

Spring 2023 Abstract Book



Title: Patient Access Recruitment & Retention Plan

Name: Jad Abi-Mourshed

Preceptors: Mary C Kelso, Regional Director of Patient Access

Agency: Robert Wood Johnson Barnabas Health

Purpose: To analyze the patient access department's orientation process in order to identify flaws that employees may encounter down the road and suggest ways to improve the hiring process.

Significance: During the onboarding seasons at Robert Wood Johnson Barnabas Health, hundreds of new employees begin a fresh journey in healthcare. While some may have the experience to carry over to their new positions, others must start from scratch and grasp as much knowledge as they can in just the few weeks of onboarding training they have. Due to inadequate onboarding and training received by many employees in the Emergency Department, specifically the Patient Access department, staff often find themselves struggling as they feel they lack the necessary knowledge to work efficiently This project, through gathering first hand evidence from employees on and off the floor combined with research on best practices for a Patient Access team, the onboarding and training processes at RWJBH will run much more efficiently and result in less flaws in the long run as employees will be more confident when enduring their journey.

Method/Approach: As part of the efforts to improve the onboarding and training process of the Patient Access department, gathering information regarding the shared concerns amongst the registration staff was a crucial first step. Through feedback sessions and surveys, key areas of necessary improvement were identified directly from the staff themselves which allowed for a clearer perspective of which concerns should be prioritized in respect to the shared concerns. Once the foremost concerns were identified, it was vital to inquire into the onboarding and training process of the department in order to determine how those processes align with the staff's current problems. This analysis assisted in identifying best practices for patient access representatives that were in line with staff concerns and addressed their needs accordingly.

Outcomes/Results: After examining which practices would be of the greatest benefit to the staff it was important to work alongside the management team to develop an action plan. The action plan should establish an efficient level of preparedness for new hires while addressing the concerns of the current staff. This can be done through the inclusion of updated training materials, additional training sessions, and ongoing support for new hires.

Evaluation/Conclusion: The overall consensus of this project demonstrated that there are obvious discrepancies between the training process received by each staff member. Ultimately the action plan will eliminate those discrepancies by establishing an efficient and effective onboarding and training process that will be the staple of the Patient Access department. This will enable new hires to be better prepared for their roles and provide them with the tools and knowledge necessary to succeed while also improving patient outcomes and the overall quality of care provided by the department.

Title: Mental Health Consequences in the Post-COVID-19 Cohort

Name: Mariem Abid

Preceptors: Dr. Sabiha Hussain

Agency: Rutgers Robert Wood Johnson Medical School

Purpose: To understand the mental health impact in those suffering from Post-COVID-19 syndrome.

Significance: Post-COVID-19 syndrome has affected approximately 30% of individuals who were infected with COVID-19. This translates to close to 300,000 individuals in New Jersey suffering from the effects of Long COVID Symptoms associated with Post-COVID-19. These symptoms include ongoing shortness of breath, fatigue and cognitive loss. The impact on mental health is unclear.

Method/Approach: We screened all patients from January of 2021 to February of 2023 who were enrolled in the Post-COVID-19 recovery program from symptoms of anxiety and depression with the use of validated surveys; the Patient Health Questionnaire-9 (PHQ-9) and the Generalized Anxiety Disorder Questionnaire-7 (GAD-7). The patients were above the age of 18 and have had Long COVID; ongoing symptoms for 4 weeks after the initial diagnosis of COVID-19.

Outcomes/Results: A total of 615 surveys were completed between January 2021 and February 2023. For the question asking if patients experienced symptoms of anxiety, 333 patients (64.2%) answered yes. For the question asking if patients experienced symptoms of depression, more than half; 269 patients (53.1%) marked yes.

Evaluation/Conclusion: Our results show higher than normal rates of both anxiety and depression. For patients who are suffering from anxiety and depression due to COVID-19, there are numerous resources that are implemented and encouraged for patients to use. At the Post-COVID-19 clinic, there are neurologists and social workers who come in to talk to patients about possible next steps to take in order to get them mental health help. The pandemic has had severe effects on the mental health of individuals as they suffer from Long COVID symptoms.

Title: Lifestyle and Nutrition Program in Patients with Latent Tuberculosis (TB) Infection and

TB Disease

Name: Melanie Aguilar

Preceptors: Deborah Handler, MSCT, CCRC - Principal Investigator

Agency: Rutgers Global Tuberculosis Institute

Purpose: Research on whether changes in eating habits and lifestyle improves treatment outcomes and overall quality of life for patients with Latent Tuberculosis infection or TB disease.

Significance: "Tuberculosis is a bacteria that affects the lungs, infecting 10 million people worldwide annually with approximately 1.5 million deaths each year" (World Health Organization). "Poverty is a powerful determinant of tuberculosis. Crowded and poorly ventilated living and working environments often associated with poverty constitute direct risk factors for tuberculosis transmission" (World Health Organization). Due to the physical strain that tuberculosis takes on the body, the program is asking patients to improve their nutrition and lifestyle, while also taking the daily state mandated TB medicine. Due to poverty being a social determinant for TB (World Health Organization), this program wants to educate and assist individuals in the Newark, NJ area with prioritizing a healthier lifestyle to possibly better their medication outcome and hopefully carry that on after the program to better their health.

Method/Approach: The project has a 1-year timeline, with each participant needing to commit 90 days, with a maximum of thirty-five participants. Potential patients need to have TB or LTBI as well as a comorbidity, such as diabetes, hypertension, high BMI or high cholesterol. The first 30 days of the program, each participant will have their food shopping done by the interns, as well as getting any kitchen supplies that can encourage making healthier foods. Medical information and blood is taken at day 0, day 30 and day 90 to compare results from the beginning to end of the program. Medical information taken includes blood pressure, A1C (glucose level), weight, height and immune response through the blood. If patients opt to not take part of the study, they can join as a control. A maximum of fifteen controls are able to enroll in this study. Controls do not get food or education packets, do not need to fill out daily journals or have access to meetings with a dietician. They are asked to provide medical information and blood, as well as complete a few surveys at day 0, day 30 and day 90.

Outcomes/Results: The project went live the first week of February, within the two months there have been twelve potential patients screened for enrollment. Of those twelve, three have moved forward with the process and are actively enrolled. Meaning that enrollment is at 25% right now. 100% of the enrolled participants are being treated for Latent Tuberculosis infection (LTBI) and 100% of the enrolled participants are women.

Evaluation/Conclusion: In the long run, the research team hopes to encourage other TB clinics to encourage a clean diet and healthier lifestyle with the expectation that it can better the TB treatment outcome. Through conversations with potential and enrolled participants, a barrier is participants finding time to complete daily journals and arrive at the clinic to pick up packets. Daily reminders and direct communication with participants has improved journal entries and consistency with clinic appointments. This internship opportunity has been able to guide the intern to searching for different careers within public health research. The next step would be entering a masters of public health program for more direction on a specific research field, such as epidemiology.

Title: Social Media as a Catalyst for Spreading Social Services

Name: Malka Ahmed

Preceptors: Wafaa Saad

Agency: Women and Family Ascending Association Organization

Purpose: To use social media platforms to spread awareness about the Wafaa Organization and their different social services to those in need.

Significance: New Jersey is the fifth state for the largest population of immigrants. Paterson, New Jersey has a 42% immigrant population. Many of these newcomers lack accessibility to social resources. Through social media platforms such as Facebook, Instagram and TikTok, W.A.F.A.A. 's Organization shares their many social resources to provide assistance. By collaborating with other non-profit organizations, our goal was to provide and increase awareness of the social resources available.

Method/Approach: Social media posts, including the messaging, visuals, and hashtags were planned for the months of February, March and April. During these couple of months, staff attended 10 events, and partnered with other non-profit organizations and influencers with similar values and goals to raise awareness on the different social media accounts that provide resources to the community. When clients came to the office for in-person meetings, they were encouraged to follow the organization on social media and share business cards with friends/family.

Outcomes/Results: Social media followers increased by 100 followers a month between January and April. When asked how they knew about our organization, 75% of our clients answered Google and social media posts. 20% were referred by friends, and 5% were by non profit organization referrals.

Evaluation/Conclusion: The use of social media to raise awareness has increased client intake during the months of January and April. Consistency, timed posts and interactions on social media can serve as a catalyst for spreading the organization's social services. In order to increase client intake, collaboration with the community, local law enforcement and places of worship is recommended.

Title: Assessment of Financial Barriers Towards Blood Cancer Care in the South

Name: Mohammed Ahmed

Preceptors: Tracy Moore, Patient & Community Outreach Manager

Agency: The Leukemia and Lymphoma Society (LLS)

Purpose: To assess common financial barriers affecting adult patients diagnosed with blood cancers in the Tennessee/Alabama region and promoting LLS resources

Significance: In the United States, one person is diagnosed with a common blood cancer every 3 minutes, and one person passes away from a blood cancer every 9 minutes (The Leukemia and Lymphoma Society, 2021). Despite these critical statistics, there are still disparities in blood cancer diagnoses and treatment. For instance, patients living in the Southern United States are more likely to experience worse health outcomes and are significantly more likely to be uninsured compared to the remaining United States (Kaiser Family Foundation, 2016). LLS works to combat this problem by providing various financial, emotional and informational assistance programs for eligible patients to alleviate the hardships associated with a blood cancer diagnosis. Although disparities exploring disease outcomes in the South have previously been analyzed, this project seeks to better understand the broader financial hardships that are affecting patients living in the specific region of the South that LLS treats. This project will also promote other LLS resources and connect interested patients with any other respective program.

Method/Approach: Between 02/08/2023 and 05/01/2023, patients who were diagnosed with a blood cancer and living in the Tennessee/Alabama region were contacted via a phone call or email from a Salesforce registry. The financial assistance they received was recorded, with four programs available to cater to different challenges- insurance copays, urgent needs/emergencies, travel assistance, and daily non-medical expenses. Patients with a history of benefitting from multiple programs were noted. LLS resources regarding financial programs were then explained, and patient interest in applying was tracked.

Outcomes/Results: Of the adult patient sample size that was contacted (n=200), 108 patients (54%) participated in the copay program, 94 patients (47%) participated in the urgent need program, 82 patients (41%) participated in the financial aid program, and 23 patients (12%) participated in the travel assistance program. Of the 200 patients, 88 patients (44%) were contacted via email with links to apply for financial and emotional assistance programs. 62 patients (31%) went to voicemail, where verbal directions were given for applying for these programs. 35 patients (18%) picked up the call and 31 discussed their willingness to learn about financial programs (89%). Finally, 15 patients (8%) were unable to be reached completely.

Evaluation/Conclusion: The LLS copay assistance program was the most popular financial aid program that patients from the Tennessee/Alabama region utilized, which helps cover medical insurance premiums, prescription medications, and treatment related copays. This reflects challenges that patients in the South face in health insurance coverage compared to the rest of the country. The copay program is an area of funding that LLS could prioritize to make a strong impact for this specific patient community. Finally, a process evaluation reveals the limitations of contacting patients through the Salesforce registry, as only 18% of patients were able to communicate their perspectives through a call. Some of the challenges in contacting patients could be due to using an unfamiliar NJ area code for calling, and calling during business hours when patients could be at work. Better outcomes may be possible through using a number with an area code from Alabama or Tennessee and focusing calls after working hours.

Title: The Importance of Providing Adequate Leadership Services in order to Enhance Program

Outreach

Name: Olugbemisola Akinsiku

Preceptors: Quadai Palmer, President

Agency: From Jersey with Love (Leading in Love)

Purpose: To improve community leaders' access to leadership training and resources in order to enhance their ability to impact their local communities and their staff.

Significance: Occupational stress is a major source of concern for American workers, and has been found to be linked to adverse health outcomes at the psychological and physiological level such as anxiety, depression, burnout, job dissatisfaction and even suicide. The pandemic was found to make work-related stress worse as it exacerbated preexisting stressors and mental health issues, which are two well-known risk factors for suicide (Gilligan, 2021). This stress, if left untreated, can lead to higher organizational costs and employee turnover, which can jeopardize the effectiveness of a leader's leadership over their employees and outreach. From Jersey with Love is working to address organizational shortcomings by providing leadership webinars, and opening up more effective channels of communication in order to better assist organizations where they are lacking in their community outreach.

Method/Approach:

The project began by identifying the top ten skills needed for effective leadership and from these skills, a "Quick Facts" search was conducted which allowed for the collection of mental health statistics regarding different spheres of leadership. Next, the organizations in the community we were interested in polling were determined. From there a survey was conducted over the course of six weeks, with 65.2% of the data collected stemming from leaders in the Non-Profit sector. Data from the surveys was then exported to a spreadsheet which reported on leadership training and mentoring resources, number of years spent in their current industry, and mental health questions regarding the needs of said leaders.

Outcomes/Results:

Of all the leaders surveyed, 73.9% reported having a mentor in their field, with 26.1% of participants reporting not ever having an industry mentor. 78.3% reported taking leadership classes, while 78.3% of leaders believed their company offered adequate training and mentoring resources. In regards to mental health, 56.5% of leaders reported questioning their own needs at that time. 56.5% of leaders reported compromising without their needs being met. When asked about how often they engage in self-care activities, 40% reported once a week, 40% reported once a day, and 20% reported rarely engaging in any self-care activities.

Evaluation/Conclusion:

More than half of the respondents surveyed mentioned interest in planning and organization policies, and support. From the data collected it was determined that self-care activities, workshops, newsletters, free training opportunities, and leadership conferences would need to be offered to help leaders maintain their personal care while also addressing the needs of the employees under their care in their organization. From Jersey with Love conducted a leadership conference on March 24th, 2023 that provided a health workshop with a physician, self-care activities, and facilitated conversation on improving leadership capabilities. From this conference it was determined that bi-annual surveys would need to be administered to continue to gauge leadership growth and engagement, as well as ensure continued support.

Title: Safety Device Assessment and Workplace Training

Name: Zainab Alhaddawi

Preceptors: Rahman Shafique - General Manager

Agency: Blue Star Contracting

Purpose: Conduct research at Blue Star Contracting in East Brunswick, New Jersey, to bring light to new safety devices into the construction industry.

Significance: The construction industry sees around 150,000 injuries on job sites annually, according to the United States Bureau of Labor Statistics. It is essential to prioritize the safety of every worker on the job. Therefore, interns at Blue Star Contracting aim to identify the best safety practices and equipment on construction sites to reduce the number of injuries and deaths in New Jersey and New York. The goal is to reduce the rate by 100% using the available resources. This project will focus on collecting feedback from current Blue Star employees and construction workers working in New Jersey and New York to be able to implement new and improved safety devices.

Method/Approach: Conducted a study on the various safety devices used in the construction industry. An anonymous survey was created using Google Forms, which was sent to current Blue Star Contracting employees, seeking their opinions regarding workplace safety. The survey aimed to identify whether additional safety measures should be introduced, and the employees' overall satisfaction with the company culture and environment. The survey was extended to other construction workers and individuals working in the construction industry and residing in New Jersey and New York through various social media platforms such as Instagram and Reddit. Another anonymous survey was sent on May 1st to the employees at Blue Star Contracting to collect suggestions regarding safety equipment and construction devices.

Outcomes/Results: The survey results from the employees at Blue Star Contracting revealed that they were satisfied with the current safety devices in use and appreciated the company's focus on safety. However, the survey results from other construction workers and individuals working in the construction industry in New Jersey and New York indicated that there is still room for improvement when it comes to safety devices on construction sites. Of the 184 respondents, 22% reported feeling unsafe on the job due to inadequate safety devices or equipment. Furthermore, the employees at Blue Star Contracting shared that some were interested in upgrading their personal protective equipment. To respond to these suggestions, some research was done to find new personal protective equipment. Several promising options were found and presented to the management team at Blue Star Contracting. As a result of this survey, the company invested in enhanced personal protective equipment.

Evaluation/Conclusion: Overall, the study demonstrated the importance of continued research and investment in new safety devices and equipment in the construction industry. By prioritizing safety, companies can create a safer workplace for their employees and reduce the number of injuries and deaths on construction sites in New Jersey and New York. Blue Star Contracting remains committed to exploring new ways to ensure its employees' safety.

Title: The Impact of Marketing Platforms in The Legal Field

Name: May Alkaisi

Preceptors: Jordan B. Rickards, Esq.

Agency: The Law Office of Jordan B. Rickards, Esq.

Purpose: Managing marketing platforms to create targeted, data-driven marketing campaigns to enhance the firm's marketing tactics, increase new client flow, and maintain client satisfaction.

Significance: Effective marketing strategies are crucial for law firms to promote services, attract and maintain clients, and establish a brand identity (Reuters, T, 2018). By leveraging platforms like Levitate and Marketing360, firms can create targeted, data-driven campaigns that optimize across multiple channels, measure effectiveness and refine strategies to improve future results. The advanced features and tools offered by these platforms are used by the Law Office of Jordan B. Rickards to enhance the firm's overall marketing tactics and deliver measurable results. With almost two decades of expertise, Jordan B. Rickards, the proprietor of The Law Office of Jordan B. Rickards, focuses on multiple domains, comprising but not restricted to: Marital and Family Law, Criminal Law, Personal Injury, and others. The scope of this project is to organize the firm's client database and reach out to past, current, and future clients using Levitate and Marketing360 as new marketing tools.

Method/Approach: Accounts with Levitate and Marketing360 were created as new data-bases to store and manage new, current, and old client cases. Client information from old, current, and new cases were entered into both platforms from a different network called PracticePanther. As Levitate was primarily focused on email marketing, client's were sent follow-up messages pertaining to their specific needs as well as targeted email campaigns written by the firm. The network also offers tools for managing contact lists and tracking email engagement metrics that were used to evaluate the rate of the platform's success with the firm's network. In combination with Levitate, Marketing360 offers a more comprehensive set of tools for managing digital marketing campaigns across multiple channels including Facebook, search engines, and display networks. Features for tracking and analyzing the performance of marketing campaigns, including data on customer behavior and conversion rates were evaluated through the statistical data.

Outcomes/Results: After the successful implementation of Levitate, the email open rate has increased to an impressive 71%, which is much higher than the industry average of only 18%. Furthermore, the monthly email campaigns sent through Levitate have an average view rate of 83% within just 7 days. In addition, with pre-written and automated Facebook posts, the firm is able to maintain a consistent and active social media presence. Similarly, the results of using Marketing360 show that: over the last 60 days, the firm saw a significant increase in its online presence and reach. The results show a total of 135,864 content impressions, 7,069 ad impressions, and 1,102 impressions through other channels.

Evaluation/Conclusion: The firm has successfully implemented targeted, data-driven marketing campaigns using Levitate and Marketing360, resulting in a significant increase in its online presence and reach. By investing in effective marketing strategies, the firm has established its brand identity, attracted potential clients, and maintained positive relationships with current and past clients. Moving forward, the firm plans to continue leveraging the advanced features and tools offered by Levitate and Marketing360 to create more targeted, data-driven marketing campaigns that deliver measurable results and enhance overall marketing tactics.

Title: Memory Matters: A Comparative Analysis of Patient Recruitment Methods for

Alzheimer's Research

Name: Rawan Aly

Preceptors: Kaylee White, Ph.D., Site Manager

Agency: Princeton Medical Institute

Purpose: To assess the efficacy of various methods of patient recruitment for Alzheimer's and memory loss study patients, including social media, community outreach, and physician referrals, and recommend the most effective ways.

Significance: Alzheimer's disease is a progressive neurodegenerative disorder that is the leading cause of dementia and currently has no cure. An estimated 6.7 million Americans aged 65 and older will live with Alzheimer's in 2023 (Alzheimer's Association, 2023). The development of effective treatments for Alzheimer's disease is therefore crucial and clinical trials play a critical role in advancing this understanding. The success of clinical trials depends on the patient recruitment number, which is a significant challenge in Alzheimer's research. Princeton Medical Institute is a clinical trial research facility that conducts assessing the efficacy of various recruitment methods

Method/Approach: The effectiveness of recruitment rates for Alzheimer's/Memory Loss patients was reviewed based on 73 total pre-screenings conducted from January to April 2023 to analyze the effectiveness of marketing methods used for patient recruitment. Of these pre-screenings, 19 were conducted in January, 22 in February, 15 in March, and 17 in April. Various recruitment methods were used during the memory pre-screenings, such as physician referrals, social media platforms, through word of mouth, and referral platforms. The recruitment methods for each pre-screening were collected and analyzed to determine the most effective strategy by inputting them into Excel. The clinical research coordinators will be able to use this information for a developed recruitment plan, gathered from analysis, to increase patient recruitment numbers. Princeton Medical Institute will implement the plan from May onwards to ensure success in attracting patients.

