Pharmacists may realize too late that effective treatment is not allowed when returning to practice based on their state's policies.

Implications of this study suggest that there is a need for proposing a model regulation or legislation to provide clear guidance to licensees with OUD while still protecting public safety.

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### Poster

**Regulatory Insights: Examining the Landscape of State Policies That Allow Medication for Pharmacists With Substance Use Disorders**  
Audra Butler, PharmD Candidate and Mary Douglass Smith, PharmD

**BACKGROUND**

- Individuals with an opioid use disorder (OUD) have several treatment methods to consider: an abstinence-based approach, outpatient treatment, cognitive therapy, and medication prescribed for the OUD (mOUD), including methadone, buprenorphine, or buprenorphine.
- The goals of therapy are to minimize cravings and withdrawal symptoms and return to activities of daily living.
- Each state's regulations differ on medications that are allowed, restricted, or simply vague in guidance for the practitioner.
- Clear and effective communication between program participants, licensing boards, and treatment providers can help these licensees return to practice while reducing the risk to public safety.
- Pharmacists are entrusted to have full cognitive function and clear judgment while practicing for the good of public health and safety. These same goals apply to pharmacist with an OUD. By establishing clear guidance on the rehabilitation and maintenance of OUD in pharmacists, including pathways back to licensure, these individuals can seek and establish effective treatment strategies without compromising patient safety.

**METHODS**

**OBJECTIVE**

This study sought to establish the landscape of regulatory policies related to mOUD for pharmacists.

**Primary outcome:** Assess each state's current policy, if any, on the use of mOUD in practicing pharmacists.

**Secondary outcome:** Document the states that offered support programs for pharmacists with opioid use disorders.

**BOARD CONTACT**

- Each board administrator's email address was obtained through the National Association of Boards of Pharmacy's (NABP) website or the board's webpage. If an email address could not be obtained, the website chat/message feature (if available) or an associated phone number were utilized.
- Standardized questions were presented to each board of pharmacy regarding the use of mOUD in practicing pharmacists, which drugs (if any) were allowed, and what their state offers for pharmacists with OUD.
- Each board was contacted 3 times to obtain the information.
- The answers were coded into different categories and coded as: 1) policy in place, 2) case-by-case basis, 3) no policy in place, 4) no direct answer or unable to provide, or 5) no response.

**RESULTS**

- 33 state boards (66%) responded through email or phone conversation.
- 2 states, Massachusetts and Kentucky, had an explicit policy regarding mOUD use in licensed pharmacists that was limited to use with prescriber approval.
- 19 states offered support programs for pharmacists with OUD.

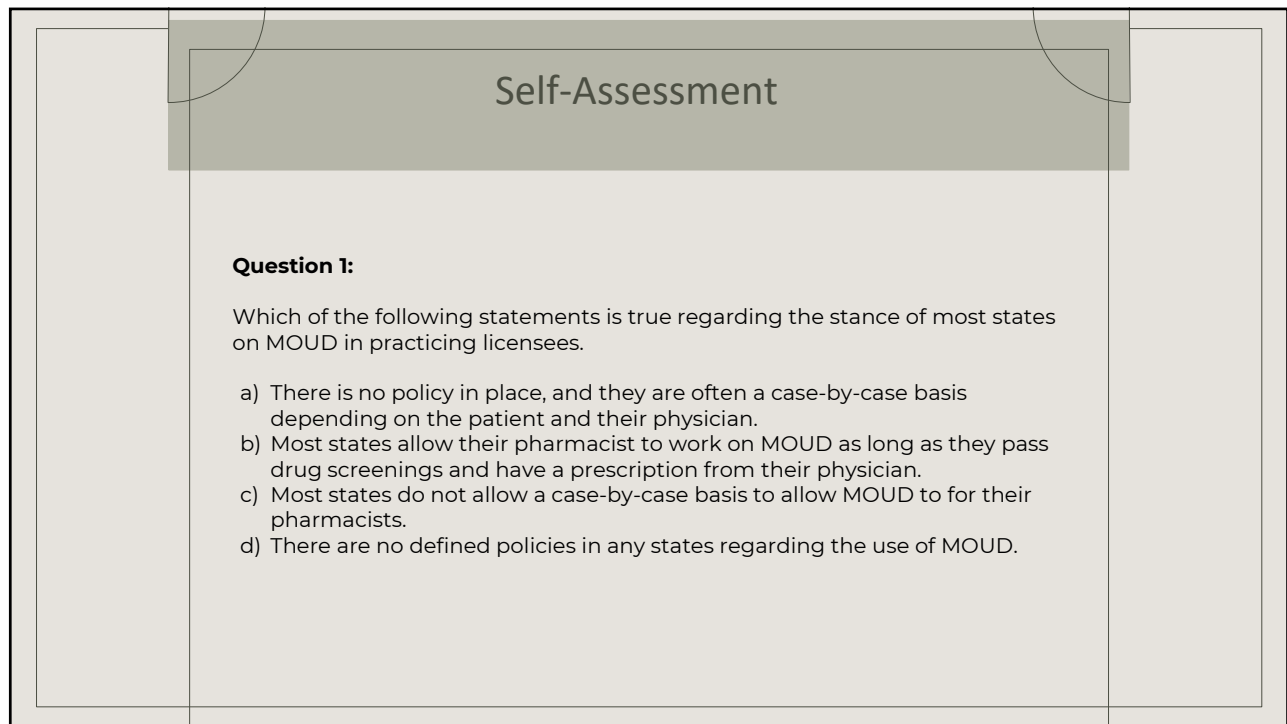
**CONCLUSIONS**

- A pharmacist with OUD can feel overwhelmed when seeking help and finding ways to preserve their professional and personal identities.
- Pharmacists may realize too late that effective treatment is not allowed when returning to practice based on their state's policies.
- Implications of this study suggest that there is a need for proposing a model regulation or legislation to provide clear guidance to licensees with OUD while still protecting public safety.

**REFERENCES & CONTACT INFO**

Category	Percentage
Case-by-case basis	30.0%
No direct answer	22.0%
No response	33.0%
Policy in place	8.0%
No policy in place	11.0%

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The poster is titled "Self-Assessment" in a large, bold, black font at the top. Below the title, the text "Question 1:" is followed by a paragraph asking which statement is true regarding the stance of most states on MOUD in practicing licensees. There are four multiple-choice options labeled a) through d).

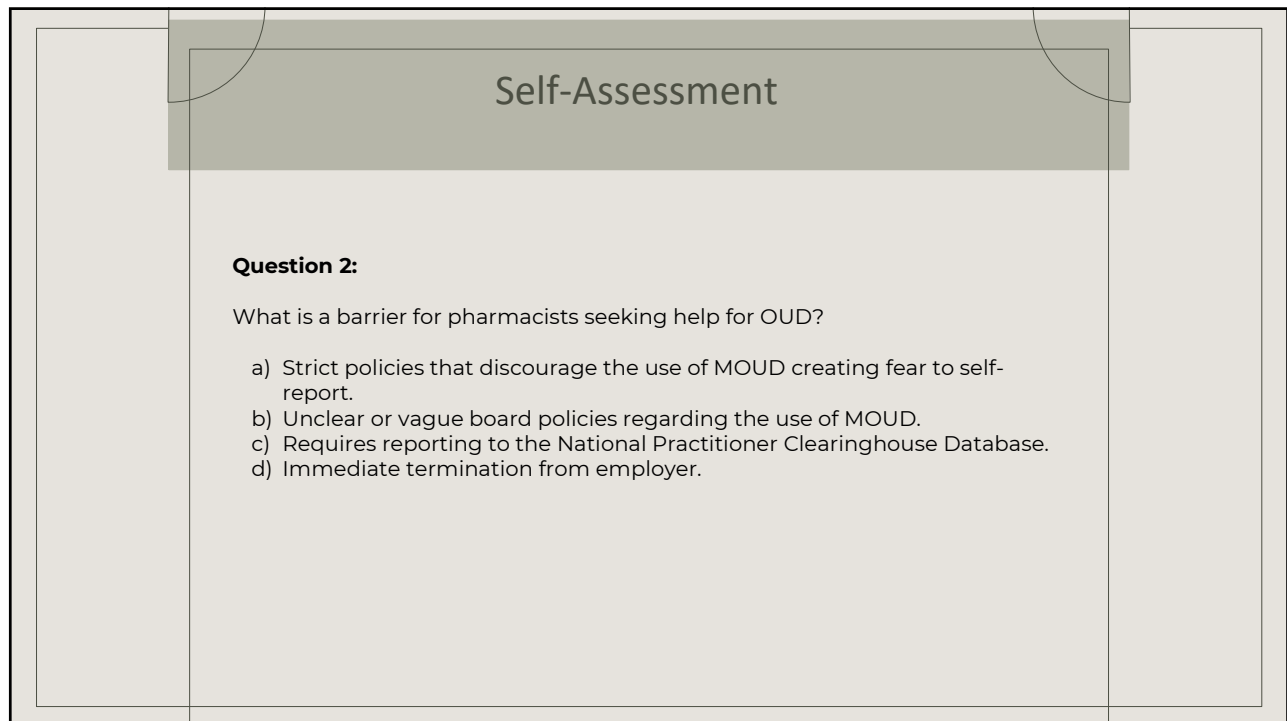
## Self-Assessment

**Question 1:**

Which of the following statements is true regarding the stance of most states on MOUD in practicing licensees.

