

## Poster Presentations: Framing a New Practice Mindset



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### Q&A

You may use the Questions 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 Questions tool.

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## Pharmacist's Role in Addressing the Rising Insulin Prices

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# Pharmacist's Role in Addressing Rising Insulin Prices

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Rachel Grande PharmD Candidate 2024  
Dr. Amy Drummond Faculty Mentor, NDSU

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## Agenda

- Introduction
- Active Learning
- Effect of Insulin Prices
- Trends in Insulin Prices
- Pharmacist's Role
- Conclusion

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## Learning Objectives

- Discuss the current status of insulin prices and how this issue affects pharmacy practice
- Identify unique opportunities for pharmacy professionals to educate the public about the causes and solutions of rising insulin costs

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Insulin is a necessary medication for patients with diabetes, however, rising costs have made it extremely difficult for patients to afford it. This issue can result in dangerous rationing of insulin or deciding to not use the medication altogether because patients cannot afford the high prices.

Barriers to adherence of insulin regimens can lead to physical and mental complications of a patient's health. A study highlighted in an Endocrine Society article indicated that better access to insulin, and therefore, better adherence could save emergency visits and hospitalizations.

Insulin inaccessibility due to emergency, and it is crucial to play an active role in assisting Pharmacists can use their efforts to increase transparency.

**How Cost Has Affected Insulin**

How Cost Has Affected Insulin
Regularly take less than the prescribed dose
Missed 1-2 doses per week
Got a cheaper insulin
Missed 1-2 doses per month
Used a patient assistance program
Used a discount drug website program
Did not fill at least one prescription
Used a rebate or coupon
My health/illness plan chose a cheaper insulin

**"Life or Death"**

A group of individuals with type 1 diabetes were interviewed to discuss the mental and emotional hardships they have encountered in response to insulin access barriers. Experiences such as unaffordable health care, institutional unresponsiveness, and life transitions caused these individuals to experience difficulties securing their medication. This often leads to negative health outcomes.

**Pharmacist's Role Advocate**

Long term: increase the transparency of this issue by communicating with others, encouraging acknowledgement and changes in legislation.\*

**CONCLUSION**

tripled since 2000, leading drug diabetes cannot live an important role in this advocate for and educate their patients. They have the opportunity to promote affordable insulin options, while maintaining high-quality, patient-centered care.

Short term: talk with providers about cost-effectiveness and discuss cost-saving options with your patients.

American Diabetes Association [internet]. Vault Consulting, LLC; c2018. Available from: <http://main.diabetes.org/dorg/PDFs/2018-insulin-affordability-survey.pdf>

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### Active Learning

How many people with diabetes in the U.S. are insulin-dependent?

- a. 1.2 million
- b. 5.4 million
- c. 7.4 million
- d. 9.2 million

What percentage of the U.S. population is uninsured?

- a. 4.1 %
- b. 9.7 %
- c. 13.4 %
- d. 20.9 %

The Endocrine Society. Addressing insulin access and affordability: an Endocrine Society position statement. J Clin Endocrinol Metab. 2021 Jan 12;106(4):935-941.  
National Health Statistics Reports. *Demographic Variation in Health Insurance Coverage: United States 2020*. February 11, 2022. Number 169. Accessed August 12, 2023. <https://www.cdc.gov/nchs/data/nhsr/nhsr169.pdf>

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### Effects of Cost

- o Insulin-dependent individuals require insulin
- o Inaccessibility leads to both a physical and mental toll
- o ADA's 2018 Insulin Affordability Survey

How Cost Has Affected Insulin Purchase/Use In The Past Year	
Regularly take less than the prescribed dose	26%
Missed 1-2 doses per week	23%
Dr/I chose a cheaper insulin	23%
Missed 1-2 doses per month	20%
Used a patient assistance program	20%
Used a discount drug website/program	20%
Did not fill at least on prescription	18%
Used a rebate or coupon	17%
My health/Rx plan chose a cheaper insulin	14%

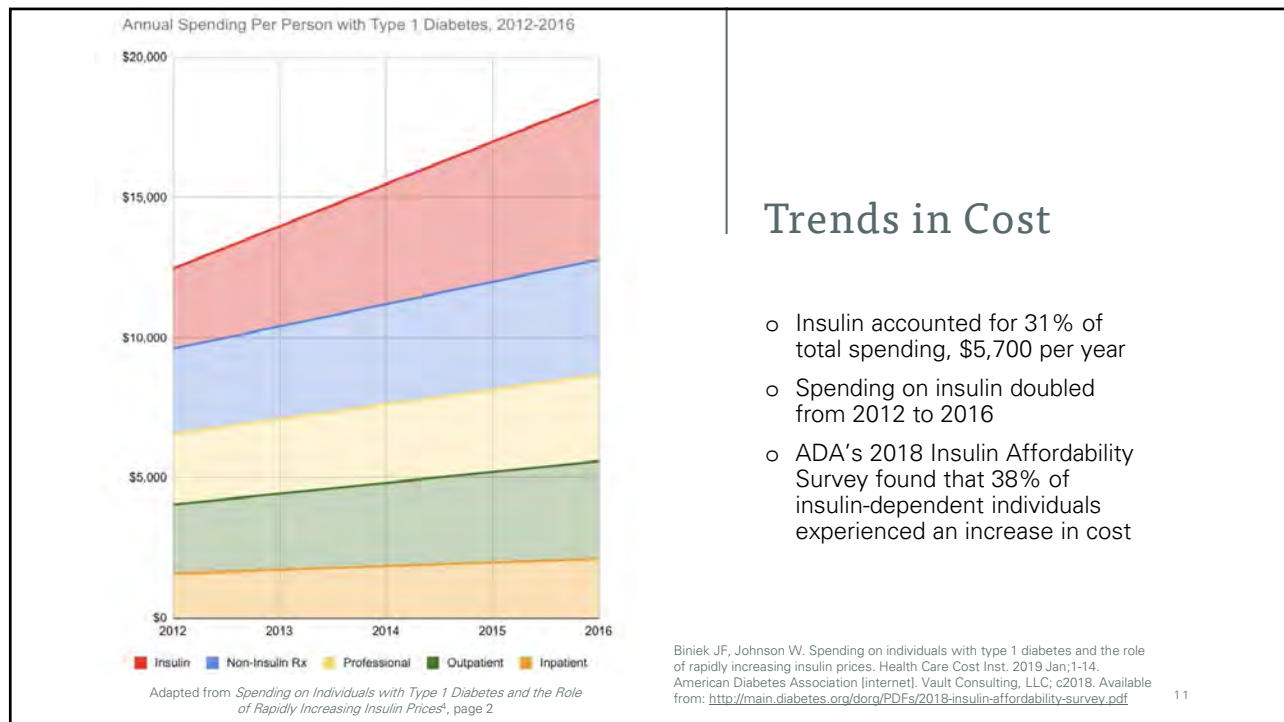
Adapted from the ADA Insulin Affordability Survey 2018<sup>9</sup>, slide number 17

The Endocrine Society. Addressing insulin access and affordability: an Endocrine Society position statement. J Clin Endocrinol Metab. 2021 Jan 12;106(4):935-941. American Diabetes Association [internet]. Vault Consulting, LLC; c2018. Available from: <http://main.diabetes.org/dorg/PDFs/2018-insulin-affordability-survey.pdf>

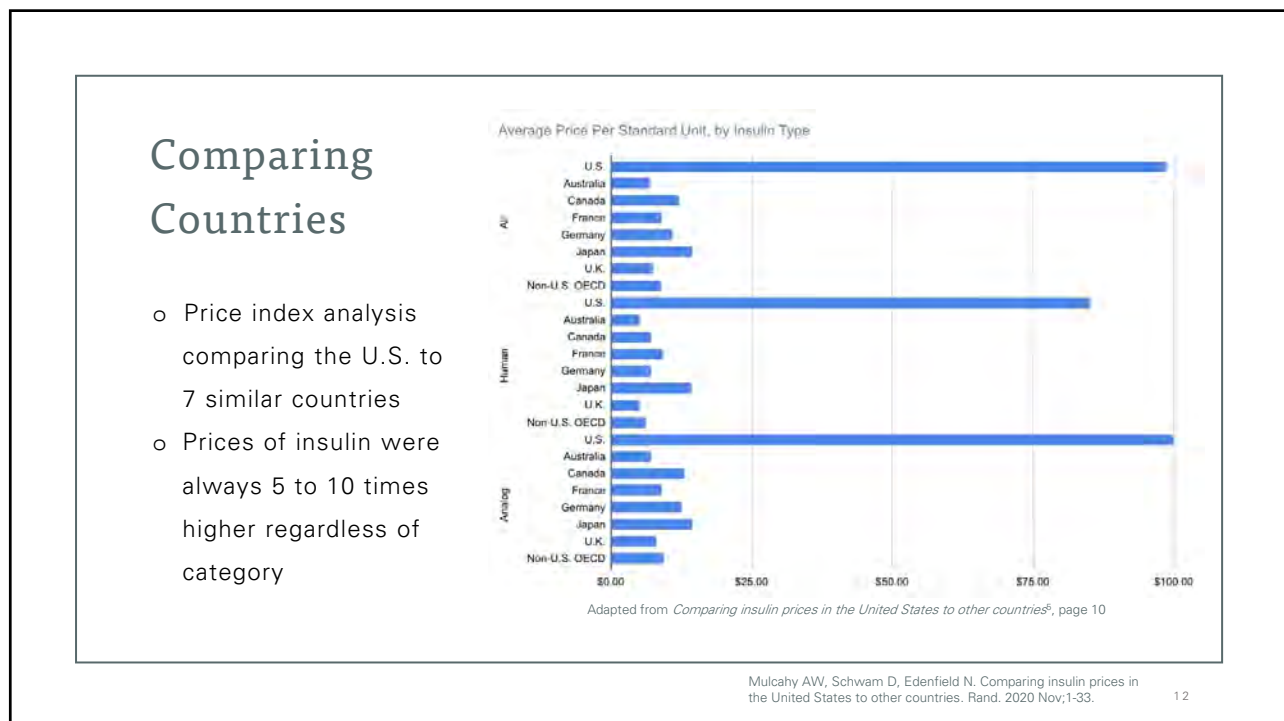
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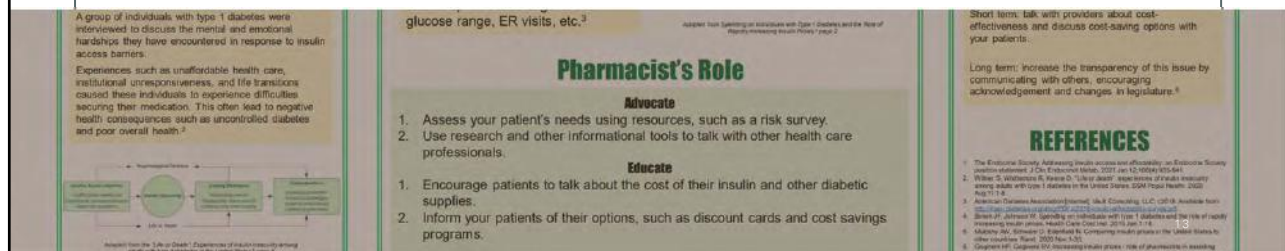


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### Pharmacist's Role

- Be open and encourage patients to share concerns
- Talk with other health care providers to provide the best option for mutual patients
- Share information about discount card and cost saving programs



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### Self-Assessment Question

Which of the following is true regarding prescription savings programs?

- a. Savings programs are no cost to the providing pharmacy
- b. Patients are already aware of savings programs if they are available
- c. Some savings programs can be state specific
- d. Savings programs can only be used in conjunction with insurance

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	<h3>Conclusion</h3> <ul style="list-style-type: none"><li>o Short term: advocate for and educate patients, look for opportunities to promote affordable options while maintaining high-quality care</li><li>o Long term: increase transparency via open communication, small steps can snowball into significant change</li></ul> <p>Gogineni HR, Gogineni RV. Increasing insulin prices – role of pharmacists in assisting patients with diabetes to enhance access. Biomed J Sci Tech Res. 2018 Aug 14;8(2):1-4. 15</p>

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	<h3>References</h3> <p>American Diabetes Association [internet]. Vault Consulting, LLC; c2018. Available from: <a href="http://main.diabetes.org/dorg/PDFs/2018-insulin-affordability-survey.pdf">http://main.diabetes.org/dorg/PDFs/2018-insulin-affordability-survey.pdf</a></p> <p>The Endocrine Society. Addressing insulin access and affordability: an Endocrine Society position statement. J Clin Endocrinol Metab. 2021 Jan 12;106(4):935-941.</p> <p>National Health Statistics Reports. <i>Demographic Variation in Health Insurance Coverage: United States 2020</i>. February 11, 2022. Number 169. Accessed August 12, 2023. <a href="https://www.cdc.gov/nchs/data/nhsr/nhsr169.pdf">https://www.cdc.gov/nchs/data/nhsr/nhsr169.pdf</a></p> <p>Biniek JF, Johnson W. Spending on individuals with type 1 diabetes and the role of rapidly increasing insulin prices. Health Care Cost Inst. 2019 Jan;1-14.</p> <p>Mulcahy AW, Schwam D, Edenfield N. Comparing insulin prices in the United States to other countries. Rand. 2020 Nov;1-33.</p> <p>Gogineni HR, Gogineni RV. Increasing insulin prices – role of pharmacists in assisting patients with diabetes to enhance access. Biomed J Sci Tech Res. 2018 Aug 14;8(2):1-4. 16</p>
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## Poster Presentations: Framing a New Practice Mindset

**Pharmacist's Role in Addressing the Rising Insulin Prices**

Rachel Grande, PharmD Candidate 2024  
Katelyn Ewer, PharmD Candidate 2025  
North Dakota State University – Fargo, North Dakota

**Background**

Insulin is a necessary medication for patients with diabetes, however, rising costs have made it increasingly difficult for patients to afford it. This issue can result in dangerous relapses of insulin or electing to not use the medication altogether because patients cannot afford the high cost.

Barriers to adherence of insulin regimens can lead to physical and mental complications of a patient's health. A study highlighted in an Endocrine Society article indicated that better access to insulin, and therefore, better adherence could save almost \$5 billion in emergency visits and hospitalizations.<sup>1</sup>

Insulin inaccessibility due to rising costs is a medical emergency, and it is crucial for health care providers to play an active role in assisting their diabetic patients. Pharmacists can use their medication expertise to drive efforts to increase transparency and education on this issue.

**Recent Trends of Insulin Prices**

A study of type 1 diabetics measured spending on medical care and insulin formulations to better understand how cost has increased exponentially.

Insulin accounted for 31% of total spending per person. This totaled about \$8,700 yearly, per person. From 2012 to 2016, insulin spending doubled, and this increase in spending was twice any other category.<sup>2</sup>

In the 2016 Insulin Affordability Study, the ADA found that 36% of diabetics experienced an increase in insulin cost. This led to significant changes in time spent out of target blood glucose range, ER visits, etc.<sup>3</sup>

**Pharmacist's Role**

**Monitor**

1. Assess your patient's needs using resources, such as a risk survey.
2. Use research and other informational tools to talk with other health care professionals.

**Educate**

1. Encourage patients to talk about the cost of their insulin and other diabetic supplies.
2. Inform your patients of their options, such as discount cards and cost savings programs.

**Prices Around the World**

A price review analysis was conducted to study insulin in the US versus 7 other countries. Researchers categorized the various types of insulin and conducted a comparison of the pricing based on a relative concentration versus dosage, volume, etc.

The price of insulin in the United States was significantly higher compared to other countries. Insulin costs in the US were always found to be three higher than all other countries regardless of the insulin category.<sup>4</sup>

**Conclusion**

Insulin prices have nearly tripled since 2005, leading to inadequate access of a drug diabetes cannot live without. Pharmacists pay an important role in this issue due to their ability to advocate for and educate their patients. They have the opportunity to promote affordable insulin options, while maintaining high-quality patient-centered care.

Don't leave talk with providers about cost-effectiveness and discuss cost-saving options with your patients.

Long term: increase the transparency of this issue by communicating with others, encouraging acknowledgment and changes in legislation.<sup>5</sup>

**References**

1. An American Diabetes Association Position Statement on Diabetes Self-Management Education and Support (DSMES) for Adults With Diabetes Mellitus. *Diabetes Care*. 2016;39(1):e1-e6.
2. American Diabetes Association. *Standards of Medical Care in Diabetes—2017*. *Diabetes Care*. 2017;40(suppl 1):S2-S9.
3. American Diabetes Association. *Standards of Medical Care in Diabetes—2017*. *Diabetes Care*. 2017;40(suppl 1):S2-S9.
4. American Diabetes Association. *Standards of Medical Care in Diabetes—2017*. *Diabetes Care*. 2017;40(suppl 1):S2-S9.
5. American Diabetes Association. *Standards of Medical Care in Diabetes—2017*. *Diabetes Care*. 2017;40(suppl 1):S2-S9.

Thank  
You

Questions?

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# Framing a New Mindset About Drug Interactions Associated With Cannabis

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Member, Virginia Board of Pharmacy

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# Framing a New Mindset About Drug Interactions Associated With Cannabis

Sarah T. Thomason, PharmD, BCPP, BCACP and  
Christina Tarasidis, PharmD Candidate



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## Learning Objectives

1. Discuss the role of the Virginia Board of Pharmacy as designated by legislation regarding medicinal cannabis.
2. Describe the purpose of the guidance document issued by the Virginia Board of Pharmacy regarding drug interactions with cannabis.
3. Identify key drug interactions with commonly dispensed medications and cannabis.