Outcomes/Results: Results showed that out of the total cohort of 73 patients, physician referrals accounted for forty-two (58%) of the memory screening patients. Social media platforms, primarily Facebook and Instagram, contributed to twenty-one patients (29%). In addition, word of mouth brought in six patients (8%), and referral platforms such as Longboat and Splash brought in 4 patients (5%). Based on these results, doctor referrals, followed by social media platforms, appear to be the most effective for recruiting memory loss patients in clinical trials. In a sample size of 73 patients at Princeton Medical Institute, the evaluation of recruitment methods for Alzheimer's/Memory Loss patients showed that physician referrals accounted for more than half of patients, accounting for 58% (n=42). The second most effective strategy was social media, reporting recruitment values of 29% (n=21).

Evaluation/Conclusion: Continued partnership with doctor's offices to increase referrals will be emphasized to improve recruitment further. Strategies towards increasing doctor referrals for Princeton Medical Institute include further developing the relationships existing with physicians. This would be done by informing them about PMI's programs and events to help them encourage patients to visit. Increasing and emphasizing the distribution of the newsletters to healthcare offices will help highlight the benefits of our ongoing studies. The newsletters and packets will serve as a compelling reminder to physicians to refer their patients to the facility for trial enrollment.

Title: Impact of COVID-19 on Food Security Among Hispanic/Latino Essential & Non-

Essential Workers

Name: Tajrian Amad

Preceptors: Sarah H. Malarkey, MPH., Sebastian Acevedo, B.S., and Pamela Valera, Ph.D, MSW

Agency: Community Health Justice Lab

Purpose: To explore if the COVID-19 pandemic affected food security status among Latino/Hispanic essential and non-essential workers in the United States (U.S.).

Significance: Food insecurity, defined as limited or irregular access to sufficient food for every person in a household to maintain a healthy life, affects over 34 million people in the United States, with the COVID-19 pandemic exacerbating the issue among lower-income families and communities of color (The United States Department of Agriculture, 2021). Historically, food insecurity has been prevalent among Hispanic/Latino populations due to various social factors such as unemployment, housing instability, limited access to healthcare, immigration status, and language barriers (Rodriguez et al., 2021). The COVID-19 pandemic's economic fallout has further impacted Hispanics/Latinos, who are overrepresented in essential industries and more vulnerable to experiencing food insecurity. Therefore, it is necessary to investigate food security status and associated factors to address the nutritional needs of Hispanic/Latino essential workers and prepare for future public health emergencies.

Methods: This study is a secondary data analysis of a cross-sectional survey conducted in the U.S. from June 2021 to April 2022. The survey aimed to investigate the impact of COVID-19 on Hispanic/Latino health and was administered to self-identified Hispanic/Latinos aged 18 years or older who could read English and/or Spanish. The survey was available in both languages and took approximately 45 minutes to complete, and participants were asked if they were essential workers during the COVID-19 pandemic. Bivariate analyses were conducted between essential worker status and sociodemographic characteristics. Additionally, bivariate analyses and chi-square tests were performed to investigate the association between essential worker status, food insecurity, and change in food security status during the COVID-19 pandemic. Frequencies and proportions were reported for all variables. All reported p-values are two-sided; p <0.05 was considered statistically significant. SPSS version 29 was used to perform data analysis.

Results: Of the 869 respondents, 393 (45%) are essential workers, and 476 (55%) are non-essential workers. Majority of the essential workers identified as female (60%). About 22% of essential workers reported a household income of less than \$20,000, whereas 19% of non-essential workers had an income above \$100,000. About half (54.2%) of essential workers were experiencing food insecurity. There was a significant difference between essential worker status and food insecurity (p < 0.001). Over one-third (35%) of essential and 22% of non-essential workers reported increased food insecurity due to the COVID-19 pandemic. Furthermore, there was a significant difference in experiencing a change in food security status during the pandemic between essential and non-essential workers (p < 0.001).

Evaluation/Conclusion: Given the high prevalence of food insecurity among Hispanic/Latino essential workers, public health must consider the increased risk of exposure to future pandemics and limited food access to fresh fruits and vegetables among low-wage workers, who already face pandemic-related challenges, specifically emphasizing access to food.

Title: Community Health Education Initiatives Performance Assessment

Name: Natalia Amoroso

Preceptors: Abigail Thompson

Agency: RWJ Barnabas Monmouth Medical Center

Purpose: To assess community health education initiatives and determine if participants are learning new knowledge or skills by attending the programs offered.

Significance: Every three years, Monmouth Medical Center conducts a Community Health Needs Assessment to determine the most important needs of the community, and uses that data to create and implement programs and initiatives that will be most beneficial to the populations they are serving. In their Community Health Needs Assessment, Monmouth Medical Center evaluates the Social Determinants of Health prevalent in their count. Social Determinants of Health are economic and social conditions that influence individual and group differences in health status. The LiveWell Center serves to create a healthier community through education programs that are offered for free. Their goal is to increase general health education and literacy, and to promote better health practices within the community. In order to assess the success of the programs offered at the LiveWell Center, surveys will be used to collect data for analysis to support improvements to programs to better engage community members and increase health and well-being for individuals in Monmouth Medical Center's service area. It is important to the LiveWell Center that data is collected to evaluate the effectiveness of the programs being offered to the community.

Method/Approach: Data was collected from community participants through surveys. The surveys were used to assess if community participants had gained knowledge or learned a new skill as a result of the health program. After researching best survey practices for public health initiatives, specific survey questions were created based on the type of programs offered at the LiveWell Center. A total of five different surveys were created and implemented at the LiveWell Center. Survey results were then manually entered into Google Forms to support data analysis and data visualizations.

Outcomes/Results: After surveying various community members across a number of different programs, it can be concluded that community participants are learning new knowledge and skills after attending a program at the LiveWell Center. For the generic health programs, 35 community participants were surveyed and 100% stated that they learned something new as a result of attending a program. Additionally, 28 out of 35 participants stated that they were going to make a lifestyle change as a result of attending the program. 60% of participants said they are planning to increase movement daily, 39% said they are going to get more sleep and 35% said they were going to drink more water. In the adult nutrition program survey responses, 90% of participants stated that they learned something new. 71% stated that they were going to make changes to their current nutrition habits by eating more fruits and vegetables, including more whole grains in their diet, drinking more water, and eating healthier snacks.

Evaluation/Conclusion: Based on the survey data, the programs at the LiveWell Center are effective, and individuals are learning new knowledge and skills. It is important to continue to collect data to evaluate the programs and receive feedback for how to make the program content better, more engaging, and continue to educate individuals to make healthy lifestyle changes to better their overall health, as well as the overall health of the community.

Title: The Effects of Mathematics Tutoring on Students at the Skyway Family Success Center

Name: Raymar Anciado

Preceptors: Lissette Lewis

Agency: Prevention Links' Skyway Family Success Center- Jersey City, New Jersey

Purpose: To evaluate how tutoring and assistance with mathematics homework will help children's understanding of mathematical concepts taught in school.

Significance: The subject that students from all across the world, in grades K-8 struggle with the most, is mathematics. Community members of the Skyway Family Success Center have complained about the lack of help they have when it comes to their child's need for assistance with mathematics. Students who live in Jersey City will have the opportunity to come to the Skyway Family Success Center for a free after-school tutoring program every Monday, called Monday Mathematics. The program is geared towards helping children in grades K-8 with all mathematical concepts that they learn in school, through assistance with homework, help with practice problems, or short teaching lessons. Tutoring will be given after school in an attempt to reach as many children as possible. Giving students the opportunity to have a quality education and excel in mathematics, through a personalized one-on-one tutoring session that is of no cost to their family.

Method/Approach: An informational flier was made to inform and attract parents to bring their children in for help with mathematics homework. Participants of the program expressed their current standing with mathematics and what they would like to improve on and get a better understanding of. From then on there were sessions of tutoring that took place where the particular needs of that child were addressed and their understanding of that concept was enhanced. Students were asked to complete their mathematics homework alongside a tutor, and were given assistance when needed. On days they do not have mathematics homework they practiced and review their current math topics by going over past assignments or school work. Students also had the chance to learn new concepts if they had no assignments and are efficient when practicing current/old concepts. The program took place every Monday of the month and on the last Monday, at the end of the class, students were asked to gauge whether or not the tutoring sessions were effective in helping them learn and understand mathematics concepts better.

Outcomes/Results: The program started with 4 participants from grades K-4, a baseline level of where they stood with their math comprehension was established. The children were then helped with mathematics homework if they had been assigned some for that day or given problems to solve for practice and prep for their tests. On average, students had a better understanding by the end of their tutoring sessions, math scores improved on an average of 10%. Students were also able to solve problems almost twice as fast, and more confidently. Days where students had no mathematics homework and were proficient in practicing concepts they recently learned, they were taught new concepts that they would be learning next. This would give students an advantage over their classmates by being exposed to these concepts before being taught in their classrooms.

Evaluation/Conclusion: Throughout the duration of the program, attendance rose from 4 to 10 students. All students were given the tutoring they needed to succeed in mathematics, improving math scores, confidence in math skills, and understanding of concepts. This aid should improve the grades of children who attend the tutoring sessions, helping them excel in mathematics and eventually other courses.

Title: Exploring Maternal Mortality in South Asian Countries

Name: Sobhana Archakam

Preceptors: Aakanksha Deoli, MHA

Agency: Edward J. Bloustein School of Planning and Public Policy

Purpose: To investigate maternal health interventions and compare maternal health outcomes in Bangladesh, Pakistan, and India.

Significance: The maternal mortality in developed countries, such as the United States in 2021 was 32.9 deaths per 100,000 live births (CDC, 2021). On the other hand, the maternal mortality in developing countries in South Asia, specifically Bangladesh and Pakistan, are 165 per 100,000 live births (SDG, Bangladesh 2019) and 186 per 100,000 live births (Knoema, 2022), respectively. "Almost 95% of all maternal deaths occurred in low and lower middle-income countries in 2020, and most could have been prevented" (WHO, 2023). This project will complete a comprehensive literature review to explore maternal health outcomes and interventions in Pakistan, Bangladesh, and India.

Method/Approach: 50 peer reviewed journal articles were researched and reviewed on Google Scholar using keywords like maternal mortality, maternal mortality interventions, maternal health initiatives, Pakistan healthcare system, maternal health outcomes, sexual health awareness, and reproductive health education. Primarily, key demographic variables like population size, income level, unemployment rate, socioeconomic status, and education level for all three countries were identified and compared. To narrow the scope of this research, five main themes influencing maternal health outcomes were investigated for all three countries: geography, education, misinformation, cultural and societal beliefs, and the impact of community health services. After reviewing the literature and the comparative data, India was identified as a best practice country with similar maternal health challenges but improved outcomes.

Outcomes/Results: In Pakistan, 1 in 20 women with emergency obstetric complications reaches a facility for treatment. Pregnant mothers from urban areas utilized antenatal care healthcare services 2x more than pregnant mothers in rural areas and maternal mortality was found to be higher in rural areas. Furthermore, only 46% of women knew about the period of fertility, and it was found that pregnant mothers depended on male guardians which prevented them from receiving timely emergency obstetric care. In Bangladesh, the maternal mortality in rural areas is 1.2x that of urban areas. Moreover, only 14.5% of the poorest mothers sought emergency obstetric care compared to 46.7% of the rich moms. When looking at India, high maternal mortality rates were predominantly due to discrimination based on caste, religion and a lack of female autonomy in healthcare decisions. To elaborate, it was found that 50% to 80% of maternal deaths occurred among those of lower castes. About 34% of women in India reported not delivering in health institutions because they did not think it necessary, while an additional 6.5% did not due to a lack of knowledge.

Evaluation/Conclusion: High maternal mortality rates in Bangladesh and Pakistan were primarily due to a lack of skilled healthcare staff, inaccessibility to adequate healthcare services in poor, rural areas due to low socioeconomic status and lack of awareness. A successful maternal health intervention in Tamil Nadu, India was chosen as a best practice which involved government deployment of well-trained healthcare staff to rural areas; proper, timely referral and access to adequate transportation to emergency obstetric care; sexual health education; and the creation of a surveillance system to determine the cause of problems in the healthcare system that led to maternal mortality. There is a strong possibility that Pakistan and Bangladesh can improve their maternal health outcomes through similar interventions.

Title: Exploring Maternal Mortality in South Asian Countries

Name: Sobhana Archakam

Preceptors: Aakanksha Deoli, MHA

Agency: Edward J. Bloustein School of Planning and Public Policy

Purpose: To investigate maternal health interventions and compare maternal health outcomes in Bangladesh, Pakistan, and India.

Significance: The maternal mortality in developed countries, such as the United States in 2021 was 32.9 deaths per 100,000 live births (CDC, 2021). On the other hand, the maternal mortality in developing countries in South Asia, specifically Bangladesh and Pakistan, are 165 per 100,000 live births (SDG, Bangladesh 2019) and 186 per 100,000 live births (Knoema, 2022), respectively. "Almost 95% of all maternal deaths occurred in low and lower middle-income countries in 2020, and most could have been prevented" (WHO, 2023). This project will complete a comprehensive literature review to explore maternal health outcomes and interventions in Pakistan, Bangladesh, and India.

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Evaluation/Conclusion: High maternal mortality rates in Bangladesh and Pakistan were primarily due to a lack of skilled healthcare staff, inaccessibility to adequate healthcare services in poor, rural areas due to low socioeconomic status and lack of awareness. A successful maternal health intervention in Tamil Nadu, India was chosen as a best practice which involved government deployment of well-trained healthcare staff to rural areas; proper, timely referral and access to adequate transportation to emergency obstetric care; sexual health education; and the creation of a surveillance system to determine the cause of

problems in the healthcare system that led to maternal mortality. There is a strong possibility that Pakistan and Bangladesh can improve their maternal health outcomes through similar interventions.

Title: A Study Investigating Novel Highly Selective Sigma 1 Receptor Antagonists in reducing

Binge-like Eating

Name: Abanoub Jorge Armanious

Preceptors: Morgan H. James, Ph.D., Assistant Professor, William J. Welsh, Ph.D., Norman H.

Edelman Professor, Youyi Peng, Ph.D., Bioinformatics Specialist

Agency: Department of Psychiatry, Robert Wood Johnson Medical School

Purpose: To analyze whether the sigma-1 receptor (S1R) is a highly promising target in novel therapeutics to treat binge eating disorder (BED).

Significance: The sigma receptors were initially identified in 1976 as an opioid receptor subtype and later as a phencyclidine binding receptor. Now it is widely recognized that sigma receptors comprise a unique family distinct from opioid and phencyclidine receptors, and are classified into two subtypes: sigma 1 receptor (S1R) and sigma 2 receptor (S2R). The development of S1R antagonists for clinical use has remained elusive. X-ray crystallography recently revealed a previously unknown ligand-binding pocket of antagonists of the S1R, which allowed us to design and validate a lead compound (PW507) that binds S1R at nanomolar concentrations, has excellent blood-brain permeability, and acceptable oral bioavailability.

Method/Approach: The research team tested the efficacy of PW507 in reducing binge-like eating and motivated response for palatable food in rats. Female Long Evans rats (n=16) were maintained on a high fat diet (45% fat, ad libitum) for 8w before being given intermittent access (30 min, twice/week, 4w) to sweetened fat (vegetable shortening/10% sucrose). Rats were then trained to lever press for sucrose pellets on a low (fixed ratio [FR] 1) or high effort (FR5) schedule of reinforcement. Rats were treated with PW507 (0, 5, 10, 15, 20mg/kg; i.p.) 15 mins prior to binge and operant test sessions using a within-subjects design. The team also tested the effects of PW507 on locomotor activity in an open field apparatus.

Outcomes/Results: The S1R is highly expressed in both central and peripheral nervous systems, and has been identified as a ligand-gated molecular chaperone protein within the endoplasmic reticulum (ER) and plasma membranes. PW507 dose dependently decreased binge-like intake of sweetened fat and high effort (FR5) responding for sucrose pellets. At the lowest effective dose (10mg/kg), PW507 had no effect on low effort (FR1) responding for sucrose or general locomotor activity.

Evaluation/Conclusion: Antagonists selective for the S1R have been shown to elicit beneficial effects in neuropathic pain and the mitigation of drug abuse, including alcohol, cocaine, and methamphetamine. On the other hand, S1R agonists have been reported to play important roles in neuropsychiatric and neurodegenerative disorders including depression, amyotrophic lateral sclerosis, epilepsy, and Alzheimer's disease. Therefore there is an urgent need to develop novel compounds that bind to the sigma receptors (S1R and/or S2R). Such compounds can be used to treat certain diseases that are associated with S1R and/or S2R. PW507 addresses this unmet need.

Title: Nu-Day Program Outreach

Name: Gabrielle Atchison

Preceptors: Frank Greenagel

Agency: Prevention Links

Purpose: To create marketing materials and conduct outreach to encourage children, ages 13-17 in NJ, to enroll and participate in the Nu-Day Program

Significance: In 2019, it was stated that 4 in 10 high school students in the United States had reported using marijuana at some point in their life (CDC 2021). Given that Prevention Links is only located in the State of New Jersey, it is important to know that 26% of high school students in the state were given, offered, or sold illegal drugs when on school grounds (New Jersey Department of Education 2019). The best way to combat the drug epidemic in the U.S. is through early intervention (Substance Abuse and Mental Health Services Administration 2016). Free and easily accessible programs here in New Jersey, such as Prevention Links, will help to lower the number of high school students who continue to use throughout their lifetime by giving them the necessary resources and treatment that they need. This project will contribute to the solution by spreading awareness and educating people about the free program at Prevention Links called NU-DAY in hopes of increasing the number of participants that register for the program. Specifically, the program is designed for high school students who are 13-17 years old and experience substance use disorder themselves or within their families.

Method/Approach: A comprehensive Excel sheet of 15 high schools in Union County was created to ensure the majority of 13-17 year olds would be reached. Information included consisted of items such as school name, district, point of contact, their title, and contact information. An email template was then crafted, personalized, and sent to each point of contact. A total of 3 marketing/ outreach materials were created and ready for distribution, along with the pre-existing business cards and brochures. Upon receiving a reply, they were prompted with dates and times to set up a phone call to provide additional information about the NU-DAY program. Concluding the meeting, the school point of contact was issued the outreach materials. Over-time the NU-DAY program will keep track of participants and take note of where new participants are being referred from.

Outcomes/Results: Of the 15 high schools in Union County that were contacted, 2 responded. One respondent requested a zoom meeting to discuss the NU-DAY program. Following that meeting, the point of contact was sent 4 outreach materials that are to be displayed in the counseling office. The second school representative responded with an invitation for NU-DAY program representatives to attend an event held by their Mental Health Awareness Club. At the event, 5 sets of outreach/ marketing materials were displayed on the table, totaling 150 pieces. Of the 150 pieces of marketing materials, a total of 87 were handed out to parents, faculty members, and students at the Mental Health Awareness Club event. At this time, the NU-DAY program has not acquired any new participants from this outreach.

Evaluation/Conclusion: The project will be evaluated based on the number of responses received back from the schools' points of contact as well as the number of participants gained in the NU-DAY program from these high schools. Ongoing collection of participation referrals will take place until the cessation of the NU-DAY program as well as the continuation of reaching out to organizations that have access to adolescents ages 13-17 who are eligible for the NU-DAY program.

Title: Outcomes of Community Outreach Event of the Rutgers Youth Enjoy Science (RUYES)

Program

Name: Harleen Badwal

Preceptors: Dr. Sunita Chaudhary, Associate Professor of Surgery, Director of Research Education

and Casandra Gabriele and Rosa Messina, Program Coordinators

Agency: Rutgers Cancer Institute of New Jersey (CINJ)

Purpose: The goal of the RUYES program is to encourage youth from economically and ethnically disadvantaged backgrounds to pursue STEM, specifically biomedical research and research-related careers. In order to help students succeed this program provides research, professional development and community outreach experience. RUYES organized and hosted a field trip for Woodbridge High School (WHS) students at the Rutgers Cancer Institute of New Jersey and conducted evaluations to determine the effectiveness of community outreach.

