Ohio Research Forum 2024

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OPA Annual Conference & Trade Show

April 5-7, 2024

OHIO PHARMACISTS ASSOCIATION

1 VOICE VISION TEAM

Learning Objectives

At the completion of this activity, the participant will be able to:

1. describe research projects being conducted by pharmacists, student pharmacists and faculty in Ohio; and

2. describe the impact these research projects have on the practice of pharmacy, economic/social/administrative areas within the profession and/or pharmacy education.

Ohio Community Pharmacists' Untapped Potential in Maternity Care Deserts

Maria Duodu, PharmD Candidate
Natalie DiPietro Mager, PharmD, PhD, Professor of Pharmacy Practice
Ohio Northern University Raabe College of Pharmacy

OPA Annual Conference & Trade Show
April 5-7, 2024

Disclosure Statement

- Maria Duodu and Natalie DiPietro Mager have no relevant financial relationship(s) with ineligible companies to disclose.

  and

- None of the planners for this activity have relevant financial relationships with ineligible companies to disclose.

Learning Objectives

At the completion of this activity, the participant will be able to:

1. Define maternity care desert
2. Recognize trends in maternal mortality and obstetric service provision in the U.S.
3. List provision of maternal health services by Ohio community pharmacists practicing in maternity care deserts
4. Describe Ohio community pharmacists' interest to develop new maternal health services

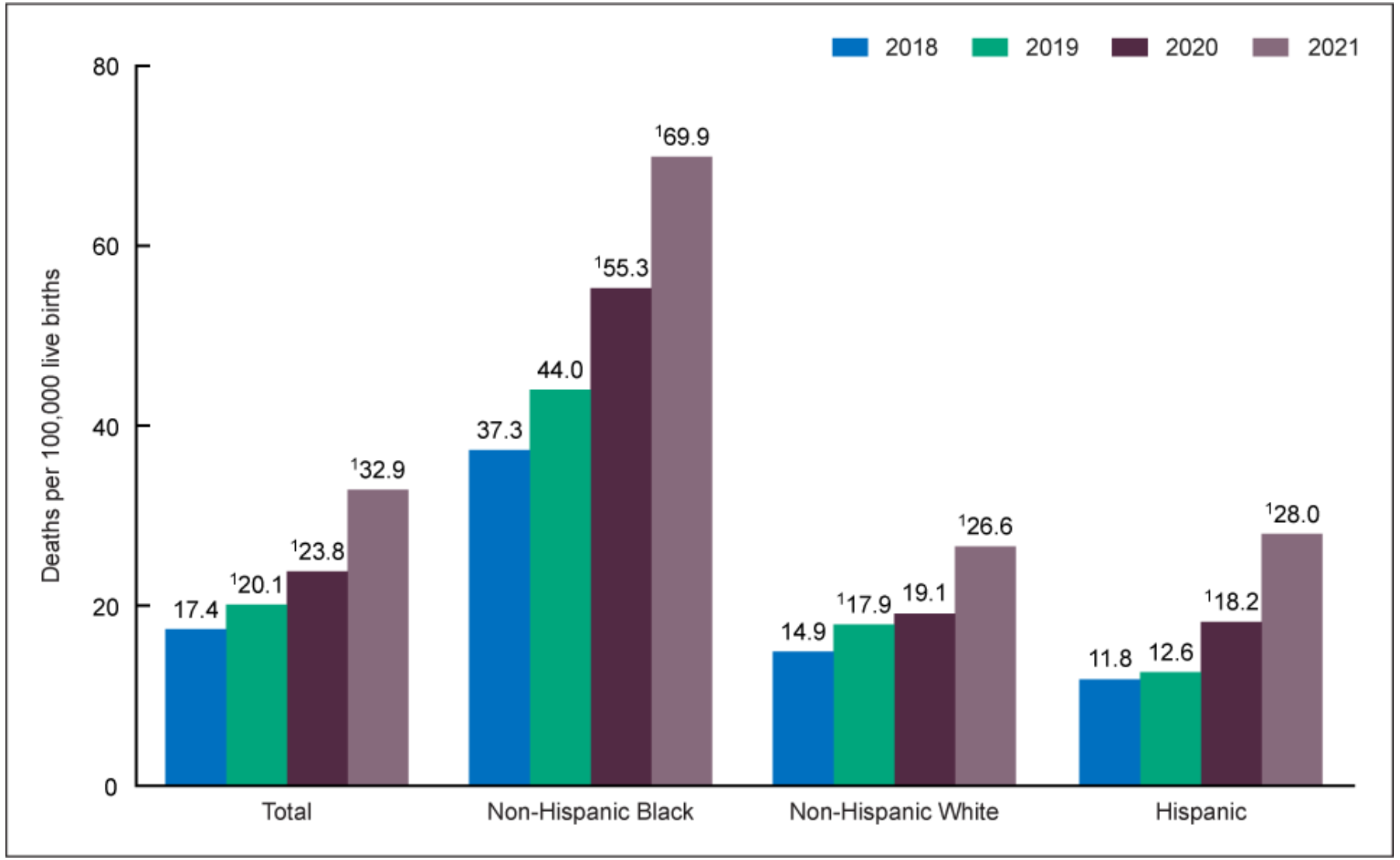
Background

- "Maternity care desert" is a term used to describe geographic lack of access to obstetric services in the U.S.[1]
  - Especially common in rural areas

- Over 2 million women in the U.S. reside in regions with no access to birthing facilities or maternity care providers.[1]
  - An additional 4.7 million women live in areas with low access.

- The number of maternity care deserts in the U.S. is growing.[1]
  - Ohio had the most women (over 97,000) impacted by overall reductions in access to care since the 2020 March of Dimes Report.

Source: March of Dimes[1]



Maternal mortality, U.S. 2018-2021

Source: Centers for Disease Control and Prevention[2]

Maternal Health Service Set for Pharmacists

National Alliance of State Pharmacy Associations
May 2020

Source: National Alliance of State Pharmacy Associations[4]

- Reducing maternal mortality requires integrated & continued care, which community pharmacists can help to provide.[3]
  - In 2020, National Alliance of State Pharmacy Associations (NASPA) released the Maternal Health Service Set for Pharmacists.[4]
  - Outlines services pharmacists can provide to reproductive-age patients pre-pregnancy, during pregnancy, and post-pregnancy.[4]

- Currently, there is great need among reproductive-age women for these services. For example:
  - Among non-pregnant women aged 20-44 years, nearly 41% have uncontrolled hypertension, while 52% had uncontrolled diabetes.[5]
  - < 50% of women with pre-pregnancy diabetes and/or hypertension received recommended counseling before becoming pregnant.[6]

- Community pharmacists can help fill these gaps.
  - The importance of pharmacists providing or being interested in providing these services lies in several key factors:
    - accessibility, reducing health disparities, timely interventions, and improving overall health outcomes.

Primary objectives

- Determine whether community pharmacists in maternity care deserts in Ohio:
  - are aware of trends in maternal mortality
  - provide NASPA-recommended maternal health services

Secondary objectives

- Determine whether community pharmacists in maternity care deserts in Ohio:
  - screen for social determinants of health
  - have interest to develop new women’s health services

Methods

Survey development

- Anonymous 22-question survey assessing knowledge, practices, & opinions
- Pre-tested before distribution
- Ohio Northern University IRB review

Survey distribution

- All Ohio community pharmacists with a primary practice site in a county with low/no access (n=222)
- Emailed to recipients (Qualtrics™)
- Small incentive offered

Data collection

- Responses collected fall-winter 2023
- Open 6.5 weeks
- Reminders sent

Data analysis

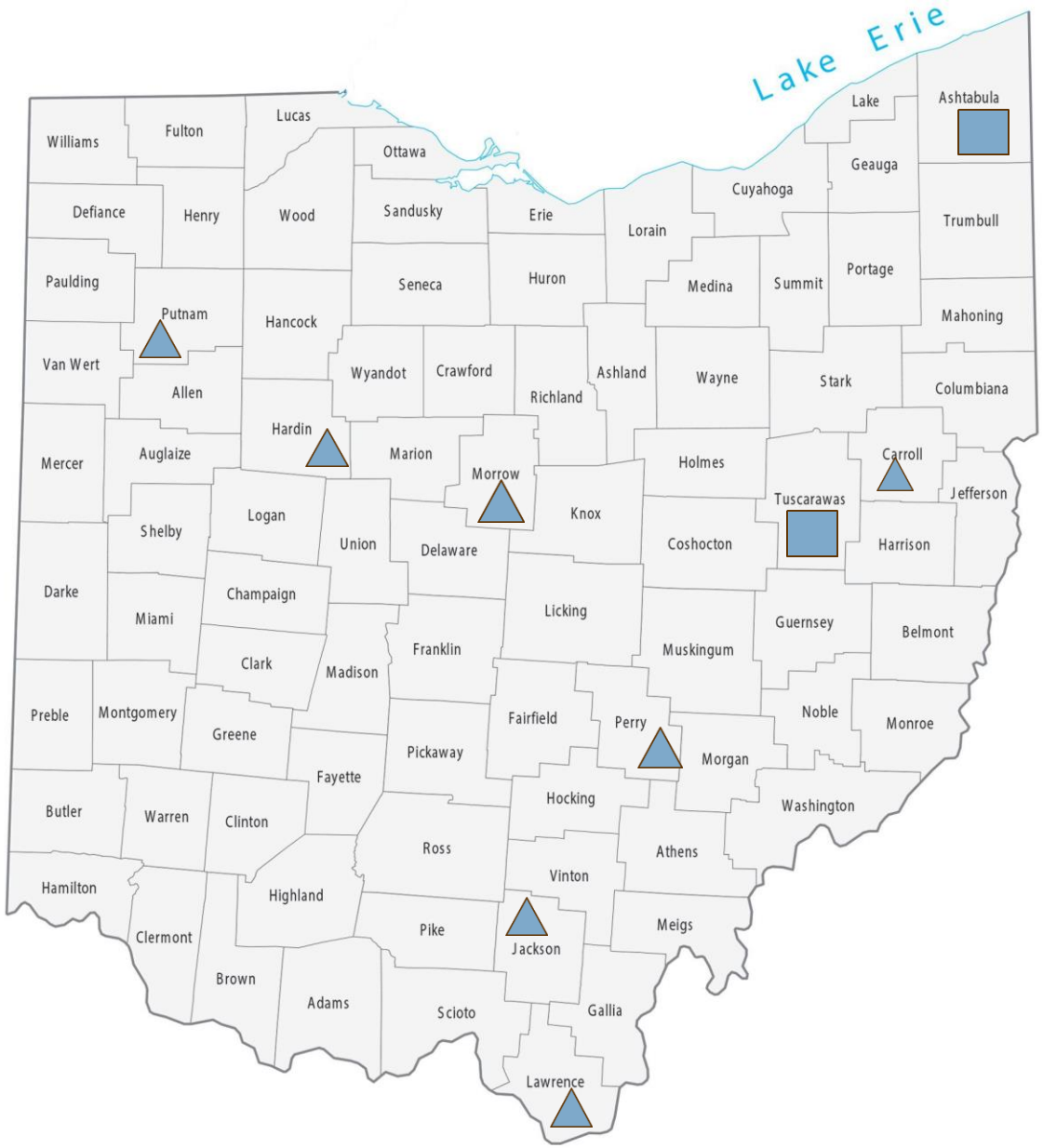
- IBM® SPSS v. 29
- Descriptive statistics
- Missing data excluded

Results

- 31 community pharmacists participated (14% response rate)

Table 1. Demographic characteristics of respondents (n=31)

Characteristic	n (%)
Gender	
Female	13 (48%)
Male	12 (44%)
Gender diverse/non-binary	2 (7%)
Missing	4
Pharmacy type	
Independent	5 (16%)
Small chain	3 (10%)
Large chain	19 (62%)
Other (e.g., outpatient hospital)	4 (13%)

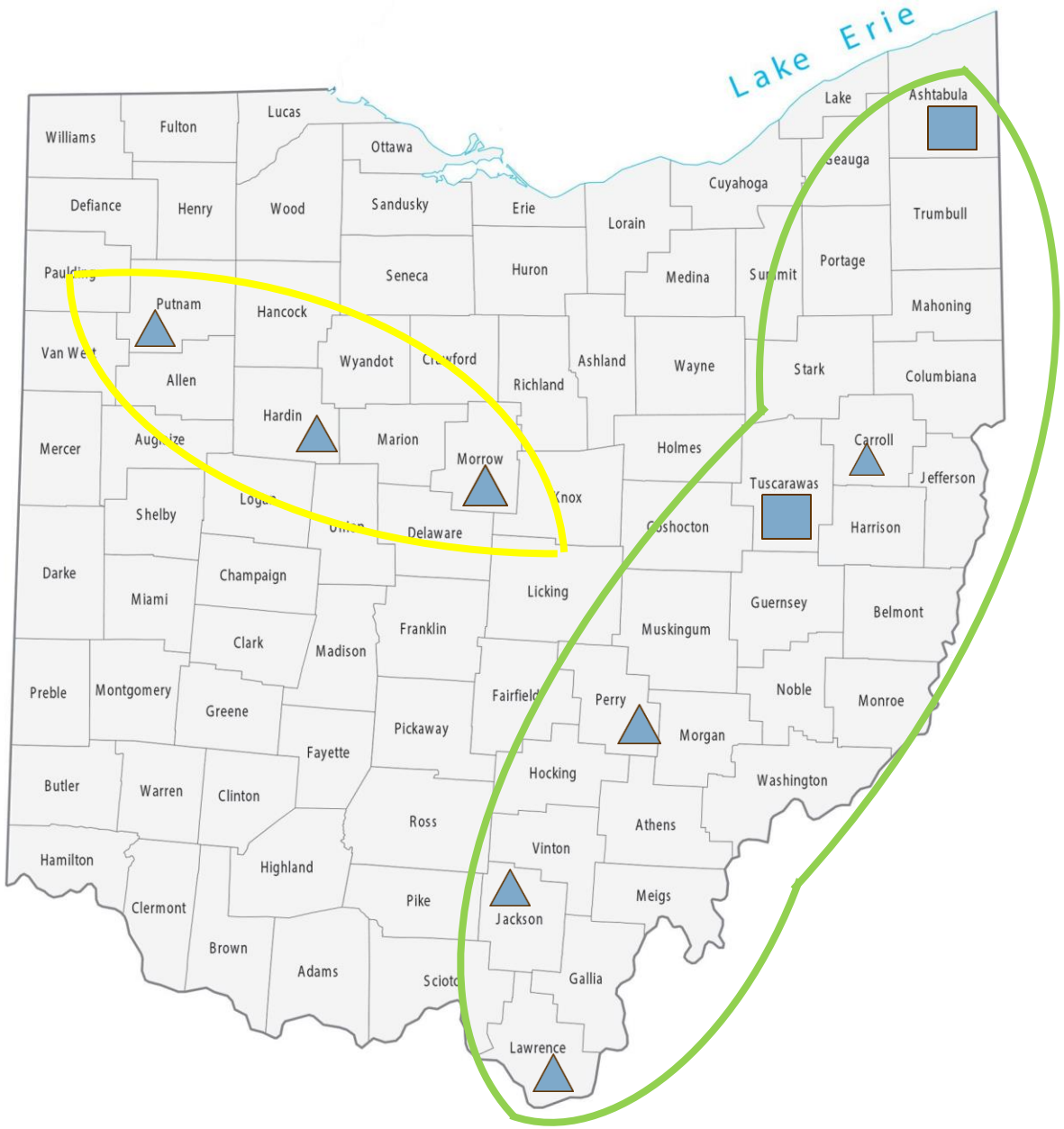


Source: GISGeography.com

Figure 1. Distribution and county status of respondents

2 Low Access counties

7 Maternity Care Desert counties



Source: GISGeography.com

Figure 1. Distribution and county status of respondents

2 Low Access counties

7 Maternity Care Desert counties

6 Appalachian counties

3 Rural, non-Appalachian counties

- 48% of respondents knew that maternal mortality has been increasing
  - 42% “not sure” of the current trend

- 84% of respondents knew that maternal mortality is higher in Black women as compared to White women in the U.S
  - 10% “not sure” of the current trend

- 11% were aware of the NASPA maternal health services set

- 61% of respondents indicated they were familiar with the term “maternity care desert”
  - Only 35% of those working in a maternity care desert knew that they did so

Table 2. Services provided by community pharmacists in low access or maternity care deserts (n=31)

Services most often provided, currently	Immunizations: n=26 (1 interested to develop)
	Chronic disease state management (e.g., hypertension, diabetes): n=17 (8 interested to develop)
	Tobacco cessation: n=16 (5 interested to develop)
Services least often provided, currently	Alcohol use: n=3 (11 interested to develop)
	Ovulation test counseling/education: n=5 (13 interested to develop)
	HIV and STI: n=6 (10 interested to develop)

- 74% would like to learn more information about women's health services that community pharmacists can provide to patients
- More time and additional staff were most often reported as needs

- Most respondents reported “never” screening for priority social determinants of health (SDOH)
- However, 48% wanted to in learn more about how to screen and refer for SDOH

Table 3. Screening for SDOH among community pharmacists in low access or maternity care deserts screen (n=31)

SDOH	Always	Sometimes	Never
Food insecurity	**1**	**9**	**19**
Transportation	**2**	**8**	**18**
Housing problems	**1**	**9**	**18**
Utilities	**1**	**11**	**17**
Violence/abuse	**2**	**11**	**15**

Discussion

- Results indicate the need to raise awareness about maternal mortality and maternity care deserts
- Although there are currently gaps in comprehensive provision of women's health services or screening for SDOH, pharmacists expressed interest in learning more and implementing new programs
- Opportunities to provide continuing pharmacy education on these topics should be explored
- Future studies should examine the effectiveness of pharmacist-led maternal health care services

Conclusion

- There is untapped potential for Ohio community pharmacists' practicing in in maternity care deserts
- Though the data may not be generalizable due to response rate, these results demonstrate a need to raise awareness about maternal mortality and maternity care deserts
- Given the interest expressed in providing additional services, pharmacists should receive more support to implement the NASPA Maternal Health Services Set to help bridge the gap and work toward health equity

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1. March of Dimes. Nowhere to go: Maternity care deserts across the U.S. 2022 Report. https://www.marchofdimes.org/sites/default/files/2022-10/2022_Maternity_Care_Report.pdf.