- a) There is no policy in place, and they are often a case-by-case basis depending on the patient and their physician.
- b) Most states allow their pharmacist to work on MOUD as long as they pass drug screenings and have a prescription from their physician.
- c) Most states do not allow a case-by-case basis to allow MOUD to for their pharmacists.
- d) There are no defined policies in any states regarding the use of MOUD.

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The poster is titled "Self-Assessment" in a large, bold, black font at the top. Below the title, the text "Question 2:" is followed by a paragraph asking what is a barrier for pharmacists seeking help for OUD. There are four multiple-choice options labeled a) through d).

## Self-Assessment

**Question 2:**

What is a barrier for pharmacists seeking help for OUD?

- a) Strict policies that discourage the use of MOUD creating fear to self-report.
- b) Unclear or vague board policies regarding the use of MOUD.
- c) Requires reporting to the National Practitioner Clearinghouse Database.
- d) Immediate termination from employer.

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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health

### Contact Information


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**Dr Mary Douglass Smith:**  
(803) 212-8190, mdsmith@presby.edu

References:



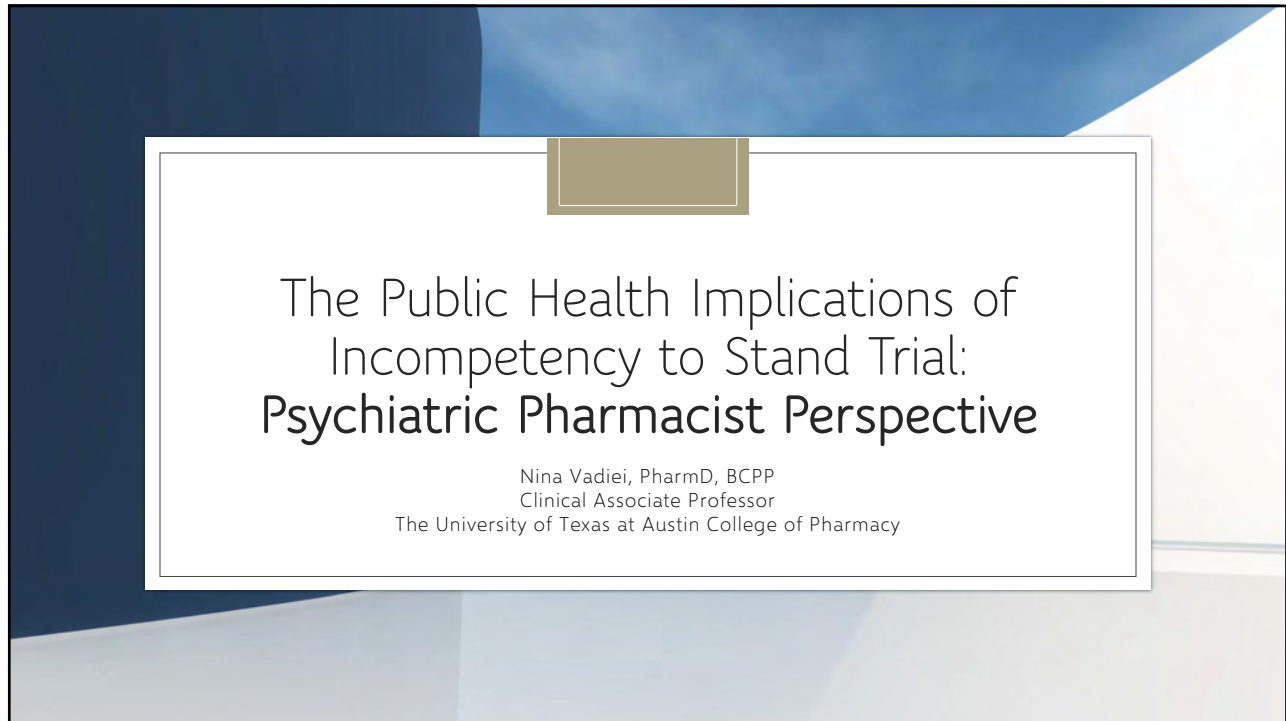
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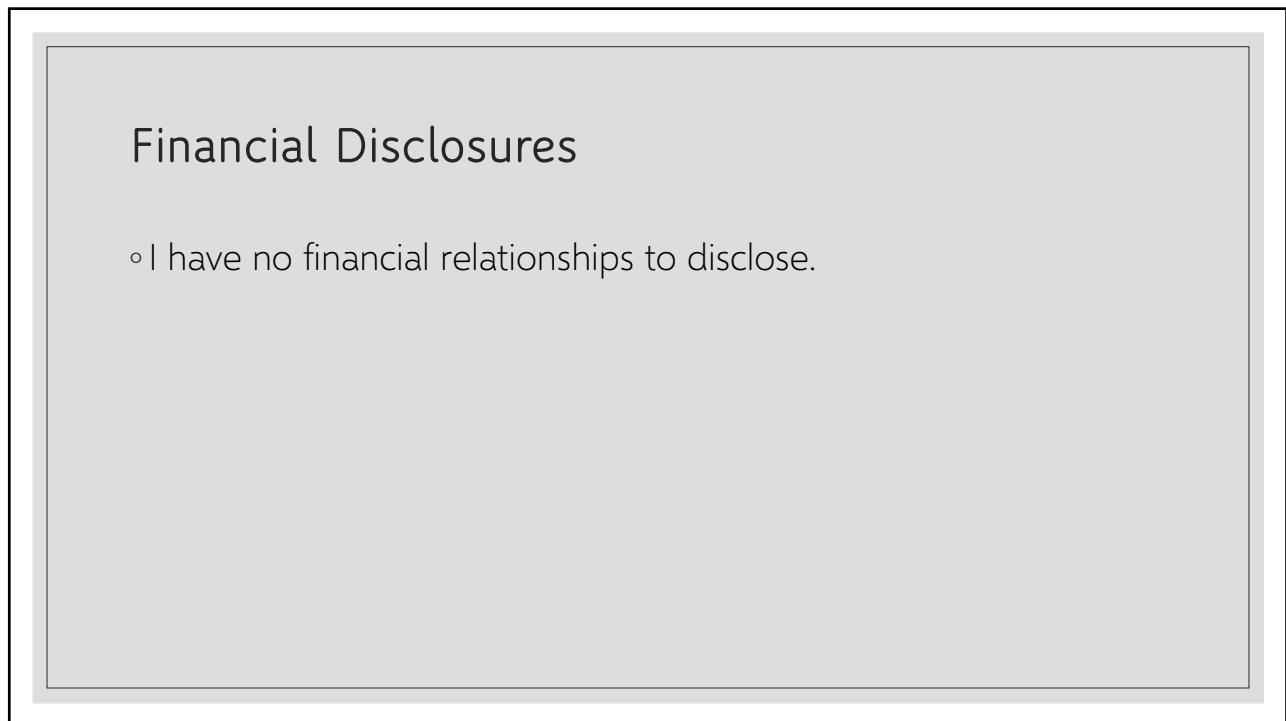
## The Public Health Implications of Incompetency to Stand Trial: Psychiatric Pharmacist Perspective

Nina Vadie, PharmD, BCPP  
Clinical Associate Professor  
The University of Texas at Austin

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## Learning Objectives

1. Describe the barriers persons with severe mental illnesses (SMI) face in accessing mental health treatment.
2. Explain the role of the board-certified psychiatric pharmacist in fulfilling policymakers' recommendations for improving the full continuum of care for persons with SMI.
3. List measurable outcomes pharmacists can track when implementing a psychotropic stewardship program.