Significance: The RUYES program provides opportunities to students to engage in mentored cancer research, professional development and outreach to increase the value of STEM education to address health disparities. The agenda of the field trip focused on raising awareness about cancer, research, and diverse healthcare careers. Evaluations were conducted to measure how effective the field trip was in expanding the knowledge base of students with the goal of minimizing educational inequities.

Method/Approach: RUYES coordinated with WHS teachers to set a date for the field trip. To expose students to new research RUYES reached out to two guest speakers from Rutgers School of Public Health and Robert Wood Johnson Medical School to present their research, and a tour was organized at the Cancer Institute to help students understand the process and essence of research in healthcare. Folders were given to each student consisting of handouts about cancer research and diverse career opportunities in medicine to be discussed in detail as a group. A survey was filled out by students to rate the amount of information they learned in the categories of factors that influence health, biology and genetics of cancer, and exploring a career in science/health-related topics and the results were analyzed.

Outcomes/Results: Over the course of the day different activities were conducted. Students went on a tour of the Cancer Institute, visiting the medical research library, the treatment areas, and discussion with postdocs in research laboratories. A Behavioral Scientist presented her research on the measures of biological stress and a Molecular Biologist and Biochemist discussed the targets in the treatment of T-cell Leukemia. Students then worked in groups to carry out an experiment on vaping chemicals using a cell health test kit yielding results supporting vaping flavors being harmful. The survey was completed by all 32 WHS students who attended the trip. Each category was rated on a scale of 1-5. Before the trip a majority of students rated their knowledge in each category a 3 out of 5 but afterwards the majority of students rated each as a 5 out of 5.

Evaluation/Conclusion: The aim of the survey was to assess how effective the outreach had been over the course of the trip. With the help of the planned activities throughout the day, students were able to increase their knowledge and understanding of healthcare and the importance of research. Students enjoyed the hands-on lab activity and wanted more interactive activities. To continue to minimize educational inequities, having a more ethnically diverse group of speakers and researchers would improve the outcome. Ultimately, this trip allowed students to network while strengthening their knowledge, hence conducting a session about tips to successfully network would also be beneficial in future planning.

Title: Leadership Support Liaison

Name: Bryan Balarezo

Preceptors: Saskia Leo Cipriani, Carlos Fernandez

Agency: Center for Latino Arts and Culture

Purpose: To evaluate the significance of and improve the mental well-being and leadership among student leaders in the Rutgers Latine community.

Significance: Rutgers University-New Brunswick enrolls 8,000-10,000 freshmen annually, but mental health issues among college students have increased. Over 60% of US college students met the criteria for at least one mental health problem during the 2020-2021 academic year, and almost three-quarters experienced moderate or severe psychological distress, as reported by the Journal of Affective Disorders and the National College Health Association respectively. Despite some mental health resources being available, many students do not seek help due to a lack of knowledge or fear. Cultural centers like the Center for Latino Arts and Culture play a crucial role in creating a supportive and welcoming environment for students to understand what it means to be Latine in the United States. The Center works towards enhancing Latine student recruitment, retention, and graduation rates while promoting leadership and professional skills. Raising awareness about mental health resources, and advocating for student well-being.

Method/Approach: The project's target was to increase awareness of the resources available at the Center for leaders within the Rutgers Latine community. We used two approaches: hosting weekly leadership advising sessions for current leaders and students, and tabling at various Rutgers events to inform incoming freshmen about the Center's mission and services. During the advising sessions, we surveyed students about their awareness of faculty/staff and resources, emotional state, and community inclusion. For current leaders, we investigated their knowledge of club leadership processes that they must accomplish before the end of the semester. Furthermore, subjects such as transition from old to new executive boards. The tabling aimed to provide information on where to go for assistance with personal or professional issues. These approaches ensured that Latine students had access to the support they needed.

Outcomes/Results: The project provided valuable guidance and assistance to student leaders in various areas, including learning personal and technical aspects of leadership such as emotional intelligence. Students became more knowledgeable about where to seek help when facing certain issues with their organization. As well as info sessions on mental health services for Latine students were established. The work contributed to a more supportive and successful environment for Latine students at Rutgers.

Evaluation/Conclusion: Working with the CLAC was a positive experience that supported its mission of promoting inclusivity and representation for the Latine community. The project aimed to improve this objective by offering leadership resources and mental health support, with a particular emphasis on attracting students seeking or currently holding leadership positions. The overall experience was extremely valuable and skills will definitely be transferable to future endeavors and postions.

Title: Promotion of Cervical Cancer Screenings

Name: Mary Barsoum

Preceptors: Direct Supervisor: Emma Izzo, PA-C

Project Managers: Marina Khalil and Gehan Ibrahim, MD

Agency: Women's Physician LLC

Purpose: To collaborate with medical providers and patients to schedule cervical cancer screenings and implement social media marketing into the practice's business model.

Significance: Cancer is the second leading cause of death for women in the United States, with about 13,000 new cases of cervical cancer annually and about 4,000 deaths annually (American Cancer Society, 2023). Early detection of cervical cancer is critical in reducing the mortality rates, as the current 5-year survival rate is 67% (American Cancer Society, 2023). Current screening recommendations for Pap smears or HPV tests are every three to five years for the average woman (American College of Obstetricians and Gynecologists, 2022). To combat the devastating mortality rates of cervical cancer, medical interventions, and social media promotion of cancer screenings can increase the likelihood of early diagnosis and save lives (Noman et al., 2020; Plackett et al., 2020).

Method/Approach: The healthcare providers retrospectively review Pap smear results for female patients aged 21 to 65 over three months. Manually recording and analyzing the results of the 310 women results in categorizing the findings into four groups: 1) normal results, 2) abnormal results that further subdivide as (a) Low-grade Squamous Intraepithelial Lesion (LSIL) and (b) High-grade Squamous Intraepithelial Lesion (HSIL), 3) Atypical Squamous Cells of Undetermined Significance (ASC-US), and 4) results that were inconclusive or deemed unsatisfactory.

Outcomes/Results: Of the sample size cohort (n=310), 233 women (75%) had a normal Pap smear, 25 women (8%) had Low-grade Squamous Intraepithelial Lesion (LSIL), 12 women (3.9%) had High-grade Squamous Intraepithelial Lesion (HSIL), 37 women (11.9%) had Atypical Squamous Cells of Undetermined Significance (ASC-US), and 3 women (1.2%) had inconclusive or unsatisfactory results.

Evaluation/Conclusion: Based on the data obtained from the sample size of 310 women who underwent Pap smear testing, the results conclude that a majority of the women had normal results, with 75% of the sample having normal Pap smear results. However, a significant proportion of women had abnormal results, with 8% having LSIL and 3.9% having HSIL. Additionally, 11.9% of the sample had ASC-US results, indicating the presence of atypical squamous cells of undetermined significance. While the number of women with inconclusive or unsatisfactory results was small (1.2%), it is still an area of concern and may indicate the need for further testing or follow-up. In light of these findings, it is vital to emphasize the critical role of Pap smear screening in the early detection of cervical cancer. The results of this study highlight the need for regular Pap smear screening, which can be promoted through social media platforms to reach a wider audience. Overall, regular Pap smear screening and effective promotion through social media can play a crucial role in reducing cervical cancer incidence and mortality rates. It is essential for healthcare professionals and public health practitioners to continue monitoring trends in cervical cancer screenings, advocating for regular screenings, and implementing policies to increase access to screening, especially in underserved communities.

(Citations)

Title: Modeling Informatics Data to Track Maternal Risk and Care Quality

Name: Farah Beche

Preceptors: Alex Schramm, Director of Research

Shuang Xu, Lead Biostatistician/ Senior Data Analyst

Alexander Friedman, Columbia University's Maternal-Fetal Medicine Specialist

Agency: Saint Peter's University Hospital Department of Research

Purpose: To determine safety practices for high- risk pregnancies and reduce risk for adverse maternal outcomes.

Significance: Non-Hispanic Black women had a maternal mortality rate of 55.3 deaths per 100,000 live births in 2020, which was 2.9 times higher than the rate for non-Hispanic White women (19.1) (CDC, 2022). It is unknown to what extent suggested safety practices for high-risk clinical experiences are implemented and how much they lower the risk for unfavorable maternal outcomes, considering that maternal morbidity and mortality have increased, setting the mortality rate of New Jersey 16% higher than the US average (GIWPS, 2021). To detect patients at risk, following treatment and management for sizable populations, data generated from the electronic health record (EHR) will be examined. This project's main hypothesis is that EHR data may accurately pinpoint clinical variables linked to errors to intervene in cases of maternal crises such as hypertension and sepsis. A study consortium will examine the EHR data from 8 hospitals to help build clinical trials and treatments.

Method/Approach: For this study, the EHR data from about 50,000 delivery hospitalizations involving women between the ages of 16 and 55 from Saint Peter's University Hospital from 2016 and 2022 were analyzed. The deliveries were identified using their unique ICD-9/10 codes when each patient's records are matched with a medical record number. The existing data was de-identified from our hospital's records between 2016 and 2022 using ICD-9/10 codes in accordance with NIH standards. The data was then sorted by common demographic factors including insurance, age, race/ethnicity, location, insurance, language, education, and more importantly for this project, gestational and pre-existing health conditions. Given that gestational conditions were present in more than 70% of pregnancies, it was necessary to devote the remainder of the internship to monitoring these rates

Outcomes/Results: Data for about 50,000 delivery hospitalizations was converted to an Excel spreadsheet. Of the sample size, 607 had depression, 5191 had diabetes, 3109 had hypertension, 428 had mental illness, and 3228 had obesity. Over six years, rates of depression decreased by 28.5% with a rise from 2021 to 2022, rates of diabetes increased by 14.2% with a rise from 2016 to 2018, rates of hypertension increased by 26.6% with a dramatic rise from 2019 to 2020, rates of mental illness decreased by 73.3%, and rates of obesity increased by 77.3% with a rise from 2016 to 2018.

Evaluation/Conclusion: Maternal risk has been linked to adverse pregnancy outcomes, including diabetes, obesity, hypertension, depression, and mental disease. The results of the data analysis made it apparent that diabetes was the most common condition in expecting mothers. Pregnant women with obesity and diabetes should be the focus of future research and prevention strategies. Ongoing monitoring of pregnancies should be implemented in order to produce risk stratification for unfavorable outcomes. This will help develop a system that can estimate patient risk and provider reactions for suspected problems.

Abstract Citations

Title: Privacy issues in preserving new technological EHR systems

Name: Quincy Benbow

Purpose: To reduce the growing concerns of security, privacy and confidentiality within implementing Electronic Health Records, in the attempt to improve patient health.

Significance: Annually, millions of people are targeted for their personal health information and the number of patients affected grows every year. In fact, in the past year alone there were 11 reported healthcare data breaches of more than 1 million records. Analysts concluded that the majority of those breaches were avoidable if better security measures were taken. To ensure patient information is protected, more and stronger security measures must be set into place. This will inevitably lead to a savings of millions of dollars annually in reducing the cost of healthcare breaches and improving patient trust in healthcare facilities.

Method/Approach: Ever since the major data breaches in 2015 and recently in 2022, administrators have looked for ways to lower the risk of data breaches. To do this, most facilities began performing regular IT risk assessments, which has allowed each facility to neutralize some ransomware attacks and unsecured patient information. Risk IT assessments can be used as a self-audit to identify hazards and evaluate all possible solutions to the risk. The next step is to update the security systems infrastructure to maintain secure servers. Increasing firewall protection and malware detection services will be essential to protecting PHI. Cleaning up user devices with PHI will reduce hacking and potential patient data loss. A virtual user system cleanup on a regular basis will not only make computers work more efficiently but will lower the chance of information being spread and ensure data is both correct and usable at all times. Most health facilities should also prioritize, weekly or at least bi-weekly audits to monitor and alert facilities of potential inefficiencies. Lastly, protecting all medical devices by ensuring all of the data is encrypted will be a pivotal tool used to increase the security of patient health information.

Outcomes/Results: From the approaches used within the scholarly articles, it has been proven that major reductions in hacking and breaches have been created based on these methods and strategies. In fact, ever since companies have been placing emphasis on increasing privacy and security, the number of breached records has decreased. The HIPAA journal referenced the number of breached records decreasing in January to 1,064,195 healthcare records being exposed or impermissibly disclosed. The current 12-month average is 4,209,121 breached records, which is substantially lower. With more efficient ways to maintain privacy, there becomes an increased possibility that data will stay secured.

Evaluation/Conclusion: Allowing for better cybersecurity methods and regular risk assessments will inevitably allow for better patient health outcomes and trust. To maintain patient health information, steps need to be taken to reduce inefficiencies disturbing the peace of many patients. Investing in stronger cybersecurity systems and risk consultations have been linked to the reduction of overspending on fines from data breaches. It has also reduced hackers' attempts in stealing sensitive information. If done correctly, there should be a decline in companies who have chosen to improve their data security. Analyzing the month to month healthcare data breach report from the HIPAA journal will allow the findings to be identified.

Title: Review and Data Analysis of Clinical Trials IRB

Name: Adam Benglas Kaufman

Preceptors: Alexander Schramm

Agency: Saint Peter's University Hospital

Purpose: To review the IRB applications for Clinical trials to ensure that appropriate steps are taken to protect the rights, safety, and well-being of human subjects that participate in research.

Significance: Human rights abuses in research have been a long ethical problem throughout history (Constantin, 2018). For example, the Tuskegee Syphilis Study and the Nazi war crimes, have emphasized the need for the Institutional Review Board (IRB) to ensure that research studies involving human subjects are conducted ethically to protect the participants. The IRB's primary responsibility is to review and approve research studies involving human subjects to ensure that they are regulated. The IRB is important in Saint Peter's specifically due to the increased volume of clinical trials being done at the hospital in recent years. The IRB also helps to maintain public trust in scientific research and the hospital staff by ensuring that research studies involving human subjects are conducted with the highest ethical standards, and the hospital can be trusted. This project focuses on the IRB process, IRB importance, and future actions needed to ensure top quality healthcare at Saint Peter's University Hospital.

Method/Approach: IRB applications for clinical trials at Saint Peter's were thoroughly reviewed. In addition, data were collected regarding informed consent, recruiting process, grants and funds. The findings and the data were presented and discussed at the meetings with the IRB Committee Board. Detailed feedback and comments seeking clarification were then shared with the respective departments that filed/ submitted the IRB application. The last few weeks were dedicated to testing the new study application portal which serves as a user friendly guide for doctors to submit their studies for IRB review. Any glitches or technical issues were reported to the IT department at the hospital.

Outcomes/Results: A total of 11 IRB applications involving human subjects were reviewed. The IRB committee approved nine of the applications. One study was flagged due to a potential bias relating to funding. After the review and discussion, the IRB committee shared the reasons for flagging and explained the concerns. As a result, the team/ department revised their IRB and submitted an improved version that was later on reviewed and verified as a valid study. In addition, another study had some concerns regarding its recruiting process due to the language barrier of the participants. The IRB committee ensured that the subjects were fully informed about the study procedure and did not sign up for financial relief purposes only. The IRB committee approved the two flagged studies a week after validating all inconsistencies.

Evaluation/Conclusion: The IRB is imperative to every hospital that performs research studies. The project was important since certain studies needed different revisions to their protocols and were fixed and approved for continued review. The supervision of the IRB proved that it serves as a powerful tool when managing human research studies. By obtaining approval from the IRB, Saint Peter's can assure participants that their rights and welfare will be protected throughout the study. There is a need to create an online training course which provides the doctors with information about the importance of ethics in research and the IRB process when reviewing the studies. More training will lead to better understanding of ethical concepts, less resources wasted reviewing the studies back for change, and better patient care.

Title: Mental Illness in Elderly Incarcerated Women: Diagnosis and Interventions

Name: Serina Bernardo

Preceptors: Dr. Gloria Bachmann

Agency: Women's Health Institute at RWJ

Purpose: To create a literature review about mental illness in elderly incarcerated women and discuss possible interventions from the New Jersey Reentry Program.

Significance: Elderly incarcerated women are a vulnerable population in correctional health facilities with unique health concerns. Their conditions are often overlooked and as a result, their mental health and quality of life suffers. Research has described that elderly incarcerated women experience significantly high rates of anxiety, depression, and suicide ideation largely due to the stress of the prison environment (Gundy & James, 2022). Additionally, security standards are often more severe than necessary and recreational activities do not take into account this population. One of the missions of the Women's Health Institute is to create positive change in the women's health field through research and advocacy. This project will study and address the mental health concerns of elderly incarcerated women, as well as support recommendations to better accommodate this population.

Method/Approach: Research was conducted by obtaining peer-reviewed and scholarly articles using Google Scholar, PubMed, Rutgers Library, and other related health sources such as the CDC. The key words used in the search were "elderly incarcerated women", "mental illness", "female prisoners", and other related terms. Twenty journal articles were selected that discussed pre-existing mental health concerns in elderly incarcerated women, contributing factors that worsen mental health conditions, and suggestions for interventions.

Outcomes/Results: The literature review revealed significant concerns about the mental health of elderly incarcerated women. All of the articles discussed how mental health issues are highly prevalent in this population and that correctional facilities are currently unprepared to meet their needs. Nine of the articles that were selected emphasized how correctional facilities are unfit to accommodate both the physical and emotional needs of this population, highlighting that prison often exacerbates existing mental health issues such as depression, anxiety, PTSD, and suicide ideation. Seven of the articles recommended interventions such as recreational programs aimed at elderly incarcerated women, trauma-informed therapy, and improved healthcare services that better support age-related health concerns. Additionally, several articles recommended interventions like community programs to help this population re-enter society after serving their sentence.

Evaluation/Conclusion: Elderly incarcerated women require special accommodations to support their mental health and age-related concerns. The overall male-centered correctional health system contributes to their inadequate care. Besides changes related to the correctional facilities healthcare system, some other interventions include more extensive training of prison personnel to interact with this population. As the Women's Health Institute works closely with the New Jersey Reentry Corporation, a non-profit that helps people with employment after exiting incarceration, we can also apply these findings to communities of formerly incarcerated elderly women in New Jersey.

Title: Skin Health Outreach in Seniors

Name: Fatma Beye

Preceptors: Melaine Ford, Director of Social Services and Director of NBSCRC

Agency: New Brunswick Senior Resource Center (NBSCRC) - New Brunswick, NJ

Purpose: To conduct an outreach program aimed at improving the quality of life of Seniors in the New Brunswick community by developing and maintaining a skincare regimen customized to meet their needs.

Significance: In 2022, 7,654 adults in the US died from Skin Cancer, with more than half of the older adults contributing to this number (Melanoma of the Skin - Cancer Stat Facts). Over the years, the incidence rates of Skin Cancer have sharply increased in the older population, with white, non-Hispanic women and men taking the majority (American Cancer Society, 2022). People of color are often diagnosed at a later stage of cancer, causing decreased survival rates compared to their white counterparts. It is found under the common areas not exposed to the sun, such as the palm of the hands, soles of the feet, the groin area, and underneath their nails (Agbai et al., 2014). In 2019, New Jersey had an incidence rate of 21.9 per 100,000, falling just below the US average of 22.9 per 100,000 (State Cancer Profiles, 2022). This evidence suggests that there needs to be more awareness concerning skin cancer prevention in older adults. Conducting outreach at the New Brunswick Senior Citizen Resource Center will help address these concerns and bring awareness to skin cancer.

Method/Approach: A program titled "Flawless Skin for Seniors" was created at the NBSCRC to raise awareness of seniors' skin health. The program itself has 3 phases. In the program's initial phase, research was conducted to understand the different skin health issues that seniors face with a consideration of the existing demographics. This includes race/ethnicity, socioeconomic status, and gender. The team then compiled a list of topics over the next 11 weeks. The topics ranged from facial skin health to skin cancer. Once the planning phase was completed, the second phase began, the implementation phase. Each week the seniors received a 30-minute presentation on skin health; the first 20 minutes focused on the content, and the remaining 10 minutes was a Q and A forum where seniors could get their questions answered regarding the topic presented. The last phase is evaluation, in which seniors complete a survey regarding their satisfaction with the program.