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Need More Information?

Scan this QR code to be directed to key resources

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Assessing Ohio Community Pharmacists' Knowledge and Viewpoints of Medication Affordability Tools

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Faculty Advisor: Karen L. Kier

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Disclosure Statement

- Ruth Lim or Karen Kier have no relevant financial relationship(s) with ineligible companies to disclose.

  and

- None of the planners for this activity have relevant financial relationships with ineligible companies to disclose.

Learning Objectives

At the completion of this activity, the participant will be able to:

1) Discuss the impact of high deductible health plans on medication affordability
2) Discuss medication affordability knowledge gaps for Ohio pharmacists

Background

- In 2021, the National Health Interview Survey found that 8.2% of adults between the ages of 18-64 did not take their medication as prescribed due to cost, with that number rising to 20% for adults with disabilities (Mykyta)
- Enrollment in HDHP has increased over the past decade, from 20% of covered workers in 2013 to 29% in 2023 (Claxton)
- A study in 2022 JMCP found high deductible health plans created financial access problems and decreased affordable care (Alnijadi)
- Majority of the literature is focused on clinics
- A 2016 Study looked at how community pharmacists assisted Medicare beneficiaries on a limited income in Alabama (Westrick)

Study Purpose

1) Evaluate the current practice in Ohio for pharmacists regarding the use of medication affordability tools

2) Identify Ohio Pharmacists perceived knowledge gaps when it comes to Medication Affordability Tools

Medication Affordability Tools

Discount Cards	Manufacturer Copay Cards
Cost Plus Pharmacies	Generic Drug Discount Programs
Referral to a Social Worker	Federally Qualified Health Centers
Patient Assistance Programs (Charitable and Manufacturer)	Membership Programs/Savings Apps (Goodrx Gold, Walgreens Prescription Savings Club)
Medicare	Medicaid

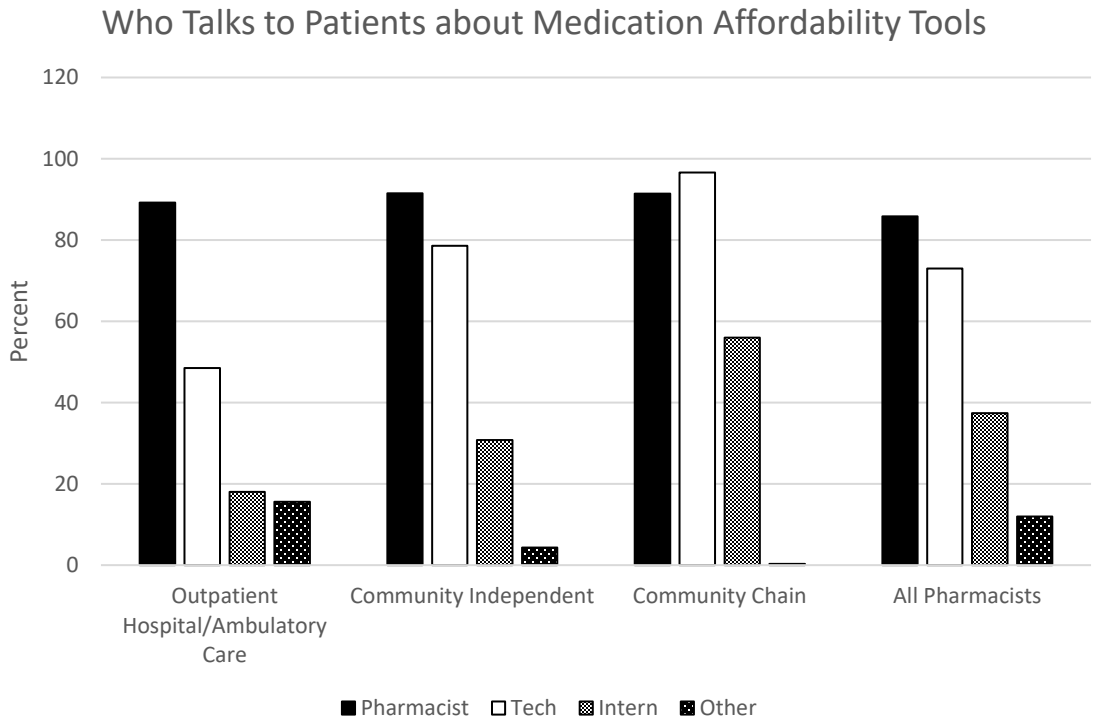
Methods

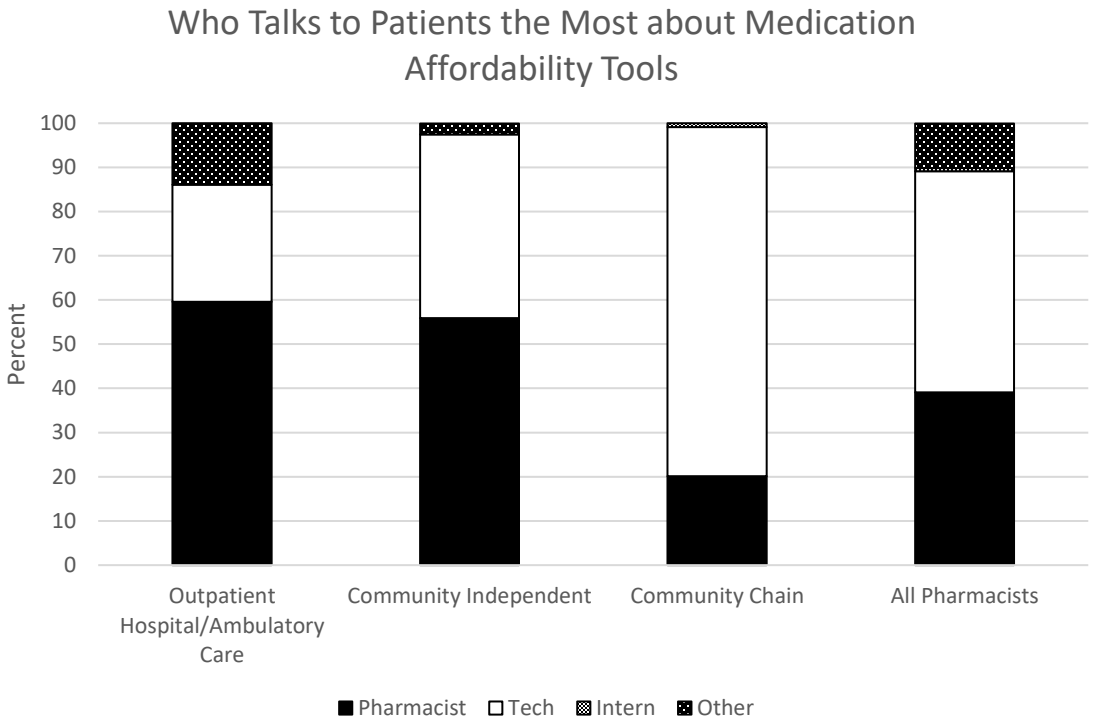
- IRB approval
- Survey developed including questions from previous Alabama study
- Pilot tested survey
- Email survey sent to every Ohio pharmacist with an active license and was open from 9/19/23-10/31/2023 with two reminder emails
- Data analyzed with SPSSv28
- Descriptive statistics with subgroup comparisons
- Exclusions included retired, no longer practicing, pharmacists with a primary site not in Ohio, inpatient, long-term care and non-pharmacists
- Focused on opinions from community pharmacists, who were most likely to interact with medication affordability tools

Demographics

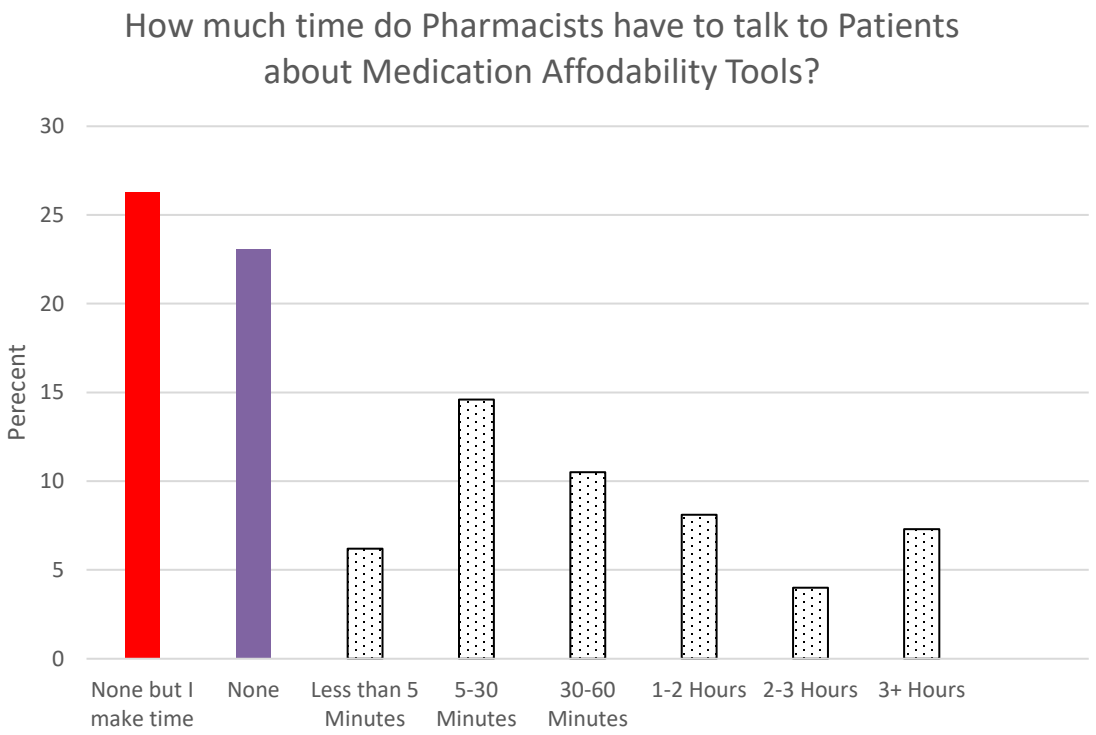
- 1716 pharmacists responded for a 38% response rate
- Length as a pharmacist mean 6.74 + 2.1 (median 7)
- Length at current practice site mean 5.66 + 2.5 (median 6)
- % of patients who can afford medications mean 46.67% + 21.4 (median 49)
- Rural 20.9%, Urban 36.6%, Suburban 42.4%

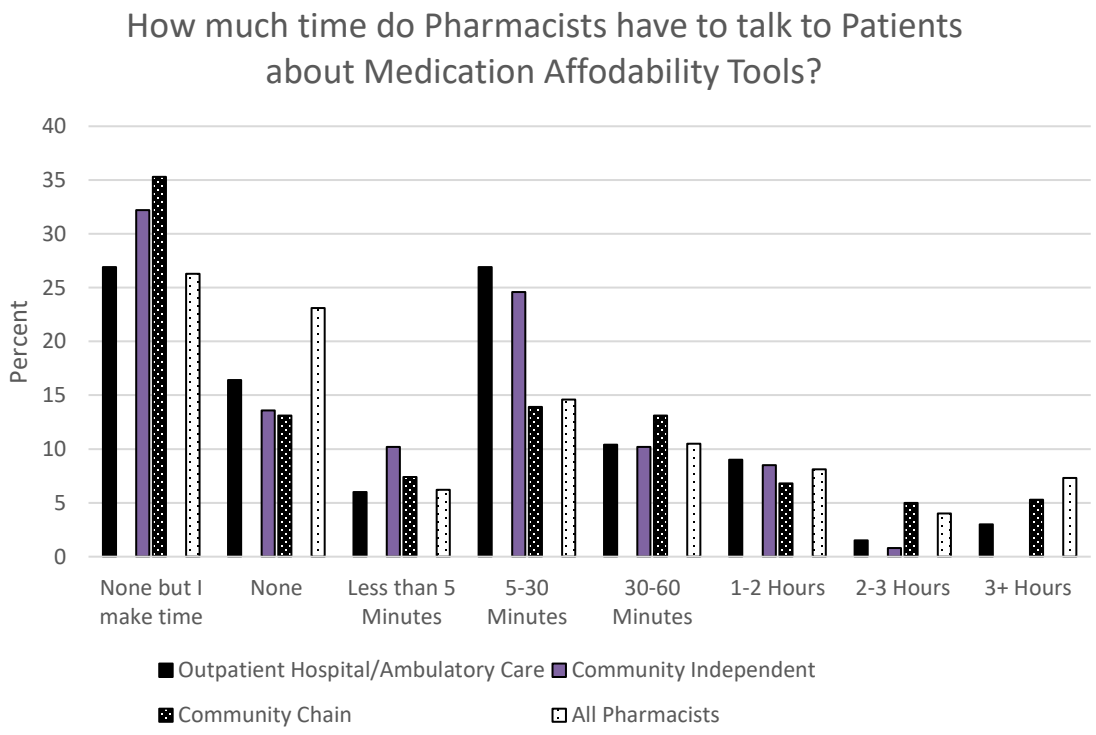
Results-Who Talks to Patients?