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## History of Cannabis in Virginia

### 1979

- The Virginia General Assembly (GA) eliminated prosecution for possession of marijuana if a written prescription was provided by a doctor for the treatment of cancer or glaucoma
- The law did not create a legal process for patients to obtain medical marijuana

### 2002

- Federal circuit court ruled doctor "recommendations" are protected by the First Amendment as a form of speech

### 2015

- The GA authorized possession of marijuana based on a doctor's recommendation and prohibited prosecution of patients with epilepsy who possessed cannabidiol (CBD) with a doctor's certificate for treatment

### 2018

- The GA broadened the authorization of medical marijuana use for any medical condition
- The law authorized the Virginia Board of Pharmacy (VBOP) to license pharmaceutical processors and established procedures for dispensing medical marijuana by a pharmacist
- The VBOP issued one pharmaceutical processor permit in each of Virginia's five health regions
- Patients were required to obtain a registered physician's recommendation and register with the VBOP



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## History of Cannabis in Virginia

### 2019

- The GA passed three laws clarifying the right to use CBD and THC oils
- Physician assistants and nurse practitioners were authorized to register with the VBOP to write certifications for patients desiring medical marijuana
- The GA expanded the right to sell marijuana in edibles and other packaged forms

### 2020

- GA authorized the five authorized processors to establish five additional off-site cannabis facilities within their service area
- The GA decriminalized marijuana use

### 2021

- The GA legalized possession of up to one ounce of marijuana and authorized sales for non-medical use (2024)
- The Virginia Cannabis Control Authority (CCA) was created
- The GA enacted legislation allowing Virginians to grow up to four marijuana plants per household

### 2022

- The GA did not reenact the legislative framework for a retail market
- The GA eliminated the requirement for patients who had been certified by a registered practitioner to register with the VBOP



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## The “Why” Behind the Guidance Document

- Document developed by a state agency or staff that provides guidance of general applicability to the staff or public to interpret or implement statutes or the agency's rules or regulations
- The BOP enlisted board member Dr. Sarah Thomason and students with Operation Substance Use Disorders (American Pharmacists Association – Academy of Student Pharmacists) at the East Tennessee State University Bill Gatton College of Pharmacy to develop a guidance document regarding drug interactions with Cannabis



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## The “Why” Behind the Guidance Document

- Virginia Code § 54.1-3319(A) requires a pharmacist to conduct a prospective drug review before each new prescription is dispensed or delivered to a patient or a person acting on behalf of the patient
- Review must include screening for potential drug therapy problems from drug-drug interactions
- As legal allowances for the use of cannabis increase, the approved guidance document will assist pharmacists performing prospective drug reviews, including the screening for drug-drug interactions

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## The Guidance Document

- Download the Guidance Document and references by scanning here:



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## Focus on Drug Interactions

**THC = tetrahydrocannabinol**  
**CBD = cannabidiol**

**THC is a CYP1A2 inducer**

Decreases serum concentrations of clozapine, duloxetine, naproxen, cyclobenzaprine, olanzapine, haloperidol, and chlorpromazine.

**Warfarin**

THC and CBD increase warfarin levels. Frequent cannabis use has been associated with increased INR.

**Alcohol**

May increase THC levels.

**CNS Depressants**

Additive CNS depressant effects with alcohol, barbiturates and benzodiazepines.

**CBD is a potent inhibitor of CYP3A4**

Increases serum concentrations of macrolides, calcium channel blockers, benzodiazepines, cyclosporine, sildenafil, antihistamines, haloperidol, antiretrovirals, and some statins.

**CBD inhibits CYP2D6**

Increases serum concentrations of SSRIs, tricyclic antidepressants, antipsychotics, beta blockers and opioids (including codeine and oxycodone).

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## Framing a New Mindset

- ✓ Educate pharmacists and the public on drug interactions with Cannabis
- ✓ Promote a change in mindset of pharmacists to ensure patients are screened for cannabis use and educated on potential drug interactions is key to preventing drug-related harm
- ✓ Change the mindset and raise awareness for the general public regarding potential consequences for prescribed and recreational use of cannabis when used with other medications

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## Self Assessment Question

A patient presents to the pharmacy with a new prescription. You are aware that the patient uses medical marijuana to treat chronic pain. After reviewing the Virginia Board of Pharmacy guidance document on drug interactions with cannabis, you tell the patient you must call the prescriber because there is a major drug interaction with this new prescription and the Cannabis that might cause harm. Which of the following is most likely the new medication?

- A. Topiramate
- B. Duloxetine
- C. Warfarin
- D. Metformin

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## Questions and Discussion


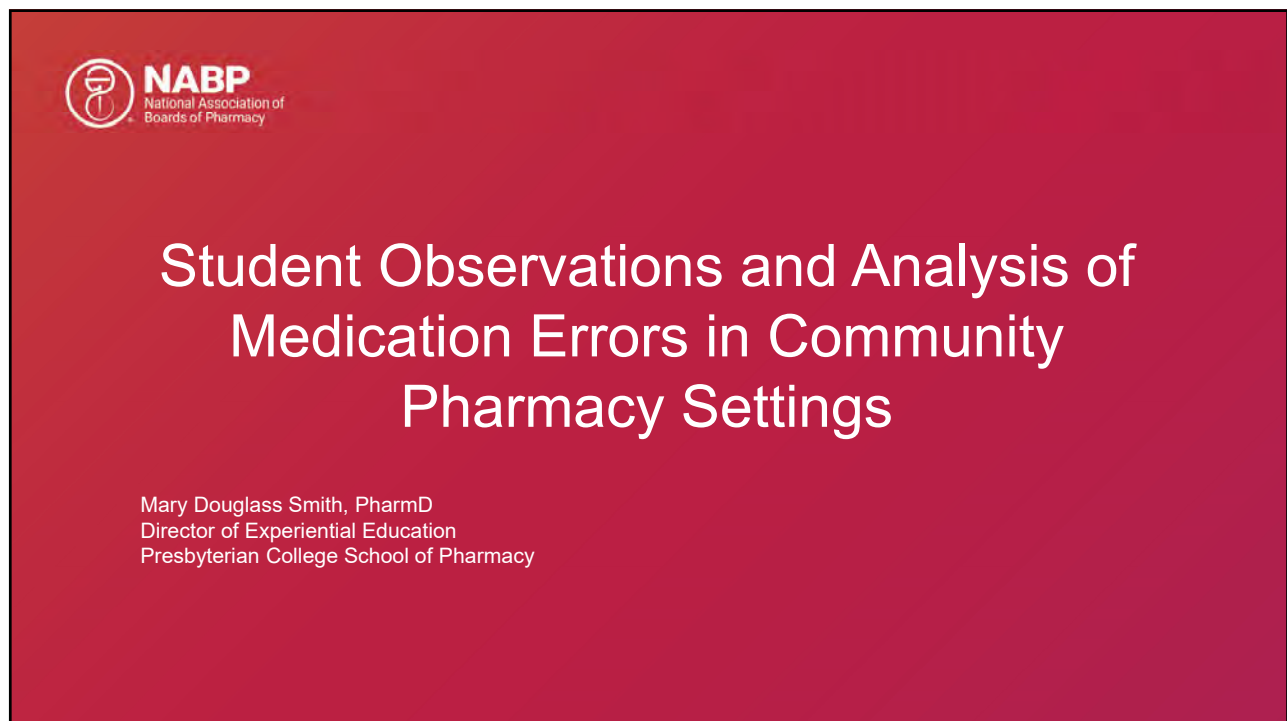
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## Student Observations and Analysis of Medication Errors in Community Pharmacy Settings

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

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## Student Observations and Analysis of Medication Errors in Community Pharmacy Settings

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Martine Abouchabki, PharmD Candidate  
Kyli Latimer, PharmD Candidate  
Kathryn Ware, PharmD Candidate  
Mary Douglass Smith, PharmD



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Learning Objectives: At the conclusion of this webinar, participants will be able to:

1. Describe the regulation related to error reporting in community pharmacy settings.
2. Explain student observations of error reporting.
3. Discuss how to evaluate the potential patient harm and error percentages relevant to the community pharmacy setting.

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# Medication Errors

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# Study Objectives

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- Describe student-reported medication errors in the community pharmacy setting
- Measure the potential harm to patients due to the medication error and determining plausible strategies to reduce medication errors

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# Methods

[illegible]

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# Methods

Standardization of Common Medication Errors in a Community Setting			
	Potential Patient Harm	Potential Patient Harm - Controls	Potential Patient Harm - Abx
<b>Incomplete Directions</b>			
ROA	1	2	1
PRN	2	3	2
Indication	1	2	1
DOT (specific course of therapy)	2	2	2
Type	1	1	1
Max/Day	1	2	1
Other prescriber instructions	1	1	1
<b>Medication Specific</b>			
Wrong drug	4	4	4
Dosage form	2	2	1
Strength	3	3	2
Quantity	2	2	2
<b>Prescriber Information</b>			
Wrong prescriber	0	1	0
<b>Other Errors</b>			
Original Date	0	1	0
Dose Frequency	1	2	1
Refills	1	1	1
Duplicate Fills	1	3	1
Early Fill	N/A	2	N/A
Wrong patient	4	4	4

Key: ROA = route of administration, DOT = duration of therapy

Gates, P.J., Baysari, M.T., Mumford, V. et al. Standardizing the Classification of Harm Associated with Medication Errors: The Harm Associated with Medication Error Classification (HAMEC). *Drug Saf* 42, 931–939 (2019). <https://doi.org/10.1007/s40264-019-00823-4>

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## Methods

Potential Patient Harm due to Medication Errors in a Community Setting		
Level	Reference	Description
0	No Harm	No potential for patient harm or change in patient level or length of care. No additional actions necessary from prescriber.
1	Minor	There was a potential for minor, non-life threatening, temporary harm that may or may not require additional communication or medication adjustments from prescriber. Increase in care/treatment is expected to be < 1 day.
2	Moderate	There was a potential for minor, non-life threatening, temporary harm that would require additional communication or medication adjustments from prescriber. Increase in care/treatment is expected to be < 1 day.
3	Serious	There was a potential for major, non-life threatening, temporary harm, or minor permanent harm that would require prescriber intervention, additional medications, emergency care, and/or administration of an antidote. Increase in care is expected to be > 1 day.
4	Severe	There was a potential for life threatening or mortal harm, or major permanent harm that would require emergency care and hospitalization, and/or administration of an antidote. Increase in care is substantial and expected to be > 1 day.

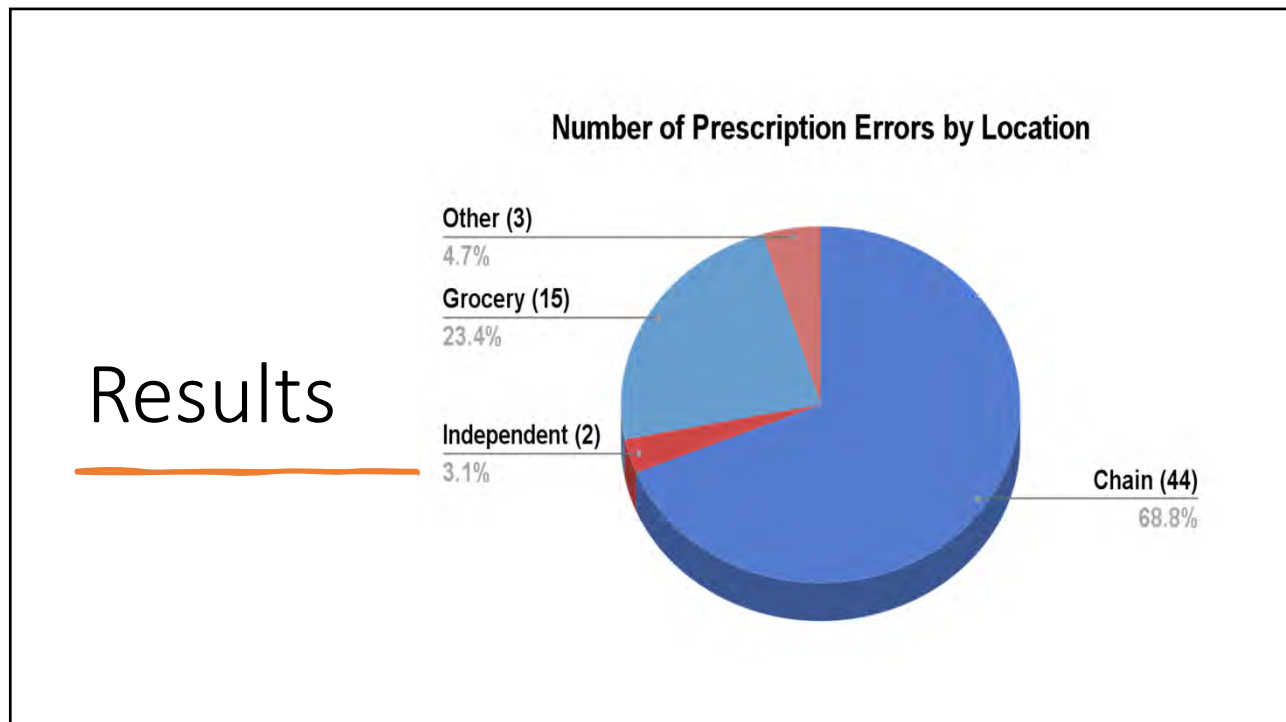
Scoring for Multiple Areas Hit:  
If 1 and 2 then it would be a 2<sup>2</sup>  
2 and a 2 then it would be a 2 Squared or 2<sup>2</sup>

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## Results

- 445 prescriptions were evaluated from 23 different community pharmacies
- 47 prescriptions had at least one or more errors
- A total of 64 errors were found from the 47 prescriptions
- The most common types of errors overall were a result of incorrect typing (17%), wrong indication (13%), wrong drug (13%), and wrong quantity (11%)

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# Results

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Top 5 Errors in Each Setting and Average Harm Rating		
<b>Chain</b>	<ul style="list-style-type: none"> <li>● Incorrect typing (n=7)</li> <li>● Incorrect drug (n=6)</li> <li>● Incorrect quantity (n=6)</li> <li>● Incorrect strength (n=5)</li> <li>● Incorrect refills (n=4)</li> <li>● Incorrect early fills (n=4)</li> </ul>	Average Harm Rating (per prescription with error) = <b>2.3</b>
<b>Independent</b>	<ul style="list-style-type: none"> <li>● Incorrect typing (n=1)</li> <li>● Incorrect dosage form (n=1)</li> </ul>	Average Harm Rating (per prescription with error) = <b>1.5</b>
<b>Grocery</b>	<ul style="list-style-type: none"> <li>● Incorrect indication (n=7)</li> <li>● Incorrect max drug/day (n=6)</li> <li>● Incorrect typing (n=2)</li> <li>● Incorrect drug (n=1)</li> <li>● Wrong prescriber (n=1)</li> </ul>	Average Harm Rating (per prescription with error) = <b>1.1</b>
<b>Other</b>	<ul style="list-style-type: none"> <li>● Incorrect typing (n=1)</li> <li>● Incorrect drug (n=1)</li> <li>● Incorrect quantity (n=1)</li> </ul>	Average Harm Rating (per prescription with error) = <b>2.3</b>

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## Analysis

Average Harm Comparison with Chain Pharmacies	
Independent	P-value: <b>0.19</b>
Grocery	P-value: <b>&lt; 0.01</b>
Other	P-value: <b>0.47</b>

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## Conclusions

- The majority of errors were observed and recorded in chain pharmacies making this the comparator.
- The highest potential harm rating was recorded for chain and other pharmacies.
- Statistical significance was achieved for the comparison of the average harm ratings between chain and grocery pharmacies.
- Limitations of the study include a small sample size for independent and other pharmacies causing a lack of power to be able to reach a statistical significance. Additional limitations of this study include that data was primarily collected from the upstate region of South Carolina and may not represent community practices across the entire state.

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## Conclusions

- Factors that can influence medication dispensing errors in the community setting include:
  - Pharmacist and technician overload/burnout
  - Look-alike and sound-alike medications
  - Lack of staff and interruptions
  - Illegible handwritten prescriptions
- Further education and training development, sufficient staffing, and ideal working conditions should be considered in order to protect patient safety and reduce error rates in community pharmacy.

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## Assessment

**What setting had the lowest potential harm rating?**

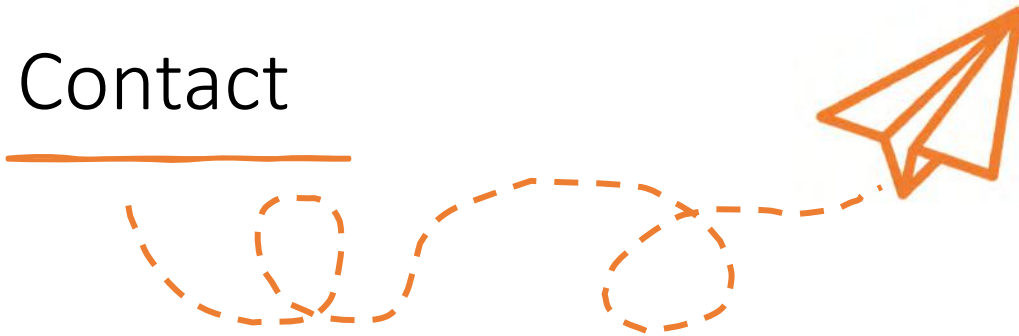
- A. Independent
- B. Chain
- C. Grocery
- D. Other

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## Evaluation of Pharmacist and Patient Perspectives on Pharmacist-Prescribed Hormonal Contraceptives in South Carolina

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# Evaluation of Pharmacist and Patient Perspectives on Pharmacist-Prescribed Hormonal Contraceptives in South Carolina

**Presenter:** Tate Owens, PharmD

**Authors:** Tate Owens, PharmD; Patricia H. Fabel, PharmD, BCPS, FAPhA; Tessa Hastings, PharmD; Abby Davies, PhD Student; Gene Reeder, PhD



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## Objectives

Identify potential barriers to implementing pharmacist prescribing of hormonal contraceptives into practice in South Carolina from the pharmacists' perspective.