Outcomes/Results: 27 seniors (84%) found answers regarding their skin concerns, while 2 seniors (6%) answered did not, and 3 seniors (9%) did not respond. There were 30 seniors (94%) who said they would recommend this program to a fellow peer, while 2 (6%) seniors declined to recommend it. A total of 15 seniors (47%) have attended the workshops 1-2 times, while 5 seniors (16%) have attended 3-4 times, 10 seniors (31%) have attended 5-6 times, one senior (3%) has attended 7-8 times, and one senior (3%) has attended 9-10 times. Lastly, 25 seniors (78%) said they would like to see more skin health presentations, 3 seniors (9%) said they would not, and 4 seniors (13%) did not respond.

Evaluation/Conclusion: Of the 32 participants, 29 seniors (91%) answered yes when asked if the outreach program improved their understanding of skin health, while 3 seniors (9%) answered no. Overall, the skin care series proved to be an interactive approach to give seniors more skin health knowledge. We encountered a problem with participation outreach, but solved it by changing the outreach location and time. Performing outreach is critical as it brings awareness to important skin health issues. The seniors have expressed great interest in this topic, and in the future, it can be beneficial to have a RWJ speaker speak to seniors about their skin health.

Title: Introduction of Patient Identification Improvements Utilizing Audit Tool

Name: Andre Bezerra

Preceptors: Brian A. Baker

Agency: RWJBH Monmouth Medical Center (MMC)

Purpose: Ensure accurate patient identification during the admission process and throughout the course of the patient's treatment within the hospital.

Significance: Patients admitted to hospitals have specific descriptors that essential staff utilize to confirm their identity and begin/continue treatment. This is the first of the National Patient Safety Goals set in place by The Joint Commission (TJC) which manages thousands of hospitals throughout the United States seeking to improve healthcare for the public. There are many instances in which staff may mistake one patient or their information for another. Anytime this type of issue occurs, it is referred to as a deviation of a generally accepted practice (GAP) during patient care. Occurrences such as these do not align with the standards set by TJC which is why a process must be implemented to ensure minimal to no errors occur during a patient's length of stay at the hospital. The majority of these GAPS are minor and are normally detected before any negative outcomes arise.

Method/Approach: Patients admitted to MMC receive a wristband which always contains their first name, last name, and date of birth. The process involves essential staff that interact with the patient to confirm their identity at each step to prevent any mistakes from being made. This includes whenever a physician, nurse, or other essential staff is in contact with the patient about their medications, changes made to their treatment plan, or potential surgeries that need to be performed. The current method being used by MMC are two patient identifiers which are their name and date of birth. The audit tool was implemented between October of 2022 and February of 2023. This listed patients, their type of observation, the type of essential staff that saw them, the actions taken along, and any comments. This audit tool was available on Survey Hero to provide a digitized version of the data.

Outcomes/Results: The data was collected within all units within the hospital between October of 2022 and February of 2023. Any instance of error is listed on MMC's database called Verge, only accessible to hospital staff. Units that reported Verge events related to patient identification included Labor and Delivery, Pediatrics, Medical Surgical, etc. According to the data, the unit that contributed the most errors in patient identification was Labor and Delivery yielding 35% of overall occurrences. The unit with the second highest occurrences was the Emergency Department (ED) at 20%. Another 20% error rate was recorded from the Medical Surgical Units. The units that contributed the least toward the error data were 10% from Mother-Baby and 5% each from the OR, Pediatric, and Laboratory. The data was reviewed and analyzed with the Quality Resource Services team to identify the appropriate units in which to implement the audit tool.

Evaluation/Conclusion: After careful review by the Quality team at MMC, it was determined that the focus on best practice implementation should begin within the Labor and Delivery unit, the ED, and Medical Surgical units. In order to ensure a reduction in patient identification errors, the other units within MMC should receive additional staff education. The next steps in this process will include implementing the patient identification audit tool and to track and trend the collected data to identify opportunities for improvement. Monmouth Medical Center strives to provide the best quality of care and it would be in the hospital's and patients' best interest that these standards remain higher to set an example for the rest of RWJ and New Jersey.

Title: Strategic Social Media Planning and Communication

Name: Jasleen Bhatia

Preceptors: Rahul Shira, Senior Product Marketer,

Hannah Grinberg, US B2B Social Media Manager

Agency: Signify

Purpose: Develop and execute strategic social media planning and content creation for Signify, (North American) company and seven of its brands to increase awareness and engagement for consumer and professional audience.

Significance: As of 2021, in the United States, seven out of ten Americans utilize social media to connect themselves with various topics and the information that surround them. From a global perspective, over four billion individuals utilize social media. Signify, formerly known as Philips Lighting, is the world's leading lighting manufacturer and is refreshing its presence on social media to generate awareness through a structured thought leadership campaign. The company has created several brand pages on Linkedin and Instagram to grow a social media presence. The company has the ability to optimize their brand awareness, share relevant information to stakeholders and reach various types of end users to increase awareness of their products and services. By strategically planning social media communication, relationships between consumers, Signify can positively influence the ability to create effective value propositions and customer satisfaction.

Method/Approach: A stakeholder analysis was conducted through marketing, communication and sales teams that provided critical information such as: identifying customer needs, influence of key stakeholders and analyzing current market perception of the brand. Critical information collected allowed for the creation of metric driven business objectives for a six month period. Progress of business objectives was determined by following, engagement rates and resharing rates. At the three month point of this time period, data collected indicated positive trends of: increased following, growth, resharing and engagement on several Signify individual brands and the United States company page. Results and outcomes were refined and focused primarily on Lightolier brand engagement and account growth.

Outcomes/Results: Our social media campaigns analyzed the effects of strategic communication and planning on Linkedin for Lightolier professional brand page. Over a three month period, the campaigns resulted in a 13% increase in followers on Linkedin, and a 530% increase in engagement. Additionally, there was an increase in reposting and average insights increased from 27 to 68 users per post.

Evaluation/Conclusion: According to our results, strategic communication on social media platforms demonstrated the importance of stakeholder mapping and intentional content creation. These efforts have a noteworthy impact on social media following, engagement and reach. The utilization of metric driven goals and targeted messaging allowed for increased following, engagement, reposting and brand awareness. The results further signal the investment of strategic social media planning to improve Signify brand success and thought leadership in the lighting industry.

Title: The Effect of Stress on Mental and Physical Health

Name: Jonelle Biggs

Preceptors: Dr. George Musa

Agency: Global Psychiatric Epidemiology Group

Purpose: To assess the relationship between stress, mental and physical health of individuals living within 100 miles of NYC, who were ages 0-17 when they were directly exposed to the WTC attacks.

Significance: The events from the World Trade Center attacks have left lasting effects on the people who've had direct exposure to it. From October to November 2001. The events of 9/11 have caused various mental ailments to develop in the individuals who had direct exposure to the incident, changing the way they perceive and manage their daily activities and social wellbeing. The Global Psychiatric Epidemiology Group's Stress & Well-Being Study aims to understand how direct exposure from the 9/11 attacks are associated with mental and physical ill-health of the victims, including toxicant exposure from 9/11, and current potential pulmonary issues (airway disorders and inflammatory processes).

Method/Approach: The project is being conducted through means of interviews, conducted over the phone or in office, at the New York State Psychiatric Institute. The participants in this study are individuals living within 100 miles of NYC, who were directly exposed to the 9/11 attacks in their childhood. Upon recruiting these participants, they are to be immediately scheduled on the calendar for the type of interview they will be undergoing (physical, interview, interview + physical), for which one of the interns will be the interviewer. Physical interviews entail asking participants about physical health and how that may be related to mental or emotional stressors. The psychosocial interview is a longer interview that asks more in-depth and detailed questions about the participant's mental and emotional wellbeing.

Outcomes/Results: The recommended number of participants interns are supposed to contact for SW2, are 12-14 participants per hour, keeping track of their interactions in their call log, an excel spreadsheet. However, approximately 6-10 contacts per hour was actually achieved, mainly due to the researcher also being involved in interviews with study participants, as a subsequent assignment on the same day. I conducted 2 phone physical interviews for SW2 and 4 interviews for SW3, 3 of which were in-person and 1 over the phone. At the end of the interview, participants are asked feedback questions about the process. All stated that the questions did not make them feel more uncomfortable or upset compared to before the interview began; and all stated they would recommend others participate in the study.

Evaluation/Conclusion: Moving forward, recommendations to increase the amount of participants contacted during recruitment includes tracking the participants called in the call log, spending more time towards the end of the shift on recruitment activities instead of doing it primarily in the beginning/middle of the recruitment shift. I also intend to contact these participants through a more varied method, such as contacting them by email and text. Additionally, through recent training in SW3, I have experienced an increase of interview opportunities compared to the opportunities provided solely for SW2. Overall, it is important to provide a satisfying interview experience for the participants in the SW2, as it increases the chances of securing them for the SW3 study, an important next step in the research process.

Title: Conducting Workforce Support Follow-up Surveys with Participants

Name: Lyla Bracken

Preceptors: Jadielle Wright

Agency: Prevention Links

Purpose: To analyze follow-up survey results and determine if the program is successful in helping participants obtain employment.

Significance: The 2019 National Survey on Drug Use and Health (NSDUH) shows that 20.4 million individuals 12 and older experienced substance use disorders (SUDs). Substance Abuse and Mental Health Services Administration (SAMHSA) mentions that working is one of the best predictors of positive outcomes for individuals with SUD. Individuals who are employed compared to those unemployed are more likely to demonstrate: lower rates of recurrence, higher rates of abstinence, less criminal activity, fewer parole violations, improvements in quality of life and more successful transition from long-term residential treatment back to the community. A longitudinal study of Government Performance and Results Act (GPRA) survey data indicated that clients who are employed while in treatment are significantly more likely to successfully complete treatment than unemployed clients. Regardless of whether work is paid or volunteer, individuals who work are more likely to reduce their substance use and better able to maintain sobriety. This evidence suggests that individuals who are in recovery and maintain steady employment are more likely to maintain sobriety and follow through with treatment for their substance use disorder.

Method/Approach: The Workforce Support Program offers case management and peer support to individuals in recovery from substance abuse disorders. The program assists participants by providing job training, resume and cover letter workshops, life coaching, and jobs and internship searches for the area they reside in. The program also helps with referrals to resources for issues outside the scope of our program (ex. Housing assistance). Once participants are entered into the system and their initial intake is completed, they are contacted on a 3, 6 and 12 month basis to complete follow-up surveys. These surveys contain questions regarding their substance use in the past 30 days as well as to what extent our program has helped them obtain employment that supported their sobriety. Participants were contacted via phone and email to complete surveys. Each survey must be completed within a specific 3 month window. Participants who cannot be contacted/located are to be reported as missing data.

Outcomes/Results: Of the sample size cohort (n=40), 30 participants (75%) reported no substance use within the past 30 days, 5 participants (13%) reported substance use within the past 30 days, 3 (0.08%) refused to answer, and 2 participants (0.05%) marked as missing data. Participants were then asked to what extent the program has helped them obtain employment that supported their sobriety. 23 participants (57%) reported to a great extent, 9 participants (23%) reported somewhat, 6 participants (0.15%) reported not at all, and 2 participants (0.05%) marked as missing data.

Evaluation/Conclusion: 75% (n=30) from the sample size cohort (n=40) maintained their sobriety while in the program and more than half (n=23, 57%) reported that the program helped them to a great extent. With these results considered it can be concluded that the aid offered by the program helped participants in maintaining their sobriety. I believe that this study should improve by including questions in the follow-ups that ask participants why they feel the program is not helping them in maintaining their sobriety as well as obtaining a job. This way the program would be able to make any needed improvements to better serve their participants needs.

Title: Clinical Information Manager performance evaluation and training improvement

Name: Andrei Brenich

Preceptors: Direct Supervisor: Dorthy Konmos, DO, Emergency Medicine

Agency: Envision

Purpose: To evaluate current Clinical Information Managers (CIMs) charting performance and training guidelines and implement additional training to improve overall CIM performance and flow in the emergency department (ED).

Significance: Medical scribes have become an increasingly important part of healthcare teams, particularly in the United States, due to the growing burden of documentation and administrative tasks on healthcare providers. Previous studies have found that medical scribes have "increased productivity of emergency department providers, which has allowed them to see more patients and reduce patient wait times" (Gidwani et al., 2017). Envision provides CIM coverage in the ER at Newton Medical. With the help of CIM's, emergency department providers are able to spend less time charting and more time providing high quality patient care. This project focused on identifying which specific areas of CIM notes need improvement and what additional training could be offered to have CIM's confidently writing high quality notes.

Method/Approach: An assessment was conducted to ascertain the specific aspects of the note writing process that required further training. This involved gathering comprehensive feedback from ED providers and existing CIMs to establish clear learning objectives that aligned with the providers' note-taking goals. After collecting and analyzing all the relevant data that was site specific, concise information sheets and PowerPoints were developed for each section of the ED note, which outlined the minimum required information and formatting guidelines for each section. Furthermore, brief yet informative quizzes consisting of 10 questions were created which covered specific information that was often overlooked or omitted in CIM notes. These quizzes were then sent out to CIMs every week, with a goal of at least an 80% passing rate by each CIM, otherwise further training would be required.

Outcomes/Results: Upon implementation of the weekly quizzes, among the 12 full-time and per-diem CIMs who participated in the initial quiz during the first week, five of them were unable to successfully pass the quiz with a score of 80%. An evaluation was then conducted to identify the most commonly missed questions. CIMs were given more time to review the materials and then were given another opportunity to pass the quiz. Over the course of the next few weeks, the CIMs continued to be given weekly PowerPoint presentations and information guides on each of the pertinent sections of the ED note, that they were then tested on. As a result of this systematic approach to training, the quizzes showed a steady improvement in scores, and by the fourth week, all the CIMs had passed the quiz on their first attempt. After all the quizzes were completed, another round of ED note evaluations were completed which showed essentially all the CIMs were now including all the pertinent information in their notes which were tested on, many of which were previously missing prior to the start of weekly testing.

Evaluation/Conclusion: The administration of the quizzes to the CIMs proved to be an effective tool in reinforcing key concepts and reducing the knowledge gaps, thereby improving their overall performance. The quizzes helped to address previous areas of weakness in their overall note writing skills. Moreover, the ED providers reported a significant reduction in note editing needed at the end of their shifts as the CIMs became more proficient in completing the notes. This stands as a testament to the efficacy of the quizzes in promoting the efficiency, accuracy and standardization in the documentation at the site.

Title: Food Waste and Curriculum Assessment in New Jersey Elementary Schools

Name: Gabrielle Bromfeld

Preceptors: Direct Supervisor: Jeanine Cava, Research Coordinator

Project Investigator: Sara Elnakib, Department Director

Agency: Rutgers Cooperative Extension; New Jersey Leaves No Bite Behind

Purpose: To pilot environmental education lessons focused on climate change awareness and food waste reduction for fifth graders in four New Jersey elementary schools.

Significance: According to the Food and Drug Administration (FDA), 37.2 million Americans do not have access to adequate nutritious food and 30-40% of the food supply in the United States is thrown away as food waste. The Environmental Protection Agency (EPA) states, the average New Jersey resident wastes 325 pounds of food per person annually which negatively impacts the environment due to increased greenhouse gas emissions. The NJ Leaves No Bite Behind project increases education, awareness, and solutions regarding food waste reduction, climate change, and their effects through the measurement of food waste from food waste audits and a collection of pilot environmental education lessons that addresses these attitudes and ideas. The evidence-based intervention worked to improve food waste reduction efforts within New Jersey.

Method/Approach: The intervention worked with two experimental elementary schools, Paterson School 27 (K-5) and the Barnegat Robert L. Horbelt Intermediate School (5-6), and two control schools. The schools were chosen due to their participation in the free or reduced federal lunch program. All fifth graders were given pre and post assessments in all four schools that consisted of 10 multiple choice questions and 5 gradient scale questions. The assessments were used to gain quantitative data from the students. Fifth graders were the targeted age group due to their ability to process information and present a positive behavior change. The two experimental schools were taught a series of six lessons made for this project over a 3 month period that educated the 5th graders on climate change, food waste reduction, and environmental impacts. The assessments measured whether the lessons had a significant impact on knowledge, attitude, self-efficacy, subjective norms, perceived behavior control, and behavioral intention.

Outcomes/Results: The sample size cohort of fifth grade students (n= 235) among 4 elementary schools in New Jersey were participants in the study. The pre and post assessment data for the two experimental schools, Paterson School 27 and the Barnegat Robert L. Horbelt Intermediate School exhibited a 12% and 9% increase, respectively, in average content answered correctly between the pre and post assessments. The data presents the majority of the students' understanding on climate change, the food system, food waste, composting concepts, and food miles when looking at the knowledge portion of the assessment. For the question "Earth is currently experiencing..." with the correct answer "a warming trend," students improved their scores by 28% in Barnegat and 23% in Paterson. For the question "Which organisms can help during composting?," students improved their scores by 23% in Barnegat and 33% in Paterson. For the question "What is recycled during the process of composting?" with the correct answer "food waste," students improved their scores by 26% in Barnegat and 28% in Paterson. Results on additional variables are currently in progress at this time due to student absences and scheduling issues.

Evaluation/Conclusion: The strengths of this project are content retention and engagement, topic introduction, and the ability to formulate a measurement tool for food waste. Some limitations include school availability to host food waste audits. Next steps include data collection and analysis, and amendments to the current lessons for publication and use by New Jersey science teachers.

Title: Community Engagement for Seniors

Name: Jessica Bryk

Preceptors: Melanie Ford, Director of the New Brunswick Senior Citizen Resource Center and

Director of Social Services

Agency: New Brunswick Senior Citizen Resource Center (NBSCRC)

Purpose: To improve wellbeing and reduce social isolation of the elderly population in New Brunswick through community engagement.

Significance: In the United States, nearly one-fourth of adults aged 65 years and older are considered to be socially isolated. Social isolation increases the risk of mortality by 30% (Center for Disease Control 2021). Loneliness and social isolation are public health concerns that have a direct effect on the wellbeing and quality of life in seniors. The NBSCRC works to combat social isolation by providing a safe space for seniors 60 years and older in the city of New Brunswick to socialize with others in the community through a range of daily social activities and health education programs. My "Community Engagement Project" contributes to wellbeing and reducing social isolation by educating on the importance of community engagement and providing opportunities for healthy engagement. The UnitedHealth Foundation's Senior Report ranked New Jersey 45th out of 50 for low levels of volunteerism. My project focuses on promoting and researching opportunities for community engagement for the members of the center that promote social interaction, community purpose and belonging.

Method/Approach: Research was conducted about the health benefits of community engagement, volunteering, and sense of community on participants focusing on the aspects of quality of life and wellbeing. This research was presented during a "Lunch and Learn" program where the project and its benefits were explained to members. Following the presentation, a survey was created to gauge interest in participating in future community service projects and collect feedback. In the following week, time was dedicated to conducting a service project as a group where members crafted handmade wellness cards for homebound members of the NBSCRC. The card making activity was followed by a survey to assess the effectiveness of the activity. A comprehensive list of all volunteer community engagement opportunities in New Brunswick, NJ was researched and compiled to be used by members of the NBSCRC.

Outcomes/Results: Research shows that community engagement seeks to better engage the community to achieve long term and sustainable outcomes. 24 participants joined the presentation and completed the survey. The survey results showed that 85% of the members believed that the NBSCRC provided them with a sense of community, 90% of respondents agreed that participating in community activities at the center made a positive impact on their wellbeing, 90% agreed that volunteering or helping the community provide a positive impact on their wellbeing, and 80% of responders expressed interest in participating in future community service projects. 15 members attended the card making activity and completed the program effectiveness survey. 100% of the participants agreed that the cardmaking event had a positive impact on them and that they would be interested in similar activities. A total of 22 not for profit organizations that offer community engagement activities in New Brunswick, NJ were identified.

Evaluation/Conclusion: A majority of the senior participants found that volunteering and engaging with the community improves their wellbeing and expressed interest in future events. Some members, however, suggested that they were not able to participate as desired due to their busy schedules. Research shows that more flexibility in terms of time commitment and adding variety to virtual engagement options could be helpful in increasing engagement among these participants.

Title: Competitive Analysis of Specialty Pharmacies (SP) and Retail Pharmacies (RP)

Name: Nicole F. Buczynski

Preceptors: Direct Supervisor: Elizabeth Krotulis, Associate Account Supervisor

Agency: BGB Communications, LLC. — New York City, New York

Purpose: To analyze the differences between Specialty and Retail Pharmacies, and propose best practices for communication with and education of Specialty Pharmacists, Healthcare Providers, and Patients.