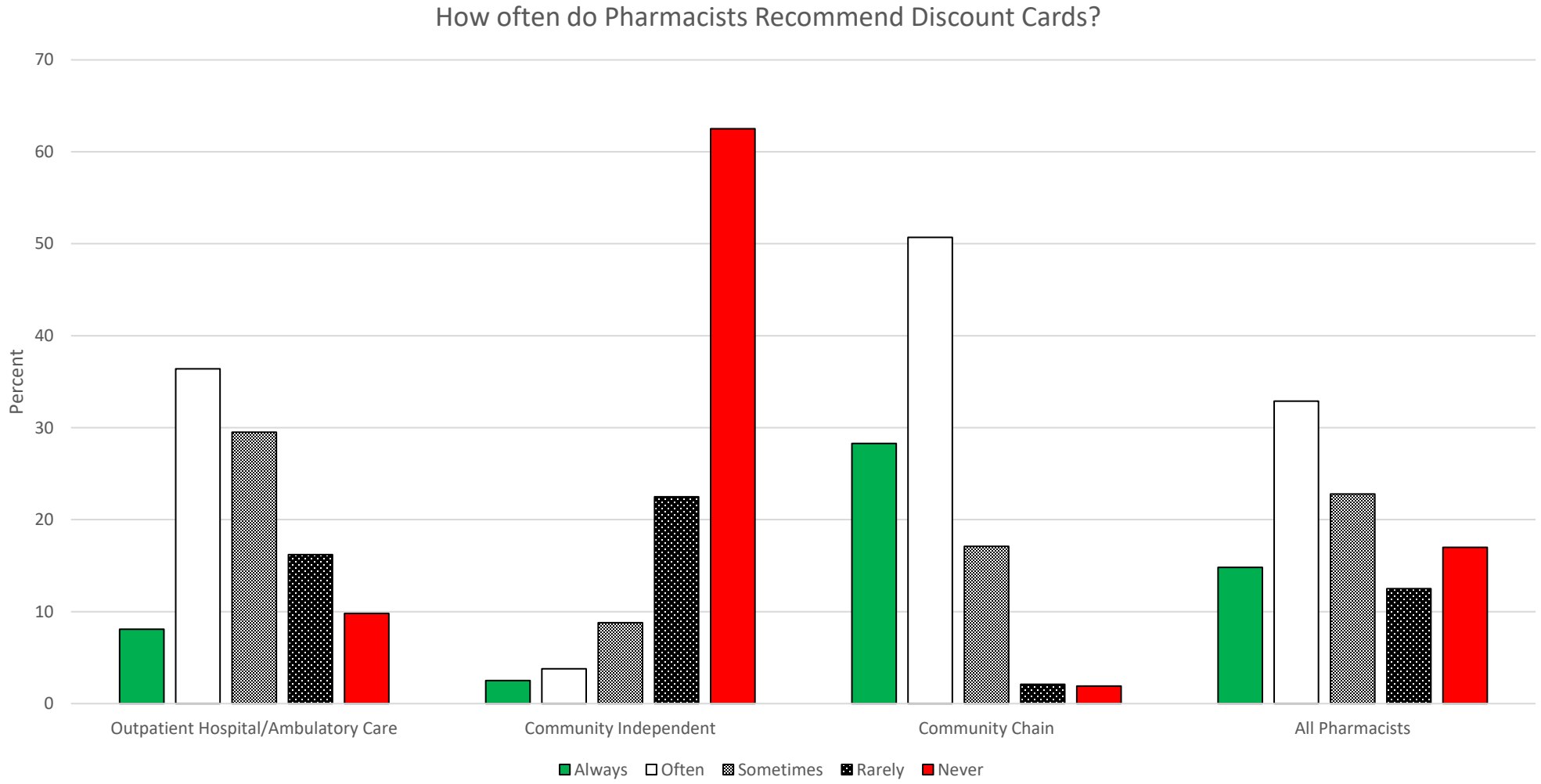


Results-Pharmacist Time





Results-Discount Cards



Results-Discount Cards

When asked if they had any other thoughts on medication affordability tools, many pharmacists wrote about discount cards

“I like looking up GoodRx and giving patients options to lower their costs”

“The discount cards take a lot of extra time due to rebilling and slows down work flow”

“When a patient asks me to bill several cards to find the best price and I have to do it for 4 prescriptions it gets unbearably time consuming. I truly want to save them money but I don’t have the time for it. One person can take up 20+ minutes just re-billing rxs”

“Community pharmacists and the public alike seem to be commonly unaware of how discount cards such as GoodRx rely on selling consumer data and not reimbursing pharmacies to fund their operations”

“Discount cards are ridiculous. They force us to charge less than cost on a lot of rx's & also grab patient data to direct market”

“Working in a clinic, we know sometimes the coupons are not good for pharmacies but we seem caught in the middle when this is the only way patients can afford medications”

Results-What do Pharmacists Do?

What Pharmacists “Always” or “Often” Recommended				
	Medicare	Medicaid	Manufacturer Patient Assistance Programs	Manufacturer Copay Cards
Hospital Outpatient/ Ambulatory Care	43%	45.6%	77.2%	75.2%
Community Independent	34.9%	57.9%	60%	75.5%
Community Chain	59.4%	47.7%	58.5%	77.3%
All Pharmacists	51%	47.8%	62.5%	69.1%

Results-What do Pharmacists Do?

What Pharmacists “Never” or “Rarely” Recommended				
	Referral to Social Worker	Savings Apps	Membership Fee Program	Charitable PAP Program
Hospital Outpatient/ Ambulatory Care	29.2%	94%	68.5%	27.1%
Community Independent	31.7%	83.8%	85%	37.5%
Community Chain	61.3%	73.9%	50.9%	62.7%
All Pharmacists	37.6%	77.1%	64.6%	43%

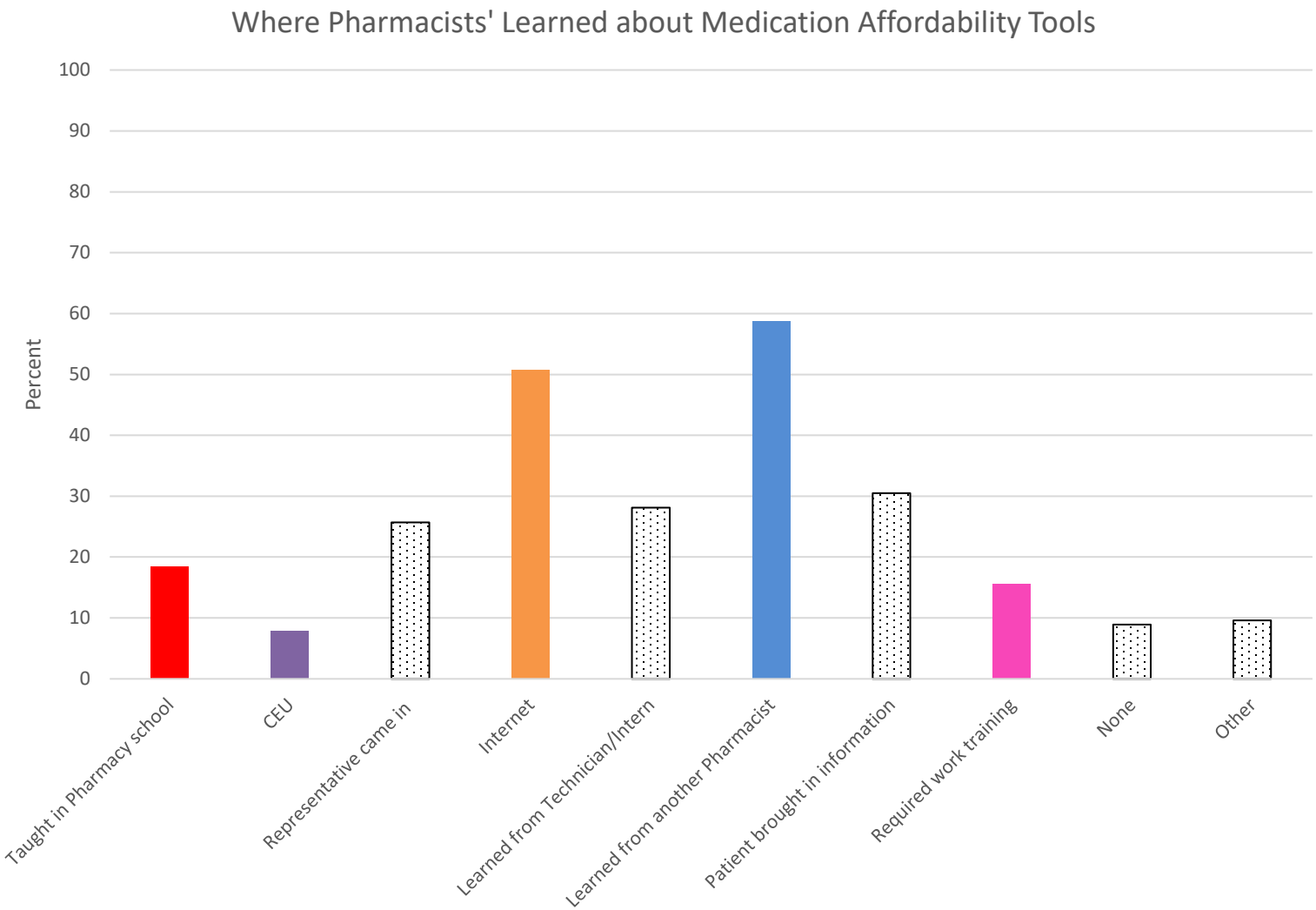
Results-What do Pharmacists Know?

What Pharmacists felt “Very” or “Somewhat Knowledgeable” of				
	Discount Cards	Manufacturer Patient Assistance Programs	Medicare	Medicaid
Hospital Outpatient/ Ambulatory Care	93.5%	97.1%	85.3%	86.6%
Community Independent	91.7%	90.7%	95.1%	95.8%
Community Chain	99.4%	88.5%	96.5%	96%
All Pharmacists	94.2%	90.8%	90.8%	91.9%

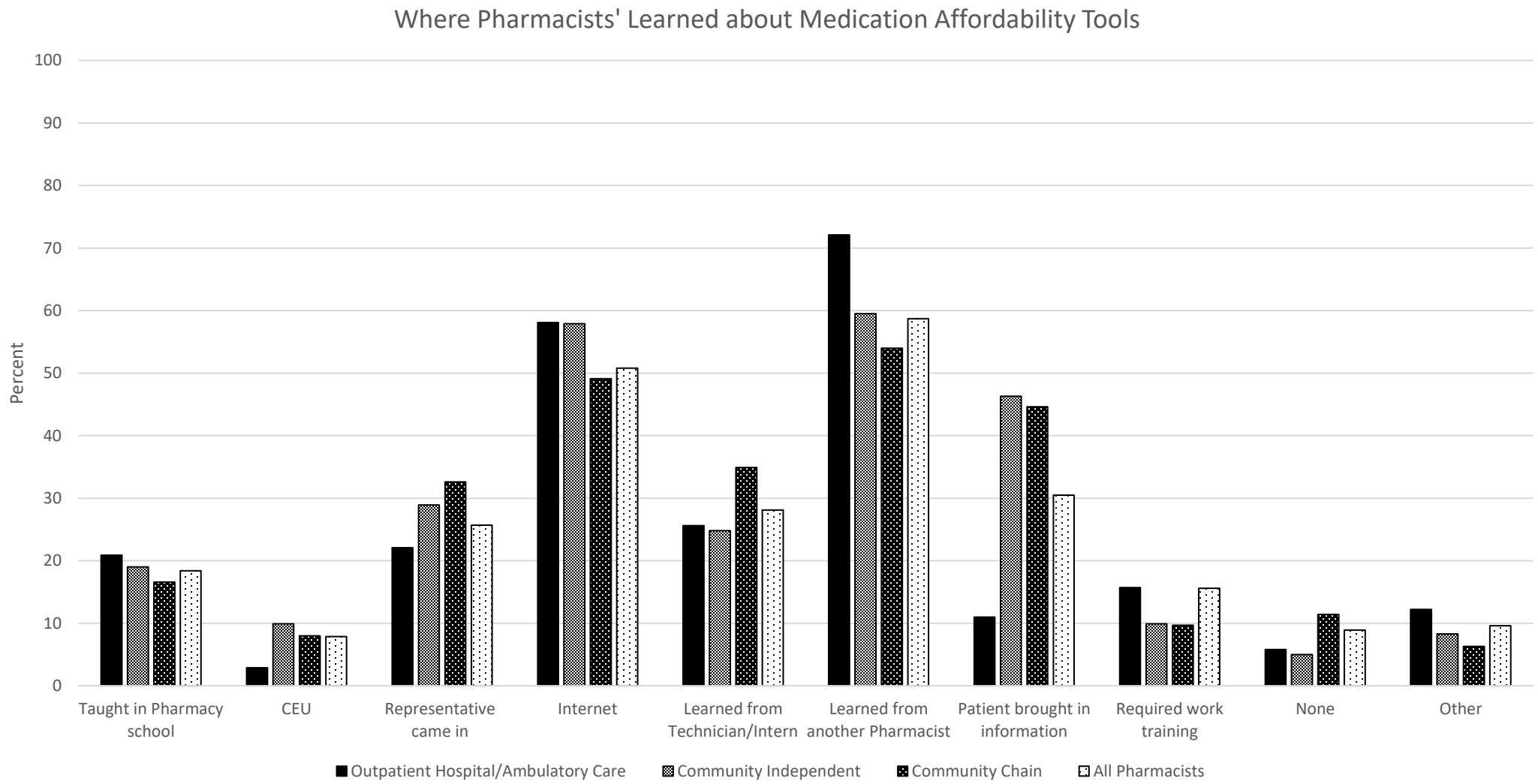
Results-What do Pharmacists Know?

What Pharmacists felt “less knowledgeable” or “never heard of”				
	Generic Drug Discount Programs	Social Worker Referrals	Charitable PAPs	Federally Qualified Health Centers/340b programs
Hospital Outpatient/ Ambulatory Care	47.1%	16.5%	63.8%	38.8%
Community Independent	43.7%	52.1%	43.8%	43.3%
Community Chain	38.2%	73.4%	64.1%	70.4%
All Pharmacists	41.1%	47.2%	50%	50.6%

Results-How did Pharmacists Learn?



Results-How did Pharmacists Learn?



Results-What do Pharmacists Want to Learn?

What Pharmacists Wanted to Learn More About				
	Federally Qualified Health Centers/340b programs	Charitable PAPs	Manufacturer PAP	Medicaid
Hospital Outpatient/ Ambulatory Care	69.9%	57.1%	44.9%	54.5%
Community Independent	49.5%	44.6%	31.7%	29.7%
Community Chain	66.6%	67.5%	43.8%	31.2%
All Pharmacists	63.1%	58.7%	40.7%	40.1%

Discussion and Conclusions-Discount Cards

Pharmacist Opinions and Practices Involving Discount Cards Were Mixed

- **Reimbursement:**
  - Independent pharmacists do not use them, likely due to low or negative reimbursement
  - Chain pharmacists used them all the time, likely because they do not have to be as concerned with reimbursement

- **Time:**
  - Pharmacists did not like how long it takes to rebill under discount cards, particularly when patients brought in multiple different cards

- **Privacy Concerns:**
  - Some pharmacists were very concerned with how discount cards used patient data
  - Last February, Goodrx settled with the FTC for 1.5 million dollars for failing to disclose sharing of user data with advertisers (FTC)
  - Not all pharmacists seemed to be aware of this, with some wanting to know how discount cards made money, and others mentioning that while they knew discount cards were using patient data, they didn't understand how
  - Pharmacists were also concerned about whether or not patients understood how their data was being used

Discussion and Conclusions-Pharmacy Schools

Encourage Pharmacy Schools to teach students about Medication Affordability Tools

- **Pharmacists are not being taught how to use Medication Affordability Tools in pharmacy school**
  - Less than 20% of pharmacists reported learning about Medication Affordability Tools in school
  - Pharmacists most commonly reported learning from the internet or other pharmacists
  - At Ohio Northern University, no electives on Medication Affordability tools
- **Pharmacists have gaps in their knowledge**
  - Limited knowledge about Federally Qualified Health Centers/340B, charitable patient assistance programs, Generic Drug Discount Programs
  - “Without my prior background in insurance coverage and patient assistance, I don't know if I would feel as comfortable just with my pharmacy education in navigating cost-saving programs”

Discussion and Conclusions-CE

More CE on Medication Affordability Tools, for both Pharmacists and Technicians

- **Lack of CE and formal training**
  - About 8% of pharmacists reported learning about Medication Affordability tools from a CE
  - Less than 16% reported getting required work training on Medication affordability tools
- **Pharmacists are interested**
  - About 50% of pharmacists learned about Medication Affordability Tools from the Internet
  - More than half learned from another pharmacist
  - A little more than 60% of pharmacists were interested in CE on Federally Qualified Health Centers/340B, a little less than 60% wanted to know more about Charitable Patient Assistance Programs, and 40% wanted to know more about Medicaid or Manufacturer PAPs
- **Technicians need training too**
  - Half of all pharmacists reported that technicians spent the most time talking to patients about Medication Affordability Tools
  - This increased to 79% in community chain setting
  - Technicians are not required to learn about Medication Affordability Tools for their certification exam (PTCB)
  - Little less than half of all pharmacists reported having no time to help patients with Medication Affordability Tools

Discussion and Conclusions-More Resources

More resources for pharmacists and patients on what Medication Affordability Tools are, how they work, and how to use them

- For patients
  - “There is a lack of patient education on this topic. We try to educate patients as best we can but there is still a large gap”
  - Several Pharmacists were particularly concerned that patient’s didn’t know how discount cards worked, or how their data could be used
  - Patient Handouts
- For pharmacies
  - Pharmacists wrote that they wished the process was easier, looking for a website or “program [that] had algorithms that a patient could plug in to maximize benefits”
  - Needymeds
  - Medication Assistance Tool
- Community Resources
  - 56% of all Pharmacists had never referred a patient to another organization for help with Medication Affordability Tools, and about 68% had never sent a patient to a 340B pharmacy or pharmacy with a Generic Drug Discount Program
  - Lack of knowledge about Community Resources
- Kentucky Prescription Assistance Program
  - Network of volunteers run by the Kentucky Department of Health
  - Helps Patients sign up for Patient Assistance Programs

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Need More Information?

