

2024 Incentive Grant Digest

The Incentive Grant Digest is sponsored by the Community Pharmacy Foundation.





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^{*}Rothholz Family Immunization Grants



2023-2024 Incentive Grant Recipients



2024 Incentive Grant Recipients with facilitators and Community Pharmacy Foundation Executive Director Kelly Brock during the 2024 APhA Annual Meeting & Exposition.



Executive Summary

N THE 2023-2024 INCENTIVE GRANT COHORT,

43 research projects were funded. This cohort of pharmacists and student pharmacists chose to address some of today's most pressing issues through their research. The research serves to both advance the pharmacy profession as well as provide individualized care to patients in the communities. This year's cohort addressed a variety of focus areas, which can be summarized to

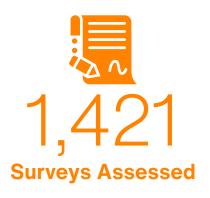
- Social Determinants of Health
- Access and Pharmacy Deserts
- Mental and Behavioral Health
- Diabetes Care
- Cardiovascular Care
- Infectious Disease (Non-COVID)
- Pain Management
- Substance Use Disorder
- Pharmacy Workplace Conditions
- Patient Care Service Implementation
- Pharmacogenomics
- COVID-19 Pharmacotherapy

Along with their research, the Incentive Grant recipients participated in the Incentive Grant Learning Extension. The Learning Extension allowed for real-time guidance from highly experienced pharmacist facilitators, in order to conduct meaningful community-based research projects.

Recipients of the 2023–2024 Incentive Grants gathered with representatives from APhA Foundation and the Community Pharmacy Foundation for the program's annual networking session during the APhA Annual Meeting & Exposition in Orlando, FL, on Saturday, March 23, 2024. The session enabled the Incentive Grant recipients to connect in person for the first time and provided the recipients opportunities to network and discuss how to continue practice innovation beyond their practice sites and the conclusion of their project work in July. In addition, 31 Incentive Grant recipients presented their findings during poster sessions at APhA2024.

Major findings from the 2023–2024 Incentive Grant Cohort include:





The APhA Foundation produced a video presentation that features the 2023–2024 Incentive Grant recipients and their project titles which can be viewed by clicking here (https://youtu.be/ozOe8u-7hK0).



Introduction to the Incentive Grant Program

STABLISHED IN 1994, the APhA Foundation Incentive Grants for Practitioner Innovation in Pharmaceutical Care is the APhA Foundation's Iongest-running program. With the generous support of the Community Pharmacy Foundation, the Centers for Disease Control and Prevention (CDC), the Daniel A. Herbert Incentive Grant Endowment, the Rothholz Family Immunization Education Fund, and proceeds from the APhA Foundation Annual Fund, the APhA Foundation Incentive Grants for Practitioner Innovation in Pharmaceutical Care provides seed funds to pharmacists and student pharmacists to support pioneering projects and concepts that advance patient care services.

To date, the APhA Foundation has provided support for more than:

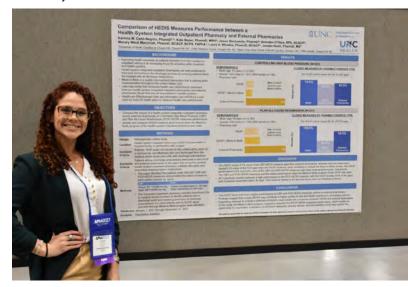


In the 2023–2024 Incentive Grant Cohort, 43 research projects were funded.



(top) Incentive Grant Recipient E'shay Winfield speaks about her research, Community Pharmacy Based Sickle Cell Disease Management Program.

(bottom) Incentive Grant Recipient Karinna Cedo-Negron presents her research on Comparison of HEDIS Measures Performance Between a Health-System Integrated Outpatient Pharmacy and External Pharmacies.





Thank You, Reviewers!

The APhA Foundation extends a sincere thank you

to our 63 reviewers, who evaluated the 2023-2024 Incentive

Rothholz, Mitchel	Peters, Katherine	Tubuo, Emlah	Backus, Kandis
Hill, Allison	Harpe, Spencer	Fink, Joseph	Saling, Jacob
Selkow, Larry	Dimovski, George	King, Harold	Sazgar, Negin
Capehart, Krista	Hon, Michelle	Rowe Davis, Dyan	Nichols, Molly
Daugherty, Kimberly	Chamberlain, Nicole	Horn, Carolynn	Edmond, Maya
Goodwin, Meredith	Rogers, Kelly	Nagao, Lori	Dempsey, Kathleen
Lutz, Susan	Tran, Alexis	Clinard, Valerie	Cloud Floyd, Carly
McDowell, Scott	Kramp, David	Pezzino, Nicole	Hakala, Gregory
Skelton, Jann	Dunleavy, Amy	Bellows, Stephanie	Schneider, Rachel
Edwards, Akesha	Adato, Beverly	Bowman, Kaylynn	Boland, Tyler
Maynard, Rachel	Dang, Yen	Dawson, Aimee	Johansen, Brittany
Steele, Marci	Cleveland, Kevin	Fanizza, Frank	Lin, Christine
Kieck, Danielle	Dang, Judy	Johnson, Ashley	Willis, Robert
Carver, Linda	Pegump, Kaitlyn	Udouj, Randall	Hamper, Jeffrey
Bessler, Kristen	Leung, Amy	Huels, Amanda	Murhammer, Payal
Henley, Jasmine	Schaefer, Beverly	Lu, Kevin	



Practice Settings

ECIPIENTS FROM MANY DIFFERENT PHAR-MACY BACKGROUNDS are involved with the Incentive Grant program, including recent PharmD graduates, experienced pharmacists, pharmacy professors, and student pharmacists. New practice settings were identified in the 2023–2024

Incentive Grant cycle such as managed care and consultant pharmacies. The variety of pharmacy professionals involved provides valuable perspectives and contributes to diverse and creative research projects. As shown in the figure below, this year's program incorporated pharmacists working in every aspect of community pharmacy.

Figure 1 Other, 3% Supermarket Pharmacy, 9% Long-term Care Pharmacy, 2% **Ambulatory Care** Clinic, 26% Hospital/Institutional (inpatient) Pharmacy, 3% Specialty Pharmacy, 5% Consultant Pharmacy, 2% College or School of Clinic (outpatient) Pharmacy, 8% Pharmacy, 15% Chain Pharmacy, 12% Independent Pharmacy, 15%



Research, Presentations, and Publications

recipients discover the areas of community pharmacy they are passionate about and determine the best next step to take in their careers.

Figure 2 shows the Incentive Grant recipients' plans for the year after their research is conducted. The Incentive Grant program also provides an avenue for pharmacists to learn how to present their research projects, a valuable skill. Furthermore, some pharmacists plan to publish their findings in a peer-reviewed journal. Figure 3 shows researchers' publication plans. Figure 4 shows statistics on this year's cohort poster presentations. Many recipients presented their research at multiple meetings, giving them opportunities to network and share their work. publication plans.

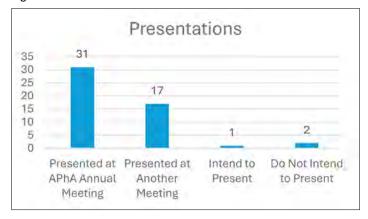
Publication of Manuscript

40 36
30
20
10 1
Intend To Submit Submitted Do Not Intend to Submit

Figure 2



Figure 4











NAME: Mariah Hubi

PRACTICE SITE:Kroger Pharmacy

LOCATION: Knoxville, TN

"After I announced my project at the local church and passed out flyers, I received an email from a stranger that was encouraging and rewarding. She said, "Hi Mariah - Your community project makes me happy. I'm a Pharmacist and I'm from Colombia. A project like yours is just exciting to most in the Latino community for all the barriers that we face. My native language is **Spanish and if you have** anything in which I could help, please let me know." **PROJECT TITLE:** Improving Medication Literacy and Medication Adherence in Spanish-Speaking Communities Through a Community Pharmacy Intervention

DESCRIPTION: This study was primarily focused on determining the impact of pharmacist engagement to improve medication literacy within a community partnership intervention. The study's secondary objective was to explore the intervention's impact on medication adherence.

Forty-four participants whose primary language was Spanish (some considered English as their second language) or spoke little to no English were enrolled in the study. Of those 44 patients, nine completed the study. Participants were asked to complete different tasks, some of which included drawing up doses of injectable insulin, determining a dose of acetaminophen for a child, and classifying ingredients in drug products as active or inactive. Regarding the dosing of insulin based on a prescription, 23 of the 44 participants (52%) incorrectly drew up the morning dose of insulin. Most study participants also incorrectly dosed acetaminophen when using the weight to dose calculation provided in the dosing instructions (34 of 44 [77%]). When identifying active ingredients from nonactive ingredients, 18 of the 44 (41%) participants named inactive ingredients as active ingredients or were unsure where to locate the list of active ingredients on the packaging of an OTC medication.

The participant's change in literacy and medication adherence was assessed after completion of the follow-up appointment. During this study, patients also reported their needs and those of their community including childcare,



clothing, food, and mental health. The most reported need was access to dental and eye care due to the high costs and accessibility issues because of the language barrier.

IMPACT: Of the 10 participants completing the study, six participants (60%) improved in answering at least one question correctly. The four other participants had no change in the number of questions they answered correctly. Regarding medication adherence, three participants took their medications, two participants demonstrated improved adherence, and one participant continued reflecting the same level of adherence.





NAME: Kaitlyn Queen

PRACTICE SITE: Campus Health Services at UNC-Chapel Hill

LOCATION: Chapel Hill, NC

"The most memorable part of this project for me was reviewing the participants' written responses, particularly those around what barriers they experienced in accessing **PrEP. One participant** disclosed that after coming out for the first time to their provider, they were told that gay men who have penetrative sex will die due to HIV-related illnesses and that they should avoid this entirely. This left a fear of not only not being able to trust any medical provider, but a fear of intimacy and connection in romantic relationships as well." **PROJECT TITLE:** College Student Perceptions and Barriers to Accessing Pre-Exposure Prophylaxis for Prevention of HIV Transmission

DESCRIPTION: The objective of this project was to collect and evaluate college students' perceptions of PrEP, their previous experiences with PrEP, and what potential barriers may have resulted in failure to access PrEP. Additionally, this project aimed to determine overall student interest in PrEP and if they would be receptive to accessing this service from a pharmacist or clinical pharmacist practitioner. The study analyzed the responses from 40 survey participants. The participants' demographics were comparable to that of the general student population at the local university.

Approximately 73% (29) of participants reported being aware of PrEP prior to taking part in the survey. However, there were only five participants (12.5%) who indicated that they had previously tried to obtain a prescription for PrEP. The most prevalent reasons patients cited for not accessing PrEP were feeling that they were at low risk for HIV transmission (37.5%) and that they feared judgment for requesting PrEP (17.5%). Nearly 78% of participants agreed seeing a pharmacist would make it easier to access PrEP, and 65% of participants would likely see a pharmacist for PrEP.

The most prevalent benefits of utilizing a pharmacist for accessing PrEP were the possibility of not needing an appointment (65%) and of saving time (60%). The most common barrier was the lack of privacy at the pharmacy (35%). Most participants (75%) reported that they are willing to pay for this service with about 23% willing to pay between \$10 and \$19.



IMPACT: The survey responses reveal that there are many prevalent barriers related to the stigma and judgment assigned to patients who may be sexually diverse, and more work should be done in improving provider education and sensitivity training.





NAME: Sarah Salomone

PRACTICE SITE: Albertsons/Safeway Pharmacy

LOCATION: Portland, OR

"The most rewarding aspect of this project has been to see the progression in the community pharmacy setting and the impact that these services can have on patients living in our communities."

PROJECT TITLE: Comparing Patient Utilization of Pharmacy-Led Services Based on Geographic Location in the Chain Community Pharmacy Setting

DESCRIPTION: This project related to the clinical services offered in the store locations of a chain community pharmacy. These services included immunizations, travel health consults, pharmacist prescribing services, medication therapy management (MTM) services, and medication administration services.

The primary objective of this study was to determine if there was a difference in patient motivation for obtaining pharmacist-led clinical services in the chain community pharmacy setting in defined "pharmacy deserts" compared to "nonpharmacy deserts." The study's secondary objective was to assess the knowledge and attitudes patients have toward community pharmacist-led clinical services and patient satisfaction with pharmacist-led clinical services in the community setting.

For the primary objective of patient motivation for obtaining pharmacist-led services, most patients identified prompt scheduling and travel distance compared to primary care provider (PCP) as major motivating factors for obtaining clinical services in the community pharmacy. Additionally, approximately 85% (26 of 32) of patients stated that utilizing the pharmacy for this service was more convenient than scheduling an appointment with their PCP.

For the secondary objective of patient awareness of pharmacist-led services, 100% of patients stated that they were aware that pharmacists were able to provide immunizations to patients in the community. For the other services, including medication administration, pharmacist prescribing authority, travel health consultations, and MTM services, approximately 60% or more of patients were unaware that pharmacists provided these additional services in the community setting. For the secondary objective of patient satisfaction, approximately 97% (31 of 32) of participants identified that they were satisfied with the service they obtained, and 100% of participants claimed they would recommend their pharmacist for clinical services.