Significance: There are treatment products for patients with complex health conditions which require criteria that classify them as specialty drugs. Specialty drugs are more expensive than retail drugs, which require support from SPs. SPs are growing in net spend compared to RPs, which are seeing a decline in prescriptions and, in some cases downsizing. The IQVIA Institute found that specialty medicines accounted for 55% of net spending in 2021, up from 28% in 2011 (IQVIA Institute, 2021). In addition, an IQVIA trend report found that RPs had a 1.3% decline in total prescriptions from 2021 to 2022 (IQVIA Institute, n.d.). Using data resources from BGB Group and public domain, this project will analyze SPs and RPs and propose best practices for manufacturer communication with SPs, Healthcare Providers, and Patients with examples for a specialty drug in the cardiovascular space.

Method/Approach: Research was conducted utilizing BGB Group and public domain resources to analyze SPs and RPs and review best practices for communicating SP drug needs with a SP drug in the cardiovascular space. BGB Group and the client developed various pathways to ensure SPs and patients are prepared to fulfill all requirements to undergo this cardiovascular drug's treatment. A patient access support program includes a symptom tracker, FAQs, and a calendar, and provides diagnosis information, explains REMS requirements, and provides access to a Nurse Navigator and Access Specialist to guide the patient through services and insurance prerequisites. Healthcare Providers are supplied with Prescriber Checklists outlining prescribing information prior to and during treatment, including enrollment, counseling, and patient support information. Pharmacists are included in Ad Boards and Webinars with Q&A sessions where updated efficacy, dosing, drug-drug interaction, safety, and patient support information is relayed. Q&A sessions allow Pharmacists to ask any important questions in conjunction with a leave-behind SP How to Order Brochure that is kept for continued reference regarding dosing and administration, drug-drug interactions, billing and coding, adverse reaction, and REMS information.

Outcomes/Results: Through a comprehensive analysis of SPs, RPs, and communication materials, BGB Group partnered with the client to successfully implement best practices for educating and informing stakeholders on the SP needs for the cardiovascular medication. Although SPs yield a higher cost than RPs and possess a more extensive filling process, they provide more flexible delivery options for patients and a strengthened Patient-Pharmacist relationship. SPs show growing trends in recent years despite the risk of prescription abandonment and industry competition. Within the first two weeks of the cardiovascular drug's launch, SP Webinars with Q&A sessions led by BGB and the client averaged 100 attendees per session over three sessions. This data indicates that SPs, healthcare providers, and patients are engaging with the materials provided and continuously following any changing indications to ensure the most up-to-date prescribing information.

Evaluation/Conclusion: With a firm understanding of SPs and RPs, best practices for education, training, and effectiveness, BGB Group can continue to produce beneficial material that aligns with the client's SP drug brand strategy. Materials produced help to facilitate the prescriber, pharmacist, and patient journey in a timely manner.

Title: Oral Hygiene in young children

Name: Ashley Burgos

Preceptors: Dr. Shah

Agency: Heal and Care Pediatrics

Purpose: To find and analyze data that shows dental hygiene in children to propose educational interventions to improve dental hygiene.

Significance: Dental caries is the most common chronic disease in children. This disease affects 24% of US children 2-4 years old, and 53% of children 6-8 years old. It is found that children who are from poor and racial or ethnic minority families have higher rates of untreated dental caries than those from non-poor and non-minority families (American Academy of Pediatrics 2014). The incidence of dental caries has only been increasing and was statistically significant in children from poor families. This evidence indicates that it is important for pediatricians to be knowledgeable about the disease process of this disease and the prevention and interventions necessary in order to maintain and restore health.

Method/Approach: Surveys regarding oral health will be given out to parents to discuss their child's oral health with the doctor/ primary care physician during their well-visits. There will be a baseline set of 20 surveys and a first cycle of 20 surveys completed for this project. This will only be done for patients between the ages of 6 months- 6 years old. It is recommended for children to have their first dental visit by the age of 1 years old, so if a child is of age and has not had a dental visit before, they will be referred to a specific dental office. The surveys will be taking note of risk factors, protective factors, clinical findings and an assessment/ plan of what the parents can do to help improve the child's oral health and prevent dental caries disease.

Outcomes/Results: Of the sample size (20) for the baseline set asking patients whether their child has had a dental office visit or not, 12 of the 20 patients (60%) have previously had a dental visit. The ones that didn't and were above the age of one years old were referred to a dental office to make their child an appointment. For cycle one, 67% of the patients who were older or equal to 12 months old had a dental home established. The results also showed 100% of the patients had a clinical exam of teeth and gums performed, daily oral health care routine assessed, access to systemic fluoride assessed, and an oral health risk assessment at 6 and 9 month wellness visit. 8 of the 20 patients (40%) were at high risk for dental caries.

Evaluation/Conclusion: Each patient has been referred to a dental office if they didn't already have one. The doctor and nurse practitioner have discussed with the parents about prevention and intervention methods to maintain the healthiness of their child's oral health and educated them on an assessment plan. Self management goals include regular dental visits, brushing teeth twice daily, using fluoride toothpaste, less/ no juice, drinking only water, eating healthy snacks, and no soda/ junk food. Being aware of the risks and causes of the disease is beneficial in decreasing the likelihood of dental caries in young children. Taking proper measures to avoid the disease will help in maintaining the child's oral health overall.

Title: The impact of the Affordable Care Act on healthcare access and quality

Name: Aliza Buttari

Purpose: Understanding the impact of the Affordable Care Act on healthcare access and quality within the United States healthcare systems.

Significance: Healthcare is an essential part of life, and by maintaining good health promotes a healthy long life. Access to medical care and treatment allows for diagnoses and treatments to help manage chronic conditions and prevents illnesses. Having access to healthcare helps reduce the mortality rate by providing life-saving interventions, preventions, and treatments. Healthcare is a significant aspect of the economy. Not only does healthcare provide jobs throughout the United States but also has a direct impact on the productivity and well-being of individuals. Healthcare is essential in preventing and controlling infectious diseases, responding to public health emergencies, and promoting population health through preventive care and education.

Method/Approach: How has the ACA impacted the healthcare system within the United States? The Affordable Care Act is a federal law that was enacted back in 2010 with the intention of increasing healthcare and improving the quality of healthcare for Americans throughout the United States. Following the enactment of the ACA we saw many benefits for Americans that they did not have before. Below are some of the benefits we saw following the ACA coming into effect.

<u>Increased healthcare coverage</u> - One of the benefits of the ACA was that it allowed an increase to accessibility for healthcare for millions of Americans. The law created several provisions, including the creation of state health insurance exchanges and the expansion of Medicaid.

Improved quality of care - The enactment of the ACA allowed the healthcare system to directly incorporate better healthcare throughout the country, By creating the provisions that aimed to improve the quality of healthcare, allowed the establishment of the Center for Medicare and Medicaid innovation. This enforced a new payment and service delivery system which systematically improved the quality of care and also reduced the cost of healthcare.

Reduces healthcare costs - The ACA goals were not to only improve the quality of healthcare but also always for affordable healthcare throughout the country. It was aimed to reduce the costs of healthcare by creating an accountable care organization (ACOs) which essentially creates a group of healthcare providers who work together to coordinate care and reduce the cost. Not only does the ACA promote preventive care, which reduces the cost, it instills better treatment plans and follow up healthcare visits. Improved access to preventive care - One of the most important factors when discussing the cost of healthcare is establishing preventive care. For those individuals who take better care of themselves and who routinely visit their healthcare providers are naturally at a smaller risk for chronic diseases like heart disease which is the largest healthcare threat in the United States.

Outcomes/Results: The ACA has made a significant impact on the healthcare systems accessibility and quality of care throughout the United States. The ACA expanded insurance coverage, improved care quality, reduced costs, and promoted preventative care. This law has helped to improve the health and well-being of millions of Americans.

Evaluation/Conclusion:

Overall, the Affordable Care Act was intended to make healthcare more accessible, affordable, and effective for all Americans.

Title: Social Media marketing within Dermatology

Name: Yaniessa Cainas

Preceptors: Anggie Viviana - Supervisor

Agency: Jeffrey Rapaport M.D, P.A Dermatology

Purpose: To enhance the social media presence for the clinic through new and improved content.

Significance: Social media has become a progressively important tool in the field of Dermatology, both for professionals and patients (Szeto, M. D. et.al, 2021). Dermatologists/physicians utilize social media sites like Instagram, Facebook, Twitter, and YouTube to inform patients about numerous skin problems, cures, and preventive measures. A substantial number of dermatologists utilize social media to offer pictures and videos that explain patients' ailments and available treatments. Dermatologists can benefit from the marketing power of social media (Szeto, M. D. et.al, 2021). To reach potential patients, many dermatologists utilize social media sites to advertise their offices and services. To draw in new customers, they might offer before-and-after images, videos, and patient reviews. Social media serves a variety of purposes in dermatology, including patient education, networking, online consultations, marketing, research, and education. It's critical for dermatologists to comprehend social media usage strategies that will boost patient results and their practice.

Method/Approach: It is crucial to have a strategic plan in place when setting up an Instagram account for a dermatological practice to ensure that the material connects with your target market and advances your company's objectives. The clinic's Instagram page serves as its digital showroom, thus it should be enhanced to draw in new clients. Include a link to the website of the clinic, a professional profile photo, and a brief bio that highlights your qualifications and services. In order to gather ideas for content, posting frequency, and other factors, numerous dermatological clinics in the NJ-NY region's Instagram accounts were examined. Create a content strategy that takes the requirements and interests of the target audience into account. Make a blend of instructional and promotional content that highlights the physician's skills, offerings, and patient outcomes. Additionally, it is a good idea to include before-and-after photos and patient testimonies. Use pertinent hashtags to increase the target audience's ability to find the material. Use hashtags like #acne treatment, #clearskin, and #skincare, for instance, if the dermatology clinic specializes on acne treatments.

Outcomes/Results: Making a social media account will help the clinic become more visible and reach more people. Social media platforms can assist the clinic in reaching out to new clients who might not have otherwise heard of it. The clinic's Instagram account will make it easier to interact with its clients on a more intimate level. By utilizing the account to distribute instructional and useful information, respond to queries, and handle issues. Patients can express their experiences with and comments about the facility on social media. This allows the user to respond to any negative remarks and promote positive feedback by keeping an eye on the social media profile. Having an active social media presence can give the clinic a competitive advantage over other dermatology clinics in the area. It shows that the physicians are staying up-to-date with current trends and are committed to engaging with the patients in new and innovative ways.

Evaluation/Conclusion: The Instagram page has been completed and is awaiting final quality assurance and senior leadership clearance. The launch date is set for the end of May.

Title: Gaps in Public Health Data

Name: Piolo Calusin

Preceptors: Devangi Patel, MPH, MCHES, HO

Agency: Montgomery Health Department

Purpose: To assist the Montgomery Health Department with identifying gaps in data for the town regarding Somerset's (NJ) Community Health Needs Assessment (CHNA). The gaps will be turned into recommendations for the health department to create a "data plan" to get a better understanding of the needs of Montgomery township residents.

Significance: Gaps in Somerset county and Montgomery data include missing information of behavioral factors, particularly substance misuse. Substance abuse and misuse impacts over 20 million Americans, with overdose deaths on the rise from 2020 (Minkove, 2022). In Somerset county (New Jersey), substance misuse, particularly with alcohol, rates are higher compared to both the state and the country (County Health Rankings, 2022). Other gaps in data include length and quality of life, quality of care and physical environment factors, all of which impact public health. This project will help the health department make data driven decisions when prioritizing community program interventions.

Method/Approach: A review of Somerset's Community Health Needs Assessment (CHNA) was conducted to identify missing data regarding the county and municipalities within. Missing data was identified through using Robert Wood Johnson's County Health Rankings, which provides a social determinants of health framework. This framework provides health factors, such as health behaviors, access to care, social and economic factors, and the physical environment of counties. These factors had subtopics, which were used to compare Somerset's CHNA. Missing data was also obtained for local municipalities, specifically Montgomery. It is also important to note that the health department review findings from Healthy New Jersey 2030 when released.

Outcomes/Results: Somerset's CHNA was missing key information regarding health behaviors and access to care. Data breaking down substance use for tobacco, alcohol, opioids and cannabis was missing. Data for the township of Montgomery also had similar gaps in data (such as substance misuse and mental health). While the CHNA did contain data and information about these issues, they can be improved upon through the use of secondary data. For further improvement plans or community health needs assessments, information from secondary data sources such as the Kaiser Family Foundation, NSDUH, NJSHAD and SAMHSA should be included. As data becomes more available post-pandemic, the CHNA should also include more data from the Youth Risk Surveillance Survey.

Evaluation/Conclusion: Somerset's CHNA and Montgomery's strategic plan can improve upon data collection methods, particularly through expanding on research about mental health and substance use. Data can be collected through secondary sources, such as federal level data like NSDUH and SAMHSA (particularly for substance use and mental health). Local municipalities, such as Montgomery, can also work closely with stakeholders and community leaders to obtain missing data. Community leaders may be able to provide information on how residents feel and the problems they face in the community. While surveys are important in finding out the needs of local towns, qualitative data should also be obtained through methods as mentioned above. Other recommendations for the health department may include developing a process to track access to care issues that residents have and connecting them with those who can help.

Title: Analysis of COVID-19 Grant Expenditures

Name: Lilly Cannarozzi

Preceptors: Ilham Atir, MBA, MLS, Laboratory Services Director

Agency: Bergen New Bridge Medical Center

Purpose: To create a summary report for NJDOH regarding Bergen New Bridge Medical Center's COVID-19 Hospital Testing Grant.

Significance: Since March 2020, the COVID-19 pandemic caused severe damage to the United States healthcare system. In New Jersey alone, there have been more than 3 million positive tests and 35,000 deaths (Johns Hopkins University and Medicine). These statistics indicate the importance of taking measures to mitigate the effects of the virus. The New Jersey Department of Health has granted Bergen New Bridge Medical Center a total 6 million dollars to fund testing and other significant projects. It is critical to use these funds effectively to help prevent further transmission, promote health in local communities, and continue to strengthen the organization. Through analysis and summary of prior reporting periods and ongoing laboratory projects, the NJ DOH will be provided with an update on the organization's grant usage.

Method/Approach: Previous reports from 2020-2022 and various supporting documents were gathered. Major milestones, proposed costs, and budget adjustments were reviewed to identify which objectives have been met successfully thus far. This data was then used to identify which intended outcomes still need to be modified or removed for future grant usage. In addition, obstacles and barriers to accomplishing objectives were identified.

Outcomes/Results: After reviewing the documents, it was determined that most intended outcomes were achieved. The primary objectives met included building additional in-house COVID PCR testing capacity, building additional in-house COVID antibody testing capacity, implementing provider and patient portals, increasing specimen collection, improving workflow processes and patient access, and building partnerships with NJ PHEL and DOH to improve accessibility and generate a research-focused program. The grant allowed for 6-10k PCR tests to run per day, 3k antibody panels to be processed per day, and surveillance testing at community health outreach and partnering locations. In addition, three new off-site testing locations were opened in Bergen County. Objectives that needed to be shifted were also identified. The original objective to increase neutralizing antibody testing capacity was modified to focus on increasing infectious disease testing capacity. All other objectives were successfully met.

Evaluation/Conclusion: COVID-19 remains a public health concern in 2023. With the COVID-19 grant awarded to Bergen New Bridge Medical Center, several large-scale projects have been proposed. After the above analysis was completed, it was determined which project milestones and initiatives were proven successful as well as how the remaining grant funds will be utilized. Remaining funds have been relocated towards the increase of infectious disease testing capacity. This initiative will promote women's health services and prevention of sexually transmitted infection. The grant has proven to be a vital component in the expansion of COVID testing and healthcare accessibility since the start of the pandemic. It will continue to provide benefits to the community, patients, and residents of Bergen New Bridge Medical Center.

Title: Camden County Cancer Screening Project, CCCSP

Name: Francesca Cannuscio

Preceptors: Plyshette Wiggins, MPH

Agency: MD Anderson Cancer Center at Cooper University Health Care

Purpose: To track and evaluate community outreach strategies that focus on providing uninsured residents of Camden County with cancer screening education.

Significance: Several factors can hinder one's ability to meet cancer screening recommendations. Lack of health insurance is strongly associated with insufficient access to health care services. The uninsured are significantly more likely to be in poor health, to have unmet medical needs or surgical care, and to lack satisfaction in the quality of care received (NJ State Health Assessment Data). In Camden County, New Jersey, 7% of people under the age of 65 reported to lack health insurance (County Health Rankings, 2020). Racial and ethnic minority populations experience higher rates of illness and death across a variety of health conditions, when compared to their Caucasian counterparts (CDC, Racism & Health). These individuals are at a disadvantage for early cancer detection and accessible healthcare. The Camden County Cancer Screening Project (CCCSP) at MD Anderson Cancer Center at Cooper University Health Care aims to increase cancer awareness, education, and screening in the Camden community at large. CCCSP provides free cancer screenings for uninsured or underinsured residents; tests include breast, cervical, colorectal, prostate, and lung cancer screening; and smoking cessation and counseling. This project evaluates and addresses health inequity factors to promote public health efforts by increasing the number of cancer screenings.

Method/Approach: The Cancer Awareness Influencer Program was developed as an innovative way to educate residents of Camden County on getting screened. Cancer Awareness Influencers were identified by considering volunteers that are willing to educate their peers about getting screened for cancer and providing them with the appropriate resources. A peer was identified to be someone that is underinsured or uninsured and due for a routine screening. Logic models were created to outline the process of the program from recruiting influencers to patients getting screened. Google forms and Google Documents were created to summarize the program description and expectations of the influencers.

Outcomes/Results: A total of 7 influencers were recruited. 2 logic models using a flowchart outlining the project from start to finish were developed. One of the logic models focused on influencer expectations. Whereas the second logic model focused on the relationship between CCCSP and influencers, and how influencers can help CCCSP achieve its goals. A guide on program description was created and shared with the influencers in the form of a Google Document. Google Forms were developed to track, record, and collect consent. Lastly, various social media posts like 'question and answer posts' and 'did you know posts' were designed for the months of March through June to increase awareness on different cancers and promote 'Get Screened South Jersey'.

Evaluation/Conclusion: The chosen Cancer Awareness Influencers are provided with the education and tools needed to speak with peers regarding getting screened. The next phase of the project will begin in the summer where the influencers will be tasked with educating at least 15 peers each through social media and/or community outreach. This project aims to screen more than 100 people for cancer in Camden County. Moving forward, additional culturally competent influencers, especially those within similar age groups as the eligible peers should be recruited to better connect with the targeted community.

Title: Investigating Social Determinants of Health that Influence Care Gaps

Name: Venecia Cano

Preceptors: Sabiha Hussain, MD, MPH, Associate Professor of Medicine

Carol Shu, MSW, LSW, Licensed Social Worker for Post COVID Recovery Program

Agency: Robert Wood Johnson Medical School - New Brunswick

Purpose: To evaluate the social and environmental factors that contribute to patients failing to complete their physicians' recommended primary prevention.

Significance: The COVID-19 pandemic has heavily impacted the increase of missed medical appointments and screenings with "9.4 million cancer screenings left undone" (Hawes, 2021). At Robert Wood Johnson University Hospital, healthcare practitioners have established a Post-COVID Recovery Program. This clinical-based program aims to address long lasting effects of a positive COVID-19 diagnosis in patients from their physical health to their emotional health and identifies the care gaps based on the social determinants of health (RWJ Barnabas Health, 2023). According to the World Health Organization, SDOHs are "non-medical factors that influence health outcomes." The scope of this project is to analyze the different social determinants of health that influence the ability of individuals to complete primary prevention interventions.

Method/Approach: Data from the post-COVID recovery program was analyzed which involved a deeper dive into the RWJ Medical School's Social Determinants ICU Spreadsheet. Further information on patients' SDOH was extracted using EPIC. Screening information such as their preferred spoken and written language, a patients' primary health insurance coverage, and occupation was recorded in an excel spreadsheet and were later analyzed. For instance, data that reflected whether a patient has received a mammogram, colorectal cancer screening, and COVID-19 vaccination were noted. Patients' current care gaps were identified based on which primary preventive interventions they failed to complete within the year.