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OHIO PHARMACISTS ASSOCIATION

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1 VOICE VISION TEAM

Impact of Pharmacist-Physician Collaboration in Federally Qualified Health Centers

Tanara N. Ellis, PharmD

PGY1 Community-Based Resident

University of Cincinnati James L. Winkle College of Pharmacy

OPA Annual Conference & Trade Show

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Disclosure Statement

- Dr. Ellis has no relevant financial relationship(s) with ineligible companies to disclose.

  and

- None of the planners for this activity have relevant financial relationships with ineligible companies to disclose.

Research Team

The research team consisted of members from both University of Cincinnati James L Winkle College of Pharmacy[1] and City of Cincinnati Health Department[2]

- Tanara N. Ellis[1,2], PharmD
- Stephanie Courtney[2], DrPH MPH
- Janie Hils[2], MPH
- Kyle Idahosa[2], MPH
- Bahar Mikaeili[1], BSc
- Zuhair Alqahtani[1], PharmD, MSc
- Jonathan Burns[2], PharmD
- Bethanne Brown[1], PharmD, BCACP

Learning Objectives

At the completion of this activity, the participant will be able to:

1. Describe the primary & secondary endpoints
2. Discuss the limitations of this study
3. Evaluate the potential impact on pharmacy practice as it relates to practice advancement

Background

- Pharmacist inclusion into patient care teams in various settings has been shown in the literature to improve clinical outcomes for patients with chronic conditions[1-3]
  - Pharmacist-Physician collaboration positively impacts glycemic control in patients with diabetes with achievement of glycemic control (A1C <7) in a shorter median time compared to those receiving usual care[2-3]
- This IRB-approved, retrospective matched cohort is an example of pharmacist-physician collaboration within 3 Federally Qualified Health Centers (FQHCs) located in Cincinnati, Ohio

Marupuru S., et al. Healthcare (Basel). 2022;10(7):1207.
Cowart K., et al. Prev Chronic Dis 2020;17:E40.
Farland MZ., et al. Ann Pharmacother. 2013;47(6):781-789

Objectives

- **Hypothesis:**
  - Pharmacist interventions have a positive impact on hemoglobin A1C values as defined by clinical quality measures (CMS122v11)
- **Primary Endpoint:**
  - Mean absolute change from baseline A1C to post-pharmacist engagement
- **Secondary Endpoints:**
  - Completed pharmacist-led diabetes self-management interventions (education, lifestyle changes, and medications added & adjustments) categorized and totaled
  - Number of completed visits and revenue generated (in dollars)
  - Medication adherence (proportion of days covered or PDC)

Methods

Patient Cohorts

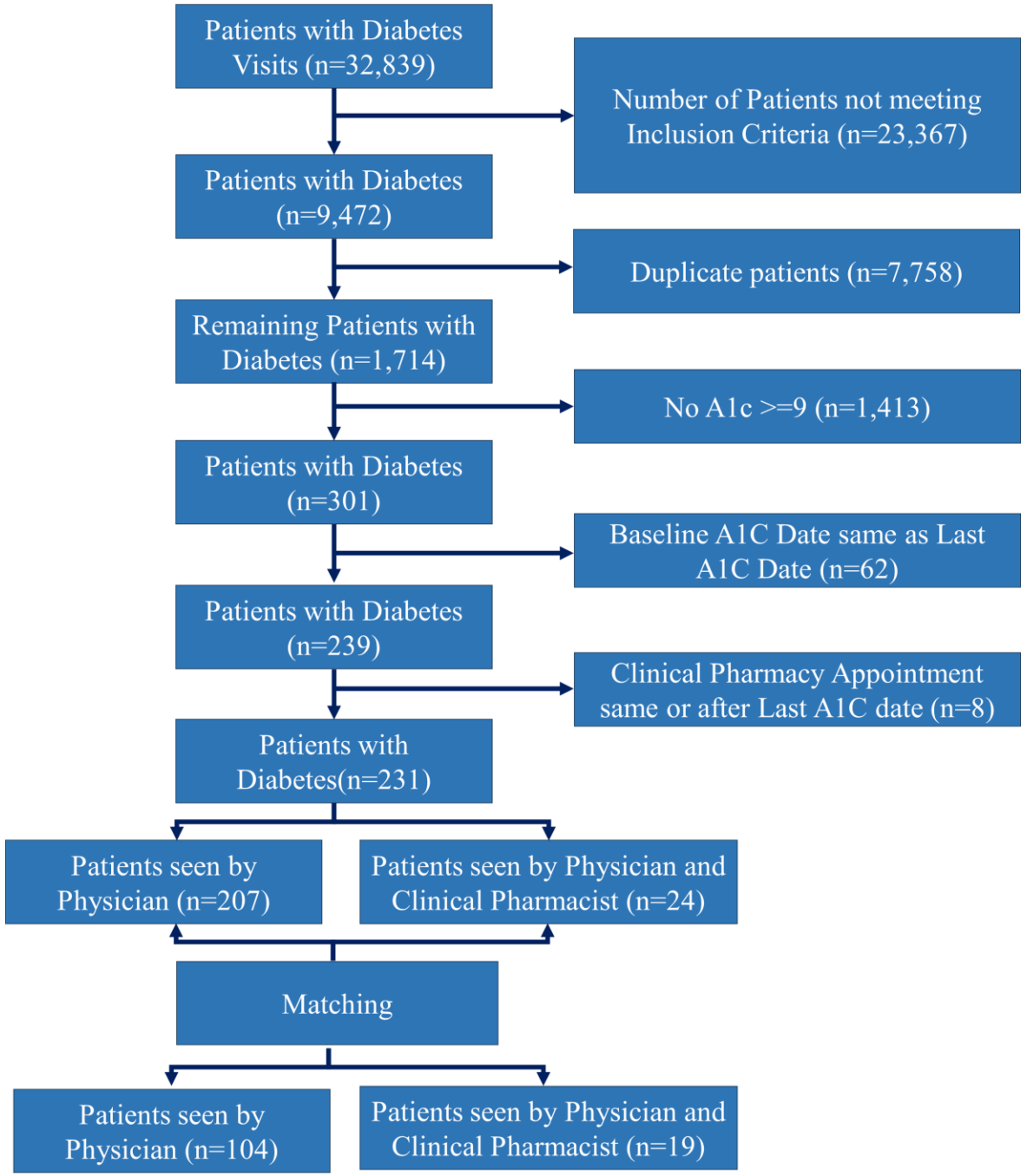
- EPIC/OCHIN datasets were divided into two cohorts based on the exposure to the pharmacist during the study period (October 2021 to December 2023), the cohorts are as follows:
    - Cohort 1: Patients who received care solely from a primary care team (PCT)
    - Cohort 2: Patients who received care from the primary care team (PCT) and a pharmacist
- Inclusion criteria:
    - All non-pregnant patients, ≥18 years old, diagnosis of Type II diabetes, A1C ≥9%, and received care during the study period

Statistical Analysis

- A two-sample t-test between the cohorts' baseline and last A1C (post-pharmacist engagement A1C in Cohort 2) was performed
- A chart review to categorize and total the number of pharmacist interventions was completed
- Revenue generation was calculated from charges based on CPT billing codes (in dollars)
- Adherence was calculated using proportion of days covered (PDC)

Eligibility and Sample Size

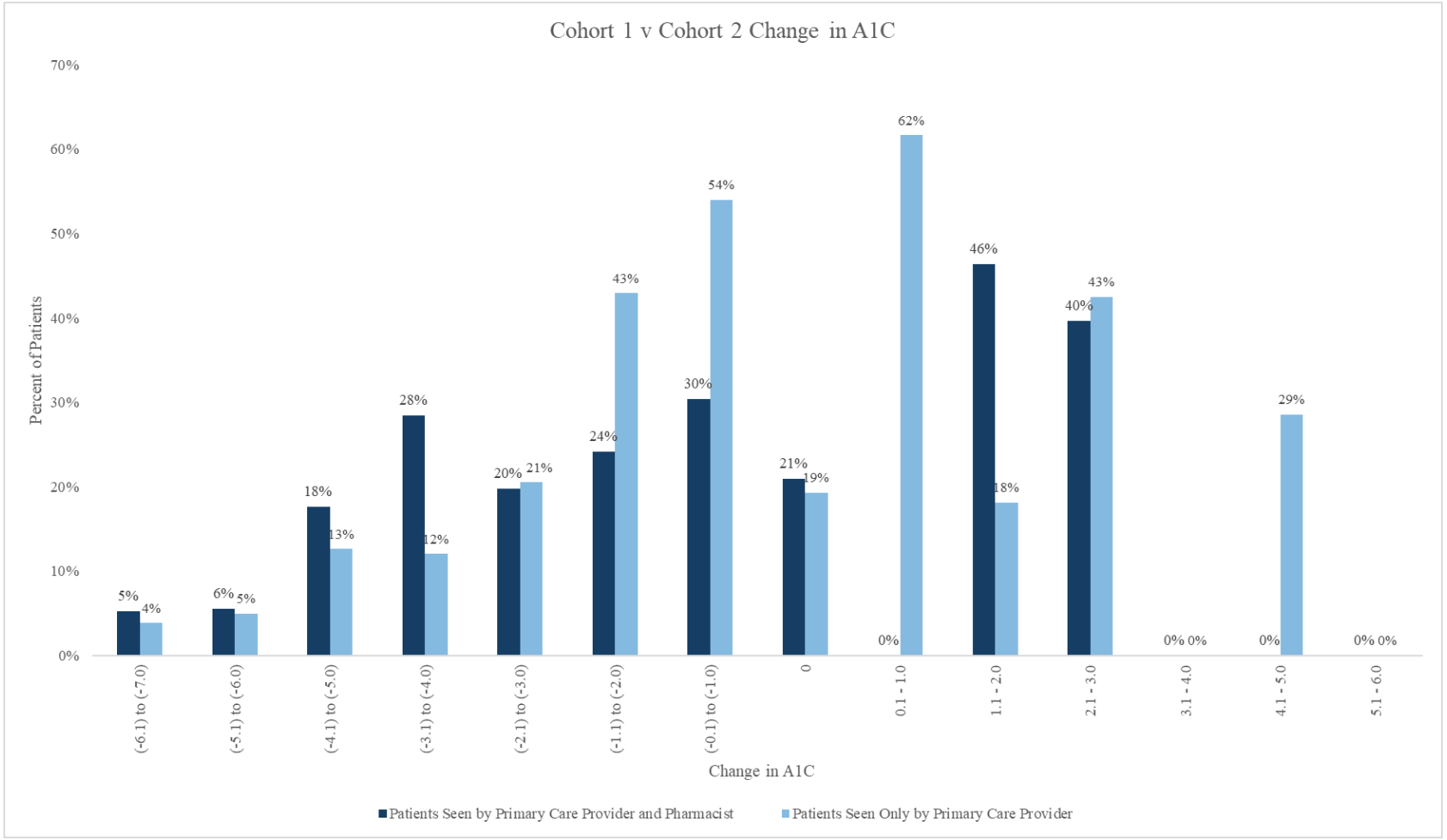
Timeline: Patients seen by Pharmacists and/or Primary Care Team between October 2021 and December 2023



Demographics

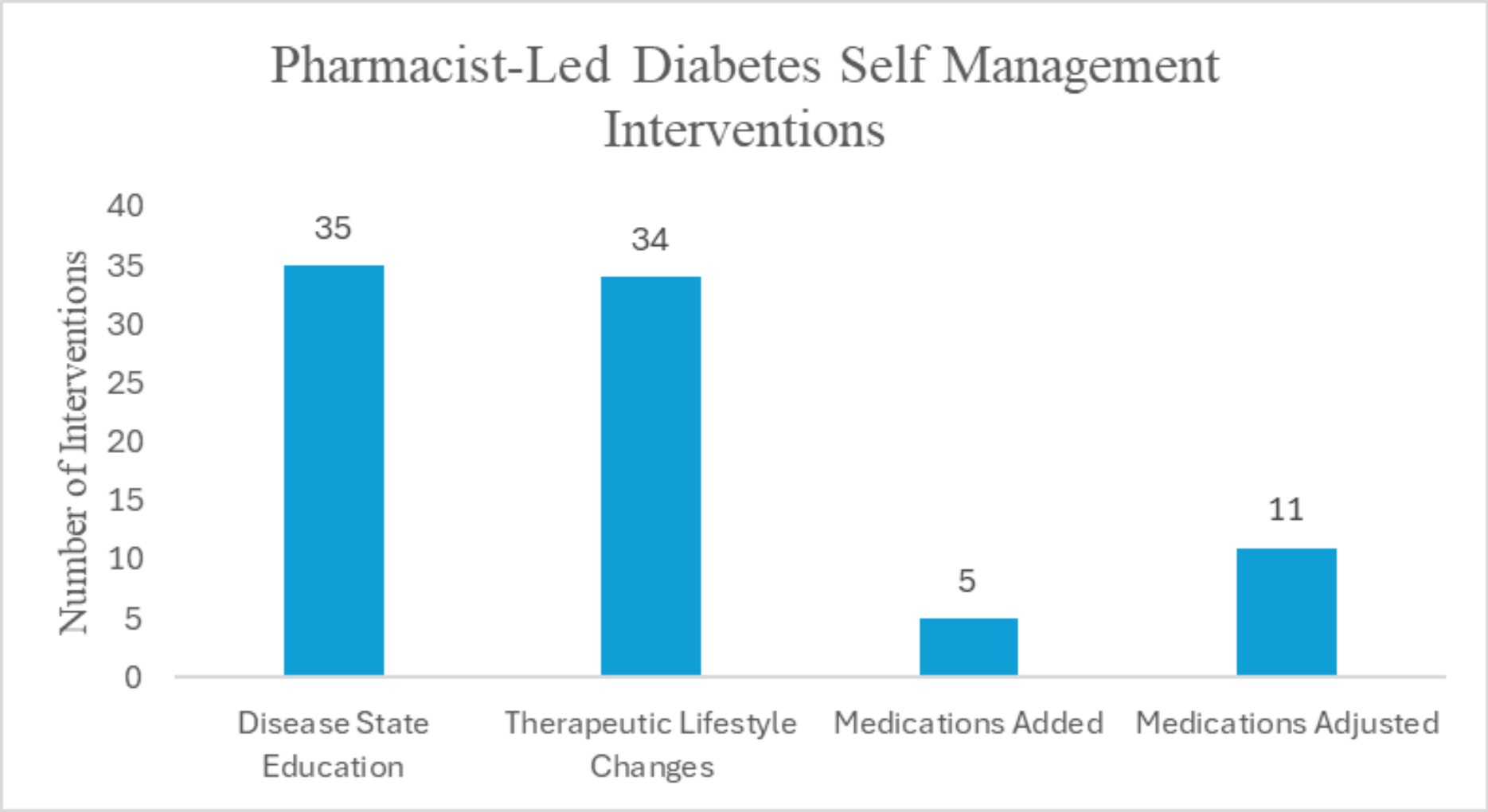
Demographics (n=231)				
	Seen by Primary Care Team (n=104)		Seen by Primary Care Team and Pharmacist (n=19)	
	# of Patients	Percentage	# of Patients	Percentage
Gender				
Female	57	55%	10	53%
Male	47	45%	9	47%
Race				
Black/African American	79	76%	12	63%
Unknown	2	2%	1	5%
White	23	22%	6	32%
Ethnicity				
Hispanic or Latino/a	16	15%	5	26%
Non-Hispanic or Latino/a	88	85%	14	74%
Age				
30-39 yrs (15%, n=35)	9	9%	4	21%
40-49 yrs (29%, n=67)	33	32%	5	26%
50-59 yrs (28%, n=64)	33	32%	6	32%
60-69 yrs (20%, n=47)	25	24%	2	11%
70-79 yrs (5%, n=11)	4	4%	2	11%
Insurance Type				
Commercial (11%, n=26)	14	13%	0	0%
Medicaid (38%, n=87)	45	43%	6	32%
Medicare (15%, n=36)	15	14%	2	11%
Self-Pay (36%, n=83)	30	29%	11	58%