Describe processes related to hormonal contraceptive prescribing that pharmacists may feel uncomfortable with performing.

Discuss potential barriers that patients in South Carolina believe they may encounter when accessing their health care related to hormonal contraceptives.



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## Disclosures

**Tate Owens, PharmD, Patricia Fabel, PharmD, BCPS, FAPhA, Tessa Hastings, PhD, Abby Davies, PhD Student, and Gene Reeder, PhD** declare no relevant financial relationships or commercial interests in any product or service mentioned in this activity, including grants, employment, gifts, stock holdings, honoraria.



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## Background

In May 2022, Governor Henry McMaster of South Carolina signed the Pharmacy Access Act allowing pharmacists to prescribe hormonal contraceptives pursuant to a statewide protocol.

The Boards of Pharmacy and Medical Examiners issued the joint protocol in November 2022.

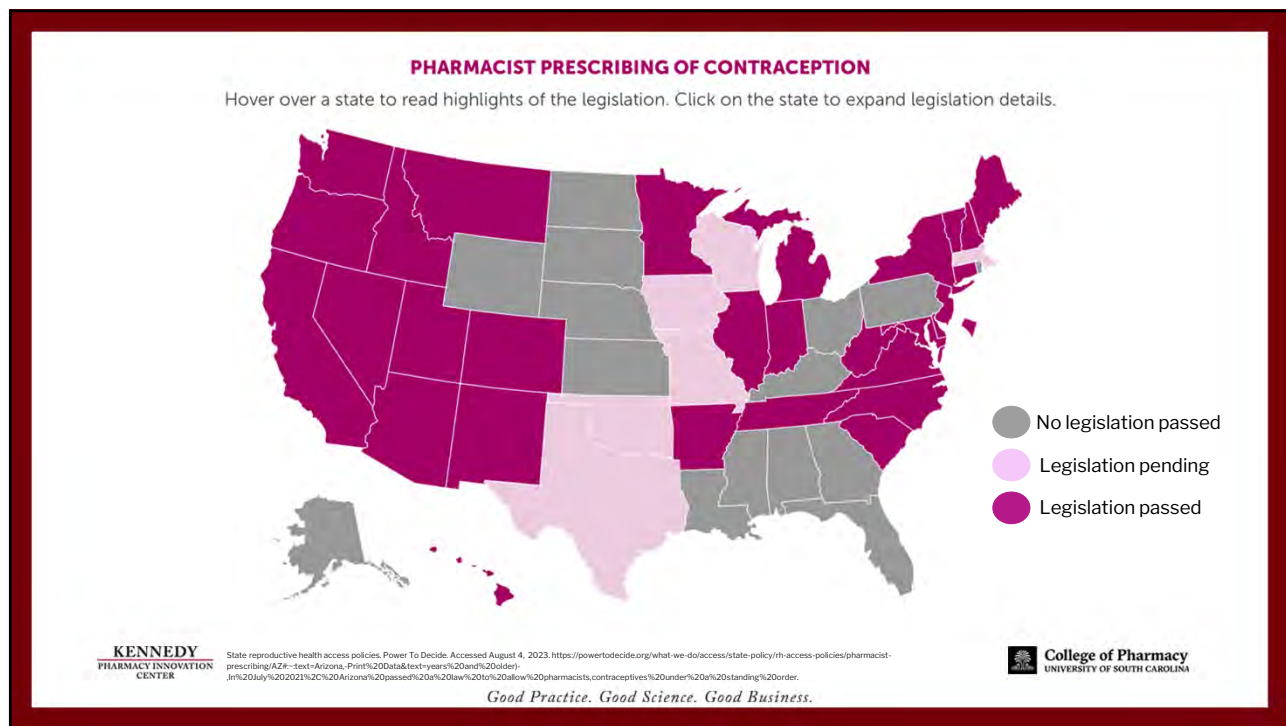


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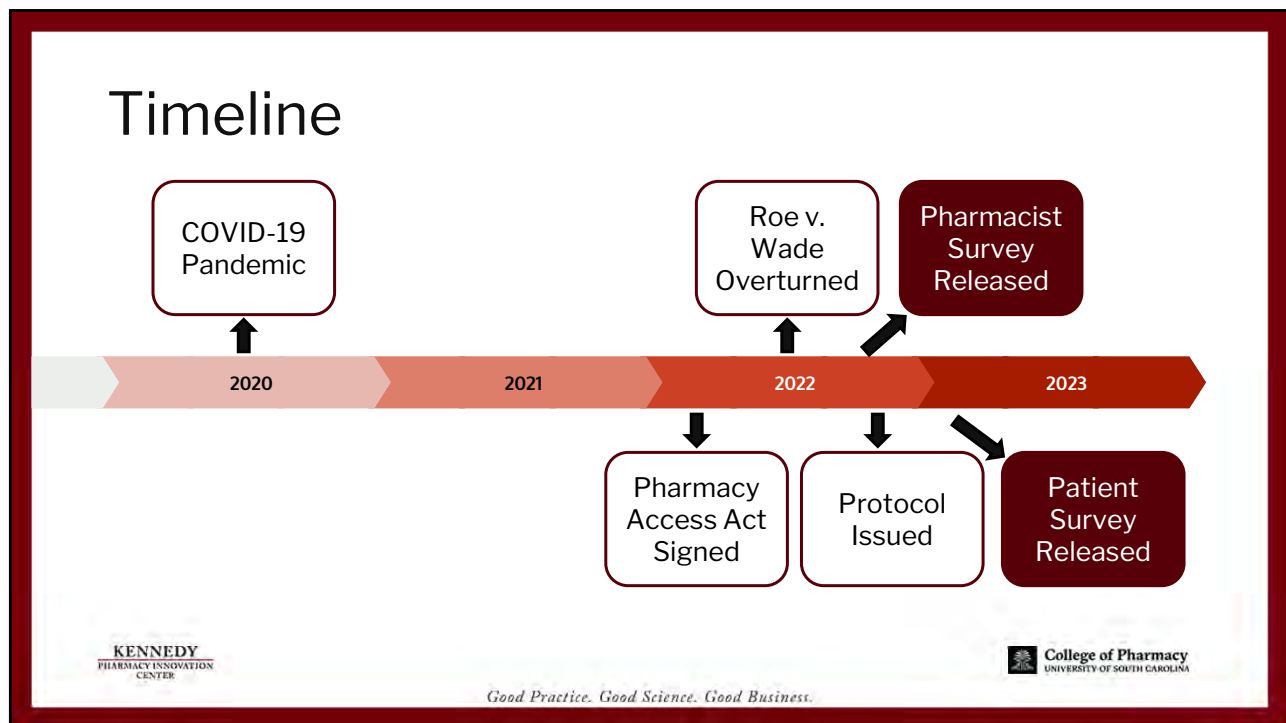


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## Study Objective

To determine patient and pharmacist perceptions of pharmacist-prescribed hormonal contraceptives after the passing of the South Carolina Pharmacy Access Act in May 2022.

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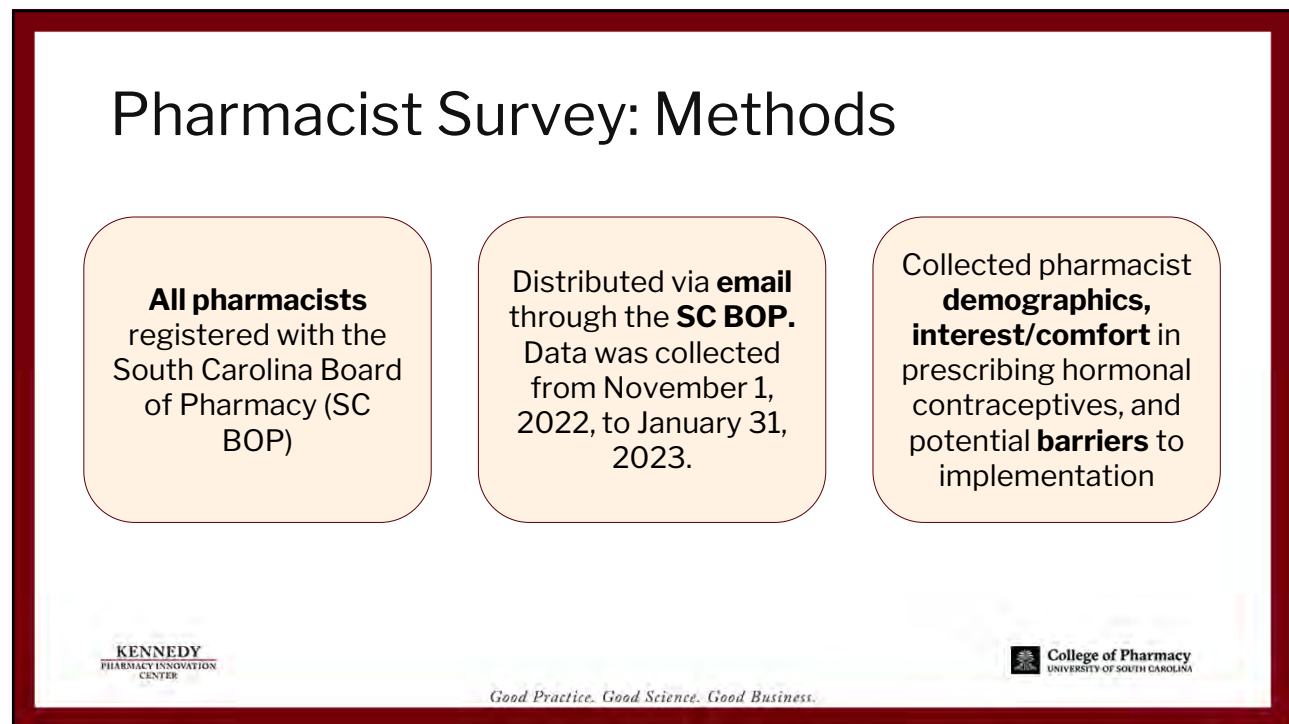
## Pharmacist Survey

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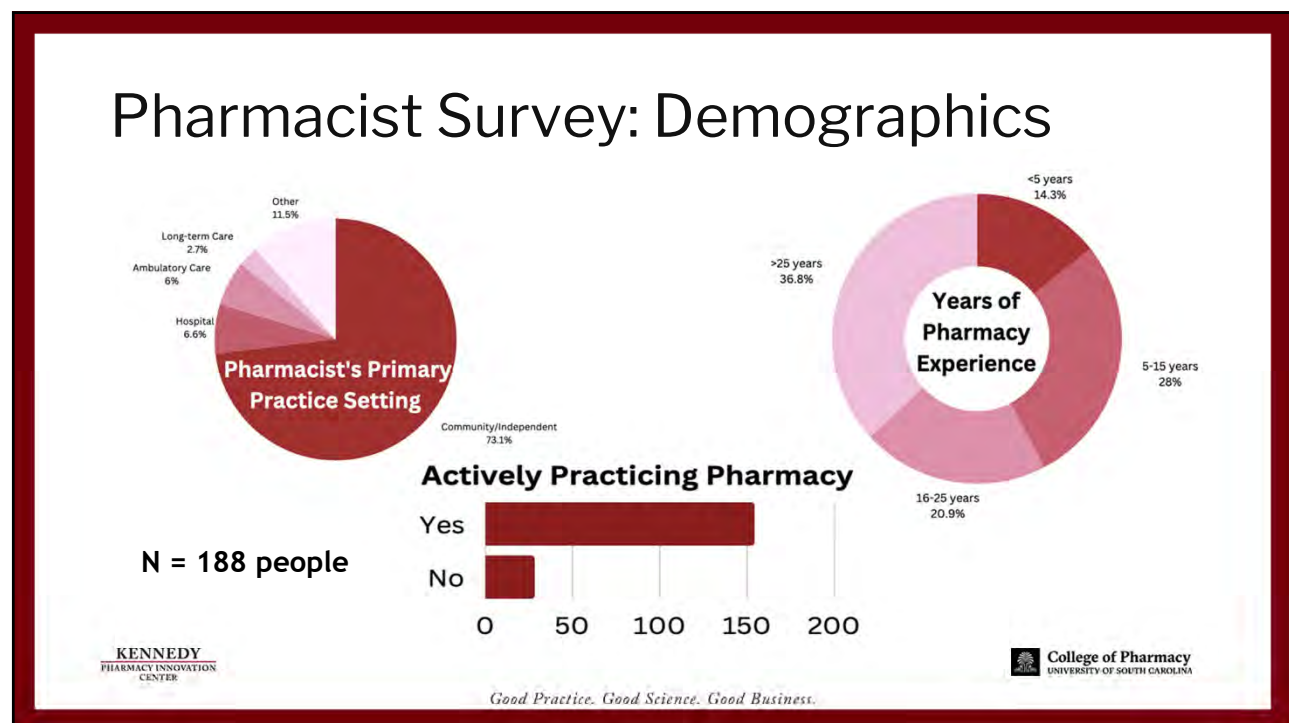
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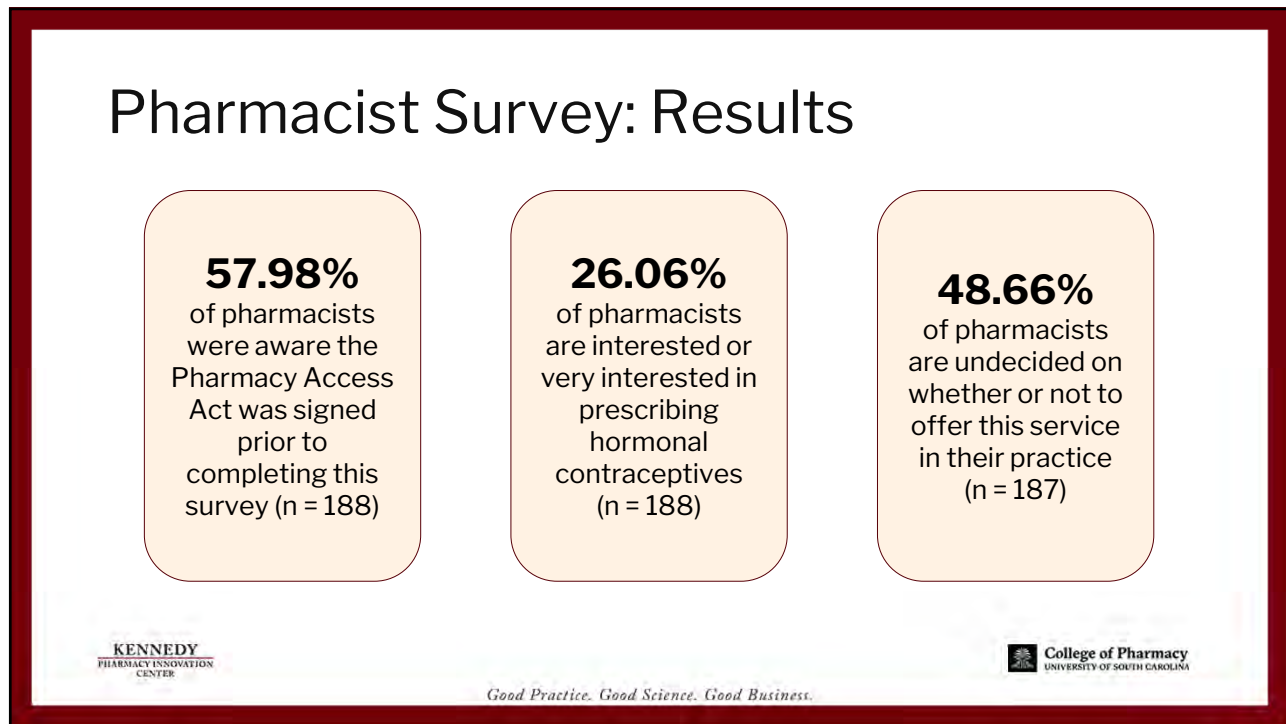
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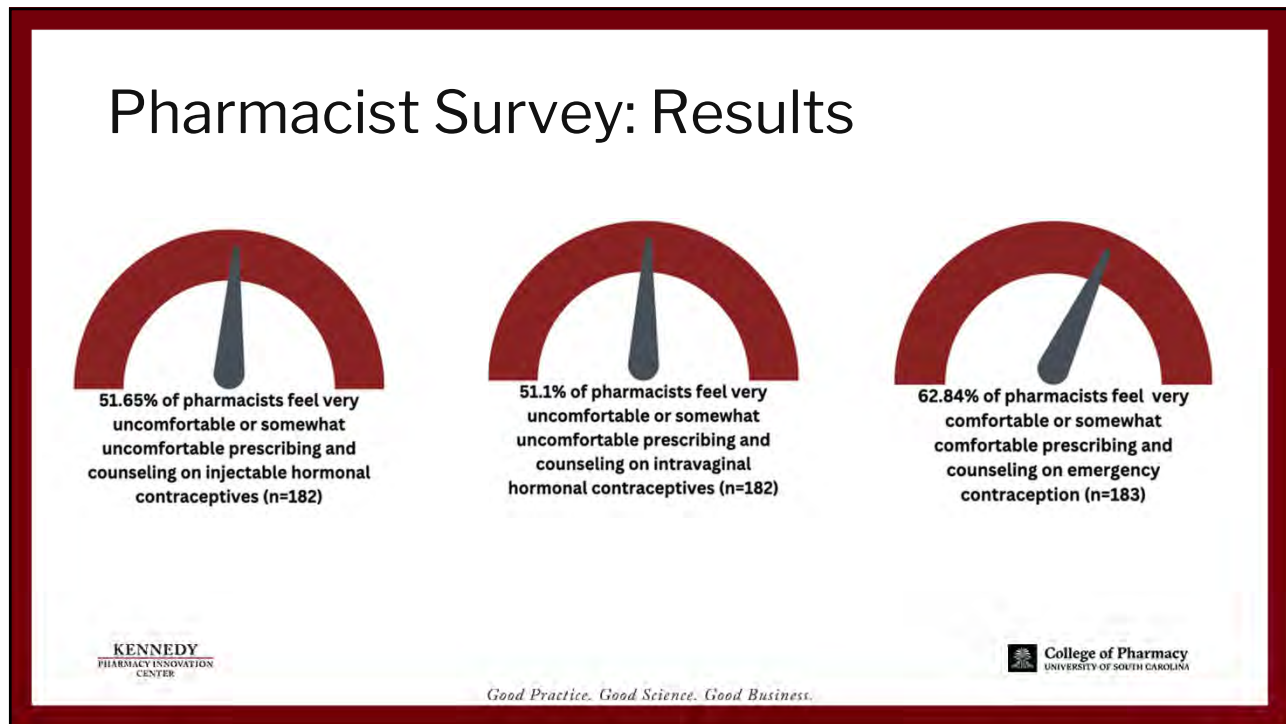
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Question	Not at all	A Little	Moderate	Very	Extremely
Lack of education and training prescribing hormonal contraceptives	14.05%	18.38%	27.57%	17.84%	22.16%
Limited access to the patient's electronic health record	13.04%	7.07%	19.02%	24.46%	36.41%
Lack of privacy in my practice setting	38.04%	11.41%	21.74%	11.96%	16.85%
Personal or religious beliefs	69.95%	12.57%	8.74%	3.28%	5.46%
Lack of time	15.14%	10.81%	18.38%	22.70%	32.97%
Contraception is a sensitive topic	42.86%	21.98%	20.88%	4.95%	9.34%
Lack of drug information resources and clinical decision support tools specific to hormonal contraceptives that are readily available during patient consults	21.86%	25.14%	23.50%	13.11%	16.39%
Lack of (sufficient) reimbursement	10.99%	9.34%	26.37%	19.23%	34.07%
Patient's ability of pay or their lack of insurance coverage	20.44%	19.34%	29.83%	16.02%	14.36%
Insufficient support staff to prescribe hormonal contraceptives	11.48%	10.93%	24.59%	19.67%	33.33%
Uncertainty regarding scope of practice and liability	8.33%	14.44%	25.00%	18.33%	33.89%
Limited support from medical providers in the community	9.29%	14.75%	30.06%	22.40%	22.95%
Patients do not want a pharmacist to prescribe their birth control	28.33%	26.11%	24.44%	10.00%	11.11%
Decision maker at my practice site is not supportive	50.00%	15.73%	21.91%	5.62%	6.74%
Unclear information regarding the law and its requirements	12.71%	30.39%	23.20%	13.81%	19.89%
Fear of women neglecting recommended health care (i.e. pap smear)	16.02%	15.47%	27.62%	16.57%	24.31%