Outcomes/Results: This analysis led to the following conclusion: of the sample size (n=80), 31(38.7%) failed to complete their colorectal screening, 24 (30%) failed to complete their mammogram, and 67 (83.7%) failed to complete their first, second, or COVID-19 booster vaccinations. Additionally, 14 patients spoke a different language other than English, 31 patients were enrolled in Medicaid or were uninsured, and 25 patients were unemployed. After careful analysis through their electronic medical charts, many of the patients enrolled still experienced care gaps (n=80), despite their primary physican's emphasis on screenings, preventative exams, and vaccinations.

Evaluation/Conclusion: The results of data indicate that many patients enrolled in the Post-COVID Recovery program could not complete their recommended COVID-19 vaccinations because of the above-mentioned care gaps. Cultural backgrounds, occupation, and insurance status significantly affect a patient's ability to make appointments and complete their screenings or vaccinations. Cultural humility and cultural competence are essential in overcoming the challenges related to the social determinants of health. Gaining trust with patients by employing community leaders to provide educational programs and materials in multiple languages will greatly advance patient compliance and understanding.

Title: Assessment of Spinal Care Patients Progress

Name: Kara Capo

Preceptors: Samantha Sternkopf, Director of Clinical Assistants and Interns

Agency: Princeton Brain Spine & Sports Medicine - Princeton, NJ

Purpose: To analyze the effectiveness of conservative treatment methods utilized by spinal care patients.

Significance: Each year, spinal cord injuries affect approximately 17,700 Americans. 39.3% of these injuries result from motor vehicle accidents, 31.8% are caused by falls, 13.2% area caused by violence, 8% caused by sports, and 4.3% medial /surgery (Scott, 2022). Spinal cord injuries negatively impact the quality of lives. These numbers provide evidence that spinal cord injuries are prevalent in the United States, and emphasizes the urgency for proper treatment and improving the quality of care for those that suffer. The analysis of conservative treatment methods will help understand what forms are most successful in improving the quality of care of spinal care patients.

Method/Approach: Data ranking the severity of pain were collected from a series of spinal care patients on their initial visit and their visit post conservative treatment in which they rated their severity of pain on a scale of 1 to 10. 1 being described as little to no pain and 10 being described as excruciating pain. The sample consisted of cervical and lumbar spine patients. This data for 500 patients were exported to a spreadsheet, and each patient was categorized by which type of conservative treatment they were referred to: a) physical therapy, b) chiropractic care, c) pain management. The two separate reported rankings were compared to see whether or not conservative treatment improved the patients progress.

Outcomes/Results: Of the sample size cohort (n=500), 304 patients (60.8%) degree of pain improved, 121 patients (24.2%) degree of pain remained the same, and 75 patients (15%) degree of pain worsened. Of those 304 patients whose degree of pain reported improved, 155 (51%) were referred to physical therapy, 79 (26%) were referred to chiropractic care, and 70 (23%) were referred to pain management. Of those 121 patients that remained the same 87 (72%) were referred to pain management treatment, 29 (24%) were referred to chiropractic care as a form of treatment and 15 (12%) were referred to physical therapy as a form of treatment. Of those 75 patients whose degree of pain worsened, 55 (73%) were prescribed pain management as a form of treatment, 22 (29%) were referred to chiropractic care as a form of treatment, and 9 (12%) were referred to physical therapy as a form of treatment.

Evaluation/Conclusion: Overall, conservative treatment helps improve spinal care patients progress, by lessening the degree of pain they face day to day. The positive outcomes of the study of spinal care patients utilizing conservative treatment methods: physical therapy, pain management, and chiropractic care surpass the negative outcomes. Although all conservative treatment methods showed effectiveness in this sample of spinal care patients, physical therapy in particular indicated to have the most success. Future directions, to further emphasize the most successful conservative treatment for spinal care patients can be done through analyzing which practice each patient went for conservative treatment and also seeing the consistency of each patient with actively doing their treatment.

Title: Increasing fan participation at Rutgers Women's Basketball Games

Name: Kai Carter

Preceptors: Shayna Sadow

Agency: Rutgers Athletics (sports marketing)

Purpose: To analyze marketing strategies for women's basketball using instagram and crowd participation during games

Significance: Although women represent over 40% of all college athletes, they are not recognized enough in sports. Specifically, in college basketball, men receive over 3,000 more attendees per game, as well as receive more than 30% more than women in terms of resources, travel allocation, operating expenses, and equipment. The sports marketing agency within Rutgers athletics generates new ideas weekly to help promote women in sports. This specific project used marketing strategies, including Instagram to increase the attendance rates during women's games and the overall recognition of women in sports.

Method/Approach: Starting in February 2023, the marketing supervisor created a calendar/planner to organize weekly meetings. We met once a week to brainstorm ideas for the sports' events. In the first week, the team discussed ideas on how to promote the game on Instagram. During the second week, the team discussed ideas to put on the video board such as trivia questions, videos of players, pictures of fans, etc. The third week of generating ideas consisted of the team focusing on making halftime shows more entertaining. The fourth week, the team thought through ideas on how to get the crowd/fans more interactive during games. During the final week, the team discussed post-game marketing such as signing autographs.

Outcomes/Results: The Instagram promotion resulted in over 200 likes and 20 shares. The second week we implemented trivia questions; the result was fans shouting out the answers. The third week's halftime entertainment was a relay race with fans participating and resulted in fans chanting and cheering the volunteers on. The fourth week game activity was showing the players mic'd up on the video board and resulted in laughs and positive comments from the crowd. The post-game activity we tried was allowing the players to sign post-game autographs for fans and resulted in a line of fans wrapped around the gym.

Evaluation/Conclusion: After evaluation, the approach that engaged the audience the most was the post-game marketing idea of signing autographs. For next year, I would suggest more advertisements for post game autographs to attract even more people. Although the overall experience was great, one thing that did not work well was getting data together. It was difficult to measure how engaged the audience was. With that being said, I would continue to meet weekly because it is a good way to generate new ideas to increase fan participation at Rutgers Women's basketball games.

Title: The Mental Health Needs of Community Leaders

Name: Claudia Sophia Carvajal

Preceptors: Quadai Palmer, President

Agency: From Jersey With Love

Purpose: To evaluate the effects of leadership on a community organization and to examine the needs of community leaders in regard to their mental health.

Significance: The importance of mental health has come into focus in recent years and its impact on the workforce and its leaders is undeniable. According to a study by Dimoff and Kelloway (2019), mental health issues can lead to cognitive impairments, compromised job performance, and adverse effects on interpersonal relationships at work and home. The lack of support many workers have felt is evident with Mental Health America reporting that 39% of their respondents felt that they did not have adequate emotional support in the workplace. From Jersey With Love is a non-profit organization focusing on a new direction entitled Leading With Love that is working to alleviate the stressors of community leaders and providing them with resources for self-care and mental health. These services include mentoring, training, and outreach programs. Conducting research focused on mental health along with results from surveys evaluating the needs of community leaders can provide a source to address existing flaws in leadership.

Method/Approach: Through research done on the top resources needed for leadership, questions for community leaders were identified. A survey was developed to collect information regarding the leadership needs identified. The survey asked questions regarding industry experience, leadership training, and mental health experiences. Questions about the importance of mental health and self-care practices were included to gauge mental health needs. Research was then conducted to identify leaders and organizations in the community that would offer insight for the survey. These leaders were centralized to the New York/New Jersey/Philadelphia area. During the survey process, the leaders were invited to the Leading in Love Annual Leadership Conference. The conference was shaped by exploratory research regarding mental health in the workforce. The surveys were conducted for six weeks and a variety of programs were provided in the meantime.

Outcomes/Results: A total of 24 community leaders were surveyed and 14 participants attended the Leadership Conference. Of the survey respondents, 78.3% said that their mental health was very important to them, 13% said mostly important, and 8.7% said somewhat important. When asked how likely they are to take out time for self care, 8.7% said not likely, 17.4% said slightly likely, 34.8% said somewhat likely, 13% said mostly likely, and 26.1% answered very likely. During the Leadership Conference, participants were polled regarding their self-care practices. All respondents reported that they engaged in several forms of self-care however their answers regarding the frequency of self-care practices varied. Of the participants, 40% reported engaging in self-care activities once a day, 40% reported once a week, and 20% reported that they rarely engaged in self-care activities.

Evaluation/Conclusion: Overall, mental health and self-care practices varied greatly amongst leaders but left room for improvement. A significant number of respondents indicated poor self-care strategies and engagement in self-care practices despite the majority indicating the importance of their mental health. Providing mental health resources, information, and programming would be valuable in addressing these discrepancies.

Title: Business Communication Usage, Analysis, and Review

Name: Aaron Castillo

Preceptors: Kenneth McManus, Senior Vice President

Agency: Alternative Regulatory Solutions (ARS), LLC - Roseland, NJ

Purpose: To conduct an analysis of Municipal Advisors' business communication usage on personal devices to determine adherence and compliance with the Securities and Exchange Commission (SEC) recordkeeping and regulation requirements for Municipal Advisors serving state and municipal public and nonprofit entities such as: cities, counties, states, hospitals, authorities, utilities, and school districts.

Significance: The COVID-19 pandemic forced many private and public companies to adopt a work-from-home environment, including Municipal Advisors. However, this has become increasingly difficult for these companies to monitor written business communications, which must also be retained in accordance with regulatory recordkeeping requirements. Business communication on personal devices is used by most of the workforce today and providing evidence of review is a growing regulatory risk, as shown by the record \$4.2 billion in SEC enforcement penalties in 2022. Text messages have a higher open rate and response rate than emails. Still, regulators have made it clear they will bring cases against those who don't supervise business communication on personal devices (SEC, 2022). ARS will determine whether further action will be required by using various electronic communication sweep analysis for a year's worth of communication data. This data will help ARS advise clients if texting for business communication was found within their firm.

Method/Approach: A comprehensive review was conducted to determine if ARS clients were using text for business communication. Data was collected using two archiving systems, Global Relay and Smarsh, which are used by 99% of ARSs' clients. To ensure efficiency, review parameters were set to identify electronic communication or messages that contained the word 'Text' or key phrases involving it, within a specified date range (January 1, 2022, to December 31, 2022), with a maximum of 100 messages per client. The collected data was then exported into an Excel spreadsheet for further analysis. Keyword data points were highlighted that helped determine whether clients were using text for business communication or not. Subsequently, a contact list of "text using" clients was created. These same clients were contacted and reminded that a review of their electronic communications revealed that text messaging was being used by their employees and that text message communications must be captured, reviewed and retained in accordance with regulatory requirements. Failure to do so could result in violations of supervisory oversight and regulatory requirements, leading to significant fines.

Outcomes/Results: A total of 40 clients that use ARS's archiving systems were part of the review and out of those clients, only 5 had been using text to their business interactions. In total the review consisted of roughly 4,000 emails and other forms of communication like: LinkedIn, Microsoft Teams, and WhatsApp. Less than 1% of the messages did involve texting in the context of the message.

Evaluation/Conclusion: Based on the results of our analysis, ARS has adequately informed their clients of SEC recordkeeping rules and regulations surrounding electronic business communications. Many clients have received the message that the SEC is cracking down on organizations that fail to capture, review and retain business communications through text messages, and they are aware of the costly fines associated with such a practice. For clients found to be using text, they will receive a bulletin message reminding them to avoid doing so which will help them remain compliant if audited in the future. Moving forward, ARS plans to conduct this review annually to maintain accurate records for their clients and provide evidence to the SEC if requested during audits.

Title: Union County Strategic Plan Update

Name: Diana Chen

Preceptors: Jessica Stuart

Agency: Prevention Links- Roselle, NJ

Purpose: To update the strategic plan to reduce substance abuse among youths in Union County, NJ.

Significance: 2.08 million youths ages 12 to 17 have reported using drugs in the past month, and in the past few years there has been an increase in youth substance abuse (SAMHSA, 2023). In Union County, New Jersey, youths are at risk for alcohol, e-cigarette, and marijuana use. Among middle school students in Union County, 7.2% reported using alcohol, 3.4% using e-cigarettes, and 1.3% reported using marijuana in the past year. Prevention Links provides programs for middle school and high school students to educate them on topics such as tobacco, alcohol, and marijuana. This project will update the statistics on middle school students regarding drug and alcohol use, so that future prevention presentations can focus on which substances are a priority.

Method/Approach: Data were collected from the New Jersey Middle School Risk and Protective Factors Survey: 2021 Union County Summary. The Union County survey was administered to 240 seventh and eighth grade students with questions about alcohol, tobacco, and other drug use in their community. Data on frequency, sources, suspension and antisocial behaviors, and covid-19 experiences were all taken accounted for. This recent data was compared to data from the 2015 summary, which was the last strategic plan update. Results from this survey can create programs that help youth avoid risky behaviors, especially with information on newer drugs. Updates were also made to demographic information, which helps find which groups are at risk.

Outcomes/Results: Of the sample size (n=240), 12.3% of students had ever used alcohol, 6.7% of students had ever used e-cigarettes, 2.1% had ever used marijuana in their lifetime, and 1.3% of students have used prescription drugs that were not prescribed to them. Alcohol is the most frequently used drug among seventh and eighth grade students, but e-cigarettes with and without marijuana is also an increasing concern in this community. While the results show lower percentages of usage than the New Jersey average, the low response rates from Union County should be taken into consideration. Data from risk factors in this community shows that 72.8% of students in the "very high risk" category had consumed alcohol in their lifetime. Youth reported common sources for attaining substances, primarily from a gas station or from a friend. Overall, alcohol, binge drinking, marijuana, prescription drug use, cigarettes, and inhalant use have decreased in the past 10 years.

Evaluation/Conclusion: The Health and Wellness Coalition will implement strategies and programs that address the problem of substance abuse in Union County using the updated strategic plan. The "Don't Get Vaped In", "We're Not Buying It", and "Keep a Clear Mind" classes distributed to various Union County middle schools and high schools enhance access to effective prevention strategies. These programs offer new and updated information gathered from the strategic plan that focuses on the vaping epidemic, emphasizing that long-term effects are still unknown. The social media campaigns on youth substance abuse and national drugs and alcohol facts week have also increased awareness amongst Union County citizens. Prevention activities and take home programs allow parents and children to stay informed on topics such as vaping, by providing facts and statistics, emphasizing short-term and long-term effects, and offering resources. Programs are not used to enforce fear into youth, but instead are used to provide information about drugs and alcohol so students can build a healthy lifestyle for themselves.

Title: Grants Newsletter Outreach

Name: Jessie Chen

Preceptors: Direct Supervisor: Alexandra Maldonado, Director of Constituent Services

Project Supervisor: Jael Davis, Outreach Director

Agency: Hon. Frank Pallone

Purpose: To compose the monthly grants newsletters aimed primarily at municipalities and non-profits with the hopes of increasing subscribers by 25%.

Significance: The grants newsletter promotes state, local, and federal grants relevant to the constituents of Congressman Pallone's district. The newsletter is published monthly via email on the first business day of each month to anyone who signs up via their email address. While applying, constituents and organizations can also request letters of support from the office to increase their chances of receiving the grant. The newsletter is important because it helps bring state and federal funds into the district. By bringing external funds into the district, the Congressman and his staff are able to improve conditions while not using what limited resources are allocated by the federal government.

Method/Approach: The outreach director, Jael Davis, is sent various grant opportunities through email, also known as Notice of Funding Opportunity (NOFO). She selects which grants will be most relevant to organizations in the district and compiles them into a newsletter. Ms. Davis then distributes this newsletter to current subscribers as well as to new contacts who may potentially benefit from grants listed in the newsletter. In addition, newsletter subscription is promoted whenever the office hosts an event; when guests RSVP, they are also offered an option to subscribe to the newsletter. The office interns also update various contact lists; the updated list is then contacted about their interest in subscribing to the newsletter.

Outcomes/Results: Through the course of this internship, the number of grant subscribers grew by about 10%. Opens, or the percentage of subscribers who open the newsletter emails, increased about 5% compared to the same time period last year. In addition, calling and updating outdated contacts increased outreach potential. In particular, identifying key individuals and entities in the local Asian community helped the office gain a greater understanding of district demographics. In the duration of this internship, the district gained \$6,588,479 in federal grant funding.Drafting letters of support on the Congressman's behalf also increased opportunities for district residents. Six are currently in process; however, one that was submitted on behalf of a constituent led to a successful application.

Evaluation/Conclusion: Promoting the grants newsletter through events has proven to be fairly effective in gaining new subscribers; however, the activity status of these subscribers remains to be seen. Most active subscribers are obtained through the Outreach Director's own efforts in reaching out to personal contacts and network.

Title: Creating a Policy/Procedure Manual for NFSB Food Pantry

Name: Richie Choque

Preceptors: Joan Roake, Food Pantry Assistant Manager

Katherine Carmichael, Executive Director

Agency: Nutley Family Service Bureau

Purpose: To create a policy and procedure service manual NSFB food pantry.

Significance: According to Rescuing Leftover Cuisine, 1 of 8 Americans experience food insecurity. They recorded about 40% of food produced, processed, and transported in the U.S. is wasted and ends up in the landfill. This is important because 7.4% of New Jersey's population are food insecure. In addition, 9% of children are facing food insecurity. By operating a food pantry, many people would be able to access the many food choices that are offered. Data from the Current Population Survey Food Security Supplement sponsored by the USDA, Economic Research Service (ERS) shows that use of food pantries increased from 2019 to 2020. According to USDA, among very low food security, 45.5% reported using food pantries. Nutley Family Service Bureau offers a food pantry for the ones who are suffering from food insecurity. During distribution days, volunteers would inform about the food pantry and who to speak to to become a member. By developing a policy plan for the food pantry, can operate a friendly, nutritious food pantry that would be accessible to those in need.

Method/Approach: The first step was to review the current regulations on sanitation, temperature, and other things like volunteer instructions, how to be a member and how to donate at NFSB. Key stakeholders at NFSB like food pantry assistant manager, were also consulted to identify appropriate procedures and regulations for food pantry management. Next, the current workflow at NFSB was examined. A total of 3 policy manuals were reviewed from food pantries in New Jersey, South Carolina, and Alaska.

Outcomes/Results: The final draft of the policy manual is created. Topics included in the policy service manual were the mission statement, objective statement, staff, hours of operations, how to be a member, client's responsibilities, and rules and regulations. Additional information on USDA civil rights statements, confidentiality, volunteers, volunteer responsibilities/duties, food handling, emergency food distribution, donations, and Nutley's special programs like Scouting for Food and Thanksgiving Initiative were also included. In the end are forms like the volunteer forms, the Nutley calendar of when distribution happens, and USDA discrimination complaint forms.

Evaluation/Conclusion: A policy and procedure service manual can help with efficient and smooth functioning of the food pantry, and increase visibility and accessibility to the food pantry in the community. The policy and procedure manual helps guide anyone in running a food pantry. It can also be used as an orientation guide for new volunteers. With more volunteers, it would help spread the word to reach more clients. Also, having more diverse volunteers on the team will help in further connecting with the community.

Title: The Importance of the 340B Program and Challenges It Faces - White Paper

Name: Maria Chowdhury

Preceptors: Fatimah Muhammed, Director of 340B Pharmaceutical Services

Agency: Saint Peter's University Hospital

Purpose: To understand the impact the 340B Department of Pharmaceutical Services and Drug Replacement has on improving patient outcomes, access to care and services, and health equity overall through the drug replacement program, expansion of contract pharmacies, manufacturer restrictions, and how that affects the lives of members of vulnerable communities such as those in Middlesex County.

Significance: The 340B program at SPUH helps to provide low-cost/affordable outpatient prescription drugs to the underserved population while also acquiring hospital savings to create clinics and programs which in turn improve health equity. Recently, over 18 drug manufacturers including Johnson & Johnson have placed major restrictions on covered entities receiving 340B discounts on drugs impacting accessibility and affordability of outpatient prescription drugs for vulnerable communities. The white paper focuses on bringing light to the current issues the 340B program faces such as manufacturer restrictions as well as recognizing how 340B savings help to lead health initiatives and the openings of clinics such as the Howe Lane Family Health Center. By doing this, the white paper hopes to increase outreach and awareness of 340B's important role in improving health equity in hopes of encouraging manufacturers to loosen restrictions.

Method/Approach: To complete this white paper, research will be conducted by the entire team of interns with each intern specializing in different subject matter. The Director of 340B Pharmaceutical Services will be consulted and interviewed to better understand, from the perspective of leading a 340B program, how manufacturer restrictions as well as other related factors are current challenges the 340B program is facing. Along with this, past research and data collected from reliable sources will be used to contribute to the white paper's content.