IMPACT: This project explored whether there was a difference in patient motivation for utilizing pharmacist-led clinical services in community pharmacies in "pharmacy deserts" and "nonpharmacy deserts." Although a direct comparison could not be made, the study determined factors that motivate patients to utilize their local pharmacist for clinical services rather than their PCP including prompt scheduling, travel distance, and convenience.









NAME: Ashanta Colemen

PRACTICE SITE:
Mathes Pharmacy and
Diabetes Center

LOCATION: New Albany, IN

"When I called a patient to inform her that she would be receiving a gift card as a token of appreciation for her time and responses, I was asked, 'So will that survey help people like me get better access to CGMs because I sure wish I qualified for one.' I spent time discussing with this participant over the phone about what my research project hoped to accomplish, what were its next steps, and how they could indirectly benefit from their contribution to the research." **PROJECT TITLE:** Bridging Technology and Patient Care: Investigating the Role of Continuous Glucose Monitoring (CGM) in Influencing Health Perspectives of Those Living With Type 2 Diabetes

DESCRIPTION: This study's objective was to identify and compare non-insulin-dependent patients living with diabetes who use and do not use continuous glucose monitors (CGMs) and their perspectives on CGM use. The study specifically looked at perceived norms, attitudes, behavioral control, and intention to use CGM.

A total of 327 patients were enrolled in the study after filling non-insulin injectables with or without oral diabetes medications at an independent pharmacy in Southern Indiana from September 2023 to December 2023. Data collection occurred the following year, and the response rate was 12.8%. Of those who responded to the survey, the mean age was 47 years old, 55% were female, and 97% were white. Additionally, 79% of respondents indicated that they had been living with diabetes for at least 4 years.

Each of these patients were contacted via mail and sent instructions as well as key information pertaining to the research study. The study included 34 consenting participants who met inclusion criteria. A total of 21% of the population indicated either prior or current use of a CGM, leaving 79% of the population as never utilizing the technology. The average length of CGM use and the kind of CGM used were not disclosed by any of the participants. It



is also unclear as to how many of these participants are established with an endocrinologist.

IMPACT: The implementation of CGMs for non-insulin-dependent type 2 diabetes (T2D) patients holds the potential to significantly enhance patient outcomes, improve the efficiency of health care provision, and contribute to the broader goals of modern health care systems. It is clear that CGMs support a shift from reactive to proactive health care. By focusing on prevention and early intervention, we have a greater chance at reducing the burden that chronic diseases bear.



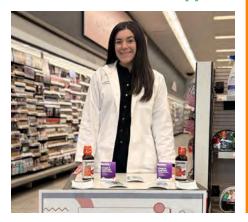


NAME: Lauren Flood

PRACTICE SITE: Walgreens Pharmacy #3759

LOCATION:Boston, MA

"The most memorable patient encounter that I experienced during my longitudinal project was with my patient who required CGM follow up. I helped in setting the device up for them and teaching them how to use the app. I have been able to assist this patient multiple times since then and have created a great pharmacist-patient rapport."



PROJECT TITLE: Effectiveness of Diabetes Management Education Delivered by a Community-Pharmacy Resident

DESCRIPTION: The study's primary objective was to evaluate a patient's understanding of blood glucose monitoring systems, including CGMs, and disease state risk management following patient education provided by a community-based pharmacy resident on injectable diabetes medication. Education based on responses to injection technique and long-term disease state management competency surveys were conducted at baseline, immediately post-intervention, and at 10-day follow-up. The secondary objective was to assess the patient's satisfaction with the service provided and evaluate their willingness to participate in a similar service in the future.

At baseline, 16% (5 of 30) of patients answered all questions regarding glucose and A1C goals correctly. Immediately following intervention, correctly answering goal centric questions increased to 73% (22 of the 30 patients) but decreased to 46% (14 of the 30 patients) at 10-day follow-up. Knowledge of proper administration technique remained consistent, with 66% (20 of 30) of patients answering all questions correctly at baseline and 97% (29 of 30 patients) at both post-intervention and 10-day follow-up. Knowledge of glucometer/CGM use was 60% (18 of the 30 patients) responding correctly at baseline, 83% (25 of the 30 patients) at post-intervention, and 90% (27 of the 30 patients) at 10-day follow up. Knowledge of hypoglycemia and risk management was 57% (17 of the 30 patients) correctly answering at baseline, 97% (29 of the 30 patients) after post-intervention, and 93% (28 of the 30 patients) at 10-day follow up.

Satisfaction with service was assessed with an average score of 4.6 overall. Secondary objectives related to satisfaction survey showed that all 30 patients would recommend it to others. A one-tailed paired t-test was performed to evaluate the significance of data as follows: baseline to post 10-day follow up: (p <0.001), post-intervention to 10-day follow-up (p <0.05), and baseline to 10-day follow-up: (p <0.00001).

IMPACT: The results of the study show that patient education provided by a community-based pharmacy resident can have a significant impact on the understanding and knowledge retention of patients when it comes to blood glucose monitoring systems. Additionally, patients receiving this type of education reported being satisfied with their interactions with the residents and would recommend it to others.





NAME: Maria Gonzalez

PRACTICE SITE:
NorthShore University
Health System

LOCATION: Evanston, IL

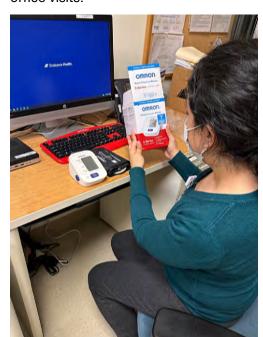
"I provided a blood pressure monitor and education to a Spanish-speaking patient. The patient truly appreciated being provided with a monitor to check their blood pressure at home. They also appreciated that we reviewed their medications, explaining the indication for each. This experience highlighted the critical role of language and clear communication in patient care, leading to improved adherence and health outcomes." **PROJECT TITLE:** Targeting Blood Pressure, a Pharmacy-Led Intervention to Improve Hypertension Control in a Community Health Center

DESCRIPTION: The study's primary objective was to provide grant-funded home BP monitors and education to patients enrolled in the clinic. The secondary objective was to assess improvement in BP through follow-up after initial intervention.

The pilot started actively seeing patients in December 2023. By the end of the study, 16 patients were enrolled and provided with a BP monitor and hypertension education. Since enrollment, 12 initial follow-ups were conducted and resulted in only one patient not recording their BP values consistently at home. Additionally, of those 12 patients, six patients returned for office visits.

Of the six patients who returned for office visits, four had BP readings recorded in office that were at goal while two were not at goal. Half of the patients among this group (three of six) brought their BP log to the visit. Although not analyzed for significance, the patients' BP data was collected.

Changes in BP were assessed for patients who were seen during an educational visit with a pharmacist and who returned post-intervention. Data showed changes in systolic and diastolic BP when comparing baseline BP taken during the patient education visits and during post-intervention office visits.



IMPACT: Providing patients with home BP monitors and hypertension education may result in an increase in the recording of BP values in a BP log. Additionally, patient follow-up to office visits following the initial visit may be impacted along with whether they are able to meet their goal BP value.





NAME: Amy Ly-Ha

PRACTICE SITE:
The University of Mississippi
School of Pharmacy

LOCATION: Jackson, MS

"The most memorable project-related patient care experience from this project was witnessing patients achieve a reduction in their A1C. For many patients in the study, this was the first time that they worked with an ambulatory care pharmacist.

Serving as a partner in helping patients attain their health goals was rewarding and reinforced my own career aspirations."



PROJECT TITLE: Use of Continuous Glucose Monitors in Patients With Type 2 Diabetes Who Are Newly Insulin-Dependent

DESCRIPTION: The objective of this study is to compare monitoring glycemic status with continuous glucose monitors versus traditional self-monitoring of blood glucose (SMBG) in patients with type 2 diabetes who are newly initiated on basal insulin with or without other antidiabetic agents.

The study was offered to 14 patients. Seven patients were actively enrolled, and two individuals withdrew consent due to patient-reported SMBG burden. For these nine participants, the average age was 49.6 years, the average baseline A1C was 12.1%, and the average initial basal insulin dose was 16.7 units per day. Five patients also used bolus insulin with an average daily dose of 10.8 units, and six participants also used non-insulin antidiabetic agents. Currently, five individuals are in the SMBG arm, and two are in the CGM arm. Two individuals completed the first trial arm, and one participant completed both arms but is awaiting their final A1C result.

For the two individuals who only completed the CGM arm, the average A1C at 12 weeks was 7.9% compared to their average baseline A1C of 11.3%. Their average time in range improved from 50.5% at the first visit with the research team to 55.5% at the third visit. Their average glucose decreased from 192 mg/dL at the first visit to 182 mg/dL at the third visit. They had a time below range of 0% but had five instances of level one hypoglycemia.

The individual who completed the SMBG arm performed SMBG three times daily. This participant's A1C at 12 weeks was 7.2% compared to their baseline of 11.9%. Their average fasting glucose decreased from 163 mg/dL at the first visit to 155 mg/dL at the third visit. Their average random glucose decreased from 203 mg/dL at the first visit to 154 mg/dL at the third visit. They reported a single level one hypoglycemia event.

Thirty-eight medication adjustments were conducted by the research pharmacists. The current average basal insulin daily dose is 18.9 units. Five participants are using bolus insulin with an average daily dose of 8.4 units.

IMPACT: Pharmacists can play an essential role in helping patients who are newly insulin-dependent. The utilization of continuous glucose monitors may result in improvements in the patient's average A1C, time in range, and average glucose decrease. When comparing continuous glucose monitors to traditional blood glucose self-monitoring, more studies will need to be conducted for more definite results.





NAME: Elena Patestos

PRACTICE SITE:
Weis Markets

LOCATION: Schnecksville, PA

"Being able to read the impact the program had on people including getting their condition under control, getting off medications, and making new healthy habits will be something memorable for me."



PROJECT TITLE: Impact and Clinical Outcomes of a Pharmacist and Dietitian Co-led Employee Wellness Program

DESCRIPTION: The primary objective of this study was to measure the change in participants' BP, A1C, and weight through participation in an employee wellness program co-led by a pharmacist and dietitian. The study's secondary objective was to evaluate the reported impact of participants who enrolled in at least one employee wellness program.

The results of the diabetes program were average changes in HbA1C of -0.43%, and weight of -4.57 lbs. Regarding the hypertension program, the results showed an average change in systolic BP of -4.15 mm Hg, diastolic BP -3.55 mm Hg, and weight -2.95 lbs.

When looking at the results of the survey questions, participants responded that 48% agreed and 52% strongly agreed that the LiveWell program helped them learn about their condition. When asked if the LiveWell program helped them make sustainable (long-lasting) changes to their diet, 1.5% of participants disagreed, 61% of participants agreed, and 38% of participants strongly agreed. Forty-one percent of respondents agreed and 59% strongly agreed that the LiveWell program helped them understand how to read nutrition labels. The question related to whether the LiveWell program helped the respondent understand the importance of eating the right amount of certain nutrients in their diet, 44% of respondents agreed and 56% of respondents strongly agreed. Looking at the question that asked if the LiveWell program helped the respondent make sustainable (long-lasting) changes to their physical activity, 6% of respondents disagreed, 62% agreed, and 32% strongly agreed. Fifty percent of respondents agreed that the LiveWell program helped them understand why it is important to remember to take their medications and to take them as directed while only 1.5% disagreed and 48.5% strongly agreed.

Regarding the question about pharmacists and dietitians involved in the LiveWell program making the program better, 3% disagreed, 33% agreed, and 64% agreed. Looking at whether participants would participate in the program again, 54.5% of participants strongly agreed, 41% agreed, and 4.5% disagreed. Fifty percent of survey respondents strongly agreed, 48.5% agreed, and 1.5% disagreed that being in the LiveWell program had an impact on their quality of life.

IMPACT: Involving a pharmacist in an employee wellness program can aid in the improvement of participants' HbA1C, BP, and weight. Their impact may also lead to participants making changes to their lifestyle, including physical activity and diet. Program participants overwhelmingly found that including a pharmacist in such a program made the program better.





NAME: Carina Salazar

PRACTICE SITE: Centro de Salud Familiar La Fe, Inc.

LOCATION: El Paso, TX

"The most memorable experience related to patient care for this project was educating patients on new technology and seeing the benefit of this access to education and CGM placement improve their overall glycemic control."



PROJECT TITLE: Expanding Pharmacy Access for Continuous Glucose Monitoring Services in a Predominantly Hispanic Patient Population With Diabetes

DESCRIPTION: The three primary objectives of this study were to (1) create infrastructure to support CGM services within a community pharmacy setting, (2) educate a community pharmacy team and medical staff on the utilization of CGM technology, and (3) recruit and expand CGM services to patients living with diabetes who have poor glycemic control. This study was conducted to evaluate the feasibility of CGM service delivery at point of dispensing in a single Federally Qualified Health Center (FQHC)-based pharmacy in a low socioeconomic, medically underserved, and predominantly Spanish-speaking community.

During the infrastructure establishment, documentation was created for a patient's electronic health record. Thirteen sensors were purchased to be used as initial stock for patients with no insurance, using the APhA Incentive Grant. Ongoing inventory could not be added to the formulary due to the current out-of-pocket cost for these patients, even at the reduced 340B rate. Patients with insurance were able to obtain sensors from outside pharmacies. For those without insurance, the pharmacy team utilized manufacturer-patient assistance programs.