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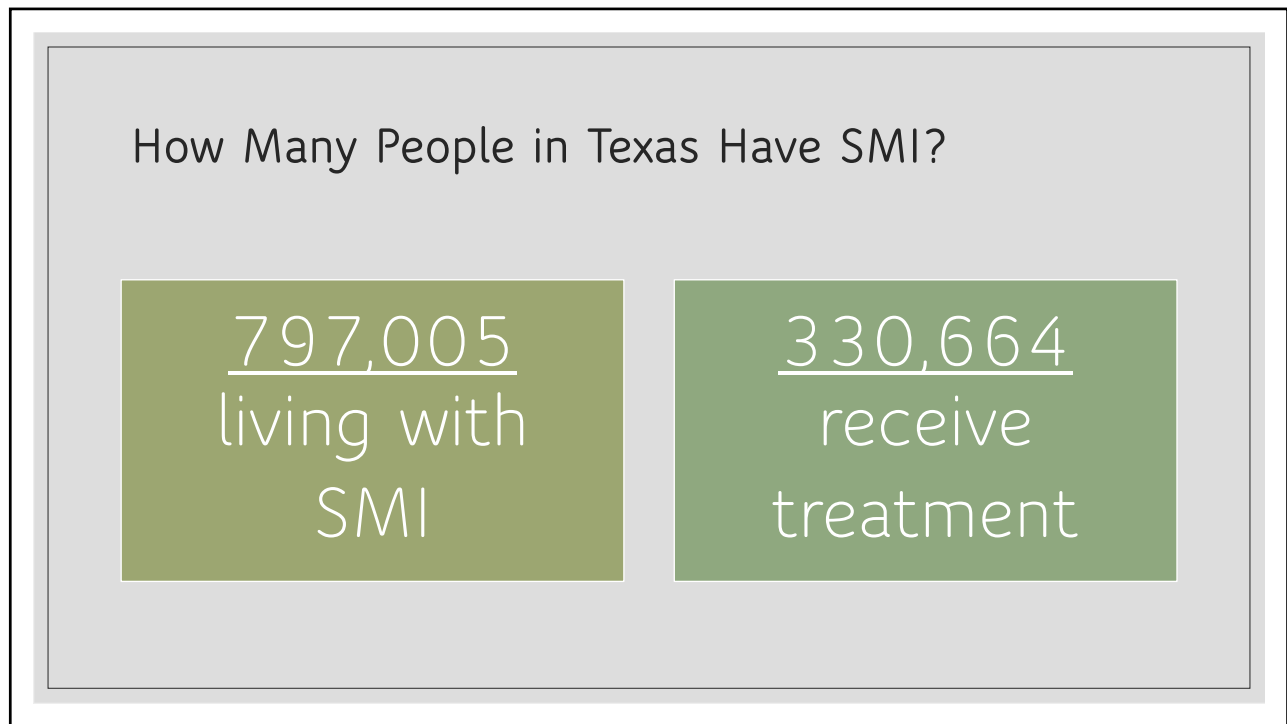
## What Is SMI?

"Severe" or "serious" mental illness, an umbrella term that includes the most serious of psychiatric disorders that puts an individual at greatest risk of anosognosia, having their mental illness criminalized or experiencing a preventable tragedy such as victimization or suicide. These include:

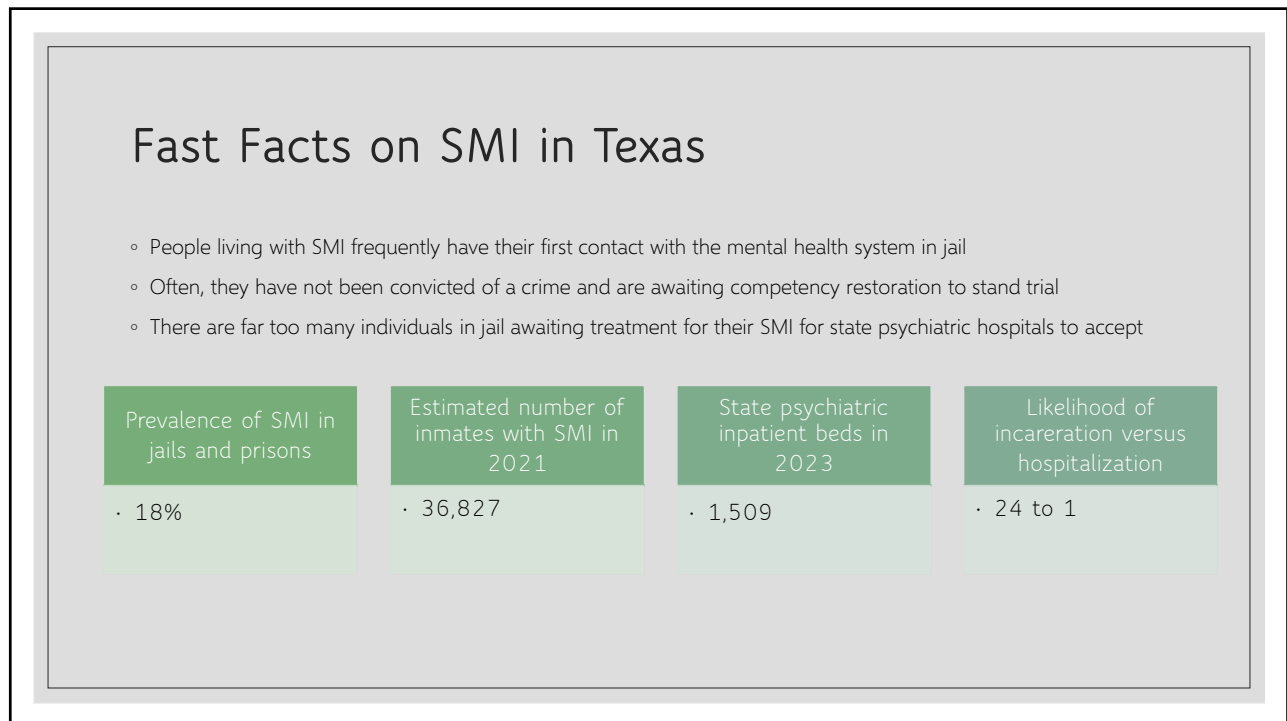
- Schizophrenia spectrum disorders
- Bipolar disorder
- Major depressive disorder with psychotic features
- Often co-occurring substance use disorders