Outcomes/Results: Currently, the white paper is in progress but the department is looking to publish it following its completion. The paper will be divided into five chapters which will cover what the 340B program is, the importance of it, the impact of manufacturer restrictions, 340B's impact on drug prices, challenges facing 340B compliance, and opportunities for advancement. This white paper is intending to bring awareness to 340B's role in healthcare and how manufacturer restrictions are limiting the program through its publication.

Evaluation/Conclusion: To best understand how successful the white paper is, a satisfaction survey will be created by the intern team to then be distributed to the 340B Pharmaceutical Services Department as a method of evaluation. Because this paper is very research-heavy, other methods of evaluation may not be possible especially with very little numerical data. To keep up to date, the white paper may be revisited in a year by the Director of 340B Pharmaceutical Services to compare developing changes as well as to understand how effective the paper was in bringing awareness to manufacturer restrictions.

Title: Pediatric HEDIS Performance Measures

Name: Jordan Clarida

Preceptors: Direct Supervisor: Stacey Knowles, Director of Managed Care

Project Supervisor: Jennifer DiGirolamo, Managed Care Coordinator

Agency: Saint Peter's Healthcare System - New Brunswick, NJ

Purpose: To analyze various pediatric HEDIS measures among the Medicaid population and engage in patient and provider outreach to increase compliance rates and quality outcomes.

Significance: In the United States, 14.7 million children and adolescents suffer from obesity. When primary care providers (PCPs) provide counseling for nutrition and physical activity, families are more likely to adopt healthier behaviors. Children of low-income parents are twice as likely to have increased BMI scores compared to children from higher income families due to socioeconomic factors and built environment. Providers at Saint Peter's Healthcare System compute BMI percentile and discuss the benefits of nutrition and physical activity with all pediatric patients during the annual wellness visit. Medicaid patients are less likely to come in for care due to their social determinants of health, and when they do, measures are often not captured correctly on medical records. This project will seek to improve patient outreach and identify gaps in data reporting.

Method/Approach: A review of the 2022 Medicaid Performance Summary from Aetna Better Health was conducted to assess HEDIS compliance rates for patients aged 3 to 17 years. The gaps in care report was extracted and exported to a spreadsheet in which it was filtered to display the noncompliant population. Patients that did not meet compliance for BMI percentile, nutrition counseling, and physical activity counseling were identified. The agency's electronic medical record (EMR) system, Athena, was utilized to explore probable causes of noncompliance. Provider documentation, billing codes, and patient medical history were probed to understand gaps in care. Patients who did not receive services were outreached by staff and any significant shortcomings in data reporting were communicated to pediatric practice administrators to improve future data capture for BMI HEDIS measures.

Outcomes/Results: Of the total patient population (n=78), 13 patients (17%) did not meet compliance for BMI percentile, 16 patients (21%) did not meet compliance for physical activity counseling, and 15 patients (19%) did not meet compliance for nutrition counseling. Further investigation revealed that the main source of noncompliance is patients not being seen for their annual wellness visit (AWV). In total, 13 patients failed to receive an AWV during the measurement year. Another major reason for noncompliance is inaccurate data capture. In particular, one patient had all three measures documented by the provider, however, coders failed to submit relevant ICD-10 codes on the claim to capture care. Likewise, 2 patients had met criteria for all three measures, however, Saint Peter's was not recognized by the payer for rendering care. Timely filing and claims run-out may account for this discrepancy.

Evaluation/Conclusion: Saint Peter's Healthcare System must be more proactive with outreaching pediatric patients for care. Medicaid beneficiaries are at a higher risk of poorer health outcomes and should be seen by a PCP annually, at minimum. Practice administrators should pull a report on the first of each month to identify noncompliant patients and schedule them for care. In addition, proper and precise coding methods are vital in ensuring the health system is credited and incentivized for providing services. When appropriate, billers must apply diagnostic codes on claims to capture services and close gaps. Continuous evaluation of administrative procedures is needed to reach and exceed HEDIS benchmarks.

Title: RWJ Safety Ambassador Program Manual Analysis and Revision

Name: Taylor Clarida

Preceptors: Direct Supervisor: Diana Starace, Injury Prevention Coordinator

Project Supervisor: Gabriella De Oliveira, Safety Ambassador Program Coordinator

Agency: Robert Wood Johnson University Hospital, Trauma and Injury Prevention Department

Purpose: To identify gaps and make changes to the RWJ Safety Ambassador Program Manual to ensure it is comprehensive and concise, promoting the fidelity of program operations and delivery.

Significance: Unintentional injuries are the leading cause of childhood death in the United States (CDC, 2021). In New Jersey, over 600,000 children are treated for unintentional injuries annually in emergency departments (NJSHAD, 2020). In 2022, RWJUH's Pediatric Emergency Department alone admitted 27,000+ patients. Many of these injuries can be avoided with proper education and awareness. The RWJ Safety Ambassador Program (SAP), a data-based educational program, trains high school students to educate 1st and 2st graders in communities around NJ about four key safety messages that promote safe behaviors: fall prevention, pedestrian safety, safety in and around cars, and wheeled sports safety. Based upon the program research, this program improves student knowledge and changes behavior/attitude related to safety. Through department meetings and discussion, it was determined that the current Safety Ambassador Program Manual lacked important information needed to promote consistent program operations and delivery. Since the Safety Ambassador Program is preparing to expand throughout New Jersey and nationally, this project focuses on revising the manual to support and guide all existing and future schools in delivering the SAP with fidelity and commitment.

Method/Approach: The first step was acknowledging that the Safety Ambassador Program Manual needed to be revised so that others could replicate this program model with fidelity. In addition, the manual was thoroughly reviewed and analyzed to identify any existing gaps. In order to close these gaps, changes to and additions of materials within the SAP Manual were created to improve comprehension and accessibility. Other existing and relevant resources from RWJ were also reviewed and modified. The final step included finalizing the revisions of the SAP Manual to promote fidelity in program operations.

Outcomes/Results: The RWJ Safety Ambassador Program Manual lengthened from a 39 page document to a 49 page document. Significant edits to the manual included adding a section that introduces the purpose of the program and its impact, as well as a section that identifies different approaches to program administration and student recruitment. The organization of the four key safety topics was repositioned, separated by topic and resources. Other edits included a redesign of the title page and logo, the addition of the program's participation agreement, the creation of teaching card/photo links, and the inclusion of Spanish resources.

Evaluation/Conclusion: The revised SAP Manual will promote replicable program delivery and ease the transition of overall expansion for all oncoming and existing schools. The impact of these revisions will be observable in the next year of the program, as well as with each expansion. These updates are necessary to ensure that the SAP Manual is comprehensive and concise for consistent program delivery and fidelity. The SAP Manual will be reevaluated every other year to ensure the information included meets the ongoing needs of the program.

Title: Exploring Viral Genetic Signatures in Tumor Tissues from Human Patients

Name: Arielle Cohen

Preceptors: Richard Copin, PhD, Associate Director of Bioinformatics

Agency: Regeneron Pharmaceuticals

Purpose: To develop a unique and refined computational method to leverage thousands of sequences from human samples and identify associations between diseases and the presence of viral genomes.

Significance: Comparative analysis of the vastly increased collection of complete genomes has demonstrated that acquisition of viruses is a general mechanism playing a role in the development of cancers. As such, the World Health Organization estimates that 15% of all cancers are attributable to infections and 10% are linked to viruses. While it is well established that Human Papilloma Virus (HPV) or Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) are the main causes of cervical and liver cancers, respectively, little is known on the role and nature of other viruses in cancers. This project will work to identify associations between new viruses and other types of cancers, among other pathologies.

Method/Approach: A curated and centralized database of 11,212 reference virus genomes involved in human diseases was developed to analyze and compare genomic data acquired from the Cancer Genome Atlas Program (TCGA). TCGA has over 20,000 primary cancer and matched normal samples spanning 33 cancer types. Initially, the analysis focused on using samples from liver hepatocellular carcinoma, colon adenocarcinoma, glioblastoma multiforme, and lymphoid neoplasm diffuse large B-cell lymphoma tumor tissues. Samples from healthy individuals were used as the control group. Custom R scripts and a suite of algorithms, including Megahit and BLAST, were combined to reconstruct, characterize and quantify viral genomes from each human sample. The results were then compared across all samples to establish significant associations between specific viruses and the cancer types.

Outcomes/Results: Hepatitis B virus, Gequatrovirus talmos, Gequatrovirus ID52, and Gequatrovirus G4 were found in patients with liver hepatocellular carcinoma. Gequatrovirus ID52 and Gequatrovirus G4 were found in patients with colon adenocarcinoma. Gequatrovirus talmos, Gequatrovirus ID52, and Gequatrovirus G4 were found in patients with glioblastoma multiforme. Gequatrovirus talmos, Gequatrovirus ID52, Gequatrovirus G4, Panine gammaherpesvirus, Pongine gammaherpesvirus, and Gorilline gammaherpesvirus were found in patients with lymphoid neoplasm diffuse large B-cell lymphoma.

Evaluation/Conclusion: Preliminary analysis identified 7 unique virus signatures across 4 cancer types. 2 viruses from the Gequatrovirus genus were shared in all tissues. HBV was unique to liver cancer, as expected. Gammaherpesvirus was only found in lymphoma. Importantly, these viruses were not identified in healthy samples. A limitation of this study is that if a virus causes cancer but is not in our database, it cannot be linked. This project is being continued with about 4,000 samples from 8 additional cancer types.

Title: Developing the SHADES Theater to Impact Rutgers Student Health

Name: Sophia Colon-Marquez

Preceptors: Mark Cruz

Agency: Health Outreach, Promotion and Education (HOPE)

Purpose: To develop a new and improved Student Health Advocates Developing Educational Scenarios (SHADES) theater that will educate the Rutgers community on safe sex, mental health, and drug and alcohol use through interactive theater.

Significance: Before college, students are often not sufficiently educated on essential wellness and health topics such as mental health, safe sex, and drug and alcohol use. As of 2019, only 43.9% of Rutgers University undergraduates felt aware of STIs and STDs (Juntilla, 2019). With a transition to modern content creation, the SHADES (Student Health Advocates Developing Educational Scenarios) theater at Rutgers would be a great resource for students to be educated on these topics through this unique performance. By rebranding and further developing the SHADES program, we will be able to increase outreach and the education college students can receive on health topics.

Method/Approach: Previous SHADES content was analyzed. Material that was still relevant was kept, and new material was created to complete the performance. A marketing plan was created to successfully launch the transition to a fully online SHADES theater. Three infographics were created and other content, including a recruitment flier on health and wellness topics using Canva. A public interview on wellness topics was also conducted to kickstart the content creation and recruit potential interests. Additionally, a Google form was created for potential recruits to fill out if interested.

Outcomes/Results: These methods were able to generate guidelines that ensure an increase in exposure for SHADES throughout Rutgers University. Once approved by Rutgers marketing, SHADES will have infographics and recruitment flyers ready to be posted on Instagram to launch the reintroduction of the program. The public interview conducted on College Avenue allowed for students to be aware of SHADES and receive more information if interested. As a result we were able to collect 4 emails of students interested in more information and participation in content creation for SHADES. This allows SHADES to have a starting base to execute the relaunch of SHADES and impact Rutgers Student health as a whole.

Evaluation/Conclusion: The SHADES program faced hardships in transitioning into a remote program during COVID-19 pandemic. This caused the program to slowly diminish. With the new plan and content created to relaunch SHADES, the program will now be able to have the opportunity to be as successful as other Rutgers student health programs. All of the materials worked on this semester will be left with the program organizers for future use.

Title: Importance of the 340B Pharmaceutical Drug Pricing Program- White Paper

Name: Sindhu Commuri

Preceptors: Fatimah Muhammad, 340B Pharmacy Reimbursement Program Manager

Agency: Saint Peter's University Hospital- New Brunswick, NJ

Purpose: To evaluate the success and sustainability of the 340B Drug Pricing Program while bringing light to current challenges this health equity program is facing.

Significance: The 340B Program ensures that low-income communities are still granted their necessary prescription drugs at affordable prices. This program also works towards obtaining increased savings for participating hospitals so that more funding can be directed towards initiatives that strive to decrease health disparities for these underserved populations. However, over 21 drug manufacturers have imposed limitations on participating hospitals, regarding drug pricing, which in turn results in the restriction of 340B discounts to underprivileged communities (340B Health). This white paper focuses on the significance of the 340B program and its efforts to achieve health equity while providing underprivileged communities a chance to obtain quality healthcare. The scope of this project is to research issues that this drug pricing program faces with drug manufacturers.

Method/Approach: A comprehensive literature review was conducted on different aspects of the 340 B program including compliance/manufacturing restrictions as well as the program's growth as a whole. Various credible external sources such as National Institutes of Health (NIH), PubMed, and the official 340B website. Key Search Words such as "health equity, 340B reimbursement, manufacturer restrictions, were used when finding articles to help structure the paper.

Outcomes/Results: The white paper will mainly consist of five sections such as what the 340B program is and its impact, the importance of the program, what manufacturer restrictions are in place, any challenges the program faces, and how to improve the success of the program. Over 15 different articles will be used to gather statistics and other important data that would be used in the development of the white paper. The number of covered entity sites taking part in the 340B program climbed from 8,100 to 50,000 between 2000 and 2020. However, with manufacturers placing limitations, in 2021 alone, just five firms' stringent rules cost safety-net hospitals \$1.1 billion in potential 340B savings. According to estimates, the yearly losses from 340B savings now amount to billions of dollars (340B Health). The findings from the research for this literature review were also used in the development of the 340B department's recent newsletter.

Evaluation/Conclusion: The white paper is currently in progress and is projected to get completed in the near future. Evaluation of this white paper will occur by analyzing the results of a Pre and Post test survey conducted by the interns of SPUH that will be given to the entire 340B Pharmaceutical Services Department at Saint Peter's University Hospital. Once published, it is expected to aid in educating the community, bringing awareness about the 340B program, and creating policies or strategies regarding health equity.

Title: Lifestyle and Nutrition Program in Patients with Latent Tuberculosis (TB) Infection

and TB Disease

Name: Nour Aliman Dandan

Preceptors: Deborah Handler- Principal Investigator

Agency: Global Tuberculosis Institute

Purpose: To investigate the impacts nutrition and lifestyle have on the treatment outcomes and overall quality of life of patients with active tuberculosis or latent tuberculosis.

Significance: The tuberculosis (TB) pandemic killed around 1.6 million people and infected over 10.6 million people in 2021. A quarter of the global population has been infected with TB disease or latent tuberculosis infection (LTBI). The World Health Organization (2022) found that undernourished people are 3 times more at risk for TB. The Global Tuberculosis Institute (GTBI) helps combat TB by offering testing and treatment services. Additionally, GTBI has many ongoing research projects aimed to improve TB treatment outcomes. This project promotes a healthier lifestyle and provides nutritional resources, with the goal of positively impacting the treatment outcomes of TB patients.

Method/Approach: TB patients who are 18 years or older and have a chronic comorbidity were screened and approached by program staff during their scheduled clinic visit with the doctor. Patients were given the option to participate in the program or be a matched control. Patients who gave their consent to participate were enrolled in the 90-day nutrition program. Participants were provided with one-on-one counseling with a registered dietitian, given education material, food packets for the first four weeks, and a kitchen item of their liking. Controls are offered a gift card for their 3 required clinic visits. Medical information such as blood pressure, weight, height, and hemoglobin A1C, cholesterol, and immune response testing were collected on day 1, day 30, and day 90 for participants and controls.

Outcomes/Results: This project is ongoing; however, after two months (February & March of 2023) of actively screening and enrolling participants, a 25% enrollment rate was observed. 100% of those enrolled, enrolled as participants and are being treated for LTBI. At this time, 10% of the required participants are enrolled, and 0% of the controls are enrolled. All participants demonstrate a better understanding of nutrition and healthy lifestyle changes.

Evaluation/Conclusion: While introducing the program to eligible patients, they expressed that they are discouraged or unable to participate because of work, lack of transportation, fear of stigma, or feeling unwell or too overwhelmed. Participants expressed during their visits that they had difficulty remembering to complete their daily check-in journals. Reminders via phone, text, or email will serve as effective methods to enhance adherence. Future plans include collecting more data (1 year in total), determining the impact of nutrition on TB treatment from the medical information gathered, and a publication detailing the study results.

Title: Patient Acess's Involvement in Pediatrics to Improve Patient Throughput

Name: Omar Dar

Preceptors: Mary Kelso - Director of Patient Access

Agency: Robert Wood Johnson University Hospital - New Brunswick

Purpose: To examine the patient throughput in the pediatrics department to assess how the registration department affects patients' experience.

Significance: A patient expects high-quality care and excellent hospital experience. For Robert Wood Johnson University Hospital, this is important for the pediatric surgery center. The pediatric surgery center wants to improve patient throughput to ensure a seamless patient process. Throughput is essential in hospitals because the more seamless the patient process is, the higher the patient satisfaction ratings will be. Existing functions in the registration and clinical departments can be changed to improve the throughput. This is the importance of the project as it looks at the Patient Access Department to determine which process can be enhanced to improve the patient's experience. By fixing the barriers between departments, the transition for the patient should be optimized to the best it possibly can be.

Method/Approach: An observational audit was completed by observing the patient registration in the pediatrics' department to see what barriers were causing a delay in the patient throughput. The observation was done by looking at the process the patient went through before they arrived, the registration process, and the process of patients going upstairs for their surgery. To understand what needed to be improved, research was done on patient experience improvement processes. Then an interview with management was done to learn about the current registration process and how it could be improved. After getting this information, I shadowed the pediatric registration desk and took notes on barriers that would cause delays in the registration process. After learning the barriers, an interview was done with the clinical staff to clarify specific barriers that may occur upstairs that can cause a slowdown in patient throughput. The final step of this observational audit was to take the barriers that were discovered and rank them on a sheet based on priority to be fixed in the existing 2023 action plan.

Outcomes/Results: After observing, opportunities were discovered that hindered patient throughput. Three main topics will be prioritized and amended into the current year's action plan. These barriers ranked in priority are effective communication, AIDET (Acknowledge, Introduction, Duration, Explanation, Thank You), and critical thinking skills. AIDET and critical thinking skills are based on the patient registration process. These barriers look at the initial process of the patient, and by focusing on these concepts, the registrars can make the process for the patient more seamless. Communication is something that both the clinical team and patient access side must fix together, as this barrier revolves around communicating with the management team of patient access and the clinical team upstairs. This project aimed to pinpoint the barriers occurring and prioritize them on importance, so they get fixed to ensure a seamless patient throughput process.

Evaluation/Conclusion: Success is high since the project will align with the 2023 performance improvement action plan. This is because the recommendation will be included in changes made by the administration throughout the year to achieve the hospital's metrics. Also, the recommendations being implemented will likely be fine as during the time I have been interning here, a couple of changes have already been made since they have been addressed. Through my experiences during this internship, I have learned the patient improvement process, which assured me that I would be very interested in pediatrics.

Title: Understanding Human Trafficking and Prevention Strategies in Healthcare Settings

Name: Frank Deigh

Preceptors: Diana Starace

Agency: Robert Wood Johnson Trauma and Injury Prevention Department

Purpose: To assess the current evaluation tool being utilized by the New Jersey Coalition Against Human Trafficking (NJCAHT) for presentations to healthcare audiences to determine if the questions accurately measure knowledge acquisition, in addition to identifying areas for improvement in content and delivery of presentations.

Significance: Human trafficking is a significant global issue, with an estimated 25 million individuals subjected to trafficking at any given time. (Labour Organization, 2017). In 2021, the National Human Trafficking Hotline received 10,359 potential human trafficking cases (Polaris, 2022). Human Trafficking and Prevention Strategies within the Healthcare Settings are critical, considering that 80% of survivors report seeking medical help while being trafficked, but no one recognized it (Polaris, 2022). Healthcare workers are one of the few professionals that are capable of identifying and working with trafficking victims; however, the lack of education and awareness of human trafficking is low (Fraley et al. 2019). Therefore, through NJCAHT presentations and post-survey evaluation questions, it is important to improve knowledge and give healthcare workers the resources and information they need to impact their practice so that there are better outcomes for survivors.