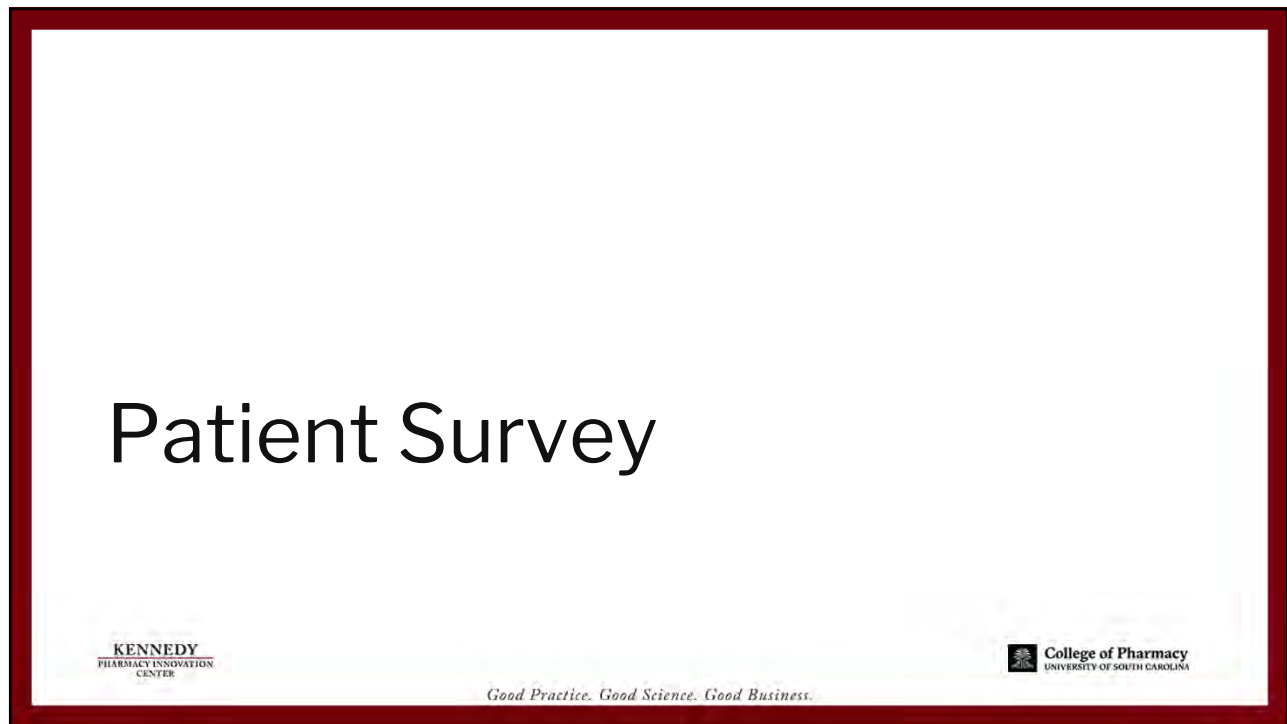
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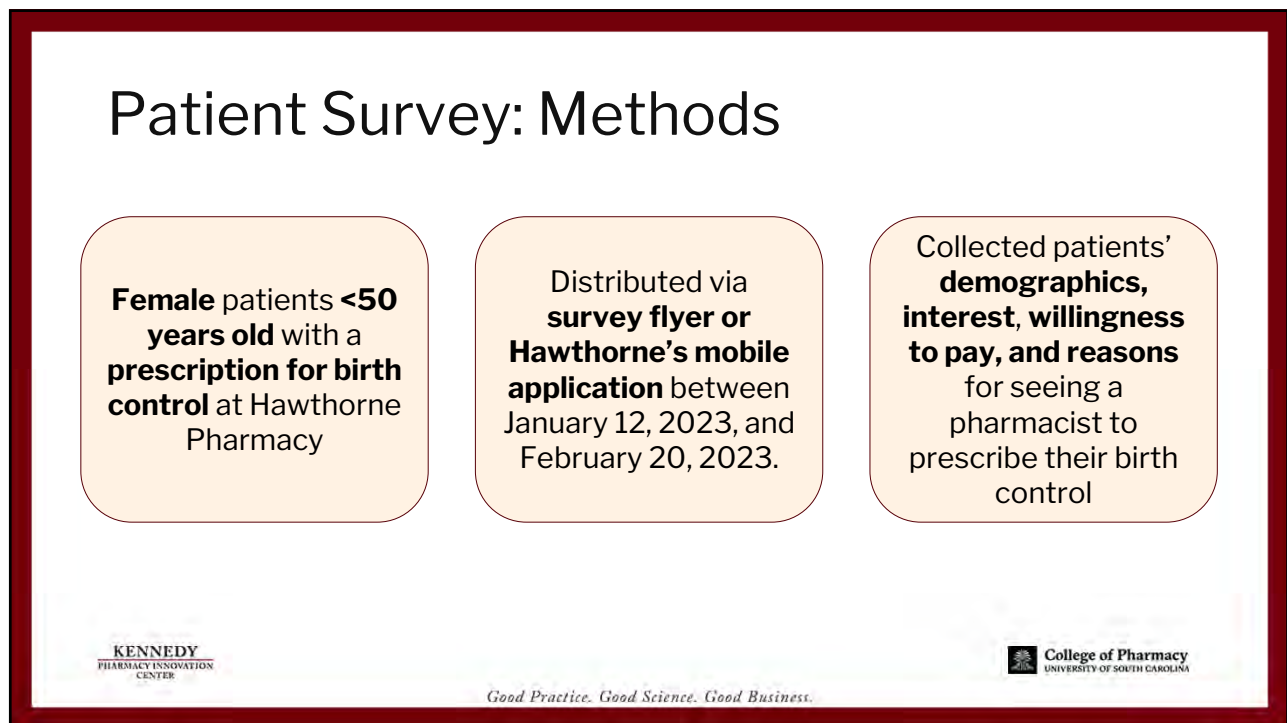
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Question	Very uncomfortable/ Somewhat uncomfortable	Very comfortable/ Somewhat comfortable
Utilizing a patient self-screening risk assessment prior to prescribing hormonal contraceptives to patients	42.86%	<b>57.14%</b>
<b>Identifying and referring patients who may be subject to abuse to the appropriate social services agency</b>	<b>57.69%</b>	42.30%
<b>Administering injectable hormonal contraceptives</b>	<b>52.19%</b>	47.81%
<b>Applying the United States Medical Eligibility Criteria for Contraceptive Use to determine patient eligibility for hormonal contraceptives</b>	<b>63.88%</b>	36.11%
Counseling patients on recommended annual medical visits, health tests, and screenings	26.37%	<b>73.62%</b>
Counseling patients on the effectiveness and availability of long-acting reversible contraceptives as an alternative to self-administered hormonal contraceptives or injectables	38.66%	<b>60.99%</b>
Providing a patient with a written explanation as the why you did not dispense a hormonal contraceptive	50.00%	50.00%
<b>Providing patients with information on the SC Medicaid Program and how to apply for benefits</b>	<b>60.77%</b>	39.23%
Counseling patients on the effectiveness of abstinence in preventing pregnancy and contracting a sexually transmitted infection or disease	37.02%	<b>62.98%</b>
Counseling patients on the need for backup contraception	28.49%	<b>71.51%</b>
Counseling patients on when to seek emergency medical attention related to the use of hormonal contraceptives	32.60%	<b>67.41%</b>
Counseling patients on the risk of contracting a sexually transmitted infection or disease, along with ways to reduce the risk of contraction	27.48%	<b>72.52%</b>

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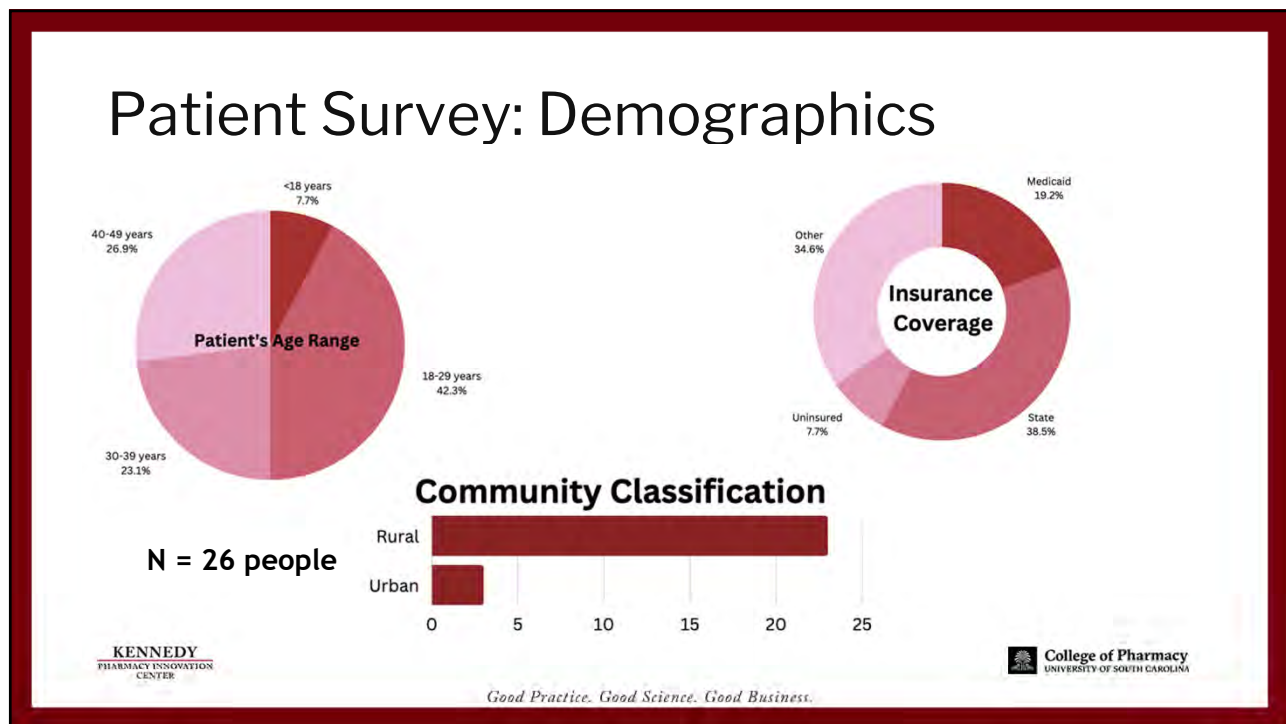


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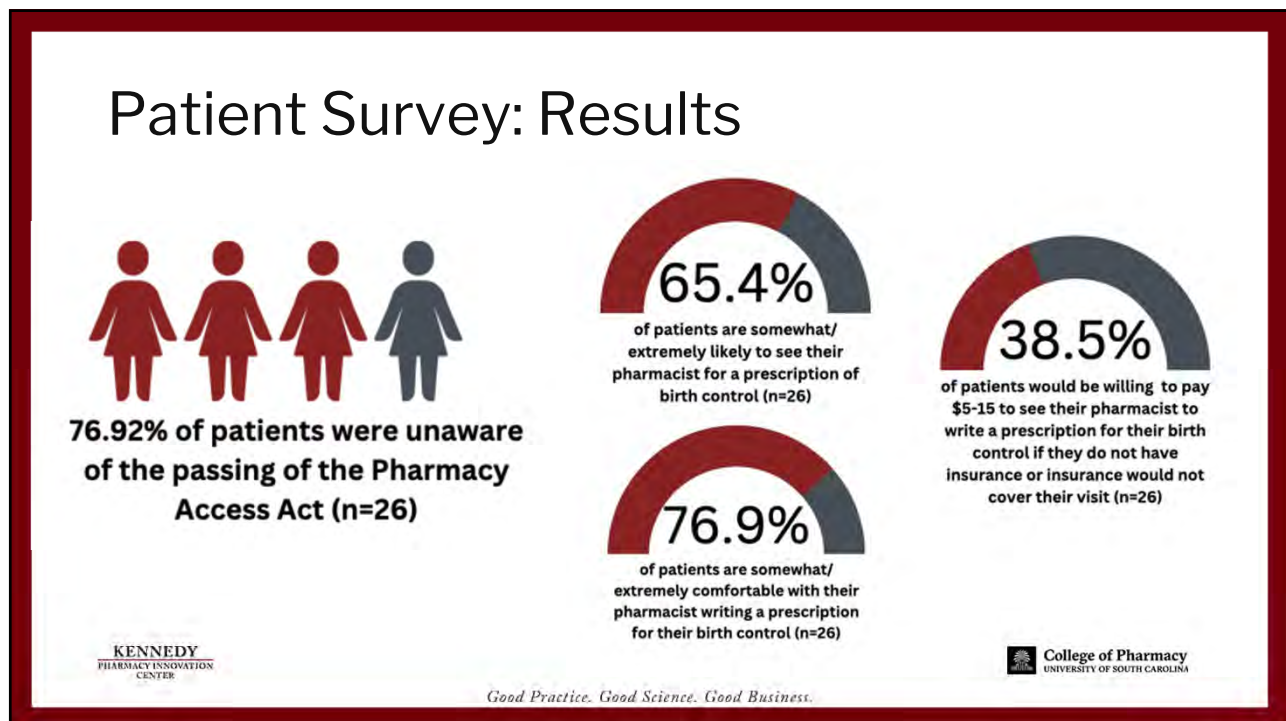


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## Poster Presentations: Framing a New Practice Mindset

Question	Strongly disagree/ somewhat disagree	Neither agree nor disagree	Strongly agree/ somewhat agree
I have trouble obtaining my birth control due to the cost of visiting my physician.	<b>69.23%</b>	7.69%	23.08%
Pharmacists are easier to access.	3.85%	23.08%	<b>73.08%</b>
I do not currently have or see a primary care provider/OBGYN/nurse practitioner/physician's assistant.	<b>84.61%</b>	0.00%	15.39%
Pharmacists have the knowledge to write prescriptions for medications.	0.00%	7.69%	<b>92.31%</b>
I do not currently have prescription drug insurance.	<b>84.61%</b>	0.00%	15.39%
My prescription insurance does not cover my birth control.	<b>84.62%</b>	0.00%	15.38%
I have transportation issues.	<b>96.16%</b>	3.85%	0.00%
I have trouble getting an appointment to see my doctor.	<b>53.84%</b>	15.38%	30.77%
Pharmacists should be allowed to write prescriptions for other medications besides birth control.	7.69%	15.38%	<b>76.93%</b>

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## Conclusions

- » Based on the pharmacists' survey results, half of pharmacists remain undecided on whether or not to offer this service in their pharmacy. Majority of concerns mentioned included lack of time, insufficient support staff, liability, and the need for additional training.
- » Based on the patients' survey results, majority of patients feel comfortable seeing their pharmacist to prescribe their birth control, and they believe pharmacists have the knowledge to write prescriptions for medications.
- » Only 26 participants completed the patient survey; therefore, additional data collection is needed to provide a more accurate representation of the patient population in South Carolina.