<https://www.treatmentadvocacycenter.org>

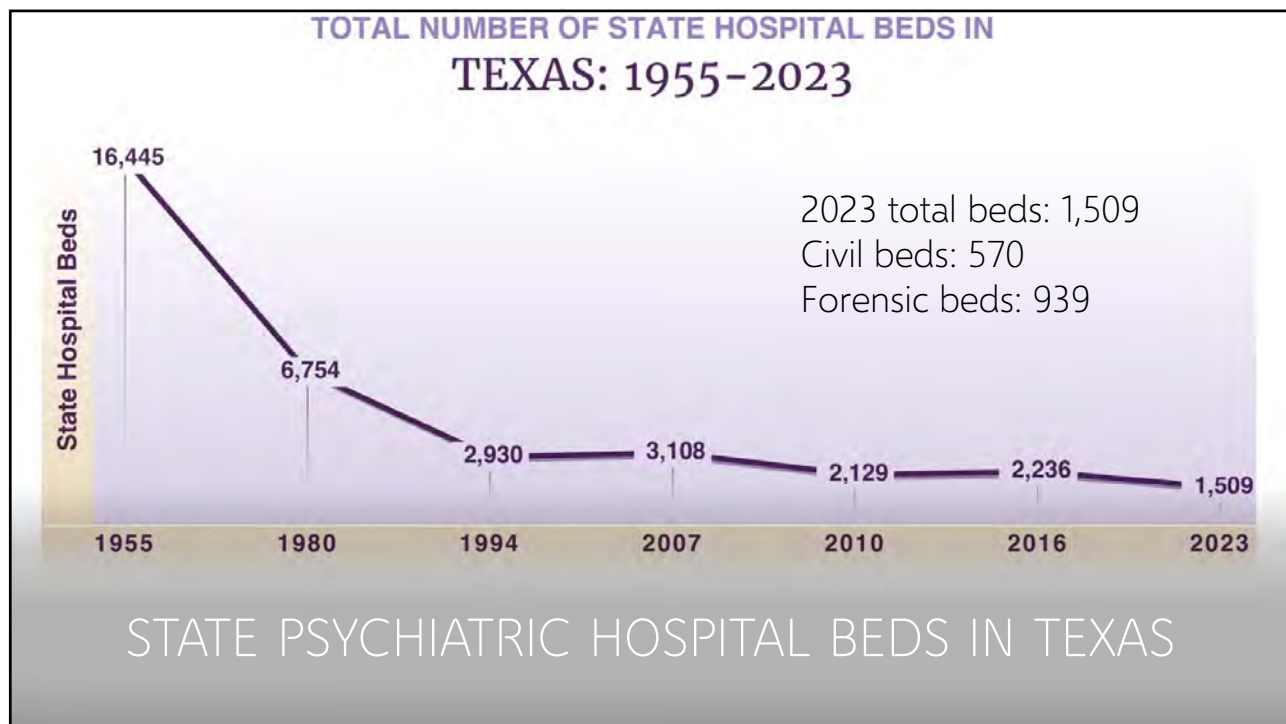
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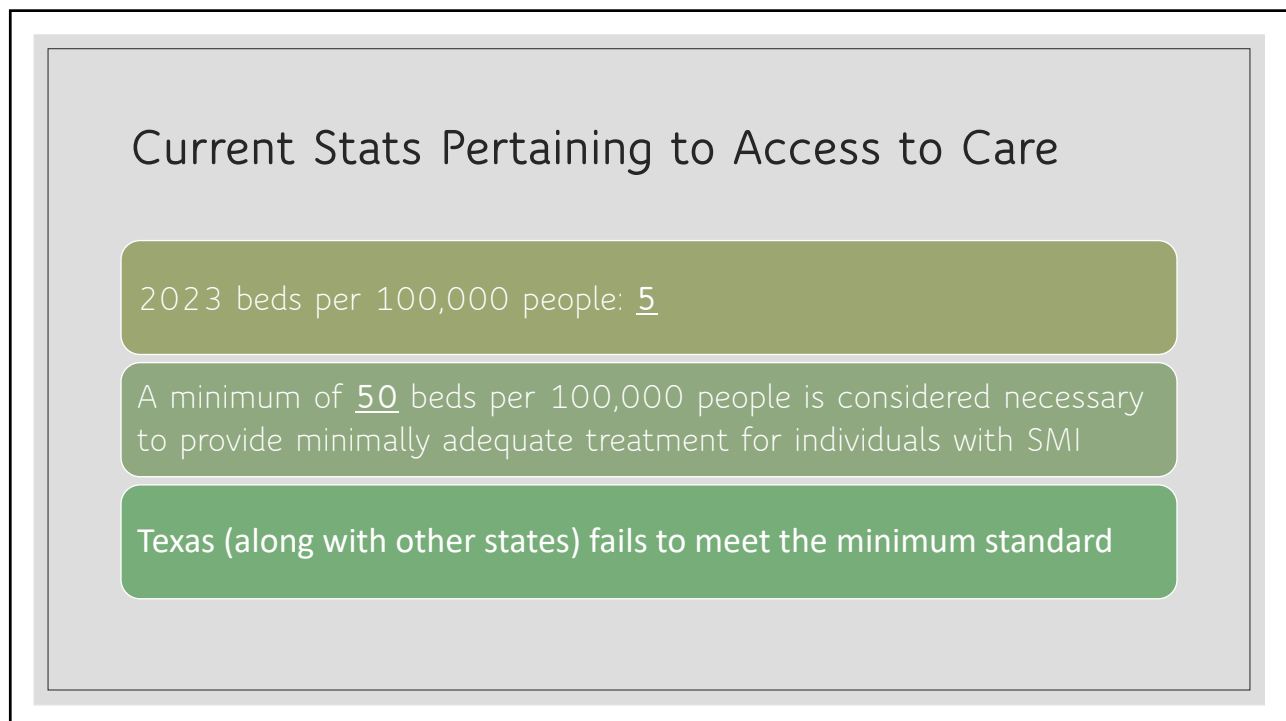
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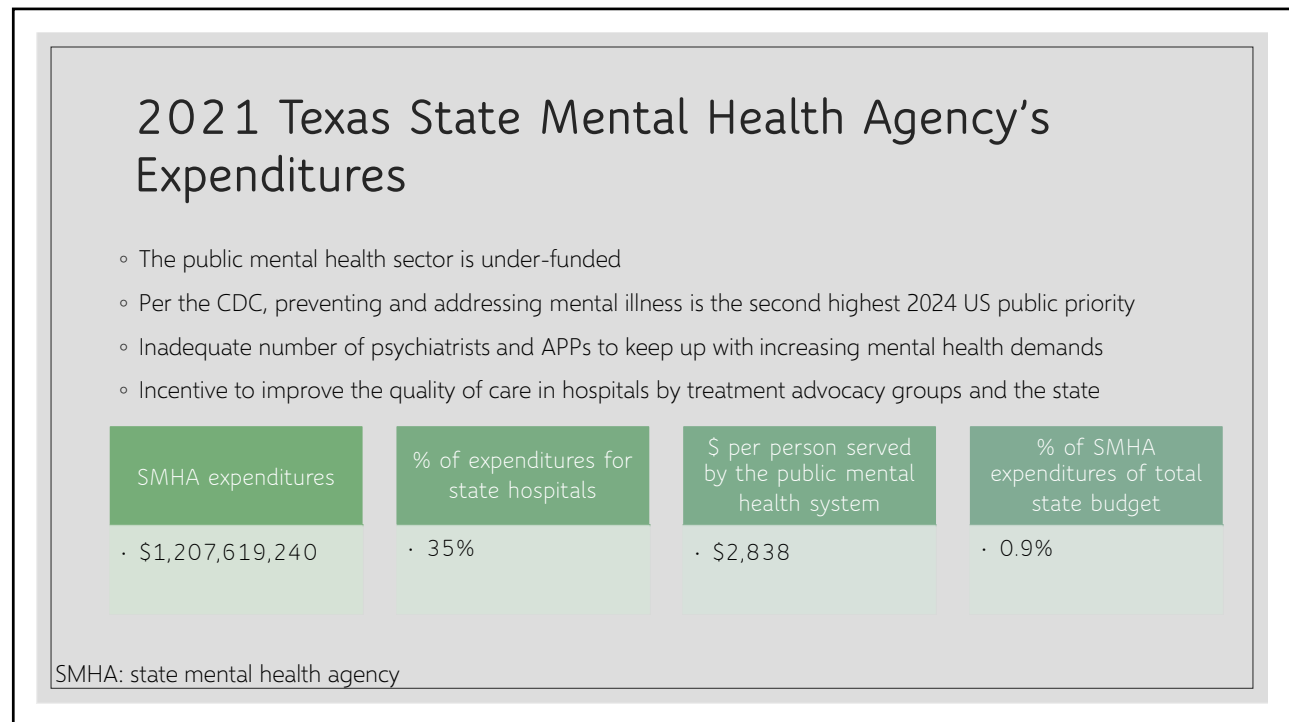
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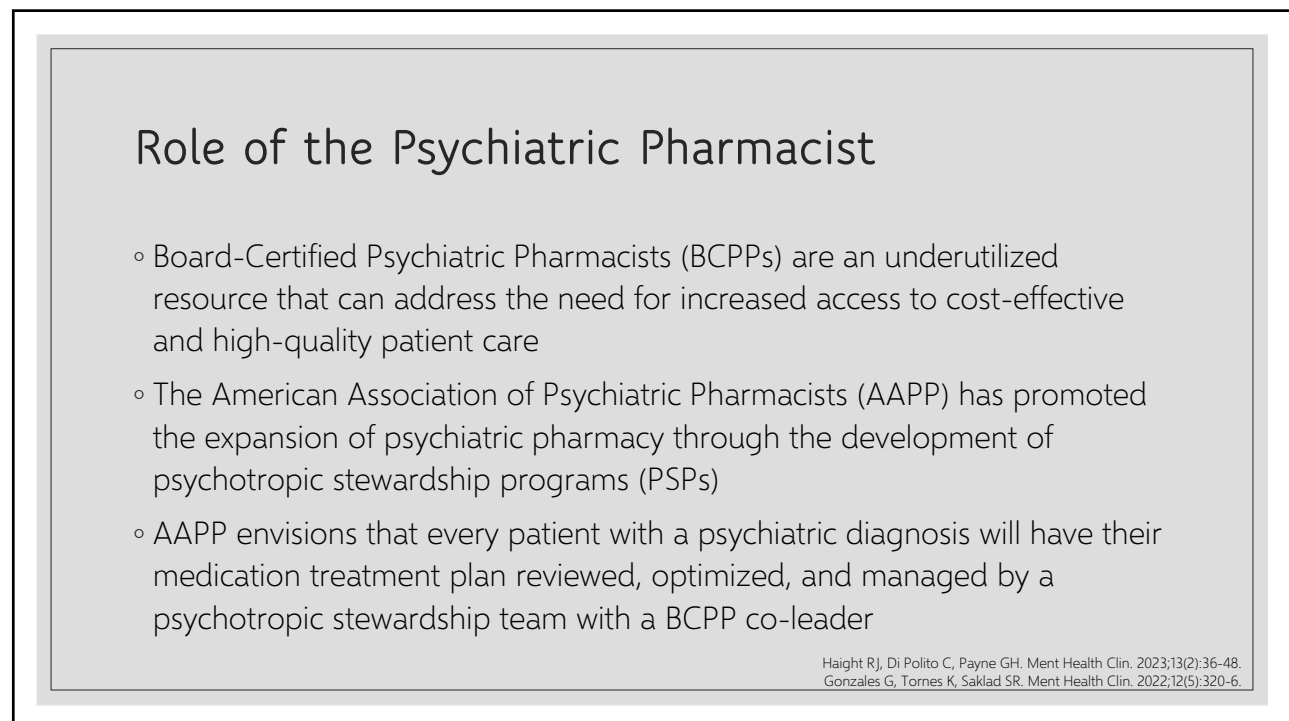
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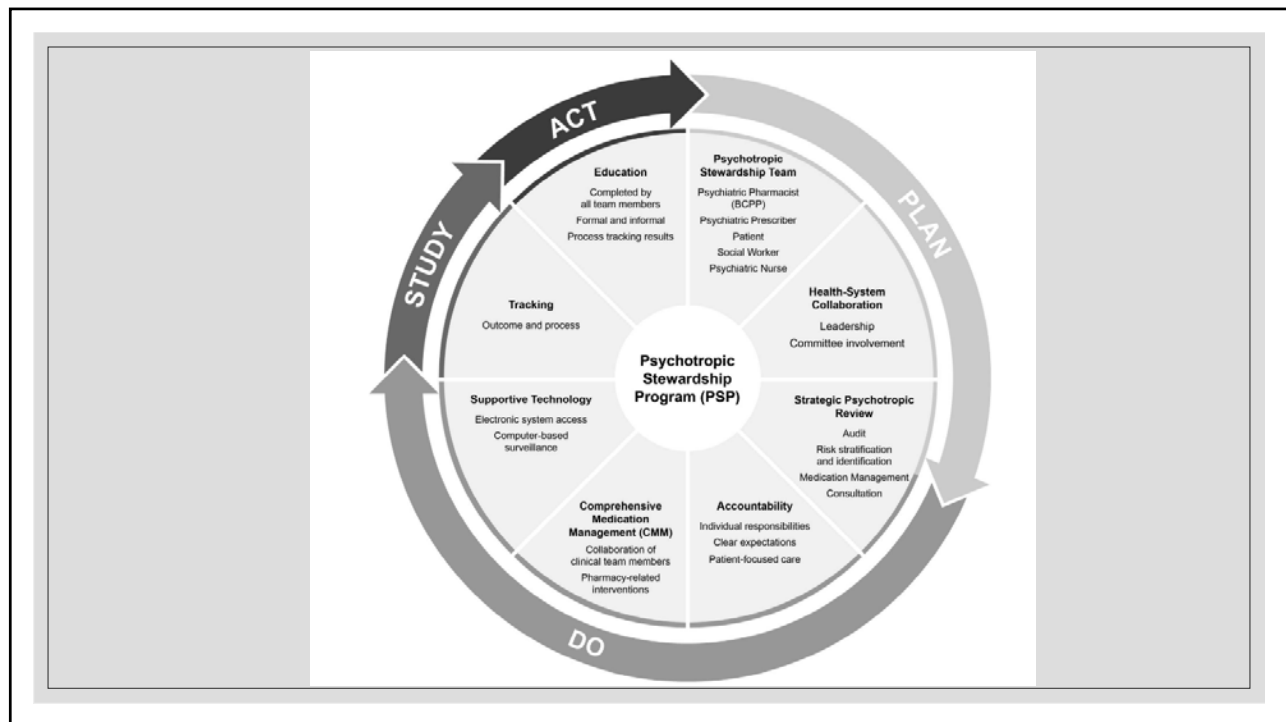