Primary Endpoint: Mean absolute change from Baseline A1C



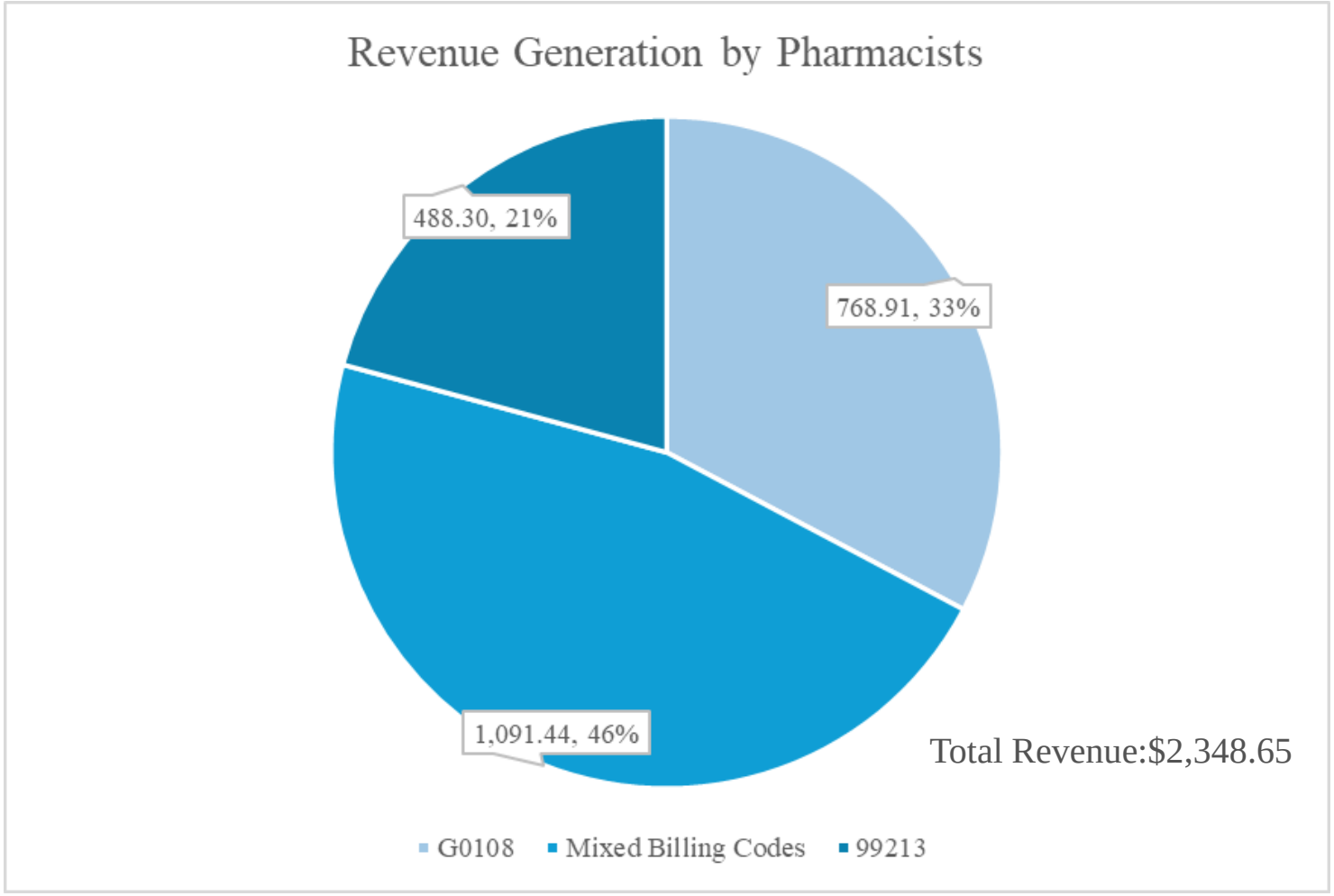
- The average change in A1C in patients managed by the PCT is -2.08, and for those managed by the PCT and a pharmacist, the change is -2.19
- There is no statistical difference ($p>\alpha$) in the mean change of A1C between the groups ($p=0.8392$, $\alpha=0.05$), but within the groups ($p< \alpha$) statistical difference is observed with ($p=< .00001$, $\alpha=0.05$) and ($p=0.0488$, $\alpha=0.05$) respectively

Secondary Endpoints: Completed Pharmacist-Led Self Management Interventions



Number of Patients = 19| Number of Visits = 40

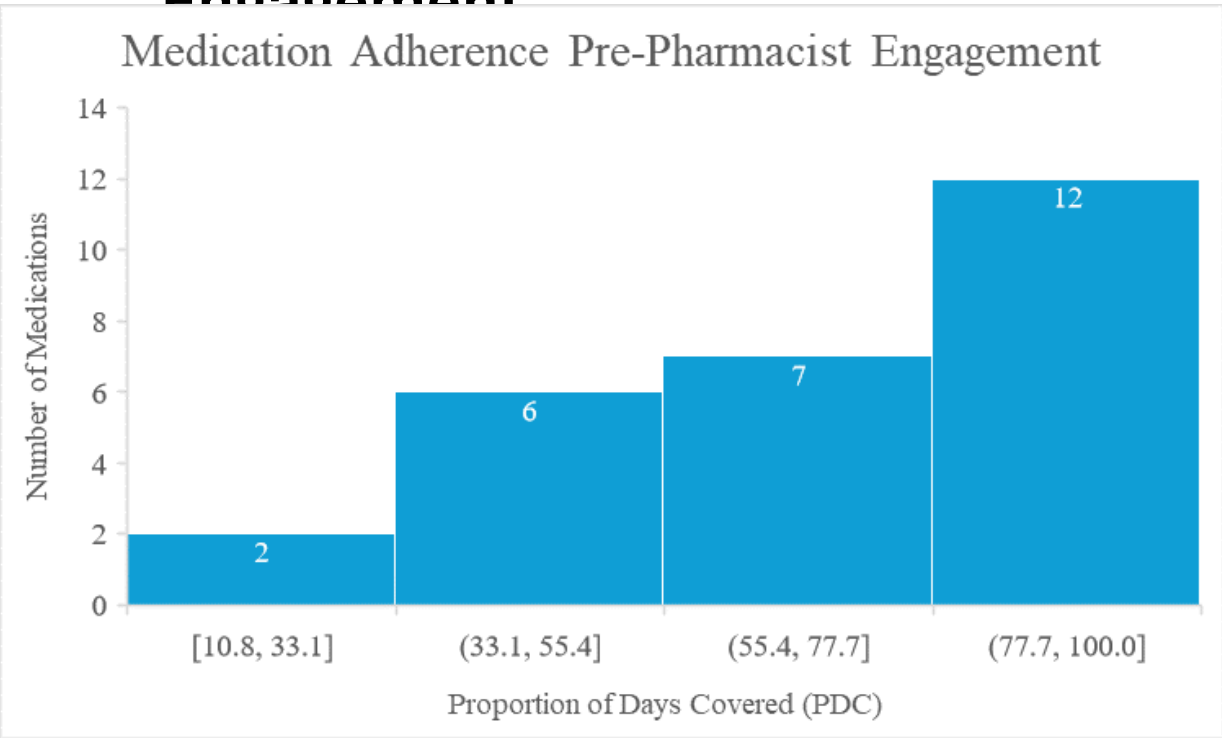
Secondary Endpoints: Number of Completed Visits and Revenue Generated



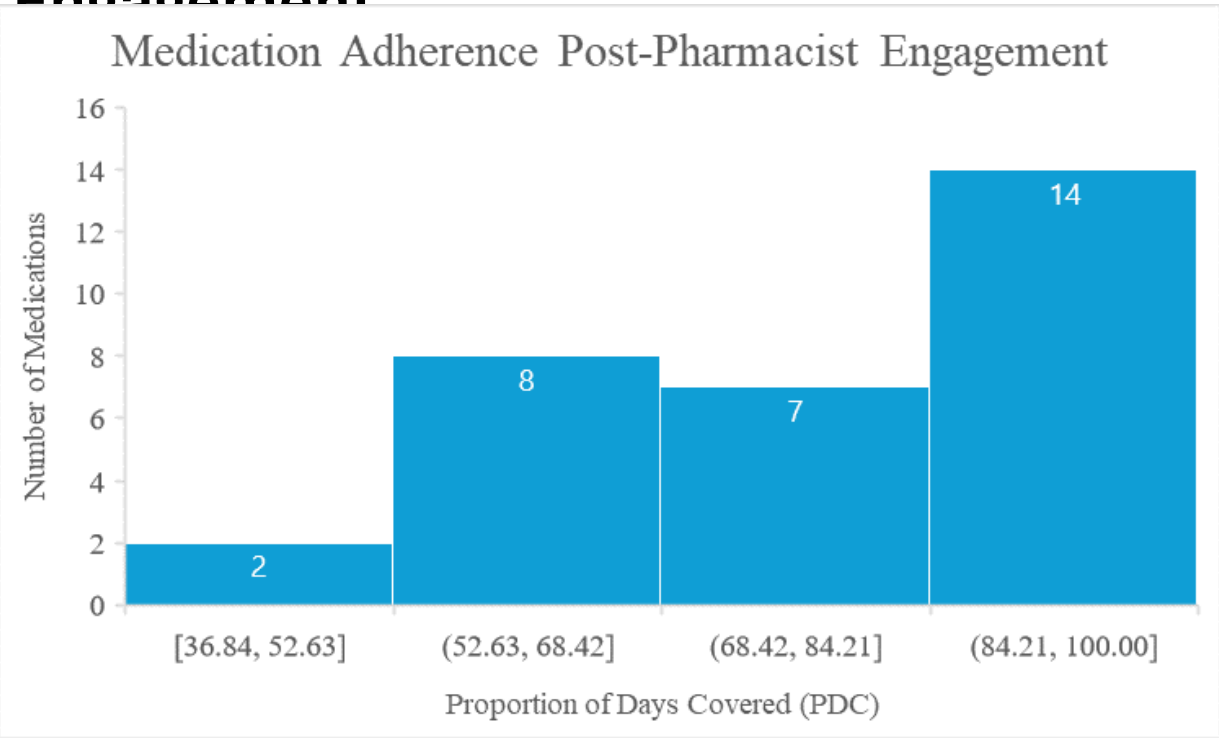
Mixed billing codes: G-108, 99605,TX016, and 99213-215 across multiple visits

Secondary Endpoints: Medication Adherence

Adherence Pre-Pharmacist Engagement



Adherence Post-Pharmacist Engagement



- There are 27 medications which were able to be analyzed pre-pharmacist engagement and 31 medications post-pharmacist engagement. The average adherence was 68.9% and 79.5% respectively (n=13)
- There was no statistical difference ($p>\alpha$) between adherence pre and post pharmacist engagement ($p = 0.067$, $\alpha = 0.05$)

Practice Advancement

- There are several limitations to this study:
  - Very small sample size (new-start pharmacy program)
  - Adherence does not include medications prescribed & filled outside of the FQHC
  - Limited study period (one residency year to complete research)
- Despite limitations, the research team was able to show:
  - There is no statistical difference ($p>\alpha$) in the mean change of A1C **between** the groups ($p=0.8392$, $\alpha=0.05$)
  - There is a statistical difference ($p<\alpha$) in the mean change of A1C **within** the groups in Cohort 1 and Cohort 2: ($p=< .00001$, $\alpha=0.05$) and ($p=0.0488$, $\alpha=0.05$)
  - There is no statistical difference ($p>\alpha$) between adherence pre and post pharmacist engagement ($p=0.067$, $\alpha=0.05$)
  - Pharmacists provided disease state education and recommended therapeutic lifestyle changes in a majority of visits
  - Most revenue generated during the study period was due to G-code billing ($768.91)

Future Considerations

- The research team can continue to evaluate pharmacist-physician collaboration between the health centers
- Recommendations for future studies
  - Comparison between 2021-2023 findings to future study dates
    - Stratify the dates during the study period to better show growth
  - Increasing sample size
    - Include all pharmacist visits
    - Stratify by disease state
  - Evaluating the median time to change of the variable of interest
  - Investigating other disease states within CPA

References

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Need More Information?

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Integrated Pharmacy and Medical Claims Analysis of GLP-1a Use Impact on Total Cost of Care

Lana Grishin, PharmD

PGY-1 Managed Care Pharmacy Resident

CareSource

OPA Annual Conference & Trade Show
April 5-7, 2024

Disclosure Statement

- Lana Grishin has no relevant financial relationship(s) with ineligible companies to disclose.

  and

- None of the planners for this activity have relevant financial relationships with ineligible companies to disclose.

Learning Objectives

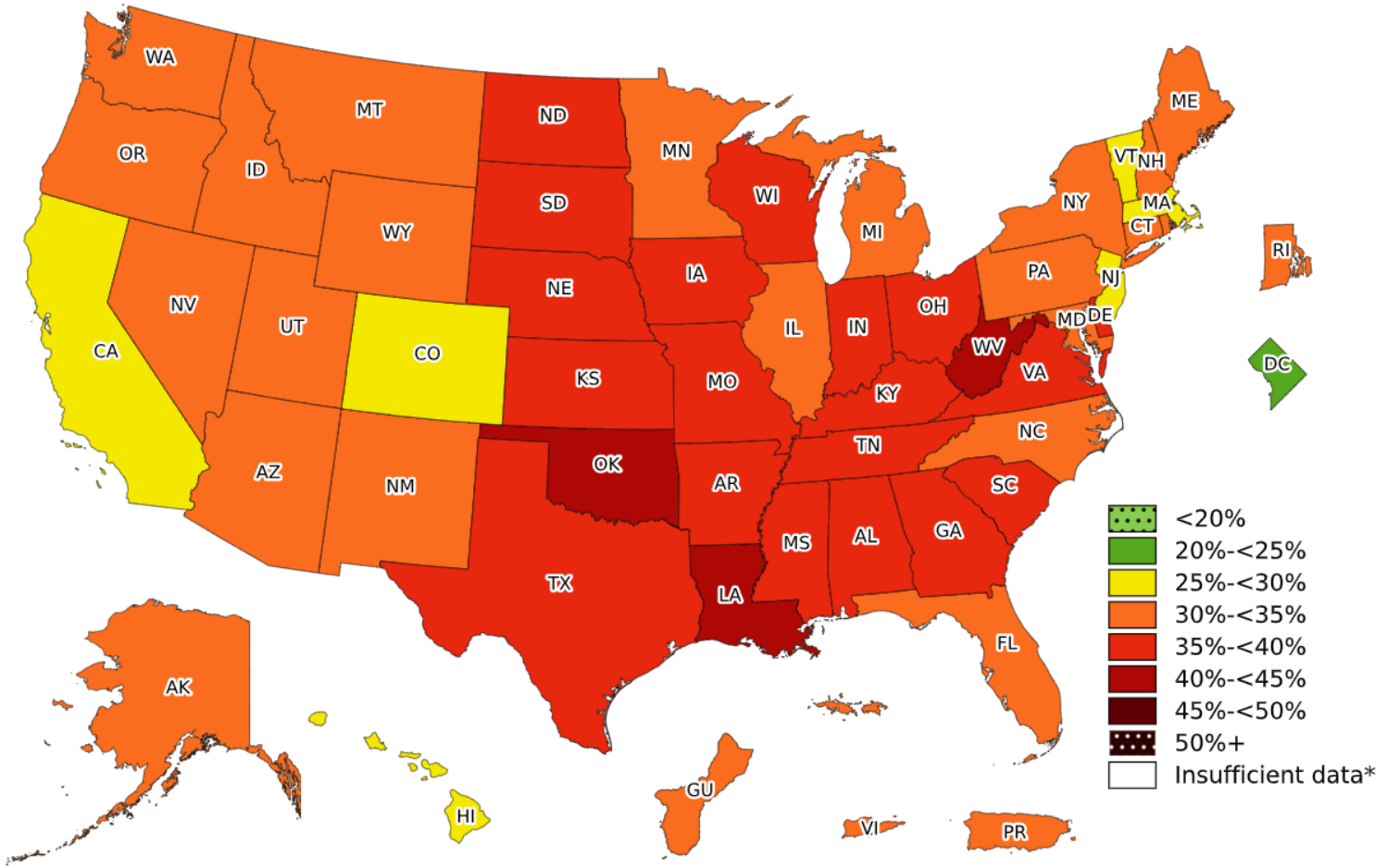
At the completion of this activity, the participant will be able to:

1. Explain how obesity is classified.
2. Understand the role of GLP1-a agents in weight loss management.
3. Interpret the financial impact of the addition of GLP1-a agents to a managed care organization drug formulary.
4. Determine future goals for utilizing GLP1-a agents as a weight loss strategy.