A step-by-step protocol was developed for applying a variety of CGM sensors at the pharmacy counseling window. The FQHC faced challenges in setting up billing parameters because it was unable to bill for the pharmacy services provided. To support infrastructure development, we conducted two educational workshops for pharmacy staff and one in-service session for medical staff. We also integrated pharmacy workflow by implementing patient check-in, a designated waiting area, and utilizing the counseling window for placement.

The average time for preparing a sensor, placing it, providing education, and collecting data at the pharmacy window was less than 5 minutes in total. In addition, we created a collection of educational pamphlets in English and Spanish, which were given to patients upon initial sensor placement. After three months of implementation, 13 patients received sensor placement at the pharmacy counseling window for 24 placements.

IMPACT: Pharmacists can be utilized to support patients using CGMs by placing the initial sensor at the pharmacy window, potentially impacting the patient's diabetes management. In total, the pharmacist's interaction with the patient including preparing the sensor, placing it on the patient, providing education, and collecting data took less than 5 minutes, highlighting that pharmacists can make meaningful improvements to patient care in a short period of time.





Immunization



Immunization



NAME: Shayna Byers

PRACTICE SITE: Howard University College of Pharmacy

LOCATION: Washington, DC

"Several students mentioned that our presence as Black pharmacists made them more comfortable learning about an unfamiliar topic. As Black pharmacists, we created a sense of comfort and safety for the Black youth in our community, making them feel seen and heard—an essential goal of this project. Regardless of the results, I felt accomplished in achieving this impact."

PROJECT TITLE: Bison Boosting HPV Vaccines

DESCRIPTION: The study investigated whether the HPV vaccine was available to students through the Howard Student Health Center (for both privately insured students and those on the school's health insurance).

The objective of this study then shifted to educating students about HPV and finding a reasonably accessible location where interested students could receive the vaccine. Unfortunately, we were unable to submit an IRB to collect data for analysis on how our educational sessions impacted students' thoughts about HPV and the Gardasil vaccine. However, throughout the project, the objective shifted from hosting vaccine clinics to addressing the issue of students not being able to receive Gardasil from the student health center or local pharmacies if they were on the school's health insurance, which often corresponds to a lower socioeconomic class. We held multiple meetings with the chief of operations for the Howard Student Health Center, pharmacists at Howard Hospital (who also face challenges administering vaccines to lower socioeconomic patients), and the Immunize DC coalition (a group of physicians, pharmacists, and vaccine specialists from pharmaceutical companies who address vaccine hesitancy and patient access to vaccines).

The project evolved into a public health initiative to advocate for students who are unable to speak for themselves or fight for this cause because they are unaware that the option to be vaccinated with Gardasil has been taken away from them. Through casual conversations with the students who were educated and discussions with pharmacists and physicians, we realized that our months of effort were not in vain. Although we were unable to meet our initial objective of hosting vaccine clinics on campus, we became advocates for



change within Howard University's health systems. We hope to pass this advocacy on to the students in the classes below us so that, in the future, they can host the vaccine clinics we were initially unable to.

IMPACT: Throughout the course of this project, we were able to pinpoint an access to care issue, surrounding the HPV vaccine on Howard University's undergraduate campus. The work related to this study was able to start a movement to help ensure that future students have access to this vaccine.



Immunization



NAME: Mya Desai

PRACTICE SITE: University of Kentucky College of Pharmacy

> LOCATION: Lexington, KY

"During an outreach event on my campus, I met a student who volunteered to participate in my survey. **She expressed interest in** learning more about the **HPV** virus and vaccine, so I provided education and checked her vaccine status in our state's registry. After our discussion, she eagerly received her first vaccine dose and requested additional resources to learn more. I felt a profound sense of accomplishment knowing I had made a positive impact, and I was excited to see her return for her second dose." **PROJECT TITLE:** Student Perception and Uptake of (Humanpaillomavirus HPV) Vaccine During Campus Outreach Events

DESCRIPTION: The objectives of this study are to 1) determine the perceptions and knowledge about HPV and the HPV vaccine in individuals who participate in a university campus outreach event, 2) assess the uptake of HPV vaccine during outreach events at various locations, and 3) assess HPV vaccine series completion through targeted vaccine outreach.

The survey was completed by 363 individuals. Persons who identified as female rated their current level of knowledge about both HPV and the HPV vaccine higher than those who identified as males. A significantly greater percent of males indicated that they had not received the HPV vaccine and that it had never been recommended by a health care provider compared to those who identified as female or nonbinary/gender fluid. Additionally, over 20% more females and nonbinary/gender fluid individuals indicated that they had received the HPV vaccine than males. Those who identified as a race other than caucasian were twice as likely to indicate that the HPV vaccine had not been recommended for them by a health care professional than those who identified as Caucasian. Similarly, the percentage of non-Caucasians who stated that they had not received the HPV vaccine was double the percent of Caucasians. However, the percentage of those who stated they had received the HPV vaccine was nearly identical for both the Caucasian and non-Caucasian groups. Those who identified African American/Black had a higher average answer when rating their current level of knowledge about the HPV vaccine than those who identified as a race other than African American/Black. There was no statistically significant differences in survey responses based on outreach event locations in student housing compared to other on-campus locations.

IMPACT: During an outreach event on my campus, I met a student who volunteered to participate in my survey. She expressed interest in learning more about the HPV virus and vaccine, so I provided education and checked her vaccine status in our state's registry. After our discussion, she eagerly received her first vaccine dose and requested additional resources to learn more. I felt a profound sense of accomplishment knowing I had made a positive impact, and I was excited to see her return for her second dose.





Medication Safety



Medication Safety



NAME:
Aishwarya Venkatachalam

PRACTICE SITE: HealthLinc

LOCATION: Mishawaka, IN

"Several Spanish-reading participants expressed worry about not being able to answer questions accurately on the knowledge assessment survey. However, upon understanding the purpose of my project, they recognized the importance of ensuring equal access to medical information. Therefore, my most meaningful patient care experience from this project involves discussing the potential impact and significance I hope it will have within these communities." PROJECT TITLE: Comprehension of a Drug Facts Label for a Newly Approved Over-the-Counter Hormonal Contraception Pill in Englishand Spanish-Reading Populations

DESCRIPTION: The study's objective is to utilize a knowledge assessment survey to determine participants' comprehension of norgestrel (Opill) from its drug facts label and compare the comprehension between primarily Englishand Spanish-reading participants.

A total of 23 eligible people were screened and recruited to complete the survey, with 20 providing consent (response rate, 87%). Ten participants completed the English reading/English label survey (EE), five participants completed the Spanish reading/English label survey (SE), and five participants completed the Spanish reading/Spanish label survey (SS). The majority of patients were aged 26–29 years (n=5, 25%), 14 (70%) identified as LatinX or Hispanic, and 13 (65%) were not currently using contraception. With significance set at 0.05, there are no demographical differences among the groups, except ethnicity. This is understandable given that native Spanish speakers are likely of LatinX or Hispanic origin.

The mean knowledge assessment score (SD) for the EE group was 5.93 (1.56), SE group was 2.96 (1.58), and SS group was 3.49 (1.91) (p < 0.05). Further analysis using Tukey's HSD test revealed that the EE group had significantly higher scores compared to both the SE and SS groups. There were no significant differences in scores between the SE and SS groups.



IMPACT: Several Spanish-reading participants expressed worry about not being able to answer questions accurately on the knowledge assessment survey. However, upon understanding the purpose of my project, they recognized the importance of ensuring equal access to medical information. Therefore, my most meaningful patient care experience from this project involves discussing the potential impact and significance I hope it will have within these communities.





Mental and Behavioral Health

Mental and Behavioral Health



NAME: Danika Lee

PRACTICE SITE:
West Virginia University/Kroger
Pharmacy (Morgantown, WV)

LOCATION: Morgantown, WV

"My most memorable experience was getting my surveys back and getting to read them. I left a section in my surveys that allowed the participants to express what they liked about the intervention and what they felt could be better or any thoughts they had. A lot of the participants were very thoughtful and gave me really good feedback showing they had considered the resources I had given."

PROJECT TITLE: Creating a Process for Community-based Pharmacy Intervention on Social Determinants of Health for Adult Patients Taking Mental Health Medication

DESCRIPTION: The objective of this study was to identify social determinants of health (SDOH) associated with medication adherence in patients taking mental health medications, assess participants' views and attitudes of SDOH community-based pharmacy intervention, and assess changes in participants' mental health medication adherence and any other social/health indicators following community-based pharmacy intervention.

A total of 73 potential participants were asked to be a part of this study. Out of these, 30 agreed to participate, 17 declined, and 18 had their prescriptions returned to stock. Another eight potential participants were ineligible due to someone else coming to pick up their prescription for their mental health medications.

Final results demonstrate that participants highlighted the need for a support system as the most needed domain among the five SDOHs. Final satisfaction survey results unanimously confirmed strong support for pharmacies offering resources to address social risk factors and pharmacists addressing social risk factors. The most varied questions were if participants found the questions helpful and if the resources given were helpful with participants agreeing or being neutral. Only one participant disagreed with the screening being adequate to address their social risk factors.

For participant demographics, all of the participants who returned their surveys were white, and over 85% were female. Over 50% had a bachelor's degree, and over 85% had commercial or private insurance. A total of 83.3% of participants at baseline exhibited excellent adherence, and after intervention decreased to 80%, with only two participants going from being adherent to not being adherent after intervention.

IMPACT: My most memorable experience was getting my surveys back and



getting to read them. I left a section in my surveys that allowed the participants to express what they liked about the intervention and what they felt could be better or any thoughts they had. A lot of the participants were very thoughtful and gave me really good feedback showing they had considered the resources I had given. Some of the people just wrote thank you are appreciated what we had done.



Mental and Behavioral Health



NAME: Ciera Sitton

PRACTICE SITE: Fred Meyer Pharmacy

LOCATION: Portland, OR

"I have one patient who will call and update me on her journey trying to improve her mental health. It, unfortunately, highlighted the struggle that comes with ever adjusting medication doses, but she was so thankful that I helped her start taking the steps to get there."

PROJECT TITLE: The Impact of Pharmacist Lead Mental Health Education on Community Mental Health Outcomes

DESCRIPTION: The primary objective of the study was to assess the impact of pharmacist-led lifestyle modification education on participants' anxiety and depression screening scores.

A total of 238 potentially eligible participants were generated by a report from the pharmacy's prescription management system. From the list, 148 contact attempts were made to offer the novel service. Of the 148 contact attempts, 66 were successful. A total of 12 of these verbally accepted the service, but only four participated in the initial appointment, two missed appointments, and five never scheduled. Initial feedback from those declining the service was unexpected but led to the addition of a post hoc objective. A total of 82% of eligible participants declined, the most common reason being a recent or upcoming follow-up with their primary care provider. We had four study participants complete the initial screening and education appointment. One completed the follow-up appointment while one refused and two were lost to follow-up. Of the four participants who completed the pre-education screenings, 75% scored moderate severity on the GAD-7, PHQ-9, or both; No participants scored higher than moderate on either screening.

Although most eligible participants declined the service, the feedback was generally positive. People noted the accessibility of the in-pharmacy service in comparison to their provider as a benefit while others mentioned that they were still trying to become comfortable with addressing their own mental health but were excited the topic was being addressed, and one of the participants in the service mentioned that the outreach made her feel cared for. A total of 44 of those eligible provided comments; of these, 80% were

notably positive.



IMPACT: I have one patient who will call and update me on her journey trying to improve her mental health. It, unfortunately, highlighted the struggle that comes with ever just adjusting medication doses, but she was so thankful that I helped her start taking the steps to get there.









NAME: Maya Boguslawski

PRACTICE SITE:
Greenwood Pharmacy

LOCATION: Waterloo, IA

"One patient learned about the service from the poster they saw while waiting in line to pick up a prescription at the pharmacy. They stated they were very excited to have an option to get tested right away and not have to wait for an appointment with their doctor or at urgent care. They got tested right away that day and said they would definitely be telling their friends about the service."

PROJECT TITLE: Implementation of and Patient Experience With a Test-and-Treat Service in a Community Pharmacy

DESCRIPTION: This study evaluated a cash-based point-of-care (POC) test-and-treat (T&T) service. The objectives were to describe the implementation, uptake, and revenue of a T&T service and describe patient satisfaction with using the new T&T service. This evaluation characterized the feasibility and acceptability of a cash-based T&T service in a community pharmacy setting.

There were various requirements to fulfill before starting a POC T&T service at our pharmacy. These included online CE courses (PREP Act Required Training for COVID-19 Therapeutics ([10 hours]), T&T Training for Pharmacists ([1 hour), T&T Training: Group A Streptococcus ([1 hour]), T&T Training: Influenza ([1 hour]), in-person T&T Specimen Collection Technique Assessment for POC testing, as well as Medicaid provider enrollment.

A total of \$590 in revenue was generated from 10 patients who used the T&T service. Of the 10 patients, four of them were employee family members. The revenue calculation does not account for employee family members as those patients were not charged an assessment fee and received the tests at cost. In total, we've given six strep tests, five flu tests, and two COVID-19 tests. One patient received subsequent treatment.