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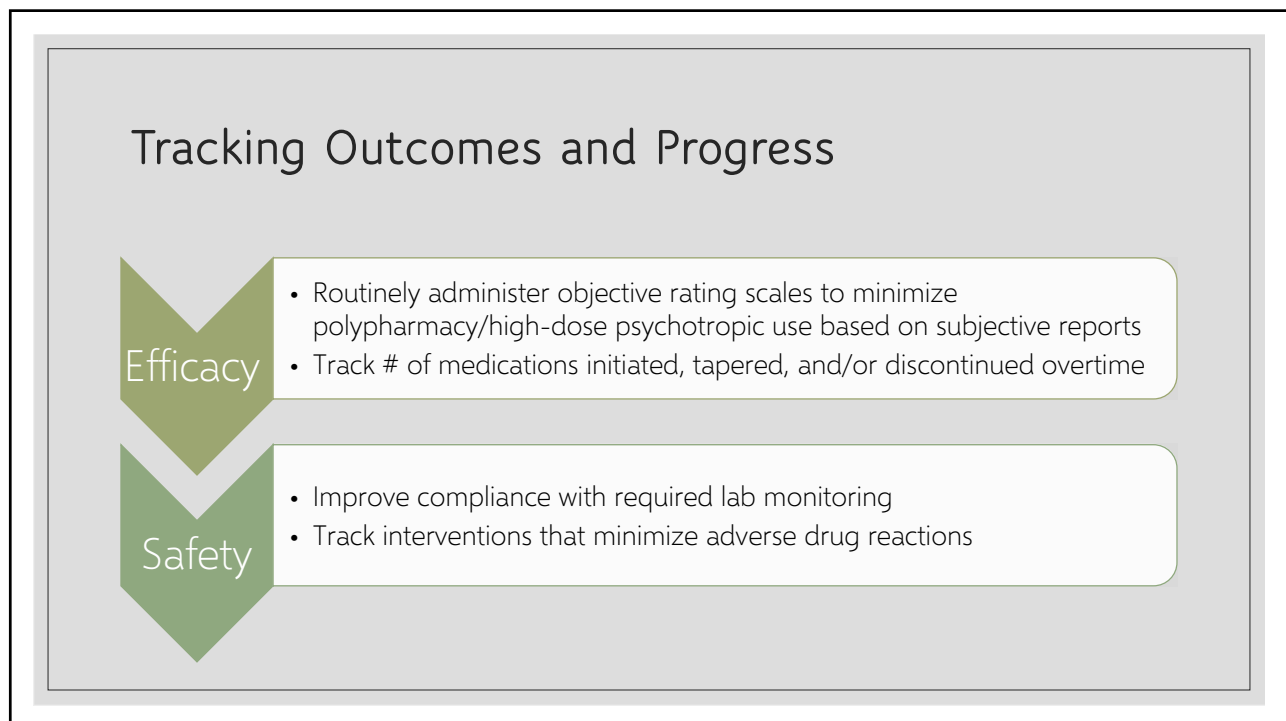


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## Poster Presentations: Evolving Pharmacy Practice to Protect the Public Health




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## Tracking Outcomes and Progress



- Collect data pertaining to patient satisfaction with care received from BCPP
- Collect data pertaining to team member satisfaction in filling care gaps

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## Beyond Beds: The Vital Role of a Full Continuum of Psychiatric Care – Policymaker Recommendations

1. The Vital Continuum: Prioritize and fund the development of a comprehensive continuum of mental health care that incorporates a full spectrum of integrated, complementary services known to improve outcomes for individuals of all ages with SMI.

Pharmacist's role:  
Integrated, complementary service should include medication management with teams including a BCPP

[https://www.treatmentadvocacycenter.org/reports\\_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care](https://www.treatmentadvocacycenter.org/reports_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care)

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## Beyond Beds: The Vital Role of a Full Continuum of Psychiatric Care – Policymaker Recommendations

2. Data-Driven Solutions: Prioritize and fully fund the collection and timely publication of all relevant data on the role and intersystem impacts of SMI and best practices.

### Pharmacist's role:

Support and encourage BCPPs to publish data pertaining to the impact of clinical services provided

[https://www.treatmentadvocacycenter.org/reports\\_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care](https://www.treatmentadvocacycenter.org/reports_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care)

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## Beyond Beds: The Vital Role of a Full Continuum of Psychiatric Care – Policymaker Recommendations

3. Linkages: Recognize that mental health, community, justice, and public service systems are interconnected, and adopt and refine policies to identify and close gaps between them. Practices should include providing “warm hand-offs” and other necessary supports to help individuals navigate between the systems in which they are engaged.

### Pharmacist's role:

BCPPs can be a vital resource for improving transition of care processes

[https://www.treatmentadvocacycenter.org/reports\\_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care](https://www.treatmentadvocacycenter.org/reports_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care)

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## Beyond Beds: The Vital Role of a Full Continuum of Psychiatric Care – Policymaker Recommendations

4. Workforce: Initiate assessments to identify, establish, and implement public policies and public-private partnerships that will reduce structural obstacles to people's entering or staying in the mental health workforce. These assessments should include, but not be limited to, educational and training opportunities, pay disparities, and workplace safety issues. The assessments should be conducted for the workforce across all positions.

### Pharmacist's role:

Advocate for funding of BCPP education/training and reimbursement for BCPP clinical services

[https://www.treatmentadvocacycenter.org/reports\\_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care](https://www.treatmentadvocacycenter.org/reports_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care)

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## Beyond Beds: The Vital Role of a Full Continuum of Psychiatric Care – Policymaker Recommendations

5. Partnerships: Recognize the vital role families and non-traditional partners outside the mental health system can play in improving mental health outcomes and encourage and support the inclusion of a broader range of invited stakeholders around mental illness policy and practice.