Background[1,2]

Map: Overall Obesity

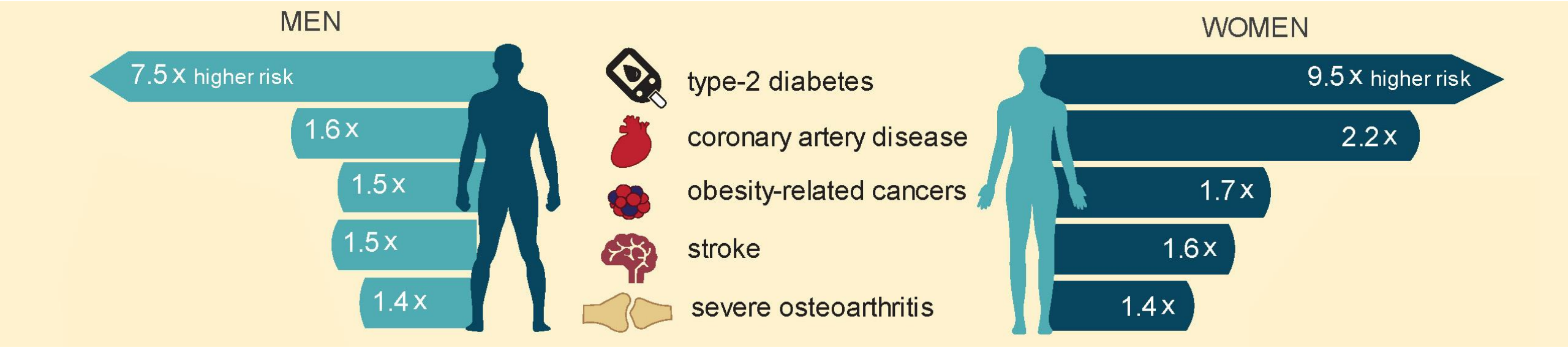
Prevalence† of Obesity Based on Self-Reported Weight and Height Among U.S. Adults by State and Territory, BRFSS, 2022



https://www.cdc.gov/obesity/index.html

Background[3]

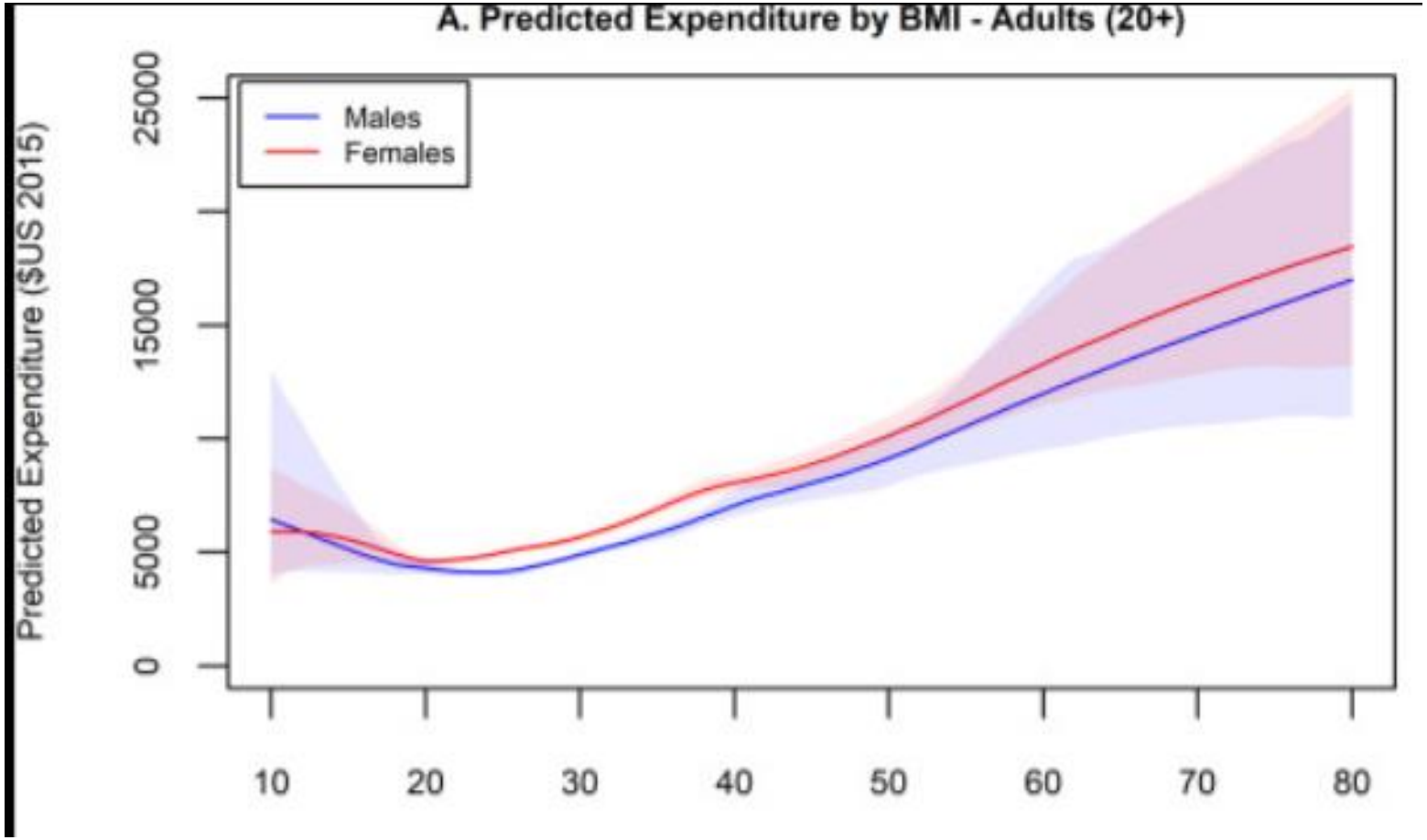
- Obesity is defined as a BMI greater than or equal to 30 kg/m^2
- Higher BMI is associated with an increased risk of co-morbidities and early mortality



https://stop.publichealth.gwu.edu/fast-facts/obesity-related-chronic-disease

Background[4]

- For every 1-unit BMI increase, healthcare cost increases by $253



https://pubmed.ncbi.nlm.nih.gov/33760880/#&gid=article-figures&pid=fig-1-uid-0

Background[5]

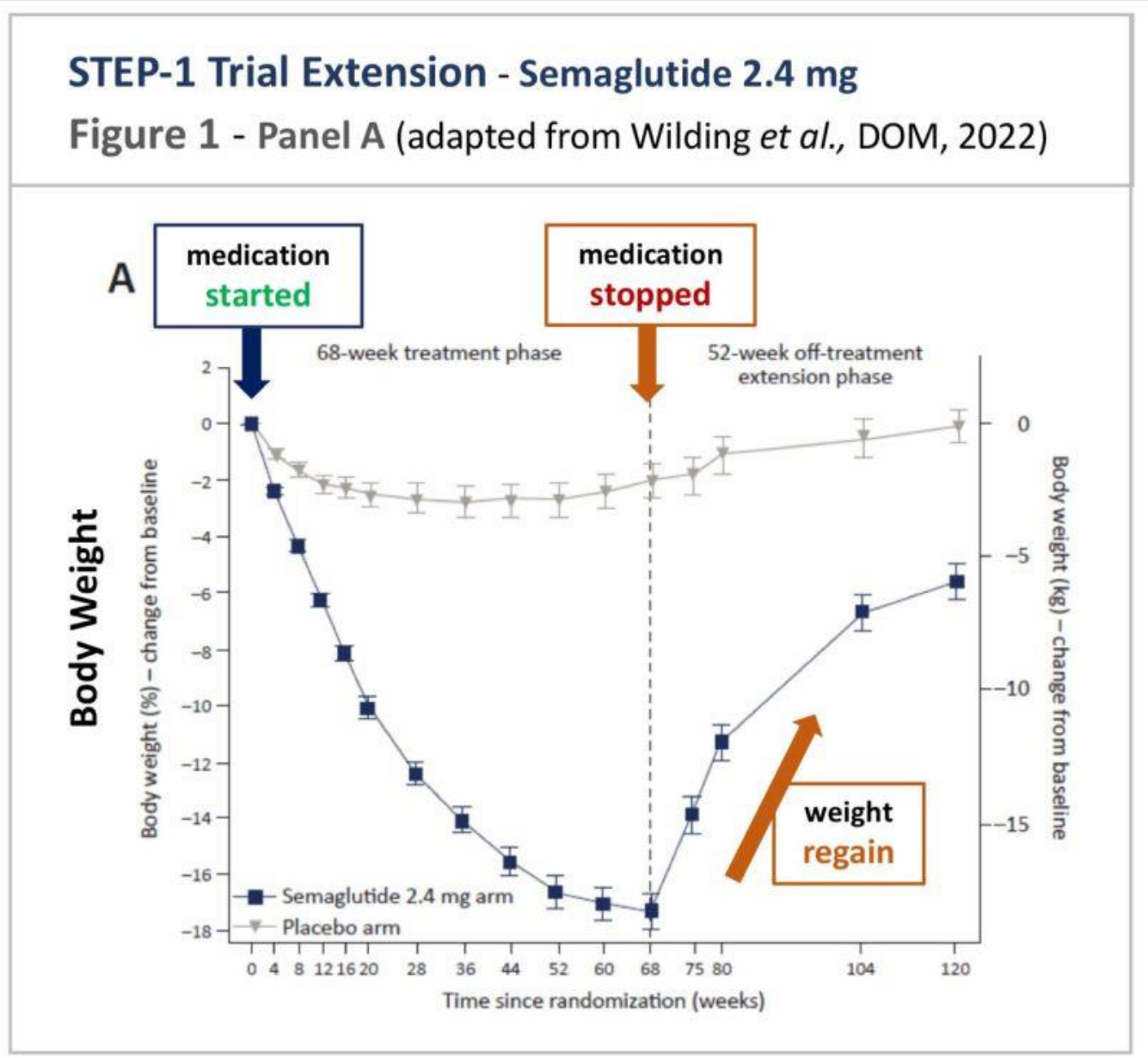
	DOSAGE	DOSAGE FORM	APPROVED FOR	WHO CAN TAKE IT?	OTHER BENEFITS
Ozempic (SEMAGLUTIDE)	1 WEEKLY		TYPE 2 DIABETES	ADULTS	HEART, KIDNEYS, WEIGHT LOSS
Rybelsus (SEMAGLUTIDE)	1 DAILY		TYPE 2 DIABETES	ADULTS	WEIGHT LOSS
Wegovy (SEMAGLUTIDE)	1 WEEKLY		WEIGHT LOSS	12+ KIDS + ADULTS	N/A
Trulicity (DULAGLUTIDE)	1 WEEKLY		TYPE 2 DIABETES	10+ KIDS + ADULTS	HEART, KIDNEYS, WEIGHT LOSS
Victoza (LIRAGLUTIDE)	1 DAILY		TYPE 2 DIABETES	10+ KIDS + ADULTS	HEART, KIDNEYS, WEIGHT LOSS
Saxenda (LIRAGLUTIDE)	1 DAILY		WEIGHT LOSS	12+ KIDS + ADULTS	N/A
Byetta (EXENATIDE)	2 DAILY		TYPE 2 DIABETES	ADULTS	WEIGHT LOSS
Bydureon BCise (EXENATIDE)	1 WEEKLY		TYPE 2 DIABETES	10+ KIDS + ADULTS	WEIGHT LOSS
Mounjaro (TIRZEPATIDE)	1 WEEKLY		TYPE 2 DIABETES	ADULTS	WEIGHT LOSS

https://www.goodrx.com/classes/glp-1-agonists/glp-1-drugs-comparison

- Glucagon-like-Peptide 1 agonists (GLP-1a)
- Initially approved for the treatment of Type II Diabetes
- Demonstrated the ability to promote 5.9% loss of body weight at three months after initiation

Background[6]

- The STEP-1 trial extension aimed to explore risk factors after withdrawal from semaglutide once weekly injection
- One year after semaglutide discontinuation and lifestyle intervention participants regained 2/3 of their prior weight loss



https://revitalizemetabolichealth.com/glp-1-agonists-the-new-weight-loss-drugs/

Background[7]

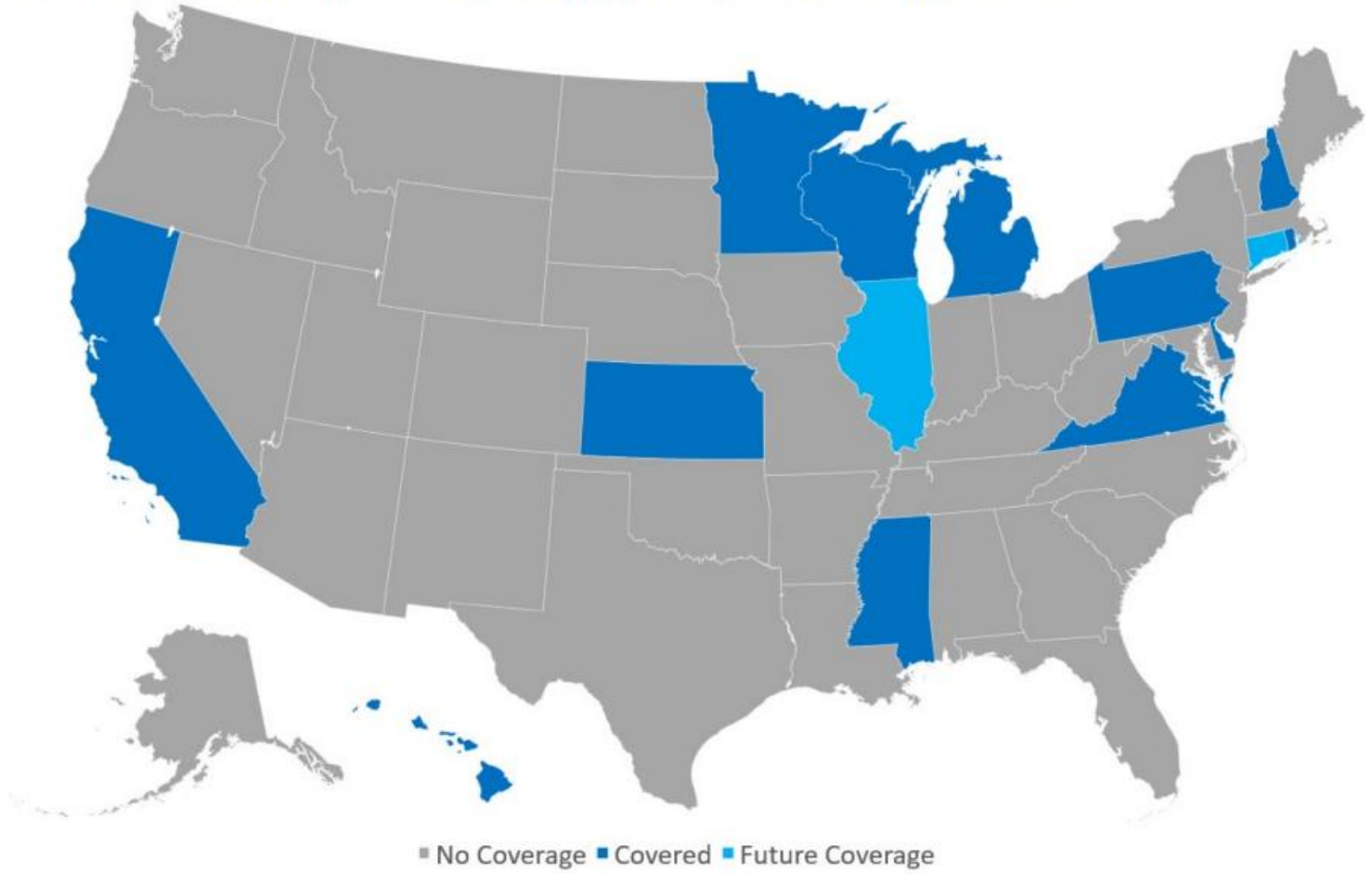
- The Institute for Clinical Economic Review (ICER) found that GLP-1a therapy for weight loss is 2-fold over-priced compared to its value associated with weight loss
- ICER uses the Health-Benefit Price Benchmark (HBPB) to determine the highest price that should be charged for a treatment based on the improvement the treatment has on overall health

	HBPB	Actual
Liraglutide	$3,800 – 4,800	$11,760
Semaglutide	$7,500 – 9,800	$13,618

Background

- Medicaid current inclusion of these agents on formularies remains limited for the treatment of weight loss

FIGURE 4: COVERAGE OF GLP-1 AGONISTS FOR CHRONIC WEIGHT MANAGEMENT BY STATE MEDICAID PROGRAM (2023)*



https://www.milliman.com/-/media/milliman/pdfs/2024-articles/1-18-24_glp1-agonists-in-medicaid-utilization-growth-and-management.ashx#:~:text=MEDICAID%20COVERAGE%20OF%20GLP%2D1%20AGONISTS%20FOR%20TYPE%202%20DIABETES,authorization%20or%20other%20clinical%20criteria.