Two patients have completed the patient satisfaction survey. Employee family members were not given the survey as their opinions may have been biased. Respondents received a strep or flu test for themselves. They either agreed or strongly agreed that they recommend the service to others and that the service is more convenient than going to the clinic or urgent care to get a test. They strongly agreed that the staff were professional, the service takes less time than going to the clinic or urgent care to get a test, and the service was of good value. If the service was not available, they would have gone to



urgent care for a test or done nothing. They heard about the service from the posters in the pharmacy and by word of mouth.

IMPACT: One patient learned about the service from the poster they saw while waiting in line to pick up a prescription at the pharmacy. They stated they were very excited to have an option to get tested right away and not have to wait for an appointment with their doctor or at urgent care. They got tested right away that day and said they would definitely be telling their friends about the service.





NAME: Riley Clark

PRACTICE SITE:

UNC Eshelman School of Pharmacy & Moose Pharmacy

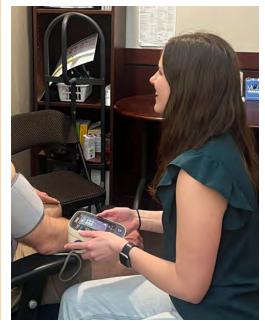
LOCATION: Mt. Pleasant, NC

"In addition to the findings, there was a question on the survey that asked if there was anything else that the patient would like us to know. There were no answers directly related to the survey, but most answers were in regards to thanking the pharmacy for being such a wonderful pharmacy that really cared for its patients."

PROJECT TITLE: Subscription-based Clinical Services and Prescriptions in a Community-based Pharmacy

DESCRIPTION: The objective of this project is to determine overall perceptions of patients with regard to a subscription-based payment model involving clinical services and prescriptions within a community pharmacy setting.

Seventy-three percent (n= 312/426) of respondents stated they had not used the service at any pharmacy, had used the service but at another pharmacy (n=12/426), or had used that service at the pharmacy (n=102/426). The services most used included pharmacist consultation regarding my medications (n= 24/28, 86%), insurance consultation (n= 15/27, 56%), and COVID-19 testing (n=15/29, 52%). Ninety percent (n=359/397) of services elicited a very comfortable or comfortable response and 10 percent (n=28/397) eliciting an uncomfortable or very uncomfortable response. In relation to comfort level with services the highest services selected for very comfortable included pharmacist consultation regarding medications (n=20/27, 74%), Insurance consultations (n=20/28,71%), and COVID-19 testing (n=19/29, 66%). Approximately one-third (n= 138/405, 34%) of patients stated they would be willing to pay a monetary amount for the services. The service most were willing to pay for was COVID-19 testing (n=15/24, 63%), followed by A1C measurement (n=14/26, 54%), then lab work (n=13/25, 52%). The services with the most reported interest of being in a bundled subscription package was blood glucose check (n=11/27, 41%) and BP check (n=10/27, 37%). The highest services selected for "this service does not apply to me" included



both hormonal contraception assessments (n=14/24, 58%) and hormone level consultation (n=14/25, 56%).





NAME: Alyssa Cosselmon

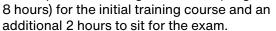
PRACTICE SITE:
Baldwin Family Health Center

LOCATION: White Cloud, MI

"When administering a postproject survey, one patient reported that they felt the comprehensive medication reviews (CMR) service was extremely valuable for them. They recommended that their friends and family members also visit the pharmacy for consultation with the pharmacist. They responded that they would come back to that pharmacist for continuation of care due to the value they gained from the service provided." **PROJECT TITLE:** The Impact of Technician-Assisted Medication Therapy Management in a Federally Qualified Health Center

DESCRIPTION: This project's primary objective was to determine if the utilization of MTM-trained technicians increases the number of comprehensive medication reviews (CMRs) completed within a certain time frame by a pharmacist. This was evaluated by comparing the number of CMRs completed within a 3-month period preceding the start of the intervention to the number of CMRs completed during the 3-month intervention period. Success was defined as an increase in CMRs completed by 40% or more. A secondary objective was to determine if including technicians in the MTM process significantly decreases the time required for pharmacists to spend on preparing for a CMR. This was defined as successful if the amount of time spent by the pharmacist was reduced by 40% or more and data were compared to a preliminary period of 2 months preceding the intervention. An additional objective was to determine if there was a cost benefit to the intervention.

A total of 20 CMRs were completed during the 3-month intervention period. Compared to previous months, this was a 40% increase, which met the objective's goal for success. Preliminary data estimated an average pharmacist time of 75 minutes (range 20 to 130 minutes) per patient visit spent preparing for the encounter by gathering information and conducting an assessment of the therapeutic regimen. With technician intervention, this was reduced to an average of 33 minutes (range 0 to 60 minutes), or a decrease in pharmacist time spent by 67%. Overall preparation time was reduced by 10%. In the preliminary period, based on the reimbursement rate of CMRs completed, it was estimated that each encounter resulted in an average loss of \$35, based on average pharmacist salary of \$60 per hour and standard reimbursement of \$60 per CMR. Post-intervention data estimated that interventions resulted in a loss of \$15 per encounter, based on average technician salary of \$20 per hour. Training for each technician required an average of 4 hours (range 2 to





IMPACT: When administering a post-project survey, one patient reported that they felt the CMR service was extremely valuable for them. They recommended that their friends and family members also visit the pharmacy for consultation with the pharmacist. They responded that they would come back to that pharmacist for continuation of care due to the value they gained from the service provided.





NAME: Megan Ditzman

PRACTICE SITE: Osterhaus Pharmacy

LOCATION: Maquoketa, IA

"My most memorable patient care experience has been giving vaccines and various education in patient homes. Many patients who are homebound tend to be behind on vaccines because they cannot make it to the pharmacy or doctor's office. It has been rewarding to offer vaccine services to patients in their homes so they can stay up to date and healthy. Many patients worry about seeing their children or grandchildren without being vaccinated, so lifting that burden has been very rewarding." **PROJECT TITLE:** Implementation and Evaluation of a Long-Term Care at Home Service in a Rural Community Pharmacy Setting

DESCRIPTION: The aim of this project is to evaluate the implementation of a long-term care at home service in a rural community pharmacy setting in Eastern lowa. The objectives of this study are to 1) describe implementation and challenges of a long-term care at home service in a rural community pharmacy setting, 2) describe pharmacist clinical interventions including the identification and resolution of drug therapy problems, and 3) measure patient/caregiver satisfaction with the service. This service is targeted to those individuals who are unable to afford residing in a long-term care facility or would prefer to stay in their homes for longer. Providing long-term care services in the home can provide longevity and improved quality of life for these individuals.

Results include patient demographics, insurance variability among patients, and results of the satisfaction survey. Fourteen patients were enrolled in this service, with an equal gender distribution of seven males and seven females. Their ages ranged from 24 to 87 years old. Half of them had already been receiving compliance packaging before joining the service. On average, they took 13 medications and had four chronic conditions each. Various clinical interventions were made throughout the project. All 14 patients received vaccine recommendations, while two out of the 14 had vaccines administered in their home. Two patients received OTC recommendations. One patient purchased a BP monitor and was educated on self-monitoring at home. One patient had a change to their UTI prophylaxis regimen based on pharmacist recommendation. One patient was educated on how to properly use their insulin pens. One patient received a referral from the CHW for community assistance. One patient was evaluated for a continuous glucose monitor and received education on proper use. The satisfaction survey sent via mail received seven responses out of the total 14 patients. Out of the seven patients, all seven reported either "Extremely satisfied" or "Somewhat satisfied." Sur-



vey results displayed overall satisfaction with the service.

IMPACT: My most memorable patient care experience has been giving vaccines and various education in patient homes. Many patients who are homebound tend to be behind on vaccines because they cannot make it to the pharmacy or doctor's office. It has been rewarding to offer vaccine services to patients in their homes so they can stay up to date and healthy. Many patients worry about seeing their children or grandchildren without being vaccinated, so lifting that burden has been very rewarding.





NAME: Madison Keller

PRACTICE SITE: Albertsons Companies and Temple University School of Pharmacy

LOCATION: Philadelphia, PA

PROJECT TITLE: Assessing Patient Interest in a Pharmacist-led Weight Management Service

DESCRIPTION: The primary objective of this study was to assess patient interest in a pharmacist-provided weight management service in the community setting. The secondary objectives were to assess patient preference to the service they would participate in and determine patient perceived barriers to participation in the weight management service.

The majority of patients were women and between the ages of 45-64. Over one-half of the respondents (52%, n=14) were prescribed semaglutide, with 26% (n=7) prescribed their therapy for 4–6 months or greater than 12 months. A total of 74% (n=20) stated that they have lost weight since being prescribed the medication. Of the 27 respondents, 59% (n=16) were not interested in a pharmacist-led weight management service. A total of 42% (n=11) of respondents stated that they were interested in a pharmacist-led weight management service. Of these respondents, 55% (n=6) noted that they would prefer the session to be 30 minutes in length. The three session topics that patients would be interested in were diet recommendations (91%, n=10), medication counseling (55%, n=6), and physical activity (27%, n=3). When asked how frequently respondents would prefer each session, 64% (n=7) noted that they would want to attend monthly sessions. Respondents that stated they were not interested in a pharmacist-led weight management service were asked a question to gauge their hesitations in the service. A total of 50% (n=8) of respondents stated that the time commitment is a hesitation to participating in the service. A total of 19% (n=3) stated that cost is a reason they would not want to participate in the service. A total of 13% (n=2) of respondents do not think the service is necessary and would prefer another qualified health care professional to lead the service. One respondent chose privacy as a hesitation to the service. A total of 13% (n=2) of respondents selected "other" as their hesitation to the service. When asked to specify what their other hesitation was, both respondents stated that they are/have previously been in a weight management program. Respondents were asked the likelihood of attending the service if their hesitation was addressed and the majority stated that they were "very unlikely" which was also the most reported response.

IMPACT: I did not interact with patients during this research. I did not distribute the surveys to ensure the survey was anonymous.





NAME: Katie Koch

PRACTICE SITE: Purdue University Pharmacy

LOCATION: West Lafayette, IN

"Throughout the interviews
I had with study participants,
I was pleasantly surprised
with how positively
the individuals viewed
pharmacists, even when they
didn't know much about
our training or education.
The most common answer
I received on this topic
was that we probably knew
more about the medications
than a physician, so why
shouldn't we be able to
prescribe them?"

PROJECT TITLE: College Students' Perceptions of Pharmacist-led Prescribing of HIV Pre-Exposure Prophylaxis in Community Pharmacies

DESCRIPTION: The primary objective of this study was to characterize the level to which students at Purdue University felt that pharmacists prescribing PrEP in a community setting would be appropriate and acceptable. The secondary objective of this study was to identify potential barriers to uptake of a service of this type and develop potential solutions. We estimate that approximately 2,000 unique individuals saw our survey recruitment flyer via social media and/or the student-only group messaging platform. There were approximately 100 valid responses to the survey, resulting in a response rate of approximately 5%. Of the 100 valid responses, only 24 met the eligibility criteria and completed the full survey. Of the 24 respondents who completed the survey, the majority were between the ages of 18 and 24 (62.5%), white (66.7%), cisgender (66.7%), homosexual (58.3%), and non-Hispanic or Latino (70.8%).

The majority of survey responses reflected that students felt that pharmacists prescribing medications, including PrEP, is appropriate. In addition to questions about acceptability and appropriateness, respondents were also asked about their concerns with pharmacists prescribing. Regarding general medication prescribing, five of the 24 respondents stated that they had concerns. These included concern about risk of a medication error (n=3, 12.5%), lack of confidence or trust in a pharmacist (n=2, 8.3%), and preference to receive a prescription from a physician (n=2, 8.3%). Whereas only respondents who stated that they disagreed, strongly disagreed, or were neutral regarding the statement about their comfort with pharmacists prescribing medications were asked about concerns, all respondents were asked about concerns



regarding PrEP prescribing concerns. The most common responses were no concerns (n=6, 24%) and preference to receive a prescription from a physician (n=6, 25%), followed closely by concern for a lack of privacy (n=5, 20.8%).

IMPACT: Throughout the interviews I had with study participants, I was pleasantly surprised with how positively the individuals viewed pharmacists, even when they didn't know much about our training or education. The most common answer I received on this topic was that we probably knew more about the medications than a physician, so why shouldn't we be able to prescribe them?





NAME: Abby McCurry

PRACTICE SITE: University of Missouri Health Care

LOCATION: Columbia, MO

"Getting people set up with the BP monitor kits-I had patients who could not afford them and could not easily get out of their home who were incredibly thankful and happy we could deliver one to their home entirely for free. These patients then all tracked and reported their BP values, and we were then able to get their antihypertensive dose situated faster and get them to meeting their BP goal faster than multiple doctor appointments would have been able to if they had not been able to report home BP values." **PROJECT TITLE:** Implementation and Impact of Community-based Pharmacist Follow-up for Patients Newly Initiated on Antihypertensive Medications

DESCRIPTION: This study aims to describe the implementation and impact of a health system's pharmacist-led antihypertensive pilot program designed specifically for patients who are newly initiated on antihypertensive drug therapy. The primary outcome was the number of eligible patients who completed at least one pharmacist-led antihypertension visit. Secondary outcomes included medication adherence which was defined by patients refilling their antihypertensive(s) approximately 80% of the time, the number and type of pharmacist interventions, and BP values at baseline and study completion.