### Pharmacist's role:

Include patient/family satisfaction of care provision as a tracked outcome for justifying BCPP clinical services

[https://www.treatmentadvocacycenter.org/reports\\_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care](https://www.treatmentadvocacycenter.org/reports_publications/beyond-beds-the-vital-role-of-a-full-continuum-of-psychiatric-care)

100

## Take-Away Points

- Access to psychiatric care for persons with SMI is a topic of national urgency
- States, including Texas, are sued repeatedly over waits for state hospital beds
- Psychiatric bed shortages are often blamed for homelessness, mass incarceration, violence, etc
- The quality of care provided by psychiatric inpatient settings is challenging to measure
  - Lack of formal guidelines
  - Insufficient staff/resources to implement and monitor guidelines
- BCPPs are an underutilized resource to help improve patient access to quality care
- Supporting implementation of PSPs may help further refine the role of the BCPP and justify development and retention of BCPP clinical services

\*My contact information: [vadiei@uthscsa.edu](mailto:vadieie@uthscsa.edu)

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## Acknowledgements

- Nina Vadieie would like to thank Catherine Hall, PharmD, BCPP and Stephen R. Saklad, PharmD, BCPP who were unable to present today but helped finalize the initial presentation proposal and today's presentation

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## Self-Assessment Question #1

1. In 2023, how many state-hospital beds were available in Texas for forensic patients?
  - A. <500
  - B. <1,000
  - C. <10,000
  - D. <100,000

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## Self-Assessment Question #2

1. Which of the following programs could help expand patient access to BCPP pharmacy services?
  - A. Assertive community treatment program
  - B. Forensic assertive community treatment program
  - C. Psychotropic stewardship program
  - D. State hospital to clinic transition program

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## The Public Health Implications of Incompetency To Stand Trial: Psychiatric Pharmacist Perspective

Nina Vadioli, PharmD, BCPP; Catherine Hall, PharmD, BCPP; Stephen R. Saklad, PharmD, BCPP

### Overflooded State Hospitals

- People living with mental illness, developmental disabilities, and neurocognitive disorders find themselves jailed, sometimes for years. They have not been convicted of a crime, rather, they are awaiting trial due to concerns about their legal competency.<sup>1</sup>
- Most beds at state hospitals have been repurposed to move people out of overcrowded jails and provide the psychiatric treatment needed to restore competency.
- There are far too many individuals in jail awaiting competency restoration for state hospitals to accept.<sup>1</sup>
- The public mental health sector is under-funded and does not have an adequate number of psychiatrists and advanced psychiatric providers to keep up with increasing mental health demands.<sup>2</sup>
- Board-certified psychiatric pharmacists (BCPPs) are an undervalued resource that can help address the growing need to increase patient access to cost-effective and advanced mental health care.<sup>3</sup>

### Psychiatric Pharmacist Role

- The American Association of Psychiatric Pharmacists (AAP) has promoted the expansion of psychiatric pharmacy through the development of psychotropic stewardship programs (PSPs).<sup>3</sup>
- AAP envisions that every patient with a psychiatric diagnosis will have their medication treatment plan reviewed, optimized, and managed by a psychotropic stewardship team with a BCPP co-leader.<sup>3</sup>

### Psychotropic Stewardship

- Initial implementation of PSPs should stratify patients with the highest risks of medication-related problems, comorbid conditions, or hospitalization.<sup>3</sup>
- Like antimicrobial stewardship, psychotropic stewardship promotes the safe and appropriate use of psychotropics, minimizes unintended consequences, and improves patient outcomes.<sup>3</sup>
- At San Antonio State Hospital (SASH), one BCPP tracked interventions over the course of 4 months and identified the most common interventions among forensic patients to be: (1) Medication not needed but prescribed; (2) Dose optimization; (3) Lab monitoring; (4) Education.

### Core Elements of PSP

### Next Steps/Future Considerations

- Track site-specific PSP outcomes at different health systems, including state hospitals.

Outcome category	Tracking process example
Efficacy	1. Administer objective rating scales 2. Track # of medications initiated, tapered, discontinued
Safety	1. Improve compliance with required lab monitoring 2. Track interventions that minimize adverse drug reactions
Education	Measure patient satisfaction with care provided by BCPP
Care Gaps	Measure team member satisfaction in BCPP filling treatment care gaps

### Conclusion

- Patients with severe mental illnesses who are found incompetent to stand trial often have substandard mental health care for years.
- Routine implementation of PSPs across state hospitals is one step in the right direction towards holding state health systems accountable for improving psychotropic use and associated health outcomes for this vulnerable population.

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# Impacts of Active Learning in a Pharmaceutical Calculations Course

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## Impacts of Active Learning in a Pharmaceutical Calculations Course




University of Arkansas for Medical Sciences

Presented By: Olgaaurora Rodriguez  
Advisor: Dr. Martin D. Perry - Associate Professor


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### Learning Objectives

-  **01** Describe the types of questions and the order of these questions in an activity that follows the learning cycle.
-  **02** Describe the benefits students experience when engaged in active learning during class.
-  **03** Explain the statistical data collected from students who were engaged in active learning and from those who received traditional lectures.

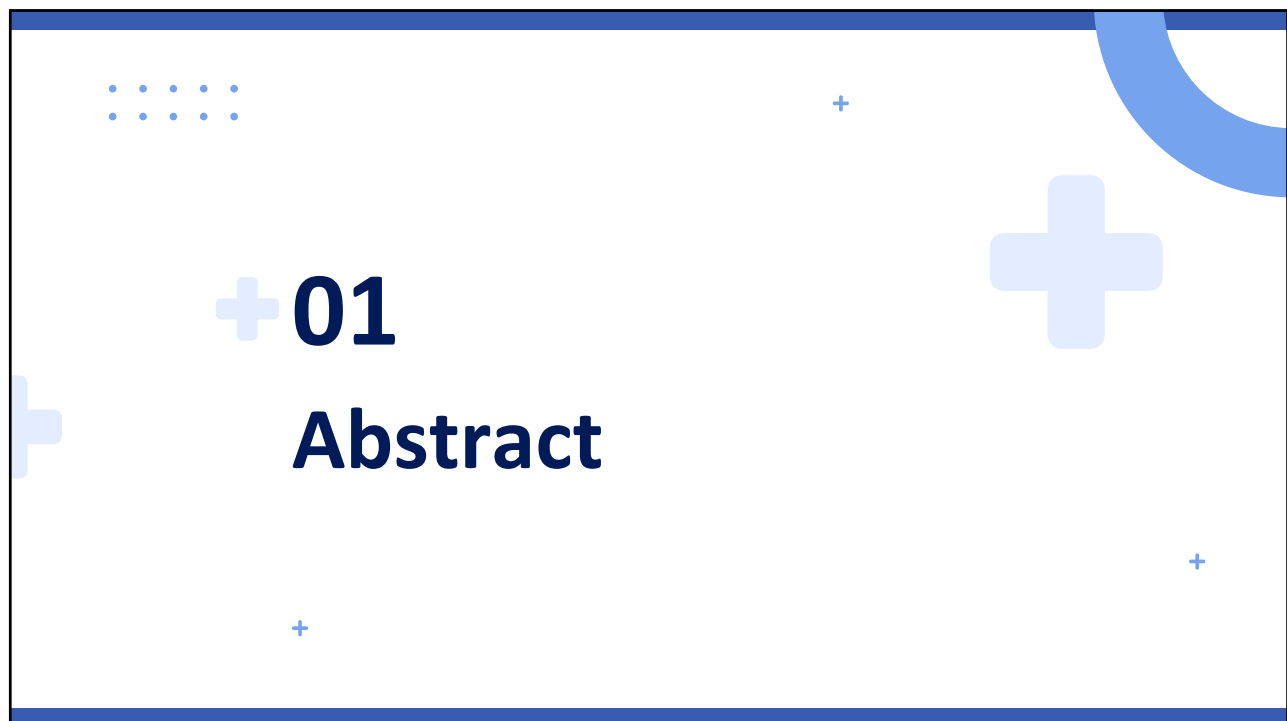
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 <b>03</b> Results	 <b>06</b> References

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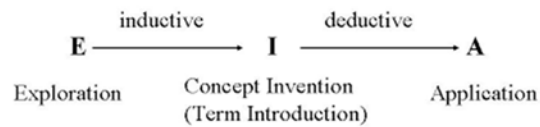


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# Introduction to Active Learning

“Evidence-based strategies require learners to construct knowledge and meaning, resulting in long-term retention as opposed to short-term memorization and superficial understanding.”

- 3 types of activity questions based on learning cycle:  
**Exploration, Invention, & Application**