Knowledge Check

- Which of the following members qualifies for GLP-1a therapy under OH Medicaid?
  A. A 35 yof with a BMI of 24 diagnosed with depression and hypothyroidism
  B. A 55 yom with a BMI of 35 diagnosed with HDL, HTN and sleep apnea
  C. A 61 yom with a BMI of 27 diagnosed with type II diabetes, HTN, HDL and depression
  D. A 43 yof with a BMI of 22 diagnosed with insomnia

Correct Answer:
C. A 61 yom with a BMI of 27 diagnosed with type II diabetes, HTN, HDL and depression

Objective

To examine the impact of GLP-1a therapy initiation on overall cost of care in Medicaid members diagnosed with obesity, in comparison to a control group.

Methods

- Retrospective pharmacy and medical claims analysis
- Claim period: February 2022 – December 2023
- Two-Step matching approach:
    1. Direct matching based on gender, line of business (OH MCD vs. MI MCD), prediabetes diagnosis, obesity diagnosis and BMI
    2. GLP-1a users matching to control group based on major chronic disease conditions (HTN, HLD, Depression), and drug utilization (statin, RASA, antidepressant)

Methods

- Exclusion Criteria:
  - Non-CareSource members
  - Members with Type II Diabetes (T2DM)
  - Members receiving cancer treatment
  - Members who received a solid organ transplant or an islet transplant
  - Members receiving chimeric antigen receptor (CAR)-T-Cell therapy or hematopoietic stem cell transplant
  - Members who have moderate or severe primary immunodeficiency
  - Members with HIV infection
  - Members receiving agents that are immunosuppressive or immunomodulatory

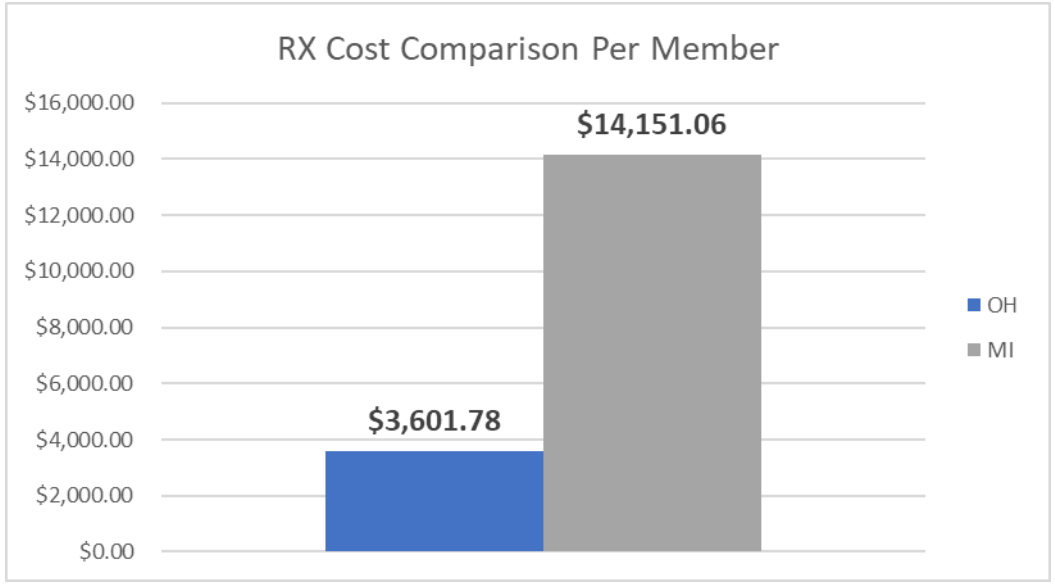
Methods

- Total Cost of Care was calculated by the addition of the two-year-period member medical and pharmacy claims paid amounts
- Welch’s t-test was used to compare the average cost per member between the control and treatment groups and confirm statistical significance

Results

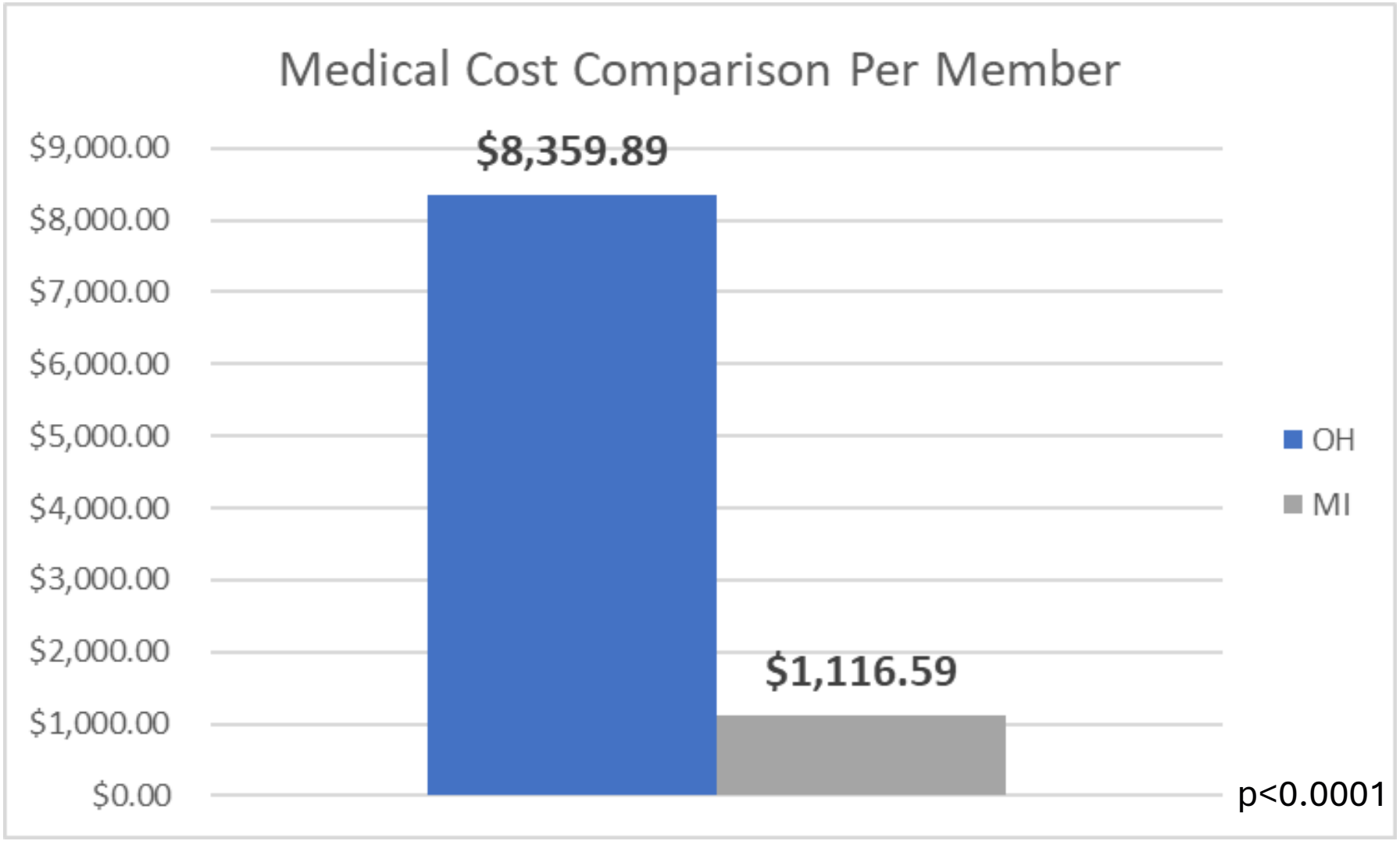
- 213 CareSource MI Medicaid members who initiated GLP-1a therapy were identified
- 430,086 CareSource OH Medicaid members met study criteria
  - After matching, 689 unique members were identified
- Average age was 40
  - 35 ± 12.3 in OH
  - 44 ± 11.8 in MI
- 75% female
  - 496 female members in OH
  - 179 female members in MI
- Average GLP-1a day supply was 235

Results

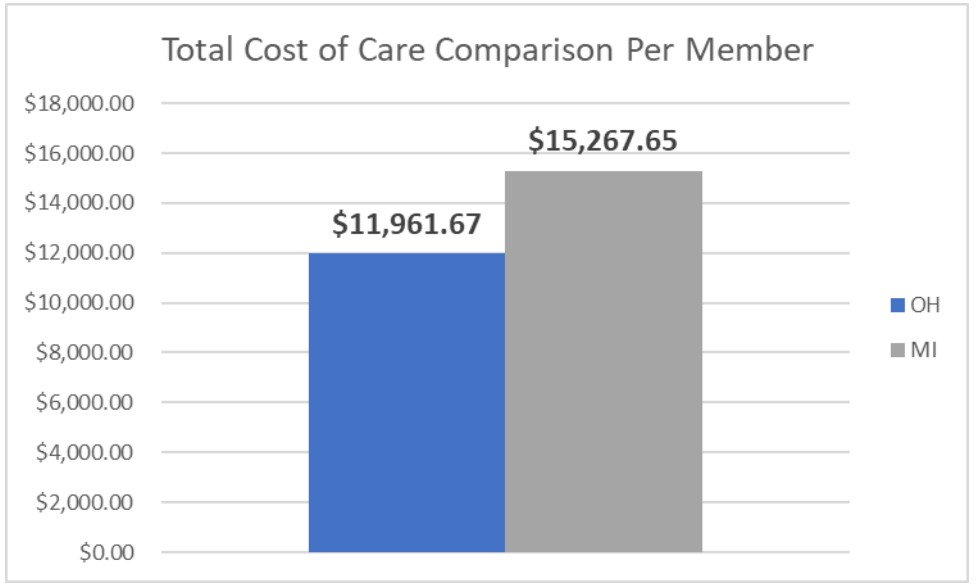


p<0.0001

Results

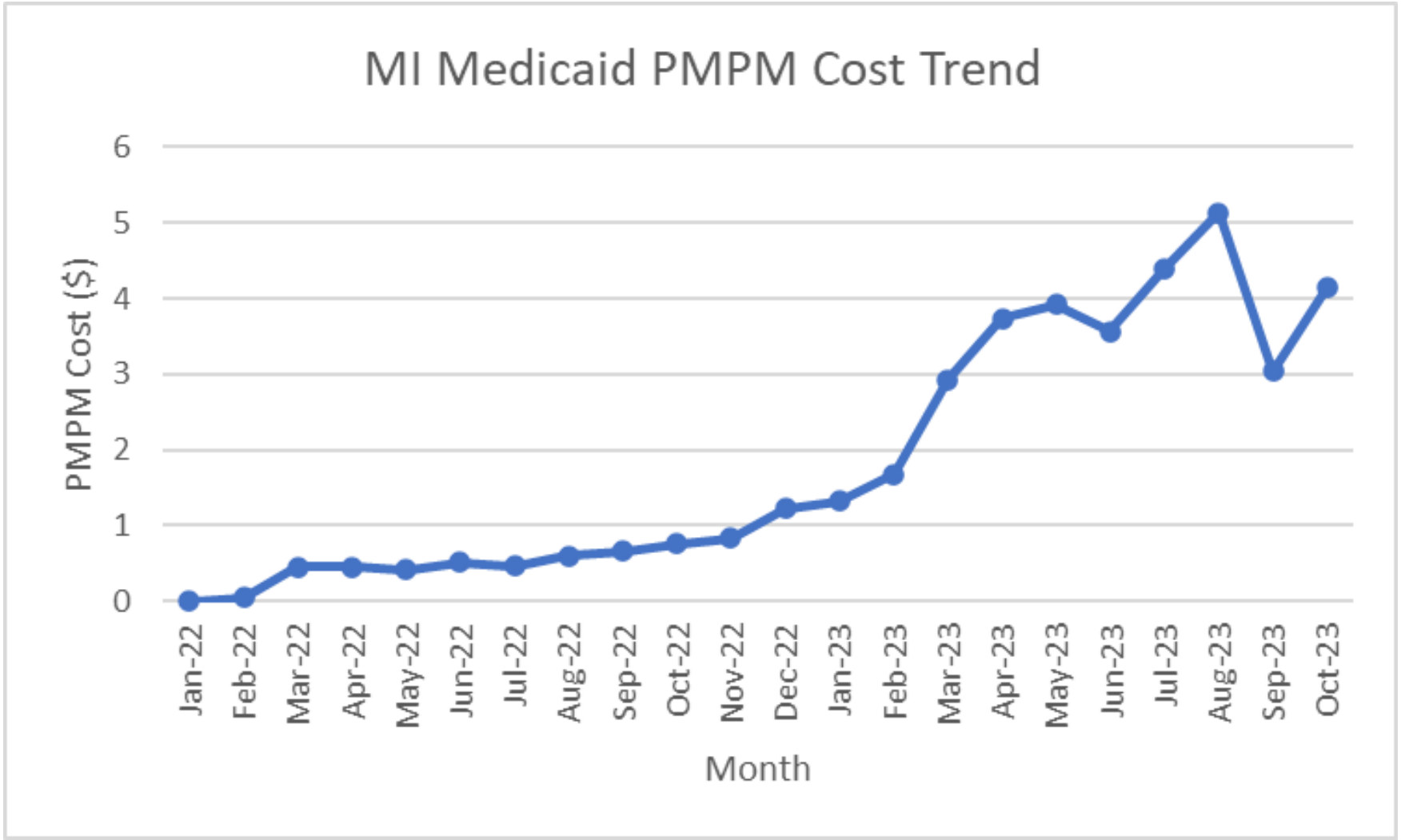

Medical Cost Comparison Per Member
$9,000.00
$8,000.00
$7,000.00
$6,000.00
$5,000.00
$4,000.00
$3,000.00
$2,000.00
$1,000.00
$0.00
$8,359.89
$1,116.59
OH
MI
p<0.0001

Results



$p<0.05$

Results


MI Medicaid PMPM Cost Trend
PMPM Cost ($)
0
1
2
3
4
5
6
Jan-22
Feb-22
Mar-22
Apr-22
May-22
Jun-22
Jul-22
Aug-22
Sep-22
Oct-22
Nov-22
Dec-22
Jan-23
Feb-23
Mar-23
Apr-23
May-23
Jun-23
Jul-23
Aug-23
Sep-23
Oct-23
Month

Conclusions

- On average, for members who initiated GLP-1a therapy Total Cost of Care was $3,305.98 higher per member than the control group
  - Rx cost was $10,549.28 higher per member in the treatment vs. control group
  - Medical cost was $7,243.30 lower per member in the treatment vs. control group
- This study supports ICER HBPB findings that GLP-1a treatment for weight loss is too costly compared to their value associated with weight loss

Conclusions

- Further research should aim to aid in the development of an evidence-based GLP-1a weight loss management program, health insurance benefit designs, and pharmaceutical manufacturer value-based contracting

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3. Global BMI Mortality Collaboration. Body-mass index and all-cause mortality: individual-participant-data meta-analysis of 239 prospective studies in four continents. *Lancet*. 2016;S0140-6736(16)30175-1. pmid:27423262
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Need More Information?