A total of 38 patients met the inclusion criteria and were primarily white and female. All but six of these patients completed at least one visit, with a quarter completing two or three visits. Recommendations were divided into those related to antihypertensive therapy and general recommendations unrelated to antihypertensive therapy. Recommendations in the "other" category included three related to hypotension concerns, three related to confirming BP goal with providers, and one related to switching antihypertensive agents. For the 24 general recommendations, the majority included other medication counseling such as correct medication administration, drug interactions, and medication safety. Finally, during this study period, five BP monitor kits and one extended size BP cuff were delivered free of charge to participating patients who requested them.

The average patient BP documented in the electronic medical record before antihypertensive start of those who completed at least one pharmacist visit was 164/94 mm Hg. Of these patients, only 25 reported a BP after antihypertensive start. For this group, the average BP after their last visit while on antihypertensives was 133/77 mm Hg leading to an average decrease in BP before and after hypertensive start of 28/15 mm Hg.

IMPACT: Getting people set up with the BP monitor kits—I had patients who could not afford them and could not easily get out of their home that were incredibly thankful and happy we could deliver one to their home entirely for free. These patients then all tracked and reported their BP values, and we were then able to get their antihypertensive dose optimized faster and get them to meeting their BP goal faster than multiple doctor appointments would have been able to if they had not been able to report home BP values.





NAME: Kaylee McNeely

PRACTICE SITE: Riverside Village Pharmacy

LOCATION: Nashville, TN

"I think the most memorable experience I had was with a patient who called the pharmacy to take the survey. She reported that she could not read but wanted to do the survey because she absolutely loved our service and the pharmacy, so she wanted to support me in my research."



PROJECT TITLE: Syncing Success: Does Medication Packaging and Synchronization Improve Adherence and Patient Satisfaction?

DESCRIPTION: The primary objective of this study was to analyze patient perceptions of their medication taking behaviors before and after using medication synchronization and medication adherence packaging. Secondary objectives were to assess overall patient satisfaction of an adherence packaging program and evaluate the improvement in medication adherence, as demonstrated by the proportion of days covered.

A total of 139 patients were included in the study, with 55 patients (39.5%) completing the survey. As for patient demographics, the population in this study was relatively like that of Riverside Village Pharmacy. More female identifying patients completed the study as well as more Caucasians completed the survey than any other race. In addition, 84.2% of the survey respondents report being over the age of 45 years old. As for income, 61.5% of the respondents said that their income is equal to or less than \$49,999. Correlational analyses revealed several significant relationships between patient perceptions, medication adherence behaviors, and satisfaction with the pill packaging program. Patients were more likely to forget to take their medications when they felt better (r (55) = 0.71, p < 0.001), highlighting the potential influence of symptom improvement on medication adherence. Furthermore, greater patient satisfaction with the pill packaging program was associated with increased motivation to stay in control of medications and disease states (r(55) = 0.68, p < 0.001). This positive correlation underscores the role of satisfaction in fostering patient engagement and empowerment in medication management. Patients reported feeling motivated to stay in control of their medications and disease states when utilizing both medication pill packaging and receiving monthly calls or texts from the pharmacy (r(55) = 0.62, p)< 0.001), indicating the synergistic benefits of complementary adherence support interventions. Moreover, patients who reported more missed doses prior to enrollment in the pill packaging program were more likely to improve their medication adherence after enrollment (r (55) = -0.529, p < 0.001), suggesting the efficacy of the program in addressing adherence challenges. These findings collectively underscore the multifaceted nature of medication adherence and the significant impact of patient perceptions and satisfaction on adherence behaviors and program engagement.

IMPACT: I think the most memorable experience I had was with a patient who called the pharmacy to do the survey. She reported that she could not read but wanted to do the survey because she absolutely loved our service and the pharmacy, so she wanted to support me in my research.





NAME: Carly Messenger

PRACTICE SITE:
University at Buffalo / Middleport
Family Health Center

LOCATION: Buffalo, NY

"I have worked in other independent pharmacies that utilize Dispill, but MFHC was the first pharmacy I had come across that utilized RapidPakRx. It was interesting to me to see the difference (or lack of difference) in adherence between the two, especially with the hefty start-up costs of RapidPakRx."

PROJECT TITLE: The Assessment of Medication Adherence During Transitions Between Medication Adherence Packaging Programs in Rural Independent Pharmacies

DESCRIPTION: The primary objective of this retrospective study is to determine the change in medication adherence among patients who began using a new adherence packaging program compared to the previous packaging program. Secondarily, data will be collected to determine the change in medication adherence among patients using vials (no adherence packaging) to using RapidPakRx (adherence packaging). Lastly, patient data will be aggregated to characterize patients most likely to utilize adherence packaging in rural independent pharmacies.

In a population of 55 eligible patients, the proportion of days covered (PDC) of patients using Dispill is 97.1% and the PDC of patients using RapidPakRx is 97.3%. These results were not statistically significant, with a p-value of 0.86. In a population of 16 eligible patients, the PDC of using no adherence packaging (vials) is 92.7%. Per Medicare Part D Star Rating standards, these are all considered adherent (PDC greater or equal to 80%). Of all 1,377 medications included in the Dispill and RapidPakRx packs for eligible patients, the most commonly included medications are categorized by indication, with the top five medications being statins (5.82%), miscellaneous over-the-counter vitamins and minerals (4.95%), testing supplies (4.51%), β blockers (3.86%), and vitamin D supplements (3.86%). Of the 55 eligible patients, 47.3% are on oral diabetes medications, 90.9% are on statins, and 70.9% are on RAAS antagonists. Between Middleport Family Health Center and Wurlitzer Family Pharmacy, 80.6% of the pill packaging users are female, with an average age of 73.6 years. Of the pill pack patients, 54.9% use commercial insurance, 35.4% use Medicare insur-



ance, and 9.8% use Medicaid insurance.

IMPACT: I have worked in other independent pharmacies that utilize Dispill, but MFHC was the first pharmacy I had come across that utilized RapidPakRx. It was

interesting to me to see the difference (or lack of difference) in adherence between the two, especially with the hefty start-up

costs of RapidPakRx.





NAME: Christy Nguyen

PRACTICE SITE: MercyOne Pharmacy

LOCATION: Dubuque, IA

"The most memorable experience was a med sync patient who came to the pharmacy to pick up their medications. They were interested in the RSV vaccine after I discussed it with them and was ready to receive it until I revealed that the copay was \$80. The pharmacy serves med sync patients who receive their medications through mail or delivery, so distance and transportation were common issues preventing vaccine appointments. However, affordability is another hurdle to consider when attempting to increase vaccine uptake." PROJECT TITLE: Implementation and Evaluation of a Vaccine Service Within an Appointment-based Medication Synchronization Program in a Community Pharmacy Setting

DESCRIPTION: The objectives were to 1) develop a workflow for adding vaccine screening as part of the medication synchronization (med sync) program and 2) to identify and administer recommended vaccines in med sync patients. Out of the 234 med sync patients identified, 59% were female and 41% were male with ages ranging from 19 to 95 years old. Patients who were 60 to 69 years old (43%) made up the largest age group followed by patients ages 50–59 years old (22%) and patients ages 40–49 years old (13%).

Of the 234 med sync patients, 164 (70%) patient profiles were reviewed on IRIS for recommended vaccines. Among the 164 patients reviewed on IRIS, the top recommended vaccines were for COVID-19 (75%), influenza (45.7%), Td/Tdap (90.9%), RSV (47.5%), and zoster (42.7%). Hep A (93.3%) and meningococcal (95.7%) vaccines were highly recommended vaccines on IRIS but were omitted from the vaccine screening process in addition to HPV and hep B vaccines. During the vaccine screening, patients were prompted with a more comprehensive vaccine screening if pneumococcal vaccines like PREVNAR 20 (25.1%) and PPSV23 (32.3%) were recommended by IRIS, but all patients declined.

Of the 164 patients reviewed on IRIS, 63 (27%) patients were called, but only 41 (18%) answered. All patients who were successfully contacted were willing to screen for vaccines. Among the 41 patients, six (15%) claimed that they had already completed all vaccines, seven (17%) patients were not interested, two (5%) patients were interested but unable to schedule appointments, three (7%) patients would rather receive vaccinations at a more local pharmacy, seven (17%) patients would rather follow-up with their provider, and 14 (34%) patients would consider recommended vaccines but not at the time of the call. Only two (0.85%) patients scheduled appointments and received vaccines.



IMPACT: The most memorable experience was a med sync patient who came to the pharmacy to pick up their medications. They were interested in the RSV vaccine after I discussed it with them and was ready to receive it until I revealed that the copay was \$80. The pharmacy serves med sync patients who receive their medications through mail or delivery, so distance and transportation were common issues preventing vaccine appointments. However, affordability is another hurdle to consider when attempting to increase vaccine uptake.





NAME: Francis Palattao

PRACTICE SITE: USC Mann/Clinicare Pharmacy

LOCATION: Los Angeles, CA

"Given that this was a retrospective analysis, I cannot comment directly on patient care experiences from this project. However, I've had several opportunities during the residency year to provide a transitions of care consult, and it is always rewarding when I am provided positive comments about the service that we provide. It's often memorable especially when the patient was initially hesitant to go through with the consult but afterward shared that they were glad they ended up taking the time to speak with me for this service." **PROJECT TITLE:** Three-Year Impact of Community Pharmacist-led Transitions of Care Model: A Retrospective Analysis

DESCRIPTION: This study had two primary objectives: to determine whether community-based pharmacist-led transitions of care telehealth outreach benefits the primary stakeholders involved and to assess the impact of this transitions of care model on 30-day readmission rates and the cost-benefit analysis over a 3-year period. Additionally, this study had two secondary objectives: to evaluate the provider acceptance rate of proposed pharmacist comprehensive medication management recommendations and whether timing of post-discharge follow-up has an impact and to determine the outcomes of provider-accepted recommendations during community pharmacist-led transitions of care outreach and categorize the top five accepted recommendations.

The study compared the outcomes of the experimental group and the control group over a 3-year period between 2020 to 2022. A total of 2,479 patients were included in this study. The cumulative results highlight a consistent trend of significantly lower 30-day readmission rates in the experimental group across all 3 years. This is demonstrated by readmission rates of 3.1%, 2.2%, and 2.4% in the experimental group compared to 14.4%, 24.8%, and 18.0% in the control group between 2020–2022, respectively. The average 30-day readmission rate between 2020–2022 was 19.4% in the placebo group versus 3.1% in the experimental group, with a statistically significant difference (p < 0.001).

The health care–associated cost savings were extrapolated by estimating the number of hospital readmissions prevented via the number needed to treat multiplied by \$15,200 (average cost of hospital readmissions reported in 2018). As such, the total potential cost savings between 2020–2022 was approximately \$5,655,500 (an average savings of \$1,885,500 per year).

IMPACT: Given that this was a retrospective analysis, I cannot comment directly on patient care experiences from this project. However, I've had several opportunities during the residency year to provide a transitions of care consult, and it is always rewarding when I am provided positive comments about



the service that we provide. It's often memorable especially when the patient was initially hesitant to go through with the consult but afterward shared that they were glad they ended up taking the time to speak with me for this service.





NAME: Allison Potts

PRACTICE SITE: St. Matthews Specialty Pharmacy

LOCATION: Louisville, KY

"In the group of patients who had an identified adverse effect with the medications. I had one patient in particular who I was able to counsel on mitigating the risk of side effects so that they wouldn't miss doses. They were experiencing some nausea with Mavyret, and I was able to counsel them to remind them to take it with food (which is recommended to begin with) and to call us back if it didn't resolve. I followed-up with them a week later, and they said that the nausea had subsided." PROJECT TITLE: Impact on Hepatitis C Treatment Adherence in a Specialty Pharmacy Through Introduction of Pharmacy-led Standardized Intervention

DESCRIPTION: The objective of this study is to assess the completion rates of hepatitis C treatment as a result of the standardized intervention. The secondary objective includes identifying barriers of nonadherence to give the pharmacy direction on how to improve future processes. There were 1,525 patients included in this study, with n=802 in the pre-intervention group and n=723 in the post-intervention group.

Completion rates between pre- and post-intervention groups are 68.8% and 68.7%, respectively. A Pearsons chi square test was completed for the primary outcome, resulting in a p-value of 0.971, showing no statistical significance. Age trends were similar between pre- and post-intervention groups (p=0.659); however, there was a higher proportion of females in the post-intervention group (p=0.004). Additionally, the prescribed medications also differed in the pre- and post-intervention groups (glecaprevir/pibrentas-vir (brand Mavyret) p=0.456, sofosbuvir/velpatasvir (brand Epclusa) p=0.067, sofosbuvir/velpatasvir p=0.781).

Of the 157 patients who were reached, 12 had adverse effects. The adverse effects reported were all related to nausea and other gastrointestinal effects. The other 145 patients reached had completed therapy and were counseled on follow-up labs. A secondary analysis of the demographics was completed to show trends in the patients who answered the phone. Of the 157 patients reached, 66% were male, 10% were taking sofosbuvir/velpatasvir (brand Epclusa), 27% were taking glecaprevir/pibrentasvir (brand Mavyret), and 63% were taking sofosbuvir/velpatasvir.