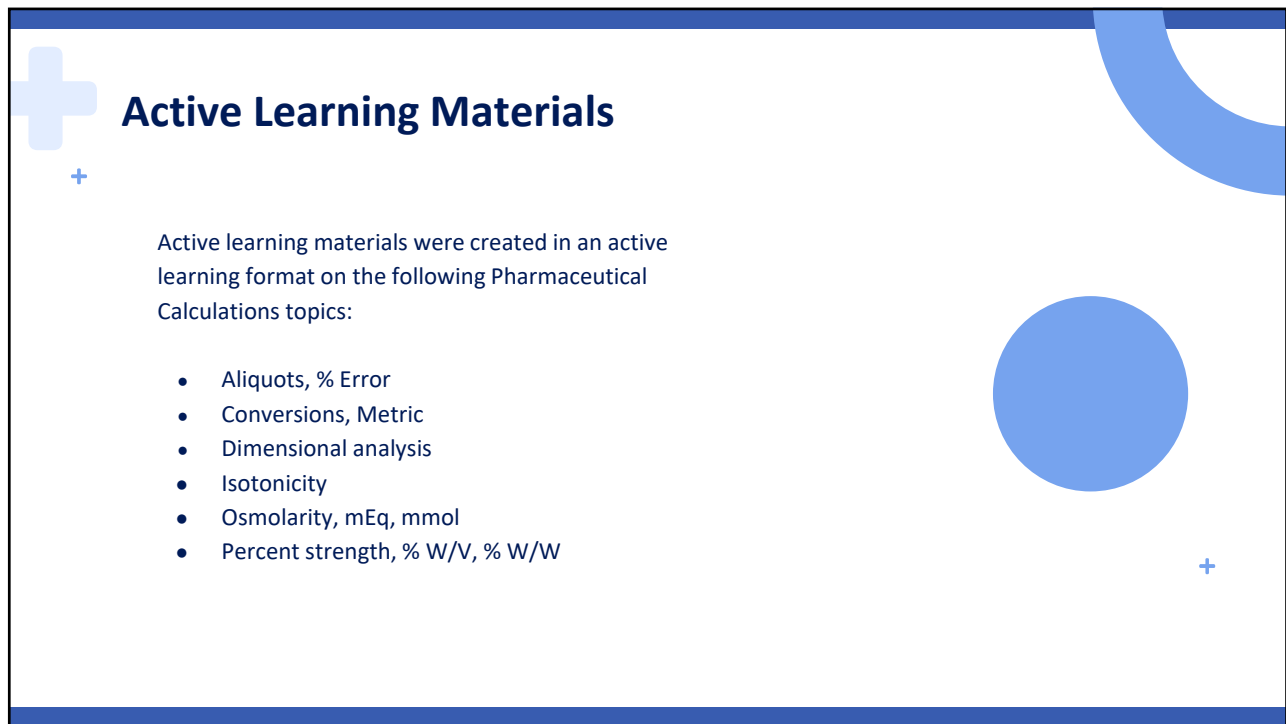


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## +02 Materials

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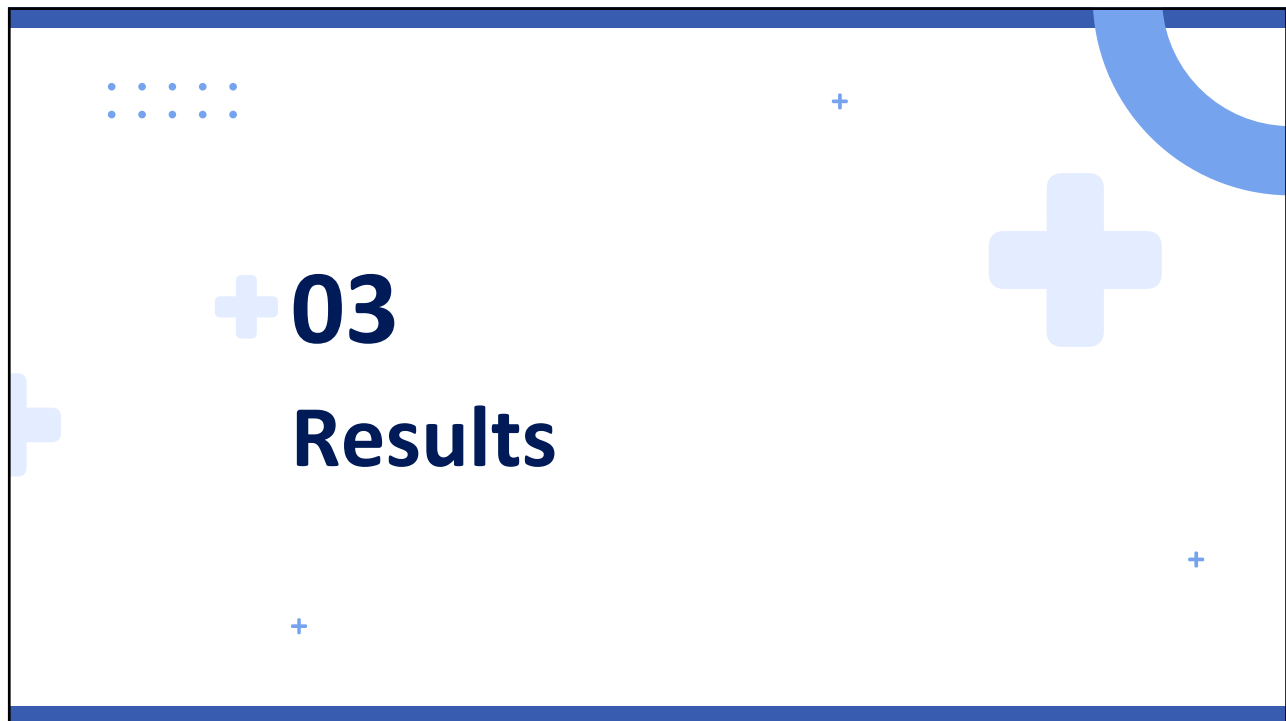
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## Active Learning Materials

Active learning materials were created in an active learning format on the following Pharmaceutical Calculations topics:

- Aliquots, % Error
- Conversions, Metric
- Dimensional analysis
- Isotonicity
- Osmolarity, mEq, mmol
- Percent strength, % W/V, % W/W

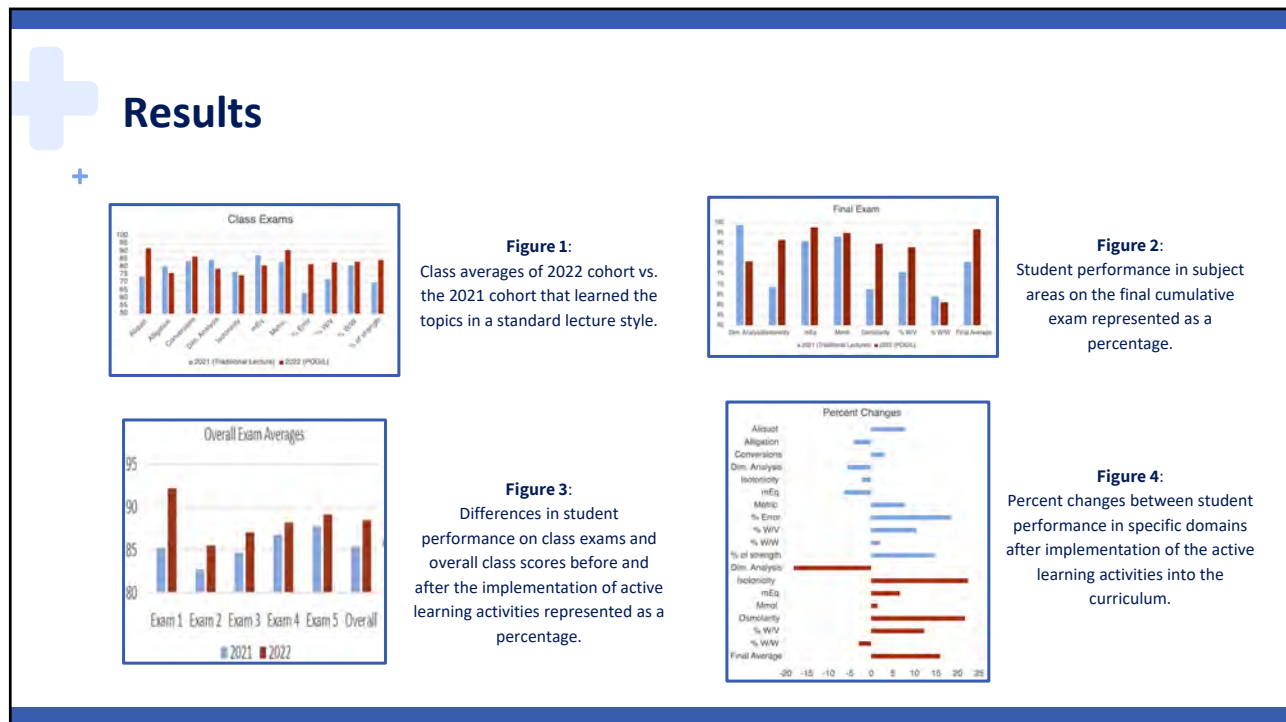
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## + 03 Results


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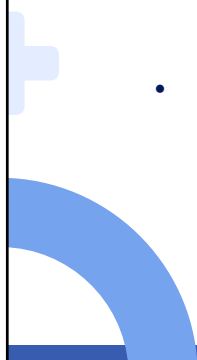


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## Discussion & Conclusions

- Substantial improvements were noted in several topics of pharmaceutical calculations.
- Some topics showed no improvement.
- Cumulative final exam yielded higher scores than the previous year.
- One data, outlier: dimensional analysis. The instructional activity on this topic occurred on the second day of class for the new P1 cohort.
- Performance shows a clear positive trend, notably in better long-term retention and improved understanding and application of the material, with a large improvement on the cumulative final exam.