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Improving Access to and Utilization of Harm Reduction Tools via a "Harm Reduction Toolkit" for Ohio State Greek life Students

Rosemary Mullaghy

Ohio State University

OPA Annual Conference & Trade Show
April 5-7, 2024

Disclosure Statement

- Rosemary Mullaghy has no relevant financial relationship(s) with ineligible companies to disclose.

  and

- None of the planners for this activity have relevant financial relationships with ineligible companies to disclose.

Learning Objectives

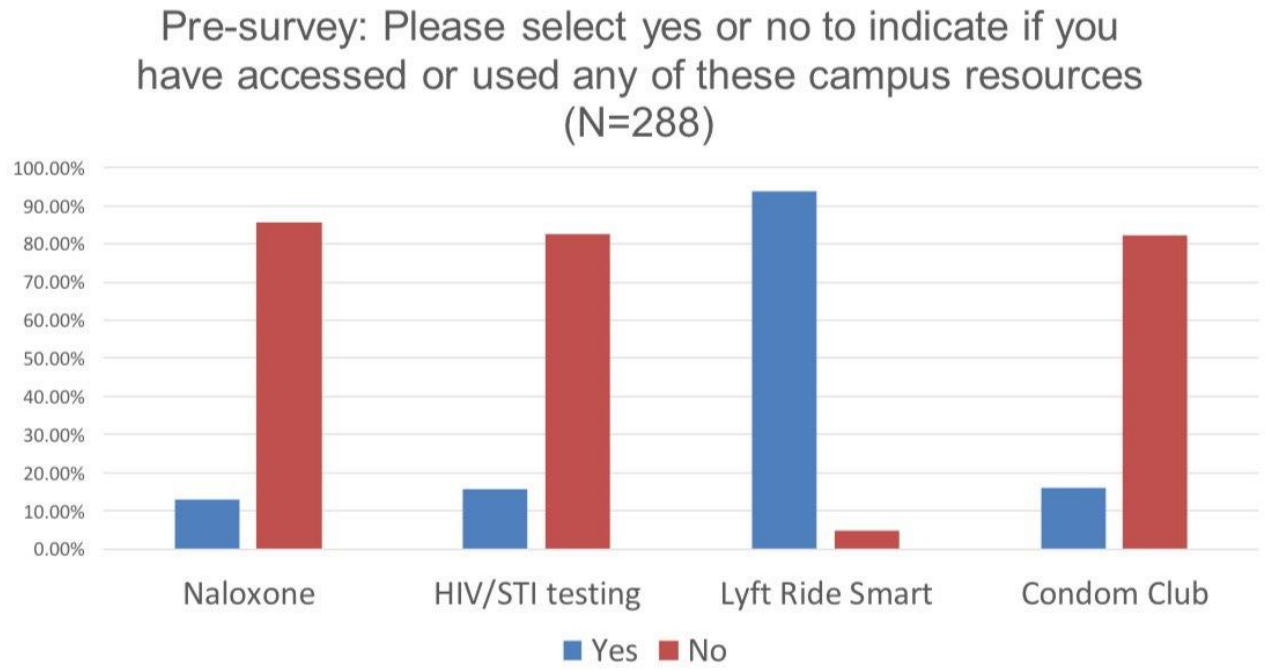
At the completion of this activity, the participant will be able to:

1. Define harm reduction and its importance on college campuses, specifically within Sorority and Fraternity Life (SFL)
2. Describe the development and implementation of a peer-led harm reduction initiative and distribution program

Background

*No. (%) Agreement**			
	Pre-survey (268)	**Post-survey (211)**	**P value**
It is important to have harm reduction resources available at OSU	93.6 (251)	96.7 (204)	0.023
I understand how to access harm reduction resources at OSU	71.6 (192)	96.2 (203)	<0.005
There are enough harm reduction resources available at OSU	77.9 (226)	89.1 (188)	<0.005
I feel embarrassed to utilize harm reduction resources	24.2 (65)	18 (38)	0.032

participants who answered somewhat agree or strongly agree



Swisshelm, 2023

- Researchers at the Center for Health and Behavior at Syracuse University found that students involved in Sorority and Fraternity life were more likely to participate in risky health behaviors than students not involved in these organizations (Scott-Sheldon, 2008)
- SFL students showed notably higher rates of alcohol consumption, tobacco and marijuana usage, and sexual promiscuity

Objectives

1. Increase access to harm reduction tools by meeting SFL students where they are
2. Engage in open and meaningful conversations around harm reduction with SFL students by meeting them in a comfortable and safe environment
3. Discuss how to use and share relevant tips and tricks about harm reduction tools provided in tool kit
4. Share harm reduction resources available to SFL students during their college experience and beyond

Research Methods

- Research design is a quasi-experimental pre-/post-test survey design with no control groups
  - Pre- and post- surveys utilized knowledge-based multiple-choice questions and Linkert-type scale items to assess knowledge and confidence gain from educational presentation
- Sample population: 18+ year old members of Ohio State's Sorority and Fraternity life
- Data were anonymized, unpaired, and aggregated and analyzed using SPSS to collect descriptive statistics and run individual t-tests to assess statistical significance

Harm Reduction Toolkit

- Naloxone
- Fentanyl test strips
- Condoms
- Educational guide for condom and fentanyl test strip usage
- Alcohol drink covers
- Alcohol drink tracking card
- Harm reduction resources card

Program Implementation

- 9 of 11 presentations occurred at individual sorority/fraternity houses
- Program consisted of a pre-survey, educational presentation, post-survey, and kit distribution
- Educational presentation discussed:
  - What is harm reduction
  - Why is harm reduction important
  - How to use each tool in the harm reduction tool kit
  - Relevant harm reduction resources available to Ohio State students and those around the Columbus area

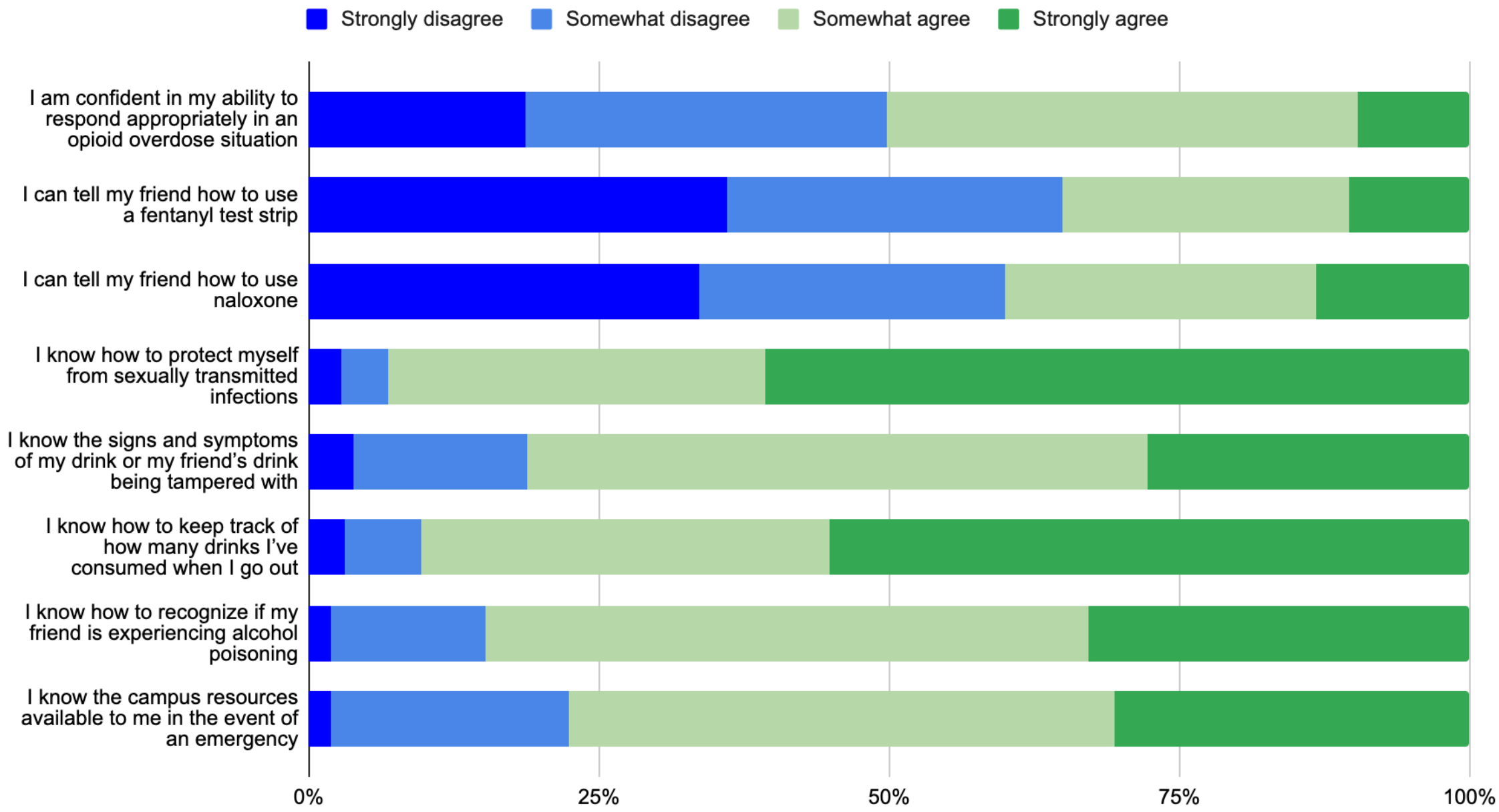
Results

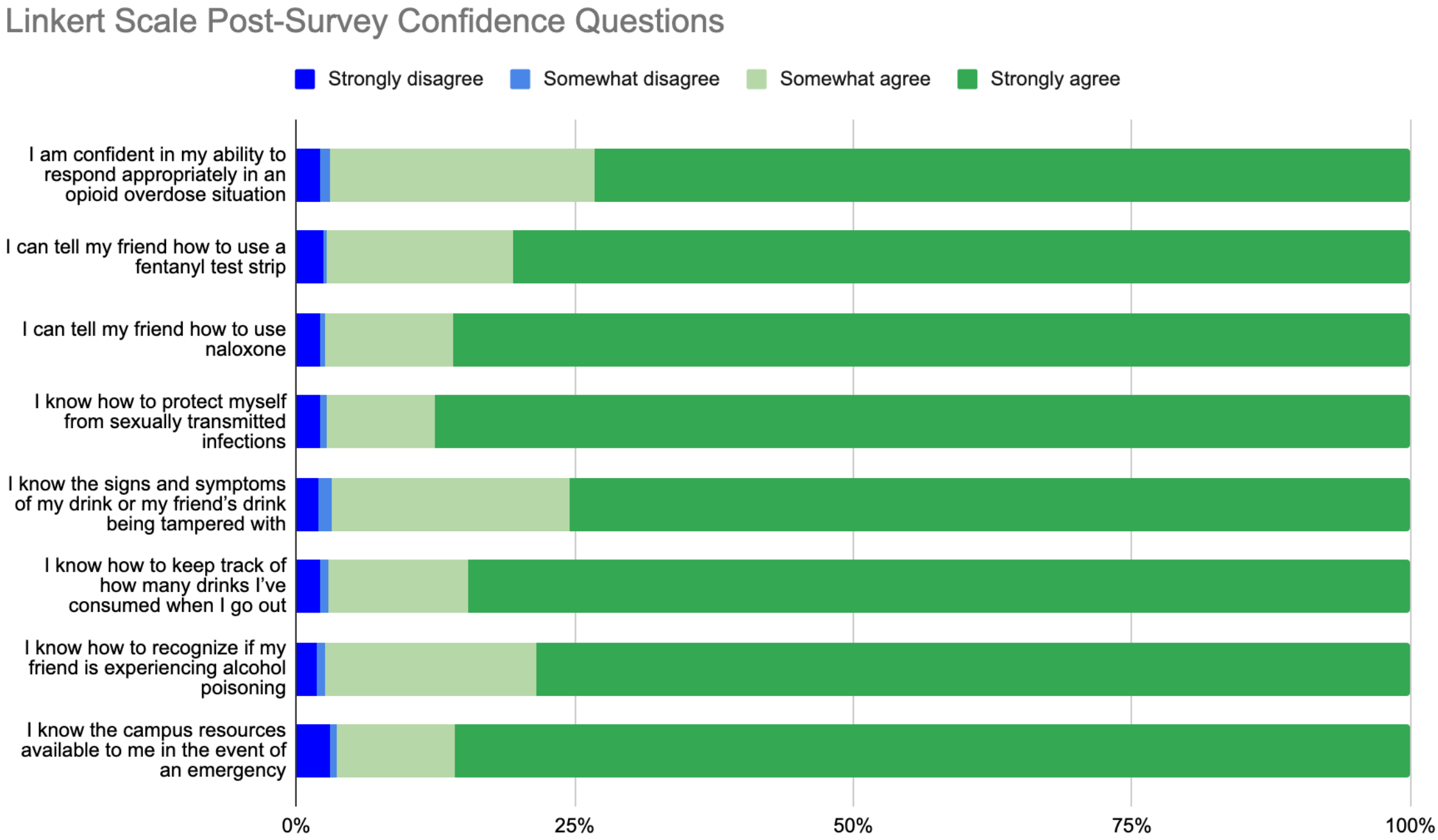
- 674 tool kits were distributed
- 11 presentations were shared
- 631 responses were collected from pre-survey
- 560 responses were collected from post-survey
- All areas assessed saw statistically significant knowledge gain

Question asked on assessment	Pre-survey percent correctness (%)	Post-survey percent correctness (%)	p-value *
What is naloxone (Narcan®) used for?	95.1	99.8	<.001
How is naloxone (Narcan®) typically administered by non-healthcare	66.7	98.0	<.001
How many standard drinks qualifies as binge drinking for men and women (assume over a two-hour period)?	61.2	96.3	<.001
Currently, most opioid-related overdose deaths are caused by which of the following?	60.6	75.2	<.001
What is an opioid?	88.4	93.6	.016
Which of the following is a reason someone would use a dental dam?	58.7	98.6	<.001
All of the following are true regarding condom usage EXCEPT:	65.9	91.8	<.001
How should fentanyl testing strips be used?	71.8	96.8	<.001

* p-value < 0.05 indicates statistical significance

Linkert Scale Pre-Survey Confidence Questions




Linkert Scale Post-Survey Confidence Questions
Strongly disagree
Somewhat disagree
Somewhat agree
Strongly agree
I am confident in my ability to respond appropriately in an opioid overdose situation
I can tell my friend how to use a fentanyl test strip
I can tell my friend how to use naloxone
I know how to protect myself from sexually transmitted infections
I know the signs and symptoms of my drink or my friend's drink being tampered with
I know how to keep track of how many drinks I've consumed when I go out
I know how to recognize if my friend is experiencing alcohol poisoning
I know the campus resources available to me in the event of an emergency
0%
25%
50%
75%
100%

Conclusions and Future Directions

- Results show improvement in student knowledge of and confidence in harm reduction tools
- Significant factors that led to success:
  - Peer-led educational model
  - Meeting students where they are
  - Presenting in a comfortable and safe environment
- Model can serve as a foundation for improving de-stigmatized harm reduction education
- Expansion of this initiative would be beneficial for other student groups besides just SFL students

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- This Must Be the Place Nonprofit Organization
- Columbus Public Health
- NightCap drink covers
- Alpha Gamma Delta Fraternity, Zeta Tau Alpha Fraternity, Delta Sigma Phi Fraternity, Phi Kappa Psi Fraternity, Sigma Alpha Epsilon Fraternity, Delta Zeta Fraternity, Pi Beta Phi Fraternity, Alpha Epsilon Phi Fraternity, Chi Omega Fraternity, Alpha Xi Delta Fraternity

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Need More Information?

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