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## Question

Which of the following do the majority of pharmacists in South Carolina feel comfortable doing as it relates to prescribing hormonal contraceptives?

- A. Counseling patients on recommended annual medical visits, health tests, and screenings
- B. Administering injectable hormonal contraceptives
- C. Providing patients with information on the South Carolina Medicaid program and how to apply for benefits
- D. Identifying and referring patients who may be subject to abuse to the appropriate social services agency

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## Acknowledgements



LABOR  
LICENSING  
REGULATION

**HAWTHORNE**  
PHARMACY & MEDICAL EQUIPMENT

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# Questions?

Tate Owens  
ltcook@email.sc.edu



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## Partnering Together to Expand Team-Based Care in Rural South Carolina

Kayce M. Shealy, PharmD, BCPS, CDCES  
Associate Dean  
Presbyterian College School of Pharmacy

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## Partnering Together to Expand Team-Based Care in Rural South Carolina

**Patricia H. Fabel, PharmD, FAPhA, BCPS**

University of South Carolina College of Pharmacy

**Kayce M. Shealy, PharmD, BCPS, CDCES**

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**Michele D. James, MSW**

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**Kristian G. Myers, MPH, CHES®**

**Rhonda L. Hill, PhD, MCHES®**

South Carolina Department of Health and Environmental Control

**Gene Reeder, PhD**

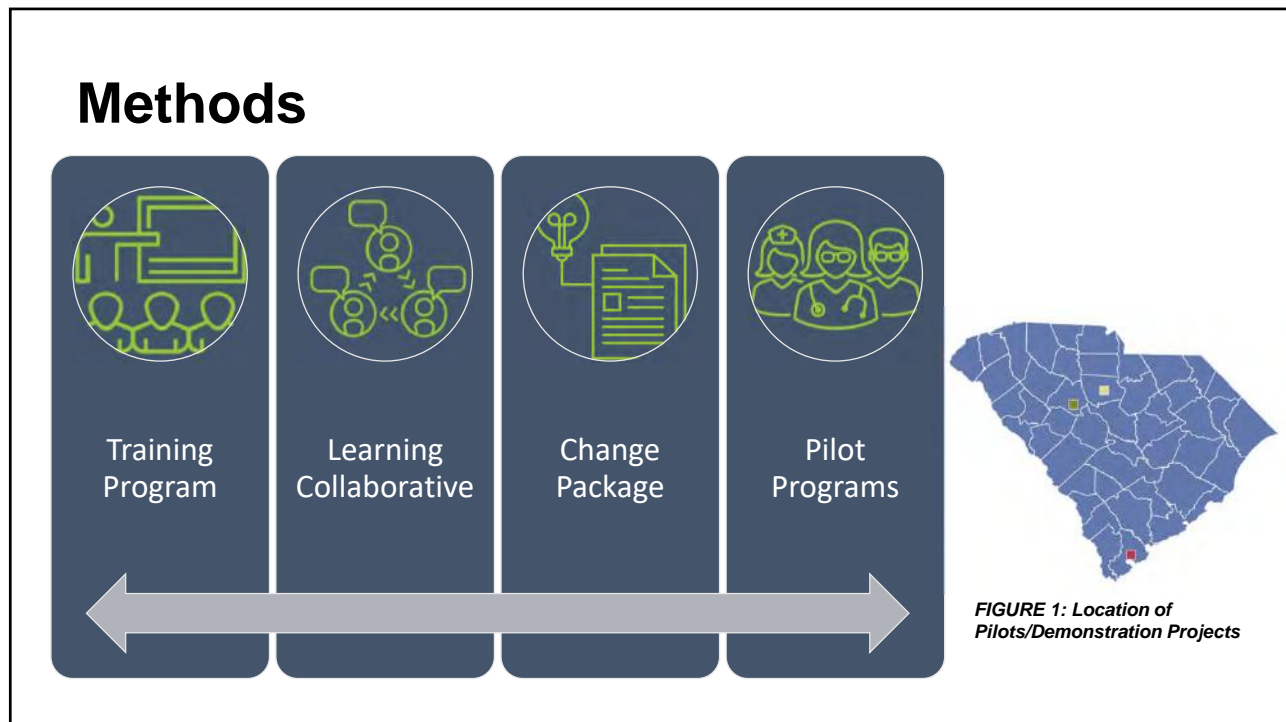
University of South Carolina College of Pharmacy

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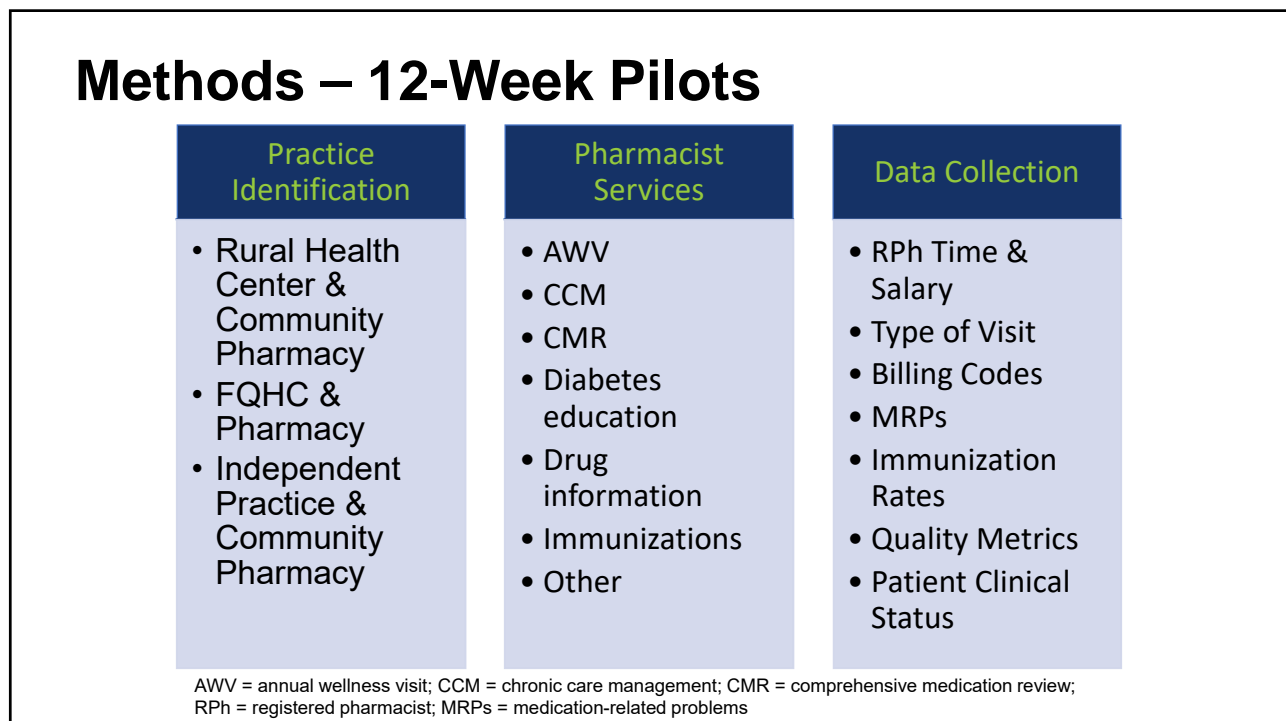
## Objectives

- Identify services that a pharmacist may provide within primary care settings.
- Describe the clinical impact of integrating pharmacists into rural South Carolina primary care practices.
- Describe the value of integrating pharmacists into rural South Carolina primary care practices.

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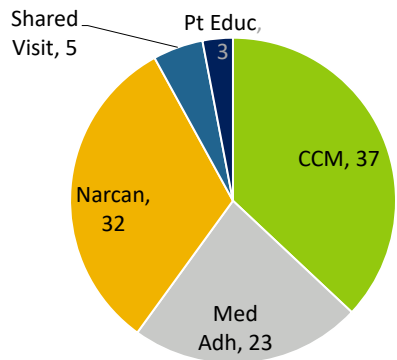


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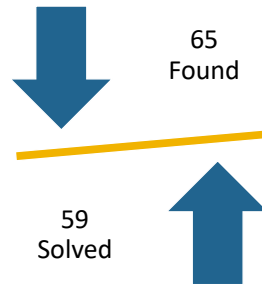


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## Results: RHC & Community Pharmacy



Medication-Related Problems

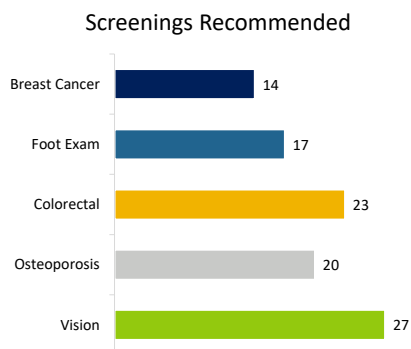


47% Immunizations Scheduled

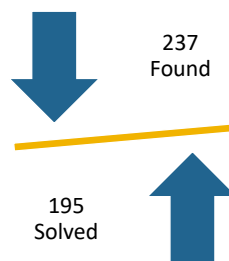
- 92 patient visits with 79 unique patients
- 37% of Pharmacist Salary Generated

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## Results: FQHC & Pharmacy



Medication-Related Problems



46.3% Immunizations Scheduled



% Controlled HTN  
↑ 4.3%

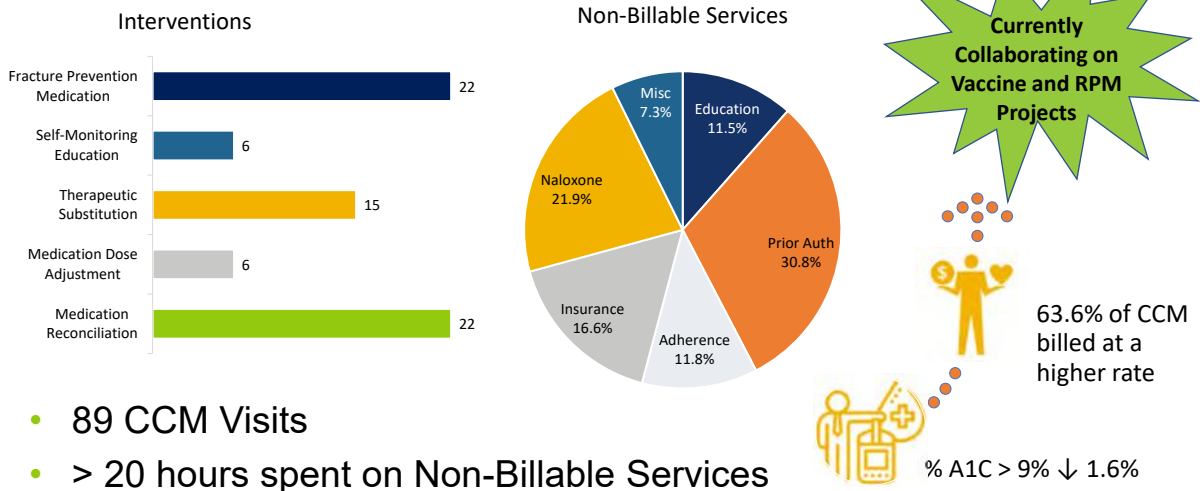


% A1C > 9% ↓ 8.7%

- 68 patient visits – 85.3% (58) were AWW
- 42% of Pharmacist Salary Generated

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## **Results: Independent Practice & Community Pharmacy**



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## **Recommendations**

- Integrating a pharmacist into primary care may close gaps in care for patients with chronic disease in rural SC.
- Funding to support the start-up expenses incurred from both rural practices and community pharmacies may be necessary.
- Clarity is needed regarding pharmacist's scope of practice and collaborative services in SC.
- Revenue-generating services are currently limited to the Medicare population due to existing health care reimbursement policies and state practice laws.

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## Pre/Post-test Question

Integrating a pharmacist into primary care may \_\_\_\_\_ the number of patients with an A1C >9%.

- a) decrease
- b) increase
- c) not change

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## Acknowledgements

- Carrie Lynch, PharmD, and Liz Mann
- Paul Edwards, PharmD, and Courtney Kaye, PharmD
- Carmon Monts, PharmD, and Sara Ballentine, MHA



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## Contact Information

- Kayce Shealy: [kmshealy@presby.edu](mailto:kmshealy@presby.edu)

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## Impacts of Active Learning in a Pharmaceutical Calculations Course

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PharmD and MPH Candidate, Class of 2025  
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Marty Perry, PhD  
Associate Professor, Pharmaceutical Sciences  
University of Arkansas for Medical Sciences  
College of Pharmacy

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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** Discuss the statistical data collected from students who were engaged in active learning and from those who received traditional lecture.

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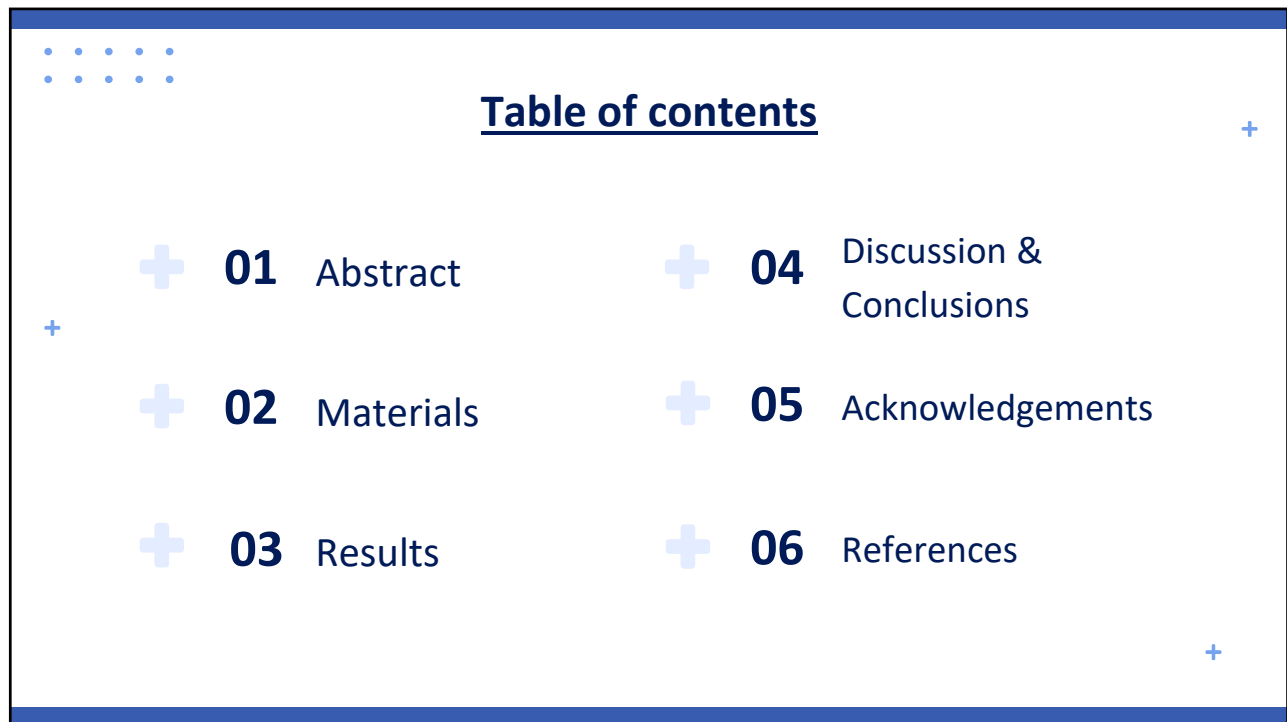








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 <b>01</b> Abstract	 <b>04</b> Discussion & Conclusions
 <b>02</b> Materials	 <b>05</b> Acknowledgements
 <b>03</b> Results	 <b>06</b> References

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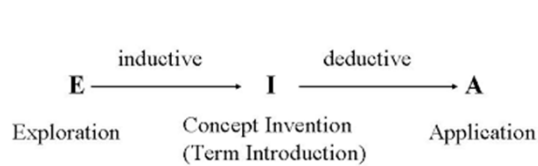


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# Introduction to Active Learning