NAME: Mariana Proffitt

PRACTICE SITE: Kroger Health

> LOCATION: Cincinnati, OH

"The most memorable experience with a patient was when I recommended a vaccine based on the patient's fill history and running her Immunization **Information Systems (IIS)** report. The patient was very grateful I brought it to her attention and was eager to get the vaccine and make sure she was protected. She said her mom had pneumonia, and she wanted to do everything she could to prevent getting pneumonia herself." PROJECT TITLE: Impact of Pharmacy Technicians Utilizing Immunization Information Systems (IIS) in a Large Community Pharmacy Chain on Vaccine Administration Rates

DESCRIPTION: The primary objective of this study is to evaluate the impact of pharmacy technician IIS access and their engagement on vaccinations administered at intervention pharmacies. Secondary objectives include evaluating the appropriateness of vaccinations administered at intervention and control pharmacies, as well as, evaluating changes in pharmacy personnel knowledge, confidence, and competence utilizing the statewide IIS.

To date, 77 vaccines have been administered from project implementation. More results to come as auditing patient's responses of "not today" or "checking with provider" continues.

IMPACT: The most memorable experience with a patient was when I recommended a vaccine based on the patient's fill history and running her IIS report. The patient was very grateful I brought it to her attention and was eager to get the vaccine and make sure she was protected. She said her mom had pneumonia, and she wanted to do everything she could to prevent getting pneumonia herself.







NAME: Elizabeth Riley-Jensen

PRACTICE SITE: Walgreens Co./Purdue University

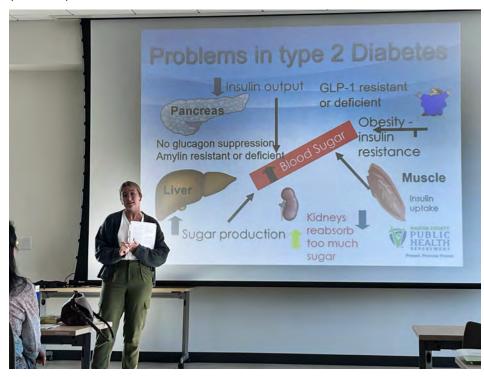
LOCATION: Indianapolis, IN

PROJECT TITLE: Type and Frequency of Health Information Requests Made by Chain Community Pharmacists

DESCRIPTION: The objective of this study is to quantify the frequency and type of patient information requests made by chain pharmacists during routine practice.

Of the 60 pharmacies located within the central Indiana district, 33 pharmacists met the eligibility criteria. Out of the 33 eligible for recruitment, 19 pharmacists consented to the study, providing an enrollment rate of 57.58%. The remaining 14 pharmacists either declined or could not be reached. The majority of the participants held a Doctor of Pharmacy degree (78.9%) and served as the pharmacy manager (89.5%) of their site. The average staff hours for the month in which data collection occurred were 288.21 pharmacist hours (SD = 71.24) and 531.63 technician hours (SD = 164.73).

The majority of information requests were only attempted once (92.90%). The most frequent sources of information include the patient or caregiver (39.80%) and the prescriber's office (53.60%). Updated medication orders or lists (41.30%) and insurance (33.30%) were the most common type of requested information for the purpose of prescription clarification or filling (93.40%).







NAME: Shelby Rummage

PRACTICE SITE:Kroger Pharmacy

LOCATION: Nashville, TN

"One participant was severely debilitated by migraines and was overusing migraine abortive medications. This participant was not aware that migraine abortive overuse can result in rebound headaches and did not know that MPT was a treatment option. After discussing the available MPT options and realistic efficacy expectations, the patient stated, 'Please keep offering this service. There are other people out there like me who could absolutely benefit from this conversation."



PROJECT TITLE: Impact of Targeted Medication Review by Community Pharmacists on Migraine Preventive Therapy Prescribing

DESCRIPTION: The primary objective of this study was to determine the impact of a targeted medication review (TMR) by a community pharmacist on increasing the number of patients prescribed migraine preventive therapy (MPT). Secondary objectives included reporting the number of patients receiving MPT for the first time after pharmacist contact and identification of patient-specific barriers to receiving MPT prescriptions.

Of 249 potential participants, 76 were excluded upon initial profile review, with the majority of exclusions occurring due to the patient having a current prescription for MPT on their pharmacy medication profile. Of the patients who did not complete the TMR, the most common reason cited was satisfaction with their current migraine regimen (37 patients ([44%]) in the enhanced TMR arm; 27 ([44%]) patients in the standard TMR arm). The second most common reason patients did not complete the TMR (outside of the inability to reach the patient after three attempts) was that they were already taking MPT received through an external pharmacy (unknown to the pharmacist upon initial targeting) or a prescription for MPT had been received at the selected pharmacy between the time the patient was first identified for the TMR and the time(s) that they were contacted.

At baseline, the majority of patients had commercial insurance (70.4% vs 60.3%), with the second most common payor being a government-funded entity such as Medicare or Medicaid (21.4% vs 28.0%). Sumatriptan and rizatriptan were the most common acute migraine treatment medications that patients were using. The same number of patients completed the TMR in each arm (n=14), and the standard TMR group had one more eligible patient than the enhanced TMR group (n = 9 vs n = 8). Three patients in the intervention arm allowed for the pharmacist to recommend MPT to their provider after the TMR, and two of those recommendations were accepted resulting in two prescriptions for MPT being received by the pharmacy. In the standard TMR arm, two prescriptions for MPT had been received by the pharmacy at 60 days post-TMR. Cost was the highest perceived barrier to MPT for patients in the enhanced TMR arm (42.9%) while concern about side effects dominated in the standard TMR arm (42.9%).

IMPACT: After speaking with more than 100 patients to offer this TMR and completing the TMR with 28 patients, a common theme was identified: The majority of patients were grateful for the outreach, even if they did not feel their migraines were severe or frequent enough to warrant MPT, yet they were also surprised as they had never been asked about their migraine history by a community pharmacist.





NAME: Kaleigh Steelman

PRACTICE SITE: 501 Pharmacy and Hillsborough Pharmacy and Nutrition

> LOCATION: Chapel Hill, NC



PROJECT TITLE: Implementing an Opioid Pledge in Two Independent Community-based Pharmacies

DESCRIPTION: The objective of this project was to implement a safe opioid dispensing service for patients who receive chronic opioid medications by obtaining a signed opioid pledge from these patients. Secondary objectives were to quantify the number of signed opioid pledges and measure the change in morphine milligram equivalents (MMEs) of those unsatisfied with current level of analgesia provided from their medication regimen.

Out of the 130 patients identified as eligible at Site A, 113 (87%) were given the opioid pledge, and 83 (73%) returned it signed. Out of the 66 patients identified as eligible at Site B, 26 (39%) were given the opioid pledge, and 12 (46%) returned it signed. The average age of patients enrolled was 63 years at Site A with 45 (63%) participants identifying as female compared to 68.5 years at Site B with three (38%) participants identifying as female.

At Site A, 22% (n=16) of patients routinely filled two or more opioid medications per month, 35% (n=25) filled an opioid medication plus a drug of concern, 36% (n=26) had a disease state of concern, and 14% (n=10) were currently unsatisfied with their current level of pain relief from their opioid medication. At Site B, 38% (n=3) filled more than one opioid medication each month, 50% (n=4) filled an opioid medication plus a drug of concern, 13% (n=1) had a disease state of concern, and 25% (n=2) were currently unsatisfied with their current level of pain relief. Due to the consultation, 80% (n=29) of the patients who did not previously have naloxone at home picked up a naloxone prescription. For secondary results, we discovered the most substantial change in MME was a decrease from 53.5 to 34.9 resulting from a change in medication. The most common intervention noticed for patients with inadequate pain relief from their opioid product was the addition of gabapentin. Additionally, one patient was discovered to be on "the triad," which is defined as the combination of an opioid, the skeletal muscle relaxer carisoprodol (Soma), and a benzodiazepine. As a result of the intervention and their prescriber's instruction, this patient has been able to stop the benzodiazepine.

IMPACT: The most memorable experience related to this project was surrounding the education provided during the consultation portion of the project. During one of the phone encounters, a patient revealed she had no knowledge whatsoever about naloxone. In fact, the patient assumed naloxone was the same thing as Flonase nasal spray. I was able to provide thorough education about naloxone including the importance and a demonstration of how to use the product. As a result of this consultation, the patient did receive naloxone at no cost and verbalized much appreciation for me and the pharmacy for providing such great care.





NAME: Hayley Wells

PRACTICE SITE: Walgreens Specialty Pharmacy

LOCATION: Kansas City, MO



DESCRIPTION: The primary objective was to examine the impact of a pharmacist-led smoking cessation service on changes in patients' attitudes toward smoking in a community pharmacy setting. Secondary objectives were to report the number of participants who agreed to use nicotine replacement therapy (NRT) and pick up NRT, as well as those who self-reported smoking cessation and examine the relationship between agreeing to use NRT and previous barriers to use.

A total of 40 participants were enrolled in the study, of whom the average age was 54 years, 52.5% were male, and 62.5% were Black or African American. Participants were assessed to have either a low (n=16), medium (n=17), or high (n=7) level of nicotine dependence. At enrollment, all but two participants identified as being a current smoker.

The ATS-18 scores were split into its three constructs and averaged between all participants. The scores pre-intervention and post-intervention were compared utilizing paired t-tests. The adverse effects of smoking construct score increased (35.78, 45.75; p<0.001), indicating that the participants had a higher level of agreement and understanding of the adverse effects of smoking at conclusion of the study. The psychoactive benefits of smoking (16.13, 5.45; p<0.001) and pleasure of smoking (14.08, 4.70; p<0.001) construct scores both decreased, indicating that the participants reported overall less benefits and less pleasure from smoking at conclusion of the study.

A total of 33 participants agreed to use and picked up NRT, 11 self-reported smoking cessation, and 32 reported previous barriers to use of NRT. Participants could report more than one barrier to use of NRT. The barriers reported by the participants were having an allergy to adhesive (n=3), cost (n=20), not being ready to quit (n=2), perceived lack of efficacy (n=3), taste (n=3), transportation (n=5), and wanting to quit "on their own" (n=5). Of these barriers, Fisher's exact tests identified two barriers to be statistically significant: cost (p=0.008) and wanting to quit "on their own" (p<0.001).

IMPACT: Helping patients with smoking cessation can be emotional as many of the patients become very vulnerable with you. One part of the smoking cessation consultation process is setting a quit date with the patient. I had one patient in particular who decided to set his quit date on the day that his daughter got to ring her "cancer-free" bell. This day then became such a memorable day for not only the patient, but for me, as I was able to see how much of a connection we can form with our patients.











NAME: Cody Beldon

PRACTICE SITE: Kroger Health

> LOCATION: Cincinnati, OH



PROJECT TITLE: The Impact of a Community Pharmacist Referral on the Completion of Annual Wellness Visits

DESCRIPTION: The primary objective of this study was to evaluate the impact of a community pharmacist referral on acceptance and completion of Medicare annual wellness visits (AWVs). All completed AWVs were compared to the number of accepted pharmacy interventions and referrals and the total number of patients with completed pharmacy interventions. Secondary objectives evaluated referral intervention declination reasons, described the source of AWV completion, and an additional secondary objective evaluated the percentage of patients who have previously completed their AWV in the past 12 months compared to the national CMS completion rate.

During this study, pharmacists engaged and documented interventions with 3,171 patients. Of the 3,171 patients asked to participate, only 60 patients declined to participate, and 51 patients were deemed ineligible for an overall acceptance rate of 96.5%. There were 2,745 patients (86.6%) who self-reported that they had completed an AWV in the previous 12 months. Pharmacists identified 317 patients (10%) who were potentially eligible for an AWV. In addition, 73 patients received the AWV recommendation, but they wanted more time to consider the recommendation. After receiving the AWV recommendation, 77 patients declined the referral and assistance in scheduling offers from the pharmacists.

Pharmacists scheduled or referred 167 of the 317 patients (52.6%) for an AWV, which does not include patients who were interested in scheduling an AWV later. A total of 241 patients were eligible for a follow-up intervention to confirm AWV completion or scheduling. After completing follow-up interventions for 220 patients, pharmacists verified that 146 patients had completed an AWV, and 24 patients reported that they had an appointment scheduled. This resulted in a confirmed AWV completion or scheduled rate of 70.5%

for all patients with a follow-up intervention. Only 27 of the 241 (11.2%) patients said they had not completed an AWV, and 17 patients (6.6%) refused to participate in the follow-up intervention.

Most patients with a verified AWV completion or scheduled appointment stated that they completed or scheduled their visit at a primary care provider's office (162/170, 95.3%). The 146 patients with completed AWVs were compared to the national CMS AWV completion rate of 30% (95 patients) for the 317 patients who were identified as potentially eligible to receive an AWV. This resulted in a statistically significant p-value of 0.00003 (p < 0.05).

IMPACT: There were many memorable patient care experiences that occurred during this project. Almost all of the experiences are not my own, but rather they are experiences I heard from pharmacists completing the AWV referral interventions. One experience was in regards to a pharmacist helping a patient identify a new primary care provider. The patient told the pharmacist that their primary care provider had recently retired, and they didn't know where to go. The pharmacist was able to use the resources provided to them to help identify an available primary care provider near the patient's home.

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NAME: Victoria Blanton

PRACTICE SITE: UNC/Walgreens

LOCATION: Asheville, NC

"Having the opportunity to provide education to geriatric patients was a highlight of this project. Through these conversations, I believe stigma regarding naloxone was reduced and patients' comfort with naloxone was increased."