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# +05

## Acknowledgements

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**Acknowledgements**

**Dr. Martin D. Perry**  
Associate Professor

**Dr. Melanie Reinhardt**  
Associate Professor

*Facilities and funding were provided by the College of Pharmacy 2022 Summer Research Program.*

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**+06**

**References**

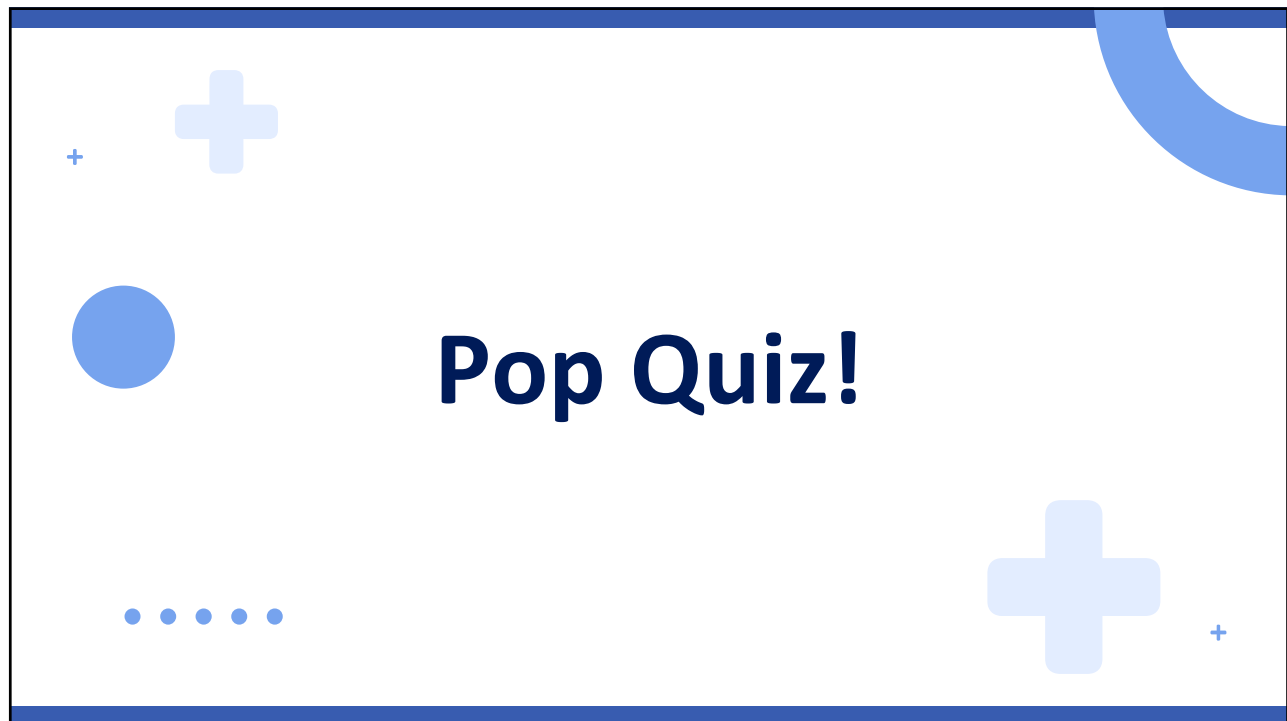
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## References

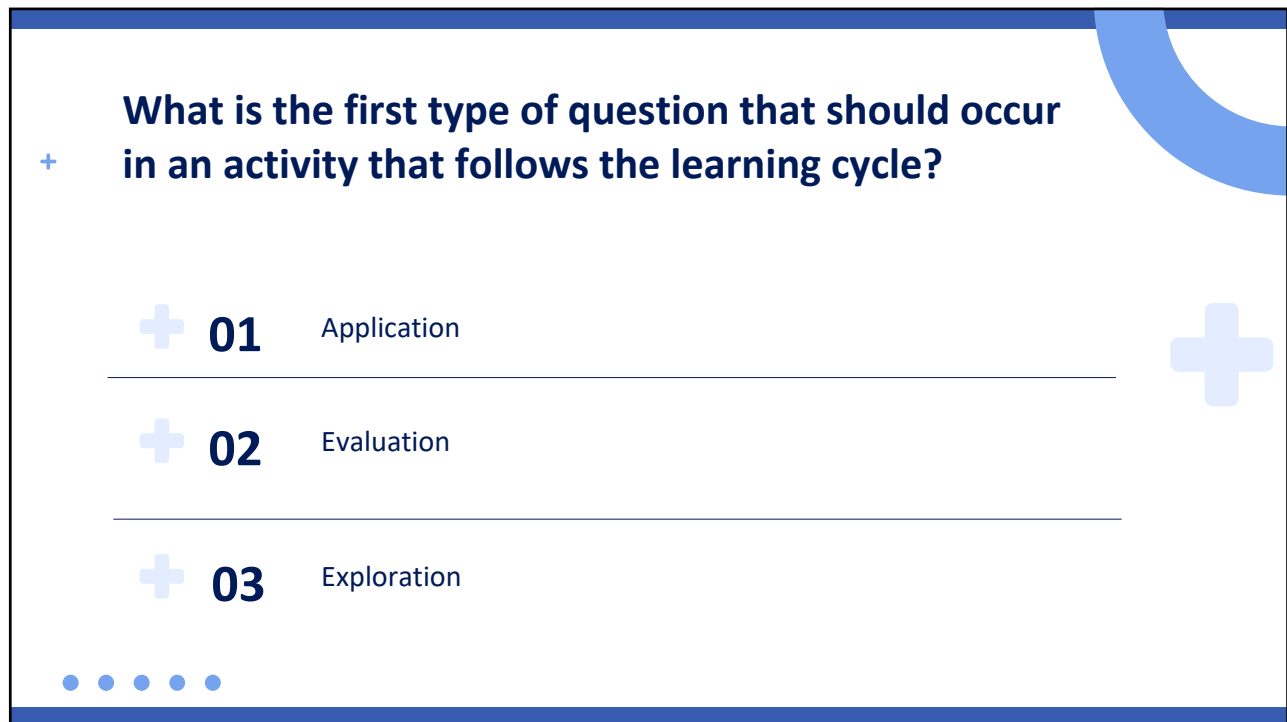
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## Pop Quiz!

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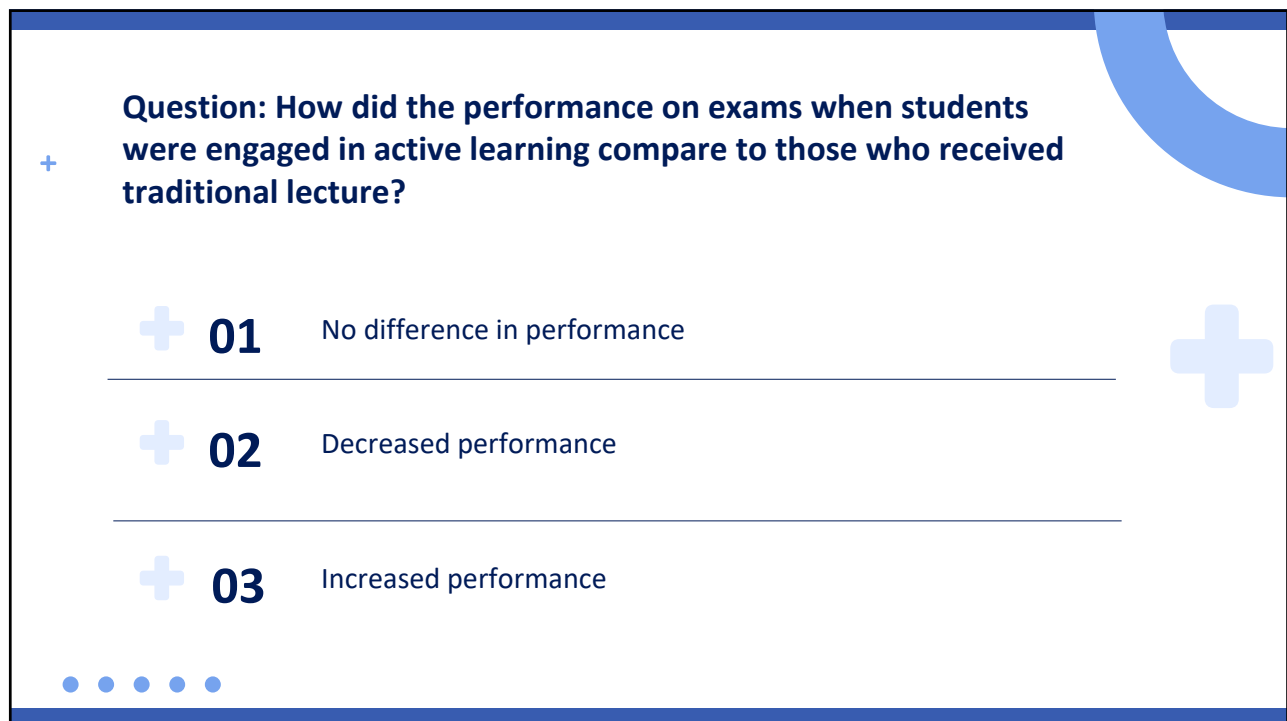


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**What is the first type of question that should occur in an activity that follows the learning cycle?**

- + 01** Application
- + 02** Evaluation
- + 03** Exploration

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**Question: How did the performance on exams when students were engaged in active learning compare to those who received traditional lecture?**

- + 01** No difference in performance
- + 02** Decreased performance
- + 03** Increased performance

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# Thanks!

Do you have any questions?  
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