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

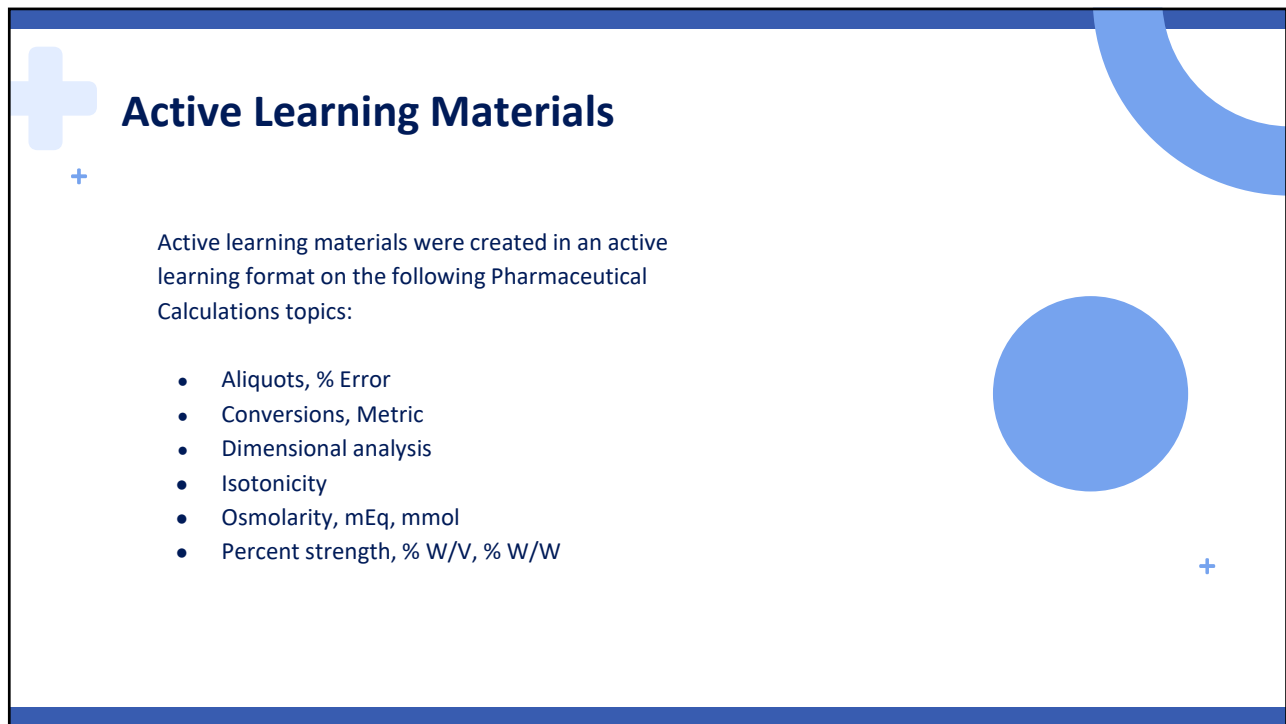
- 3 types of activity questions based on learning cycle:  
**Exploration, Invention, & Application**



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## +02 Materials

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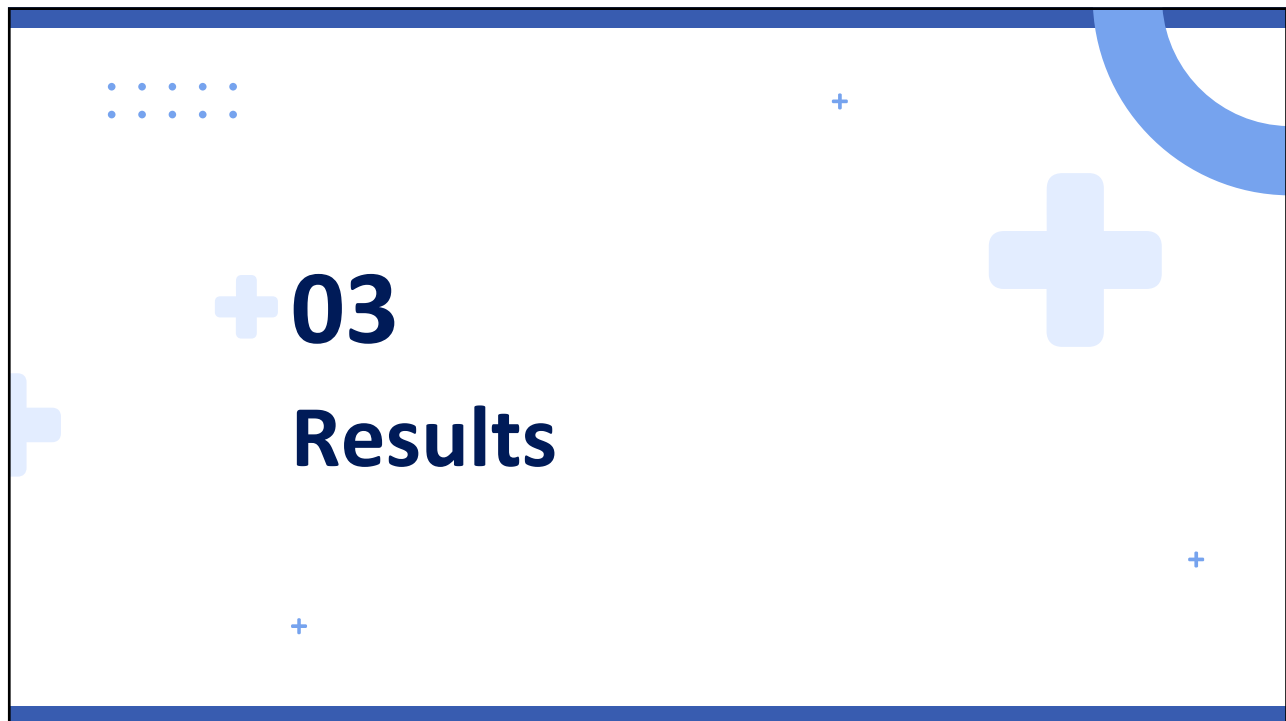
**Active Learning Materials**

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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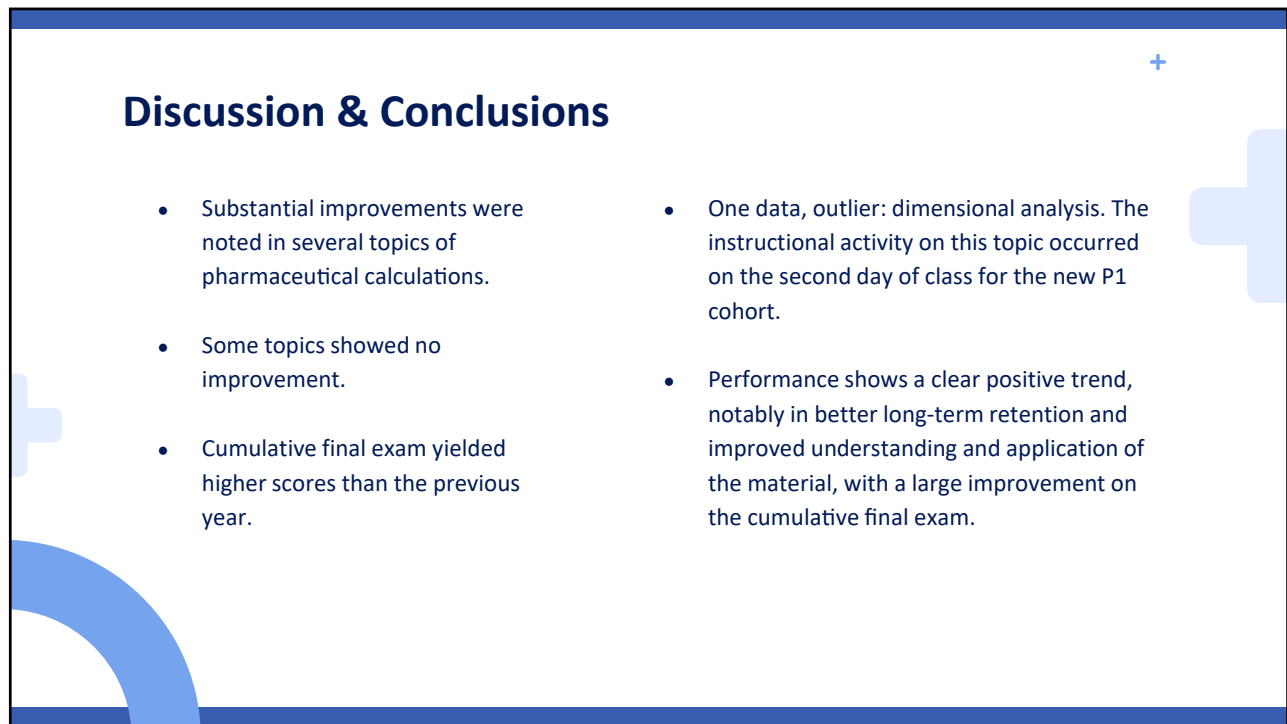
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## Discussion & Conclusions

- 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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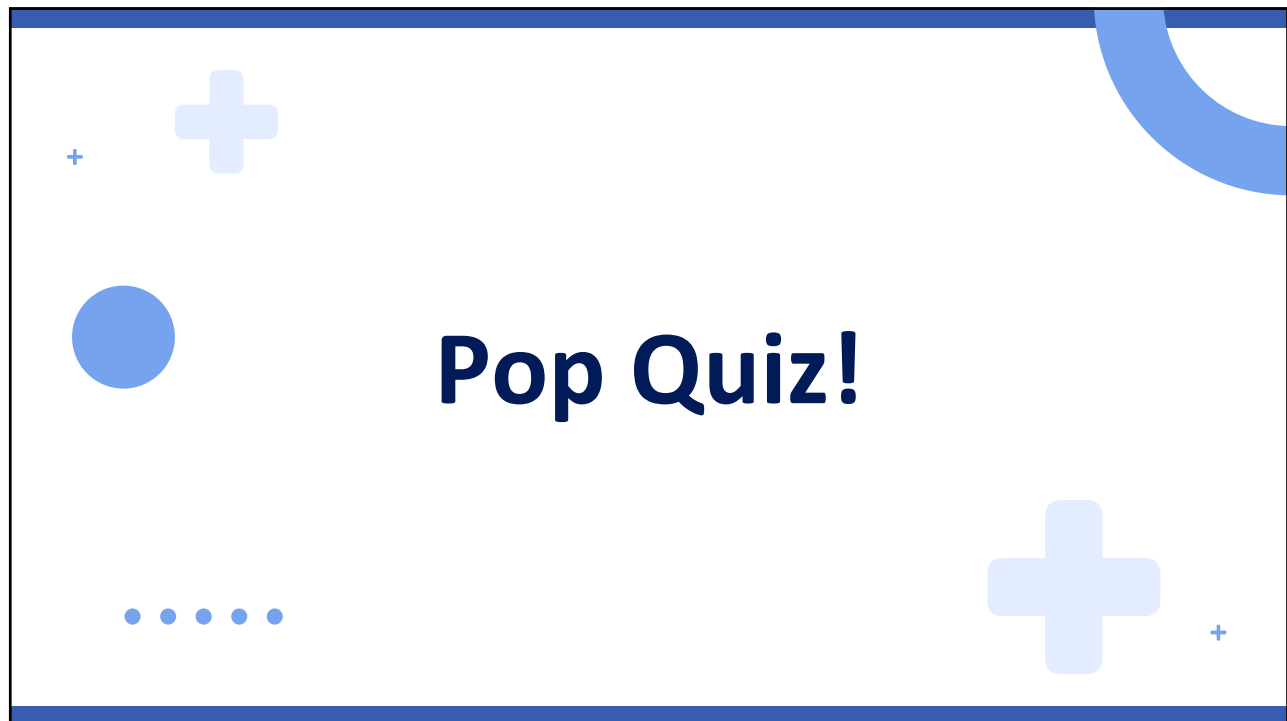
**References**

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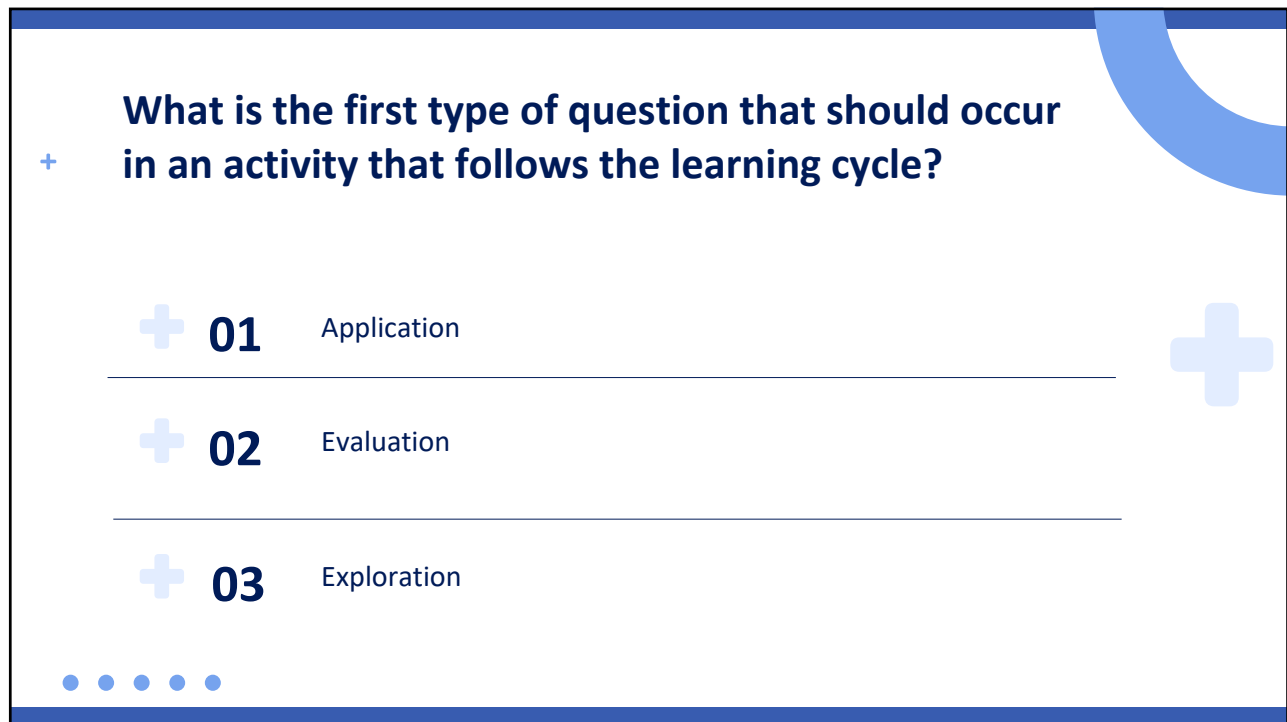




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Slide 99 features a blue header and footer. The main content area is white with a blue curved shape in the top right corner. The title is "What is the first type of question that should occur in an activity that follows the learning cycle?" with a small blue plus icon to its left. Below the title are three numbered items, each with a blue plus icon to its left: "01 Application", "02 Evaluation", and "03 Exploration". Each item is separated from the next by a horizontal line. At the bottom left, there are five small blue dots. A large blue plus icon is on the right side of the slide.

**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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Slide 100 features a blue header and footer. The main content area is white with various blue decorative elements: a plus icon and a circle on the top left, a plus icon on the top right, a large plus icon on the bottom left, and several circles and a curved shape on the bottom right. The title "Thanks!" is in the center. Below it is the text "Do you have any questions?" followed by the email "orodriguez2@uams.edu". A QR code is centered below the email. At the bottom, the "CREDITS" section states: "This presentation template was created by [Slidesgo](#), and includes icons by [Flaticon](#), and infographics & images by [Freepik](#)".


**Thanks!**

Do you have any questions?  
orodriguez2@uams.edu



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# Board Authorized Protocols: Framing a New Practice Mindset in Kentucky


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Kyle Bryan, PharmD  
Adjunct Assistant Professor/  
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University of Kentucky College of Pharmacy

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# BOARD AUTHORIZED PROTOCOLS: FRAMING A NEW PRACTICE MINDSET IN KENTUCKY



Eric Mackin, PharmD Candidate 2025; Kyle Bryan, PharmD; Bailey Conley, PharmD; Brooke Hudspeth, PharmD, CDCES; Adrienne Matson, PharmD, BCPS; Patricia R. Freeman, RPh, PhD, FAPhA, FNAP

University of Kentucky College of Pharmacy, Center for the Advancement of Pharmacy Practice

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## OBJECTIVES

- Describe the current state of Board Authorized Protocol Implementation in Kentucky
- Identify the most widespread Board Authorized Protocols in Kentucky
- Identify the practice settings in which Board Authorized Protocols are most commonly implemented in Kentucky

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## BACKGROUND

- Population-specific collaborative practice agreements known as Board Authorized Protocols authorize Kentucky pharmacists to provide protocol-driven care for a wide variety of conditions
- A protocol must be fully executed before a pharmacist can utilize it to provide care and initiate the dispensing of prescriptions
- This study seeks to describe:
  - The extent to which protocols are implemented in Kentucky
  - The relationship between implemented protocols and medically underserved areas (MUAs)

### Authorized Conditions under 201 KAR 2:380

Alcohol Use Disorder – Naltrexone	Anaphylaxis Treatment with Epinephrine
Acute Influenza Infection	Tobacco Cessation
Opioid Use Disorder - Naltrexone	Acute Uncomplicated Urinary Tract Infection
Nirmatrelvir/Ritonavir COVID-19 Treatment	Acute Group A Strep Pharyngitis Infection
Travel Health Therapies	Self-Care: Probiotics
Colorectal Cancer Screening	Allergic Rhinitis Therapies
Influenza Chemoprophylaxis	Tuberculosis Skin Testing
Self-Care: Diabetes Testing Supplies	Self-Care: Emergency Contraception
Self-Care: Diabetes Testing & Injection	Self-Care: Nutritional Supplements
Self-Care: Dietary Supplements	


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## METHODS

- Kentucky Board of Pharmacy staff disseminated a survey in fall 2022
- Protocol utilization data were collected and entered into Excel by Board staff, who provided the data to our team for analysis