PROJECT TITLE: Assessing Geriatric Perceptions of Naloxone After a Pharmacist-led Consultation

DESCRIPTION: The primary objective of this study was to assess the baseline knowledge and perceptions of naloxone in a geriatric population. The secondary objectives were to evaluate the impact of a pharmacist-led naloxone consultation on the willingness to obtain naloxone and to identify barriers to obtaining naloxone among those who declined it. Seventy patients met the inclusion criteria for a naloxone consultation. The age distribution of patients was as follows: 65-69 years (N = 20, 28%), 70-74 years (N = 22, 32%), 75-79 years (N = 15, 22%), and 80 years or older (N = 13, 18%). The opioids prescribed included fentanyl, hydrocodone/acetaminophen, hydromorphone, methadone, morphine, oxycodone, oxycodone/acetaminophen, OxyContin, tramadol, and Xtampza. Seventeen patients (24%) were co-prescribed a benzodiazepine, 11 (16%) also took a skeletal muscle relaxant, and nine (13%) had both a benzodiazepine and a skeletal muscle relaxant along with their opioid(s). Of the 70 patients contacted, nine could not be reached, 28 declined naloxone, 24 accepted it, and nine already had naloxone at home. Among the 61 patients who received a consultation, 35 lacked knowledge about naloxone and its use. Barriers to care included cost, the stigma of overdose, and a self-perception of safety with opioids.



IMPACT: Having the opportunity to provide education to geriatric patients was a highlight of this project. Through these conversations, I believe stigma regarding naloxone was reduced and patients' comfort with naloxone was increased.





NAME: Faiza Sumra

PRACTICE SITE: Kroger Health and University of Cincinnati

> LOCATION: Cincinnati, OH

"Due to the retrospective nature of this project, I did not have any patient care experience directly related. However, over this past year, I have completed numerous **CMRs both in person and** telephonically as part of my residency requirements. I thoroughly enjoy performing CMRs as this gives me one-on-one time with the patient to address any questions or concerns relating to their medications." **PROJECT TITLE:** Evaluation of Comprehensive Medication Review Quality Performed by Community Pharmacists

DESCRIPTION: The primary objective of this study was to evaluate the quality of comprehensive medication reviews (CMRs) by assessing the percentage with drug therapy problems (DTPs) identified and the number of therapy gaps resolved. The secondary objectives were to assess differences in the resolution of therapy gaps between CMRs delivered face-to-face and those delivered telephonically and to evaluate if trends exist between Social Vulnerability Index (SVI) scores and DTPs identified.

From a random sample of 10,000 patient CMRs, 48.6% had a DTP identified, while 51.4% did not. On average, 1.64 therapy gaps were resolved per CMR. The 2023 CMR data will be collected by June 30, 2024, as this marks 6 months post-CMR completion.

IMPACT: Over the past year, I have completed numerous CMRs both in person and telephonically as part of my residency requirements. I thoroughly enjoy performing CMRs as this gives me one-on-one time with the patient to address any questions or concerns relating to their medications.







NAME: Keondrece Williams

PRACTICE SITE: Harris Teeter Pharmacy

LOCATION: Charlotte, NC

"During this experience,
I was able to provide
men education about the
HPV vaccine, including
its importance, its
preventative measures, and
why they would benefit from
receiving it. I really enjoyed
expanded the knowledge
of these individuals and
to disprove common
misconceptions about this
vaccine in general."

PROJECT TITLE: Assessing Pharmacist-led Education on the Impact of Human Papillomavirus (HPV) in Men Aged 18-45 Years Old

DESCRIPTION: The primary objective of this project was to establish a teambased approach to identify eligible candidates for the HPV vaccine (Gardasil 9) and increase the number of vaccinations. The secondary objective was to evaluate the impact of this approach on the number of vaccinations administered. A total of 422 patients at control locations and 434 patients at intervention locations were screened for HPV vaccination. Of these, 254 patients at the control locations and 291 patients at the intervention locations were eligible to receive the vaccine. All 291 patients (100%) at the intervention locations were provided a recommendation to receive the vaccine, whereas none (0%) of the patients at the control locations received a recommendation. By the end of the study, one person at the control location and one person at the intervention location received the HPV vaccine. Reasons for refusing immunization included lack of interest (n=189, 65%), previous vaccination (n=50, 17%), desire for additional clarification from their primary care provider (n=32, 11%), and relocation to another state (n=20, 7%).



IMPACT: During this experience, I was able to provide men education about the HPV vaccine, including its importance, its preventative measures, and why they would benefit from receiving it. I really enjoyed expanded the knowledge of these individuals and to disprove common misconceptions about this vaccine in general.





Public Profession Perception of Patient Care Services



Public Profession Perceptionof Patient Care Services



NAME: Abbas Hanaee

PRACTICE SITE:Safeway Pharmacy

LOCATION: Rockville, MD

PROJECT TITLE: Knowledge Gaps Among Maryland Community Pharmacists Regarding Cannabis

DESCRIPTION: The primary objective of this study is to identify knowledge deficits among Maryland community pharmacists regarding cannabis. The secondary objective is to summarize their experiences with cannabis education. The survey was distributed to 143 potential participants, and 87 completed it, resulting in a 60.84% response rate. The majority of participants were female (73.6%), aged 25–34 (35.7%), and had been working as community pharmacists for 10–25 years (32.2%). Most participants held a Doctor of Pharmacy (PharmD) degree (88.4%) and had no postgraduate pharmacy education (89.7%).

Additionally, most participants do not frequently receive questions about medical or recreational cannabis, with 49.4% never receiving questions and 40.2% receiving questions once a month. There were no associations found between demographic information and knowledge of cannabis and its laws, including no links between pharmacists' knowledge and the frequency of cannabis questions they receive, their postgraduate education, or their years of experience as community pharmacists. The majority of participants were not knowledgeable about cannabis and its laws. Participants were scored on their responses to 12 questions, with a passing score set at 70%. The total mean score was 55.2% (SD 14.8) for both knowledge and law questions, and none of the participants answered all 12 questions correctly.

In the knowledge category, participants struggled most with identifying the proposed mechanisms of action of cannabidiol, with only 2.4% answering

correctly. In the law category, participants had difficulty knowing the amount of cannabis Maryland adults can purchase for recreational use, with 24.4% answering correctly. To analyze the secondary objective, pharmacists were asked about their baseline education on cannabis. Less than half (39.1%) had completed one or more lectures in pharmacy school regarding cannabis, and 34.5% had completed at least one cannabis CE session. Approximately a quarter of participants (25.3%) had no prior education regarding cannabis.

IMPACT: The participants of this study were all pharmacists, and the survey questions focused on their knowledge. There were no patient experiences with this project.





Public Profession Perceptionof Patient Care Services



NAME: Luke Witkowski

PRACTICE SITE:
Jewel-Osco Pharmacies

LOCATION: Chicago, IL

"The most memorable patient care experience was when a customer not only took our survey, but also took a minute to explain the challenges they had to navigate to find their medication that was on a backorder. Every patient had their own unique challenges to overcome during a drug shortage. Hearing all these different experiences inspired me to produce a research project around drug shortages that would really help make change in community pharmacy." **PROJECT TITLE:** Evaluating the Perceived Impact of Drug Shortages on Patient Care by Patients in a Community-based Pharmacy Chain

DESCRIPTION: The primary objective of this study was to determine the percentage of patients from a community-based pharmacy chain affected by a drug shortage. The secondary objectives were to assess the clinical, financial, and emotional impact of drug shortages on these patients and to evaluate their demographics. Overall, 100 participants took part in this survey-based research. The majority of participants were white females aged 18–74.

Of the 100 participants, 79 (79%) reported experiencing a delay in filling a medication due to a drug shortage. Among these 79 participants, there were 50 medication selections for a stimulant and 39 selections for a GLP-1 agonist, with some participants taking multiple GLP-1 agonists, stimulants, or both. Of those 79 participants, 64 (81%) reported increased stress levels, and 55 (69%) felt nervous about their overall health during the drug shortage. Additionally, 27 participants (34%) stated that their overall health declined during and after the shortage, and another 27 (34%) reported an increase in out-of-pocket medication costs due to the shortage. Furthermore, 17 participants (21%) indicated that their primary care physician helped them navigate the drug shortage, while 40 participants (50%) stated that their pharmacy team assisted them.

IMPACT: Every patient had their own unique challenges to overcome during a drug shortage. Hearing all these different experiences inspired me to produce a research project around drug shortages that would really help make a change in community pharmacy.



Public Profession Perceptionof Patient Care Services



NAME: Jacob Zanolla

PRACTICE SITE:
HealthLinc Community Health
Center - Valparaiso Clinic

LOCATION: Valparaiso, IN

"The most memorable project-related patient care experience that I encountered while working on this project was hearing patient testimonials during the interview process. As one of the pharmacists who provided the services that we sought to capture patient perspectives on, it was extremely humbling to hear the impact that my colleagues and I had on the participants. Connecting and developing relationships with patients is one of my favorite things about patient care, and as a new practitioner, hearing that patients took something away from the care I provided them was an extremely validating and humbling experience." PROJECT TITLE: Exploring Patient Perceptions of Pharmacist-Provided Tobacco Cessation Services at a Federally Qualified Health Center

DESCRIPTION: The objective of this study was to use qualitative methods to characterize patient perspectives on (a) service quality, (b) appropriateness, and (c) satisfaction related to pharmacy-based tobacco cessation services provided at a 12-site Federally Qualified Health Center (FQHC) in Indiana. During the study, patients received initial pharmacist-led tobacco cessation services at the FQHC; of these, some completed follow-up appointments and were eligible for the study. Out of 19 individuals approached, 17 (89.4%) verbal-ly agreed to participate, and 15 (88.2% of 17) consented to the study and completed an interview. Two interviews were conducted in person and 13 by telephone. Most participants were female (53.3%), aged between 45–64 (53.3%), and identified as white (93.3%). One participant identified as Black or African American, and no participants identified as Hispanic or Latino. At the time of receiving initial pharmacist-led tobacco cessation services, most participants (n=13) were using cigarettes, two were using e-cigarettes, one was using chewing tobacco, and one was using cigarillos.

A total of 23 unique themes were identified during thematic analysis. Among the 23 themes identified, nine appeared consistently across more than 10 interviews (66.6% of 15). These included satisfaction with the service (reliability), the perception that the pharmacist was committed to patients' success (responsiveness) and cared about their patients (empathy), the importance and benefits of words of affirmation, pharmacists assisting with medication access (assurance), and the advantages of pharmacists, including their demonstrated knowledge and ability to build rapport with patients (right person).



IMPACT: Connecting and developing relationships with patients is one of my favorite things about patient care, and as a new practitioner, hearing that patients took something away from the care I provided them was an extremely validating and humbling experience.









NAME: Mariam Lamie

PRACTICE SITE:

WesternU PGY-1 Community Pharmacy

"One realistic patient experience involved helping a middle-aged woman struggling to manage her diabetes due to financial constraints. During her pharmacy visit, she expressed concerns about affording nutritious food, crucial for her condition. I listened to her challenges and used our resource guide to locate nearby food banks, providing her with their addresses, contact information, and operating hours. She was relieved and grateful for the information, and a few weeks later, she returned to share that she had visited a food bank and received fresh produce and other healthy items. This support improved her diet and alleviated financial stress, enhancing her overall health and well-being."

PROJECT TITLE: Examining the Influence of SDOH Resource Guide on Pharmacists' SDOH Assessments

DESCRIPTION: This study aims to examine the difference in the frequency of Social Determinants of Health (SDOH) assessments conducted by pharmacy staff in stores with a high Social Vulnerability Index (SVI) score, comparing those who were provided with an SDOH resource guide to those who did not receive the guide. Additionally, it seeks to determine pharmacists' perceptions of the usefulness and relevance of the provided SDOH resource guide in their patient interactions. Another objective is to evaluate the extent to which patients utilize SDOH referrals provided by pharmacists in communities with high SVI scores. Currently, the resource guide provided to the intervention group has led to a 28.5% increase in the completion of SDOH assessments compared to the website resource given to the control group. Despite this increase, the difference in the number of SDOH assessments completed between the two groups did not reach statistical significance (p = 0.798). This suggests that while the resource guide may be associated with more frequent assessments, the variation observed could be due to chance rather than a definitive impact of the intervention. Future studies with larger sample sizes or different methodologies may be necessary to conclusively determine the effectiveness of the resource guide in motivating pharmacists to conduct SDOH assessments.

IMPACT: A patient was relieved and grateful for the information, and a few weeks later, she returned to share that she had visited a food bank and received fresh produce and other healthy items. This support improved her diet and alleviated financial stress, enhancing her overall health and well-being.







NAME: Jennifer Nguyen

PRACTICE SITE:
Albertsons Companies/Idaho
State University

LOCATION:Boise, ID

"Over several weeks of guidance and support, the patient gradually improved their dietary habits, leading to better control of their chronic conditions and a noticeable improvement in their overall quality of life. This experience highlighted the profound impact of accessible, tailored nutrition counseling in empowering patients to take charge of their health despite challenging circumstances."

PROJECT TITLE: Assessment of the Impact of Social Determinants of Health Barriers on Community Pharmacist-Provided Nutrition Counseling

DESCRIPTION: The objectives of this study were to explore how social determinants of health (SDOH) impact patients' access to community pharmacist-provided nutrition counseling and to identify barriers that hinder access to this counseling and food security. Examining the impact of SDOH on pharmacist-led nutrition counseling has yielded significant insights into barriers and potential solutions for improving health outcomes. The data consistently highlight that socioeconomic status (SES) strongly influences patients' ability to access and benefit from nutrition advice. Individuals facing economic hardships often struggle to purchase nutritious foods or adhere to dietary recommendations due to financial constraints. Furthermore, education level and health literacy play crucial roles in understanding and implementing dietary guidance. The data also indicate that patients with lower levels of education or health literacy may find it challenging to comprehend nutritional information provided by pharmacists, thereby limiting the effectiveness of counseling sessions. Overall, the findings emphasize the need for continued exploration of innovative approaches to overcome SDOH barriers and maximize the impact of pharmacist-led nutrition counseling on health equity and outcomes.

IMPACT: Over several weeks of guidance and support, the patient gradually improved their dietary habits, leading to better control of their chronic conditions and a noticeable improvement in their overall quality of life. This experience highlighted the profound impact of accessible, tailored nutrition counseling in empowering patients to take charge of their health despite challenging circumstances.







NAME: Anni Yu

PRACTICE SITE: Western University of Health Sciences, 986 Pharmacy

LOCATION: Pomona, CA

"I had many memorable experiences with patients while conducting this research project. Patients told me how much they appreciated our outreach events providing health care services. They also expressed that they felt cared for during the interview process. Two patients specifically stopped by our booth and helped convince others to get vaccinated when we were doing outreach at a site we had previously visited." **PROJECT TITLE:** How Can the Pharmacy Profession Improve Equity and Access to Health Care for the Unhoused Population?

DESCRIPTION: This study aims to identify barriers hindering health care access for the people experiencing homelessness population, challenges faced by health care professionals in providing care to this patient population, and strategies for improvement. Among the 38 participants, 20 reported unmet basic needs, 17 reported health concerns, nine reported a lack of social support, and five reported insecurities in their living environment. Of the 22 participants with multiple concerns, 16 stated that nonhealth concerns impacted their ability to manage their health. Twenty-two out of 38 participants were unaware of available resources, with 10 identifying outreach teams as their main resource and nine connecting to other resources with the assistance of outreach teams. Twenty-seven participants felt their concerns were not adequately addressed.

Fifteen of the 38 participants had not seen providers for a long time. Of the 23 who saw a physician in the past 6 months, 15 visited the emergency department for acute issues. Twenty-eight out of 38 participants do not have a primary care provider for chronic follow-up. Most of the 29 participants are not taking any medication, with three having prescriptions they could not continue. Thirty-six out of 38 participants said they feel or would feel comfortable interacting with pharmacists regularly.

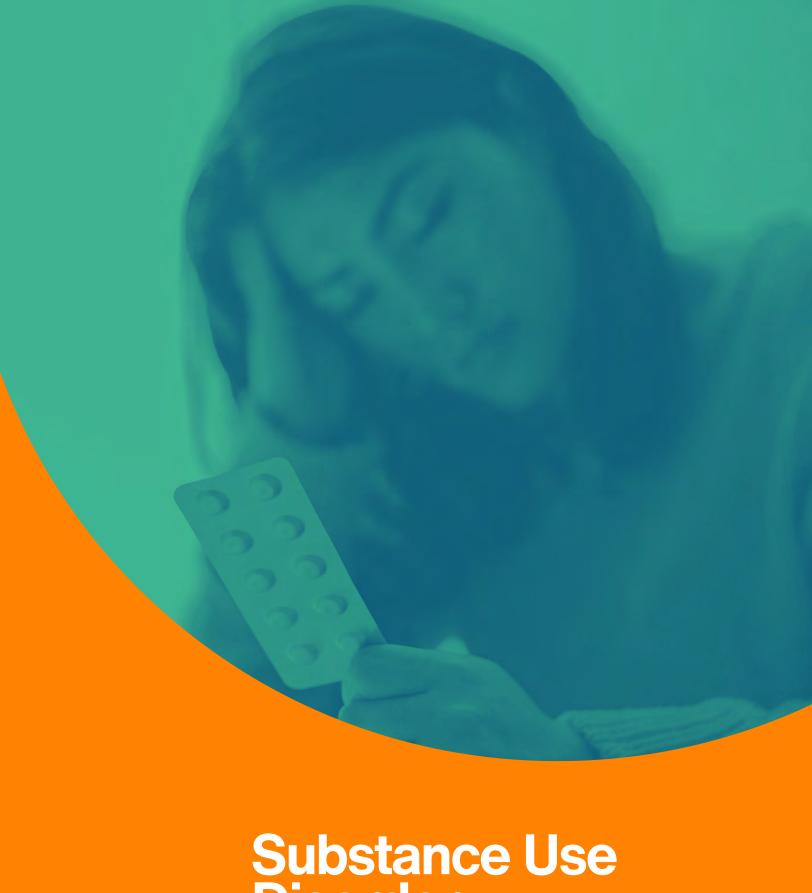
Among 11 providers, seven are pharmacists, one is a medical resident, and three are community health workers. Six providers received motivational interviewing training, two were trained in basic needs, and one on social support services, while three had no prior training. The most reported communication-related challenges include language barriers, low health literacy, and influence from substance use or mental health conditions. The most reported



non-communication-related challenges include poor health care access, lack of education, and social barriers such as distrust and discrimination.

IMPACT: Patients told me how much they appreciated our outreach events providing health care services. They also expressed that they felt cared for during the interview process.





Substance Use Disorder



Substance Use Disorder



NAME: Kaileigh Collins

PRACTICE SITE: UNC Eshelman School of Pharmacy/Campus Health

LOCATION: Chapel Hill, NC

"It was spectacular to see
the survey having a direct
impact on at least one
student. Overall, there was
an increase in naloxone
distributions during the time
the survey was open."

PROJECT TITLE: College Student Attitudes and Perceptions Toward Opioid Overdose and Harm Reduction at a Large, Public University

DESCRIPTION: Previous trials and surveys have targeted college students regarding their knowledge of opioid use and overdose. Existing data provide insight into actual and perceived knowledge and experiences with overdose situations. While these studies offer valuable information about college students' knowledge and experience with overdose, evidence is lacking regarding student perceptions and attitudes about opioid overdose.

The objective of this study is to assess undergraduate and graduate student attitudes regarding opioid overdose and harm reduction services at a large public university. A total of 201 respondents fully completed the survey, including the demographics section. A total of 80% (n=159) of respondents were between 18 and 23 years old, with 60% (n=120) between 18 and 20 years old. A majority of participants were female, at 164 of 201 (81.6%). Respondents were freshmen (n=48, 24%), sophomores (n=51, 25%), juniors (n=31, 15%), seniors (n=22, 11%), and graduate students (n=44, 22%).

Only 4.35% (n=9) of respondents either agreed or strongly agreed that there was no concern for risk of overdose on campus, with 95.65% (n=198) believing that there was some risk on campus. Additionally, 83.09% (n=172) participants either agreed or strongly agreed that there was a need for more harm reduction resources on campus. However, only 58% (n=116) of participants were either unlikely or very unlikely to obtain naloxone for themselves, but 70% (n=140) of respondents indicated that they were either very likely or likely to recommend that a friend obtain it. Similarly, 34.95% (n=72) of respondents stated they agreed or strongly agreed that they had no need for access to naloxone, but only 13.17% (n=27) answered the same for their peers not needing access to naloxone.

A total of 72% (n=145) of respondents were unaware that naloxone is available free of charge to anyone from campus pharmacies. Additionally, 54% (n=109) of participants were unaware of the North Carolina Good Samaritan and Naloxone Access Laws.

Survey availability increased awareness and information regarding the availability of naloxone from on-campus pharmacies. During the month that the survey was open, the largest amount of naloxone (26) was dispensed from both campus pharmacies for that calendar school year. Also, compared to the same month in prior years, there was an increase in naloxone distributed from pharmacies, except 2020.





Learning Extension



Learning Extension



HE INCENTIVE GRANT LEARNING EXTENSION, funded by the Community Pharmacy Foundation, was initiated in 2021 to provide Incentive Grant recipients with the tools they need to conduct a successful research project and gain appropriate recognition for their work.

The Learning Extension enables access to additional practice mentors who can guide these young practitioners in making an impact in community-based patient care and enhanced distribution and exposure of the Incentive Grant work they have undertaken. Incentive Grant recipients also benefited by participating in planned roundtable events, in-person networking, Q&A sessions, and other collaborative activities.

Themes for activities included:

- Strategies for enrolling patients in community-based research
- Poster presentation development and delivery
- Tips for high-quality publishing
- Leveraging results

Learners received real-time guidance on conducting meaningful community-based research projects by experienced pharmacists. The APhA Foundation is unique in that it maintains relationships with established pharmacists with decades of experience conducting community-based research. Through leveraging the Foundation's network, knowledge can be passed on and true investments into the future of pharmacy occur.

Recipients of Incentive Grants continue to rate the Learning Extension activities favorably. According to responses from an evaluation completed by the 2023–2024 recipients:

general program as "very program as "ver

"My faciliator has always been available for guidance and to answer any questions I have had throughout this experience."

93% rate connecting with other Incentive Grant Recipients as "very valuable" or "somewhat valuable."

"The program has allowed me to connect with new practitioners from across the country. I am lucky to be a part of a great cohort of residents looking to implement new services and finding new ways to improve patient care."

good rate having virtual learning sessions as "very valuable" or "somewhat valuable."

"The virtual speaker sessions have been extremely helpful as I knew hardly anything about how to conduct a research project and hearing from those with experience made the task a lot less daunting."



Learning Extension Schedule

Date	Method and Activity Description
SEPTEMBER	Recorded Session • IRB Insights & Strategies for Statistics
OCTOBER	Virtual Meeting Introductory meeting Considerations for conducting research in the community with Kelly Goode, PharmD, FAPhA, FCCP, and William Doucette, PhD, FAPhA, RPh
NOVEMBER	Virtual Meeting • Strategies for enrolling patients in community-based research with Adriane N. Irwin, MS, PharmD, BCACP, CDE
JANUARY	Virtual Meeting Poster presentation development & delivery with Jenny Bingham, PharmD, FAzPA, FNAP
FEBRUARY	Virtual Meeting • Tips for high-quality publishing with Bella Mehta, PharmD, FAPhA, and Marie Smith, PharmD
MARCH	In Person • APhAF and CPF Networking Event with recipients and facilitators to discuss how to continue practice innovation beyond this program following attendance at the IMPACT Care Transformation Forum.
APRIL	 Virtual Meeting Roundtable: Follow-up from the APhA Foundation Innovators Forum, how to build upon current research to transform patient care, ideas for future projects, general Q&A in cohort breakouts
MAY	Virtual Meeting Residency transitions: maintaining your project's impact with Andrea Brookhart, PharmD, BCACP, FAPhA
JUNE	Virtual Meeting • Leveraging results with Melissa Somma McGivney, PharmD, FCCP, FAPhA
JULY	Digital Product Incentive Grant Digest: Results found among the cohort Scaling Demonstrated Success Recipients of the top two research projects will leverage their work over the past year to perpetuate the practice transformation at a new community-based site or their current place of employment



Learning Extension Comments and Feedback

How valuable has it been to have a facilitator as part of this program?

"It has been extremely valuable to have a facilitator available for any questions I've had throughout the process and that they've had experience with residency research projects and thus were extremely confident and knowledgeable."

"It's been valuable to have a facilitator as part of the program for accountability reasons and to have them as a resource as this is the first research experience many of us have had."

How valuable has it been to connect with other grant recipients through this program?

"It was very beneficial to be able to discuss with peers who are going through the same experience as you to gain a different point of view for approaching research tasks."

"Connecting with the other mentees/grant recipients through this program was valuable in that it offered us an opportunity to exchange knowledge and insight while also collaborating and networking. Interacting with my colleagues inspired new ideas and enhanced the supportive environment that this program has provided."

What insights have you gained from engagement with this Learning Extension that helped you with your project?

"The learning extension has helped me think outside of the box when coming up with ideas for the poster and conceptualizing various ideas in ways I didn't think of before. It has also been nice to hear other residents' ideas about how they are presenting their research."

"I have learned a great deal about the different enrollment strategies, importance of comparative analysis, structuring of a survey for distribution, how to outline a manuscript, etc. The list goes on and on. As a first-time researcher, all the information I have learned through the learning extension has been wonderful, and I truly am grateful."



Learning Extension Comments and Feedback

How valuable have the virtual speaker sessions been?

"I've learned a lot about poster design, presentation, and overall research display. As someone who's done very little research, these sessions were helpful."

"The virtual speaker sessions have been one of my favorite aspects of the program. I have learned so much from this resource. The knowledge shared in these sessions provided a wealth of new approaches to consider in my work."

Please provide general feedback on the Incentive Grants program as a whole.

"The incentive grant program has enabled me to incentivize and encourage participation in the research. Without the incentive grant I would not have been able to provide an incentive. I have received feedback from participants that they really liked the idea of having an incentive to participate and take the survey."

"The Incentive Grants program has been a valuable opportunity for me to enhance my skills and contribute to public health initiatives. The program's support has been instrumental in the success of my project, providing funding, resources, and networking opportunities. Overall, the program has been a positive experience, and I would recommend it to other students interested in public health research."





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