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## RESULTS

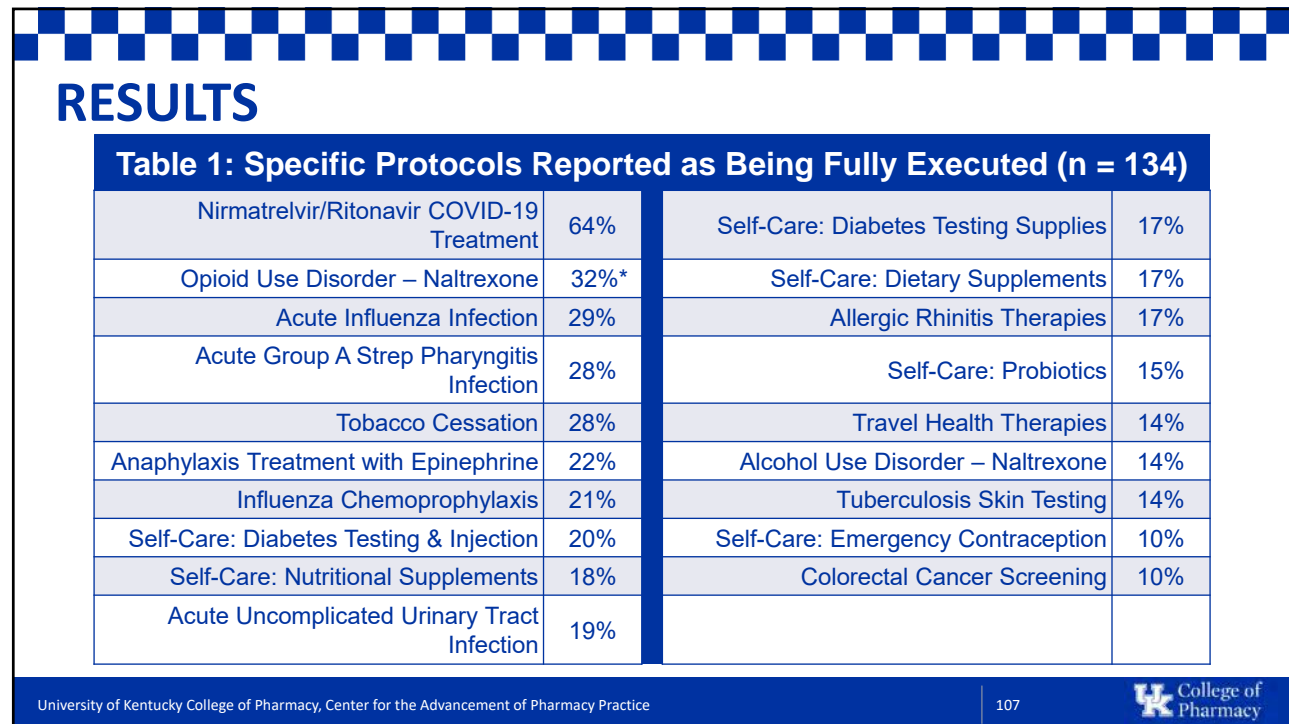
<div>64%</div> <div>Response Rate</div> <ul style="list-style-type: none"><li>• 857 Pharmacies returned survey to Board</li></ul>	<div>16%</div> <div>With a Protocol</div> <ul style="list-style-type: none"><li>• 134 Pharmacies reported at least 1 fully executed protocol</li></ul>	<div>50%</div> <div>of Counties</div> <ul style="list-style-type: none"><li>• Pharmacies in 60 of Kentucky's 120 counties reported having an executed protocol</li></ul>
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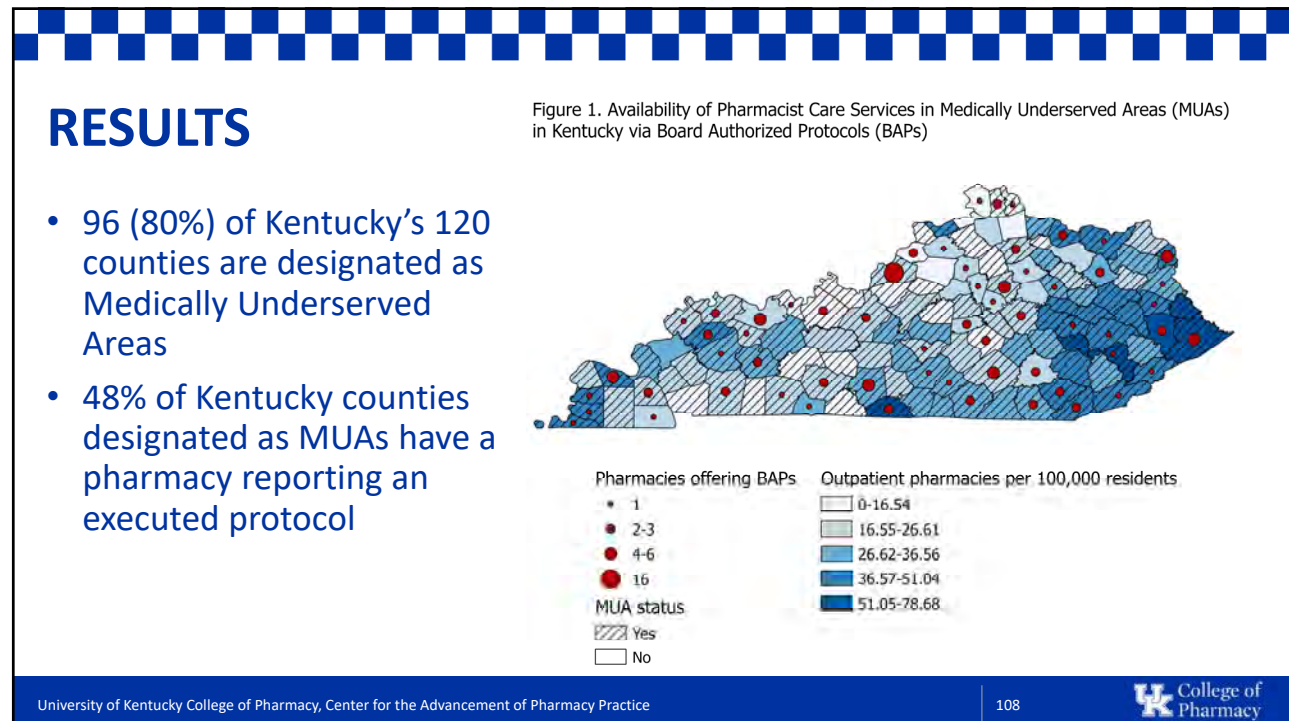
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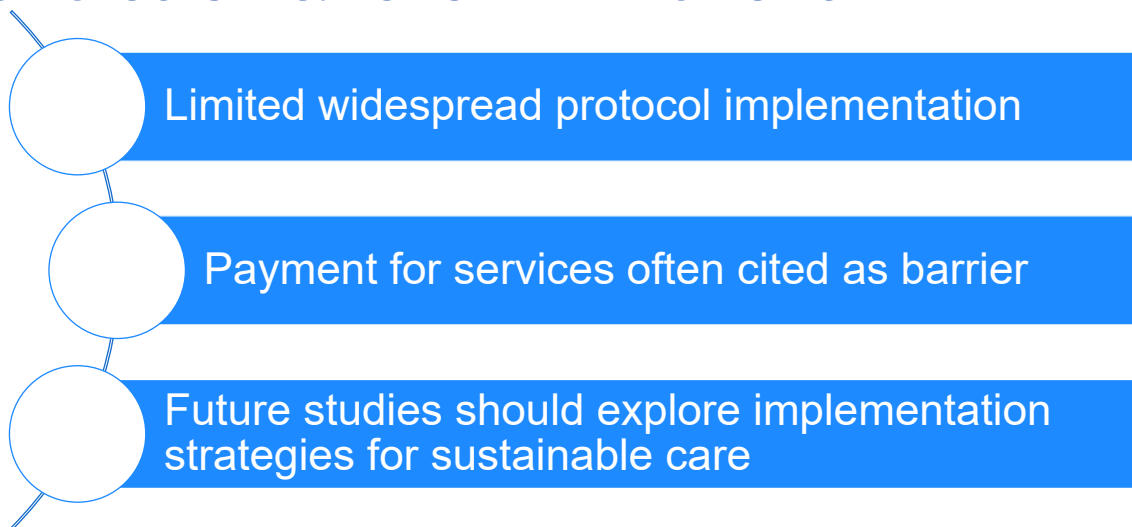
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## DISCUSSION


- Board Authorized Protocols have existed for over 5 years but few pharmacies are utilizing protocols in practice
- Despite there being a pharmacy in almost every county in KY, 50 counties identified as MUAs have no reported use of executed protocols
- The nirmatrelvir/ritonavir COVID-19 treatment protocol had only been approved for 10 weeks at the time of survey conclusion, yet it was the most executed protocol
  - Likely due to HHS mandate that ensured payment for services

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## CONCLUSION & FUTURE DIRECTIONS




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**ACCORDING TO THE SURVEY DISTRIBUTED  
BY THE KENTUCKY BOARD OF PHARMACY,  
WHICH BOARD AUTHORIZED PROTOCOL  
WAS MOST WIDESPREAD?**

A. Tuberculin Skin Testing      C. Colorectal Cancer Screening Protocol  
B. Nirmatrelvir/Ritonavir for COVID-19 Treatment      D. Tobacco Cessation Protocol

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111



**THANK YOU**

 [WWW.PHARMACY.UKY.EDU/CAPP](http://WWW.PHARMACY.UKY.EDU/CAPP)

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## Effective CDS Data Collection and Use: A Health Data Collaboration Model Using Relationships Between the State Pharmacy Regulatory Board, Independent Pharmacy Providers, State Data Collection Programs, and Electronic Service Connectors

Deena Speights-Napata, MA  
Executive Director  
Maryland Board of Pharmacy

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## Effective CDS Data Collection and Use

Deena Speights-Napata, Executive Director  
Maryland Board of Pharmacy

A health data collaboration model using relationships between the state board of pharmacy, independent pharmacies, state data collection programs, and electronic service connectors

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# Effective CDS Data Collection and Use

A health data collaboration model using relationships between the state pharmacy regulatory board, independent pharmacy providers, state data collection programs, and electronic service connectors.

**Authors:** Deena Speights-Napapla, MA; Julia Anderson, PharmD

**Affiliations:** Maryland Board of Pharmacy, Office of Provider Engagement and Regulation (OPER) - Prescription Drug Monitoring Program (PDMP)

**Disclosures:** Funding received from Maryland's Opioid Operational Command Center (OOCC) grant and US Department of Justice, Bureau of Justice Assistance FY 21 Harold Rogers Prescription Drug Monitoring Program

## Learning Objectives

- Identify the three enhancements that were available to Maryland dispensers that were identified as opportunities for direct feedback from dispensers.
- Identify the type of pharmacy that indicates the most need for support through controlled substance education materials.
- Identify the future projects on which the Maryland Board of Pharmacy and OPER plan to collaborate.

## Project Outcomes

The survey was sent to all pharmacists registered with the PDMP and all dispensers who report to the PDMP. Responses:

- 40% pharmacists at independent pharmacies
- 58% interested in integrating the PDMP into their pharmacy software system
- 62% interested in gaining clinical access to the HIE
- 26% were interested in being earlier adopters of the new naloxone reporting requirement

Educational materials were developed for pharmacists with the aim of improving controlled substance dispensing, preventing adverse events, promoting the use of the PDMP, and addressing barriers to patient care that are created by stigma.

Maryland Board of Pharmacy inspectors provided the most up to date information regarding challenges that pharmacists are facing that could be addressed in the materials.

## Pharmacy PDMP Integration Work Flow Overview

## Distribution of Independent Pharmacies

## Collaborative Projects

OPER, which houses the PDMP, has worked collaboratively with the Maryland Board of Pharmacy to promote professional education, informed clinical decision-making, best practices and innovation.

Throughout 2022 and 2023 OPER, with the help of the Maryland Board of Pharmacy, has developed materials with the goal of providing pharmacists with data to date, high quality, evidence-based information to support their dispensing of opioid medications and other controlled substances. The Board of Pharmacy provided invaluable insights into the challenges that pharmacists are currently facing.

## Demographic of Pharmacies that Reported the PDMP (Drug Usage, Province)

County	# of Pharmacies
Anne Arundel	1
Baltimore City	10
Baltimore County	5
Charles	1
Frederick	2
Hagerstown	2
Prince George's	10
St. Mary's	1
Washington	1
Wicomico	1

Map courtesy of OPER, 2022

## Contact Method Preference

In October 2022, OPER created a survey with input from Maryland pharmacists, the Maryland Board of Pharmacy, and other relevant stakeholders to gauge dispensers' interest in three enhancements available to Maryland dispensers.

- Access to clinical data through the Chesapeake Regional Information System for our Patients (CRISP) Health Information Exchange (HIE)
- Integration of the PDMP into the pharmacy software system
- Interest in early adoption of reporting naloxone dispensers

## Next Steps

**Educational Materials:** Distribute educational materials and increase awareness of these materials. Maintain ongoing communication with the Board of Pharmacy to ensure pharmacists' current educational needs are addressed and met.

**Clinical Access for Pharmacists and PDMP Integration:** Continue the collaborative effort between OPER, Maryland Board of Pharmacy, CRISP and other stakeholders. Assist pharmacies that have expressed interest in accessing appropriate resources and contact information.

**Naloxone Reporting:** Once the regulations for this change have been promulgated OPER will work with the Board of Pharmacy to provide updated guidance and resource materials to pharmacists and dispensers.

## Learning Objectives

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## PDMP Program Development

- The MD PDMP program developed a survey to distribute to Maryland pharmacies to get an idea of pharmacist dispenser interest in proposed PDMP enhancements. The MD Board of Pharmacy identified MD pharmacies and distributed the survey to MD pharmacists.
- The Chesapeake Regional Information System for our Patients (CRISP) is the PDMP database vendor that allows pharmacists access to patient data in the state Health Information Exchange (HIE). A credentialing process is required to verify provider status and obtain access.
- Survey Results:  
40% of Maryland pharmacies are independent pharmacies  
Almost 60% expressed interest in integration with PDMP  
62% expressed interest in gaining access to CRISP and the HIE

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## Poster Focus

- Identify Maryland pharmacies in most need of support
- Identify prescription drug monitoring program features and enhancements
- Identify future program goals

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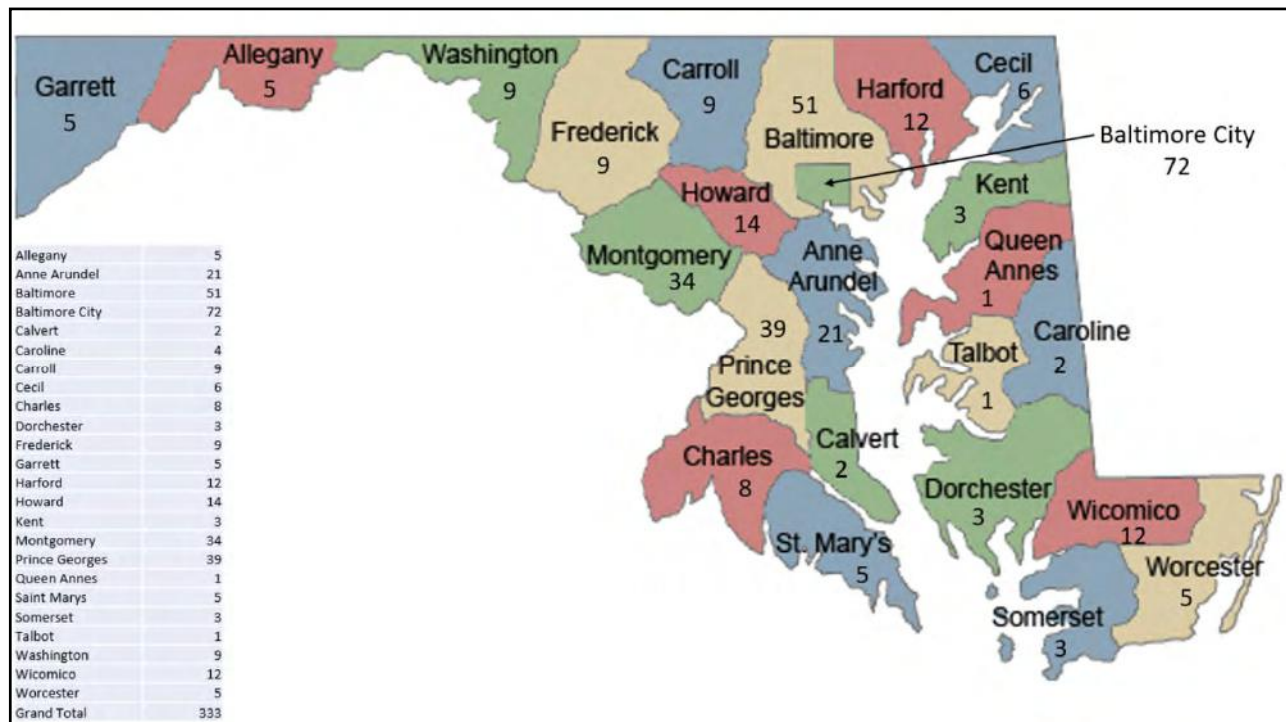
# Maryland Pharmacies in Most Need of Support

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- There are 24 counties in Maryland, each represented by a local health department.
- The largest number of independent pharmacies are located in jurisdictions that experience a high number of pharmacy robberies and pharmacy closures, and also have the largest African American, African, and Latino populations. These populations also include the largest number of citizens that are economically below the national poverty level. The total number of independent pharmacies in these jurisdictions is 196.

**Baltimore City and County – 123**  
**Prince Georges County – 39**  
**Montgomery County – 34**

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## Program Features and Enhancements

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## New Tools for Prescribers

- Prescriber Insights and Buprenorphine Comparison Report. The PDMP is working to ensure that these new tools are as accurate as possible and user friendly.
- Personal CDS Prescribing History
- Prescriber Insights

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## Comparison Reports

- The comparison report is newly developed and provides data on prescribing patterns and product of the individual pharmacy. The report also provides data from other pharmacies that allows the pharmacy to compare their individual prescribing patterns to other pharmacies.

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# Personal CDS Prescribing History

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- Includes individual prescriptions dispensing history
- Allows the prescription drug monitoring program access to the prescription dispensing history and the ability to identify red flags

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## Buprenorphine Comparison Report

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- Includes a summary of the past 60 days of PDMP dispense data for prescriptions written for formulations of buprenorphine that are approved by FDA to be used to treat opioid use
- Prescribers can view the number of patients for whom they prescribe buprenorphine compared to their peers as well as the number of patients

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# Future Program Goals

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By focusing on these pharmacies, our state prescription drug monitoring program will continue to focus on several key areas:

1. Development of a pharmacy opioid dispensing and misuse algorithm
2. Education about the state prescription drug monitoring program
3. Training on the role of the pharmacist in prescription drug dispensing
4. Removal of administrative barriers
5. Clinical access for more pharmacists to PDMP
6. Naloxone reporting

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## Self-Assessment Question

Which type of pharmacy indicated that it had the most need for supportive educational materials?

- A. Hospital pharmacies
- B. Chain pharmacies
- C. Independent pharmacies
- D. Long-term care pharmacies

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## Questions

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## Poster Presentations: Framing a New Practice Mindset

**NABP**  
National Association of  
Boards of Pharmacy

# Snapshot of Current Pharmacy Technician Practice

Kristen Snair, CPhT, MSJ  
Member  
Arizona State Board of Pharmacy

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## Snapshot of Current Pharmacy Technician Practice

by Kristen Snair, CPhT, MSJ, and Cyndi Vipperman, CPhT

### Learning Objectives

- Identify opportunities to "reframe" a new practice mindset for pharmacy technicians through representation on boards of pharmacy, standardizing minimum competency, licensure transfers, and job titles.
- Compare and contrast state-to-state variances of pharmacy technician standards.
- Describe how the COVID-19 pandemic gave rise to advanced pharmacy technician roles.

### Fast Facts

Pharmacy technicians impact health equity through roles in:


- Remote dispensing pharmacies
- Immunization administration
- Medication therapy management

State-level COVID-19 waivers and the PREP Act have enabled pharmacy technicians to:

- Administer immunizations
- Perform point-of-care testing
- Work from home

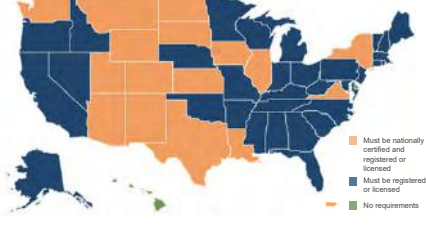
### Pharmacy Technician Representation on Boards of Pharmacy

There are 16 pharmacy technician seats on boards of pharmacy per statute/rule, representing approximately 447,000 total technicians nationwide.



### Pharmacy Technician Registration/Licensure Requirements

There are 17 states/jurisdictions that require national certification as part of the registration and licensure process.



### Points of Entry for Pharmacy Technicians

Board Regulation	Employer Training	Formal Education	Board-Approved Exams
Registration	Community-based	Accredited programs	PTCE
Licensure	Hospital-based	Nonaccredited programs	ExCPT
Certification			State/Employer exam

### Advanced Pharmacy Technician Role Examples

- IDIS Technician Specialist
- Compliance Coordinator/Regulatory Specialist
- Immunizing Pharmacy Technician
- Lead Pharmacy Technician
- Pharmacy Purchaser/Inventory Specialist
- Medication History Technician
- Technician Product Verifier
- Medication Reconciliation Technician
- Informatics Pharmacy Technician
- MTM Pharmacy Technician
- Medication Access Service Advocate
- Sterile Compounding Coordinator

### Conclusion

For more than 110 years, NABP has assisted boards of pharmacy in creating uniform education, ensuring minimum competency, developing licensing standards, and facilitating licensure transfer services for pharmacists. That same uniformity used for pharmacists can be applied to pharmacy technician licensure to achieve the shared goal of protecting public health.

### References

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State PTCB Technician Licensing. (n.d.). Pharmacy technicians need to be licensed, registered, or certified by the Board of Pharmacy? Both. Last Retrieved March 25, 2023, from <https://www.pcb.org/faq/faq-licensing>  
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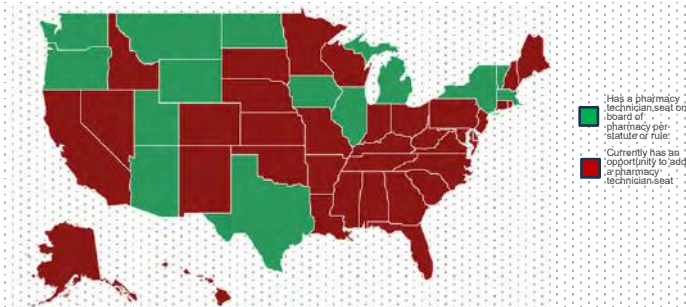
## Learning Objectives

- Identify opportunities to “reframe” a new practice mindset for pharmacy technician representation on boards of pharmacy, standardizing minimum competency, licensure transfers, and job titles.
- Summarize state-to-state variances of pharmacy technician standards.
- Describe how the COVID-19 pandemic provided opportunity to expand pharmacy technician scope of practice.

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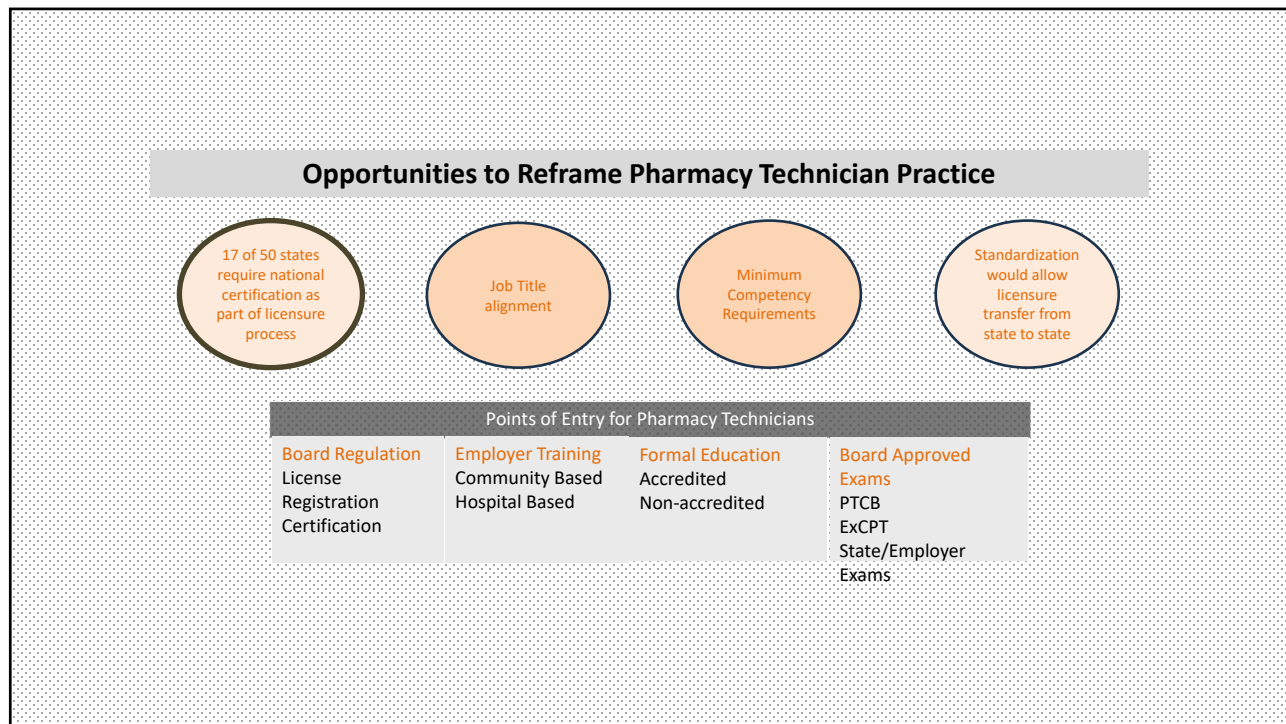
### Pharmacy Technician Representation on Boards of Pharmacy

- There are currently 16 pharmacy technicians that serve on boards of pharmacy in a pharmacy technician dedicated board member seat.\*
- This means the unique perspective of 16 pharmacy technicians are representing approximately 447,000 pharmacy technicians nationally.

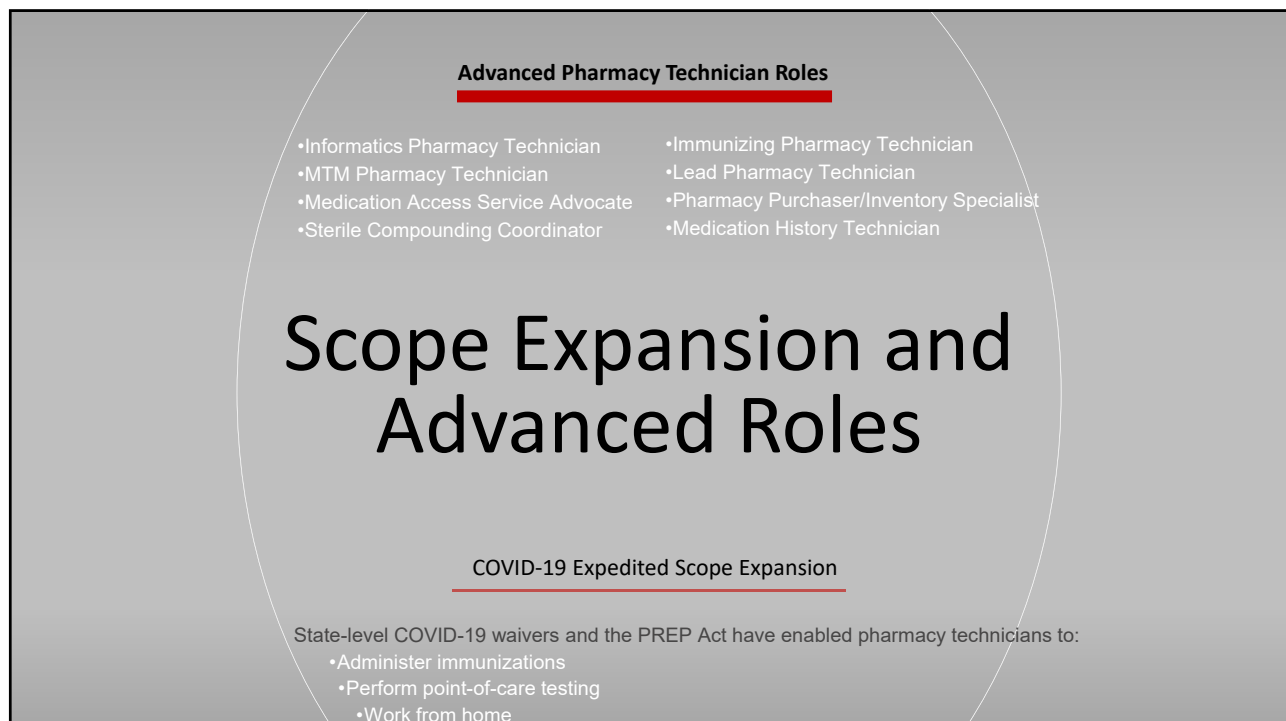


**\*Good News:** since the educational poster presentation at least 2 more states have added a pharmacy technician seat on their boards of pharmacy.

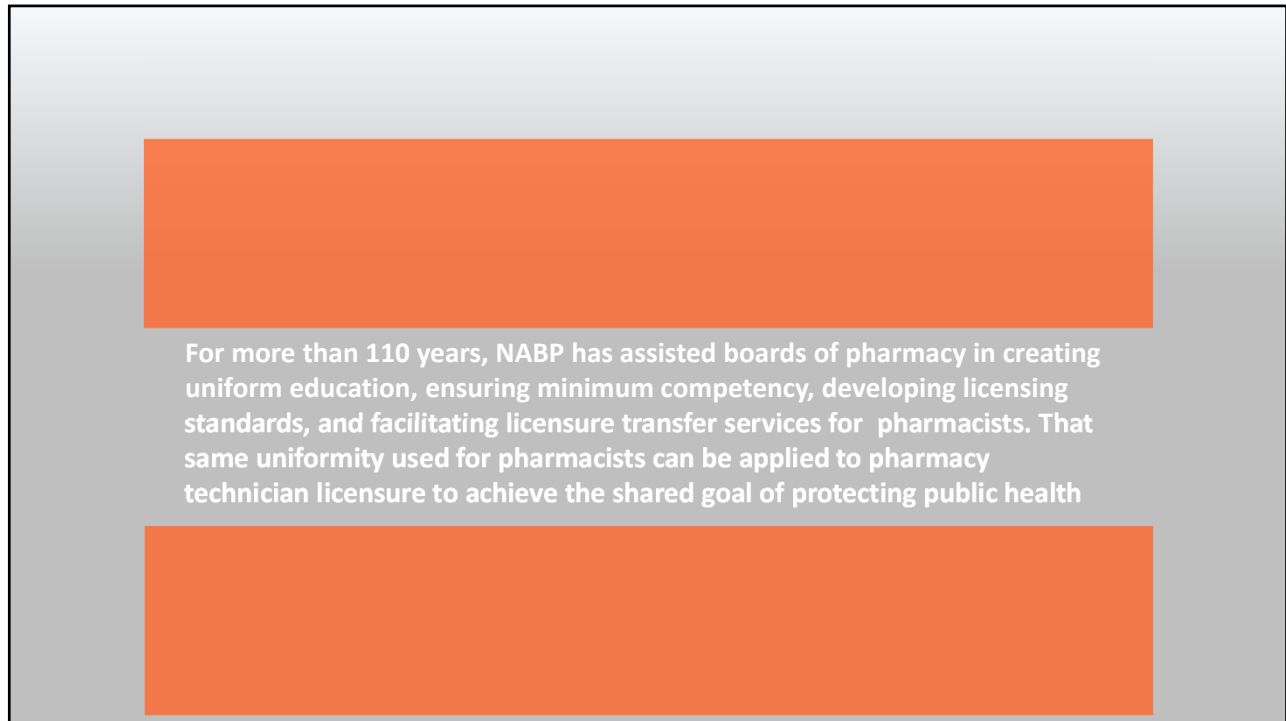
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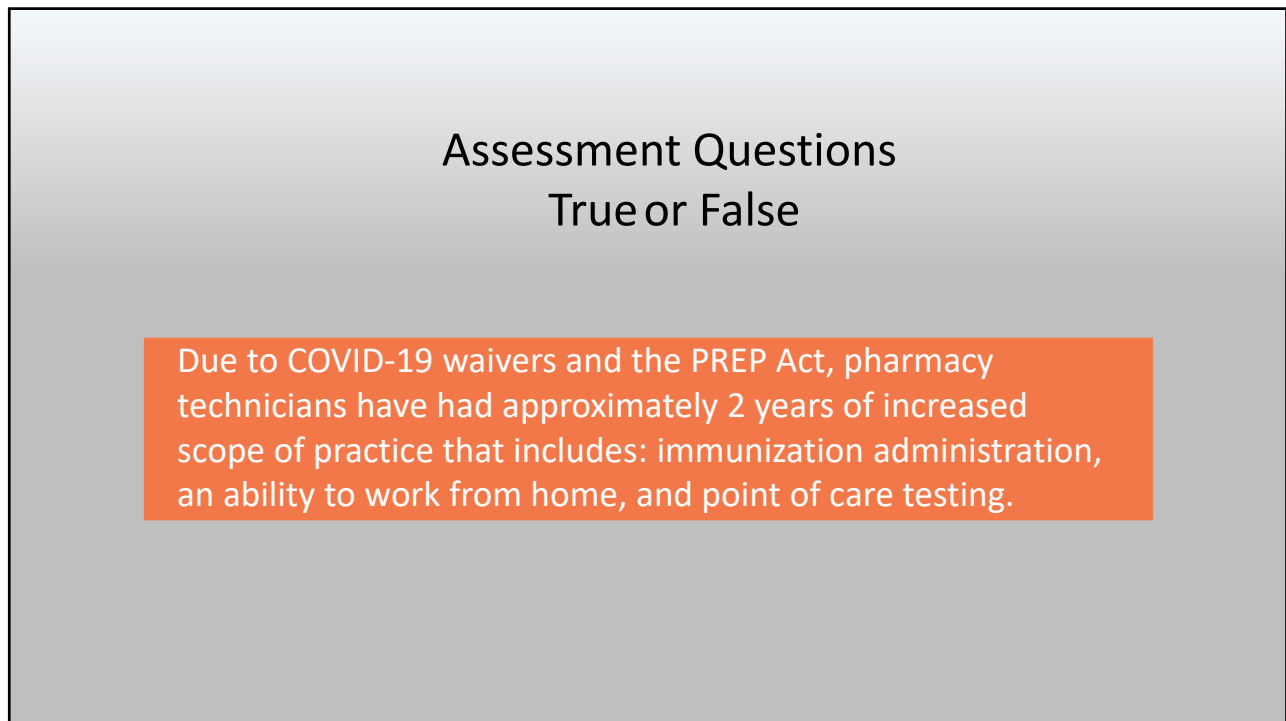


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For more than 110 years, NABP has assisted boards of pharmacy in creating uniform education, ensuring minimum competency, developing licensing standards, and facilitating licensure transfer services for pharmacists. That same uniformity used for pharmacists can be applied to pharmacy technician licensure to achieve the shared goal of protecting public health

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### Assessment Questions True or False

Due to COVID-19 waivers and the PREP Act, pharmacy technicians have had approximately 2 years of increased scope of practice that includes: immunization administration, an ability to work from home, and point of care testing.

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## Questions

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