Method/Approach: A literature review was first conducted to understand the impact of human trafficking and improve my knowledge of the topic. The current evaluation method used by NJCAHT was thoroughly investigated to understand which questions were effective in assessing knowledge and which questions revealed patterns of discrepancies. To address this concern, attended NJ Coalition Against Human Trafficking Meetings and Calls, and later a meeting with Lisa Falcón, Trauma Program Manager at RWJ, was scheduled to discuss ways to further improve the NJCAHT healthcare survey and create better questions for the improved survey. After the meeting, an email was sent to the NJCAHT committee with notes/feedback on ways to improve the survey further.

Outcomes/Results: An improved and updated SurveyMonkey was created and distributed to healthcare workers to gather data about their knowledge of human trafficking that may serve to be better effective in gauging education levels and determining ways to improve areas of weakness for future evaluations.

Evaluation/Conclusion: As the NJCAHT provides ongoing educational conferences and workshops for healthcare providers, participants will have a better understanding of HT and the ability to identify the red flags (signs). This will increase their ability to support and respond to victims of human trafficking in the healthcare setting. A validated assessment tool will effectively assess the knowledge and awareness of human trafficking amongst healthcare professionals, which in turn, will greatly benefit survivors and improve patient outcomes.

Title: Decrease the Number of No Shows in a Podiatrist Office

Name: Tiana Dequattro

Preceptors: Dr. Thapar

Agency: Ankle and Foot Specialist of New Jersey

Purpose: To address the issue of high no-show rates in a podiatrist's office at an Ankle and Foot Specialist clinic in New Jersey.

Significance: High no-show rates can significantly impact the functioning of a healthcare facility, leading to wasted resources, increased waiting times, and compromised patient care. By reducing no shows, the clinic can maximize its operational capacity, enhance patient satisfaction, and improve the overall quality of care provided. This internship aims to explore the causes of no shows and implement effective measures to mitigate their occurrence, benefiting both patients and the clinic.

Method/Approach: A comprehensive analysis was conducted on a total of 288 patient visits. This analysis included the following steps taken; left messages (73), cancellations (10), and the number of noshows (68) to identify patterns and potential causes of missed appointments. Key factors contributing to no shows were identified. These included patient demographics, appointment scheduling procedures, communication methods, or any other relevant variables. Research was conducted on methods and technologies doctors' offices can implement to reduce no-shows. By calling and confirming patients' appointments this allowed for direct communication and data collection. Through these calls, there was an observation of a significant number of no-shows, which prompted the creation of a chart to track and analyze the frequency of missed appointments. This chart served as a valuable tool for identifying patterns and potential causes of the no-show phenomenon.

Outcomes/Results: A target of 189 rescheduled appointments was set between March 20, 2023, until April 29, 2023. Reduction in the number of no shows could be improved by implementing proactive communication strategies and reminders. This includes personalized messages and convenient rescheduling options such as a schedule coordinator who can handle appointment bookings, rescheduling, and managing new patient appointments. This would help streamline the appointment process and ensure better coordination. An automated system is recommended to send reminders to patients via email or text messages. These reminders would serve as proactive communication strategies, keeping patients informed about their upcoming appointments. Another suggestion is to have a waiting list for patients who can be contacted to fill in vacant slots due to no-shows. This would optimize the utilization of the clinic's resources and reduce the impact of missed appointments. By introducing a software system that enables efficient documentation through Therapy Notes this can ensure accurate and accessible patient records. This would enhance communication and continuity of care among the clinic staff. For better processes in the future, hopefully the clinic chooses to implement these strategies.

Evaluation/Conclusion: A comprehensive evaluation will be conducted to assess the impact of the interventions on reducing no shows. This evaluation will involve analyzing the data post-intervention and comparing it with the pre-intervention data. The conclusion will highlight the success of the strategies implemented and provide recommendations for further improvement. By addressing the issue of noshows, this increased rescheduled appointments by making follow up calls. This project aims to enhance patient care and optimize clinic operations, to promote better communication for the patients.

Title: Endometriosis Awareness Program

Name: Thais Dequeiroz

Preceptors: Cathy Pinto, Office Manager

Agency: New Beginnings OB/GYN

Purpose: To educate women in various age groups about the effects of endometriosis.

Significance: According to WHO (2021), approximately 10% of women at reproductive age suffer from Endometriosis globally. Late diagnosis of the condition may lead to several complications including infertility (Kennedy et al., 2005). A study published in the Journal of Women's Health found that the prevalence of endometriosis among women in the Northeast region of the United States was 11.5%, hence the urgency to address the situation. The project is aimed to create educational materials to educate and raise awareness on endometriosis. New Beginnings is focused on increasing awareness by educating patients during their scheduled visits to help with identifying symptoms in the beginning stages of the disease.

Method/Approach: Educational materials were created including brochures and pamphlets that explain what endometriosis is, what its symptoms are, and how it can be treated. The brochure was created in both English and Portuguese languages to account for the community the clinic services. A survey was created in order to quantify the amount of patients that have knowledge of endometriosis as well as trying to understand the age group for further analytics. The objective was to understand any disparity between women's age groups. The survey collected the patient's first name, age, and if they knew about endometriosis, where they would be marked by a yes or no.

I met with patients during the pre assessment portion of their visit along with the attending nurse. During this time, I would introduce myself and the objective of my presence. I disclosed that I was collecting their first name and the purpose of the information, for full disclosure. I then presented the patient with a brochure containing information about endometriosis and also spoke with them about the disease and the importance of early detection. I also shared my personal experiences with Endometriosis to provide a first person view of how the disease affects a woman's body.

Outcomes/Results: I created a survey which was used to collect awareness information from patients over a period of 5 weeks, between January and March. Using this survey, I found that out of 180 patients, 61% of the patients reported having never heard of endometriosis before attending the awareness program. The survey collected the amount of patients I met with, divided into different age groups, and their awareness of endometriosis.

The first age group of patients, aged 18-25 years, represent adolescents and young women. In this age group, I met with 30 total patients, out of which only 1 was familiar with endometriosis. The next patient age group were aged 26-40 years, which were young women before the menopausal stage. I met with 70 total patients, out of which 24 had knowledge of endometriosis. The last patient age group were aged 41-55 years, which represent women in the perimenopausal and menopausal stage. I met with a total of 80 patients and 45 had knowledge and awareness of endometriosis.

Evaluation/Conclusion: The disease awareness program aims to increase their patient's knowledge of the condition by ensuring that they can correctly identify common symptoms, avoid late diagnosis, and know the treatment options available. Having the materials available in both English and Portuguese languages helps with maximizing the spreading of this information within the community being served.

Title: Undertaking Grant Prospect Research and Proposal Writing

Name: Zakaria Din

Preceptors: Nan Fisher, Founder of The AAT Project

Agency: The AAT Project, New York, NY

Purpose: To research available grant opportunities and acquire funding for the Green Journey Coalition.

Significance: Microplastics found in polluted water can restrict one's breathing, cause cell inflammation, and weaken one's immune system (Li et al., 2020). The Green Journey Coalition is a not-for-profit organization that uses research and innovation to develop the needed technology for cleaner water to fight plastic pollution. To curb the plastic pollution crisis, the Green Journey Coalition created a device that extracts microplastics from water. This project's grant writing process allows the Green Journey Coalition to secure funding for their device's continued development.

Method/Approach: The first step towards acquiring grant funding for the Green Journey Coalition involved creating a system of tracking their progress towards grant funding. To improve their ability to track grant funding, a comprehensive spreadsheet was developed for the Green Journey Coalition that listed around 50 different sources of grant funding. This spreadsheet included each researched organization's contact information, website links, and grant application deadlines. Alongside the creation of this spreadsheet, each organization received a letter of inquiry to provide their representatives with a strong first impression of the Green Journey Coalition's goals and mission. The second step involved researching information for and writing grant applications for each organization with open requests for proposals.

Outcomes/Results: Four foundations received grant applications from the Green Journey Coalition. These documents were written to acquire the organizations' interest in receiving a grant proposal. Also, the team wrote a grant proposal for an organization that is openly accepting proposals for researchers and scientists seeking around \$100,000. The Green Journey Coalition's mission and needs were well communicated within the proposal after revisions amongst the team.

Evaluation/Conclusion: The approval process for the team's submitted grant proposals takes a significant length of time. The Green Journey Coalition is awaiting results from each contacted organization within a six month period to potentially receive funding. To secure funding for future projects, the organization will need to access the comprehensive spreadsheet and the accompanying research. The spreadsheet should be updated on a regular basis to keep track of new grant funding opportunities.

References: https://docs.google.com/document/d/1IeqHJuMLRWDR9oGzeyidPjBu9rzHLNipGqIF-tKpfC4/edit?usp=sharing

Title: Implementing a New Approach to Primary Care Through Concierge Medicine

Name: Sara Diras

Preceptors: Iyad Baker

Agency: Baker Health

Purpose: To provide an elevated level of care and more personalized and enhanced doctor-patient relationship.

Significance: The problem with healthcare today is how difficult and inaccessible it is for the patient (Harvard Health 2021). There are a plethora of issues including uneven access, high cost but not highest quality care, weeks-long appointment, never ending waitlists, cycle of random physicians, and emotionless and sterile care (Harvard Health 2021). Baker Health decided to change the game of medicine and how it runs, hence the decision to make the switch to a concierge practice. This internship project involves aiding the practice and patients during the shift from a regular medical practice to a concierge practice. This transition is designed to conform to the life and schedule of the patient rather than at the convenience of the physician or practice. The Baker Health team will promptly take care of all of the prenatal, pediatric, and primary care needs while fostering a nurturing environment to our patients.

Method/Approach: As a team at Baker Health several programs have been implemented to provide compassion-driven hospitality and to ensure every member and family encounter is a positive one. This is on by providing the opportunity to attend curated events and activities that bridge the gap between functional health and modern medicine. An example of one is the prenatal classes held bimonthly ran by our own providers and specialists. It is designed to provide support to expecting parents and prepare them for labor and delivery. The goal is that each member who attends, will gain access to: breastfeeding education and physician-approved labor and delivery breathing techniques. Using QR codes posted at the exit sign to access our app, participants are required to scan to complete a post-program evaluation. The evaluation and reviews members leave gauges how well program participants comprehended the material and how well we did to achieve our goal.

Outcomes/Results:

By giving patients unparalleled service through our extensive offerings, we aim to redefine the healthcare sector. Thus far, attendance at these events surpassed our expectations. Before our first prenatal class, all attendees were asked to rate their understanding of labor and delivery on a scale from 1 to 10, with only 12.98% saying they had an expert level of understanding. Following the class, we asked our members to rate their understanding once again. This time, 78.16% of members reported they had an excellent understanding of labor and delivery and have a clear understanding of what to expect when they are expecting.

Evaluation/Conclusion:

The prenatal class is a success as we saw through the survey there was a 66% increase in patients understanding and knowledge on prental care before and after the class. We will continue planning programs and scheduling classes for the benefit of the member and collecting data to see how and where we can improve or even what we can offer to help the member. The best treatment is prevention; proper communication and collaboration between the physician and member for the best care (Harvard Health 2021). Concierge medicine is a partnership and our members will continue to receive the highest possible compassionate and collaborative care.

Title: Reducing Insurance Claim Denials in the Emergency Department (ED)

Name: Braedon Dobrynio

Preceptors: Mary Kelso, Director of Patient Access, MBA, MS Health Policy

Agency: Robert Wood Johnson University Hospital - New Brunswick, NJ

Purpose: To analyze insurance eligibility claim rejections/denials originating from registration issues in the Emergency Department in order to improve denial management.

Significance: Since 2016, the average denial rate has climbed 23%, and an additional 11% since the start of the COVID-19 pandemic, according to Change Healthcare's 2020 Revenue Cycle Denials Index (Change Healthcare). Unresolved claim denials create severe revenue leakage for healthcare organizations, and also negatively affect the patient experience, since the appeal process is time-consuming, costly, and may require intervention with patients after their date(s) of service. From August 2022 to January 2023, insurance eligibility rejections averaged 485 per month at Robert Wood Johnson University Hospital. This evidence indicates a gap in revenue cycle management. Interventions related to workflow in the Emergency Department, examining real-time eligibility (RTE) responses, and educating staff members on best practices for denial management and revenue cycle will help bolster internal confidence to reduce denials.

Method/Approach: The first step was to conduct extensive observations of current work flow in the ED. The registration process was assessed and feedback was collected from ED staff and management. Following weeks of observations, several meetings were held with management, billing/coding staff, and senior leadership to provide a holistic view of the revenue cycle process. The second part of the intervention process was to work with data provided by the Patient Access department specialists. A retrospective view of claims data from Sept 2022 to Feb 2023 was completed to assess major themes and commonalities within the ED. Data was filtered and analyzed in Microsoft Excel through *Pivot Tables*. The data were filtered based on variables such as payers, claim type, filing order, plan, and message. Particular attention was made to the messages in the rejection report, as well as the type of claim. Following review of data, these questions and findings were brought to the attention of management.

Outcomes/Results: It was found that the top ten payers involved in the rejection reports were Horizon BCBS, Aetna, Medicare, Geico NF, United Healthcare Medicare, Managed Medicaid (Out of State), United Healthcare, Generic Commercial, Plymouth Rock NF, and PMA Workers Compensation. This is in line with RWJ's Level *One* Trauma Center status, as it is expected for the ED to experience a high volume of workers compensation, auto accident, and no fault cases. Additionally, the cases in the ED related to Medicare/Medicaid totaled 18.69% of rejections. Overall, 626 rejections were generated from Sept 2022 to Feb 2023, compared to 846 rejections within the rest of the hospital, totaling 1472 altogether. Therefore, 42.5% of the hospital's rejections were from treat and release cases in the ED.

Evaluation/Conclusion: Reducing treat & release rejections requires best practice and protocol improvements for Medicare/Medicaid, Motor Vehicle, Workers Comp, and No Fault cases. Management is seeking a 10% baseline reduction in denials for their 2023 Performance Improvement Action Plan. To reach this goal, a re-education program is launching department wide this summer, which will include best practice improvements in the following areas: Medicare Secondary Payer Questionnaire, Real-Time Eligibility responses/content errors, demographic data collection, and registration quality improvement. As a result of this data analysis, management will continue to develop interventions at the employee level and system level to reduce the number of rejected claims.

Title: Early Child Care Nutrition Curriculum Assessment

Name: Indira Douglas

Preceptors: Project Supervisor: Gina Stravic, Executive Director

Direct Supervisor: Preeti Srivastava, Early Childcare Director

Agency: Raritan Valley YMCA

Purpose: To measure the success of a nutrition education curriculum for preschool children ages 4-5 enrolled in the Raritan Valley YMCA early child care program

Significance: Childhood obesity has become an increasingly prevalent threat to public health in the United States— according to the Centers for Disease Control, 20% of children and adolescents in the U.S are considered to be overweight or obese. Childhood obesity disproportionately affects those of disadvantaged socioeconomic status and ethnicity and is correlated with long-term chronic diseases such as cardiovascular disease, diabetes, fatty liver disease, and other psychosocial issues (Goran, 2016). Evidence suggests that nutrition education and policies in early child care programs are a necessary component of preventing childhood obesity and promoting life-long health habits (American Academy of Pediatrics, 2019). This project will develop a nutrition education curriculum within the Early Childcare program to provide children and parents with adequate nutrition knowledge and resources.

Method/Approach: To assess the nutritional knowledge and eating habits of preschool children, a preassessment was first administered to gauge understanding of nutrition and healthy eating. In the pre-test, children were asked to categorize 15 various images of food as "healthy" or "unhealthy". Direct observation and photographic documentation of lunches and snacks during mealtimes were also recorded to discover childrens' eating behaviors as well as parents' adherence to the healthy eating guidelines outlined in the YMCA's early childcare policies. Extensive research of early childhood nutrition was then conducted to determine the appropriate content to include in a nutrition education curriculum— of which included adequate variety, adherence to the 5 food groups, portion sizes, moderation, food acceptance, and positive attitudes towards mealtimes. A 10-week lesson plan of these topics that consisted of a presentation, read aloud, and hands-on group activity was developed to fill in the gaps of their nutritional knowledge and establish positive attitudes toward eating and mealtimes. Weekly emails were also sent to parents with information corresponding to each week's lesson and were also sent to reinforce these behaviors outside of the classroom. The activity from the pretest was then re-executed after the 10 week curriculum to gauge effectiveness and improvements in nutritional knowledge.

Outcomes/Results: In follow-up observations of children's behaviors and meals during lunch and snack times, the children became cognizant about the nutritional value of their meals and expressed enthusiasm about making healthy choices. Additionally, the outcome of the post-test indicated the 10-week curriculum was effective. The average score on the posttest was 92%, a 16% increase from the pretest average of 76%-- although one child that was evaluated in the pretest withdrew from the childcare program in the last month of the curriculum, and 4 children joined the program around 5-7 weeks into the curriculum.

Evaluation/Conclusion: This program, a 10-week curriculum consisting of a variety of nutrition lessons and activities, was successful in improving children's ability to make healthy food decisions of their own. Going forward, it would be better to standardize this program and permanently incorporate it into the Early Childcare education curriculum for future staff and students to use.

Title: Overcoming Racial Disparities in Alzheimer's Clinical Research Trials

Name: Ashleigh Drummond

Preceptors: Kaylee White, PhD: Site Manager

Agency: Princeton Medical Institutes

Purpose: To investigate and analyze the cause of the low rates of African American participation in Alzhemier's clinical trials, and offer ideas to resolve those issues.

Significance: Alzheimer's Disease is the most common type of dementia, a progressive brain disease that impedes memory and impacts other daily activities. Currently, there are 6.7 million Americans over the age of 65 living with Alzheimer's (Alzheimer's Association). More specifically, in New Jersey, 190,000 people over the age of 65 live with the disease but the burden of this disease is carried by African Americans who are twice as likely to get Alzheimer's than their White counterparts (CDC, 2018). According to the CDC, it is estimated that 14% of adults 65 and over with Alzheimer's are Black (2018). Princeton Medical Institutes is a clinical research organization located in Princeton, NJ that conducts clinical trials in mental health research as well as provides free memory evaluations in the community. There has been a long-documented history of discrimination and exclusion from clinical research, the most common example being the Tuskegee Syphilis experiment which contributed to the high levels of medical distrust in the Black community, (n.d.-a) The Alzheimer's Association notes that 62% of Black Americans believe that medical research is biased, (n.d.). This project will not only advocate for more diversity in clinical trials but also provide ideas on ways to improve this issue.

Method/Approach: A survey was done to collect feedback from African American participants who conducted a memory screening but did not follow through with the clinical trial participation. Patient memory screenings were sorted through to collect contact information and were contacted via text message based on race/ethnicity and their MMSE score. The survey contained five questions pertaining to race/ethnicity, place of residence, the longevity of memory problems, familial history, and the reason they chose not to participate in a clinical trial.

Outcomes/Results: A total of 30 African American patients were selected to participate in the survey. Of the 30 patients, 16 reported that they chose not to participate due to medical distrust, 5 reported they did not have the time/resources (transportation, travel time, work, etc.), 3 reported they were just uncomfortable with the process, 1 reported fear of discrimination, and the remaining 5 patients did not respond. In a follow-up survey, when asked about what could be done to increase their chance of participation, 70% stated they would like to see better representation in the staff which would make them feel more comfortable and 8% stated that they would like more education. All patients were ensured of the proper protocols that protect all research participants regardless of race, sex, religion, or sexual orientation.

Evaluation/Conclusion: Clinical research is a vital part of healthcare and is designed to test different medications or therapies for diseases without cures. Opening a research site in a more diverse community, including more diversity in ads, marketing to different communities (i.e. radio stations), and hosting memory events in black and brown communities while providing education about how these populations are protected during the clinical research process are all ways to increase diverse populations participating in clinical trials. Another recommendation is to include physicians and other healthcare practitioners of color in these organizations as patients are more likely to respond and engage with someone who looks and talks like them.

Title: The Heart of a Hospital System

Name: Arielle Dublin

Preceptors: Auanna Zamara

Agency: Memorial Sloan Kettering- 53rd Street

Purpose: To recognize the importance of every role at an ambulatory care facility and how the role affects patients within their day to day. Every role at an organization no matter how big or small will matter at the end of the day.

Significance: The Centers for Disease Control (CDC) estimate that by 2050 the annual number of cancer cases in the UnitedStates will increase by nearly 50 percent as a result of the growing and aging population. Due to this data, research has found the importance of having specialty hospitals to have patients that have cancer diagnoses within different areas of life or based on the severity allows them to be treated with care that has good intent to help them achieve great treatment based on their diagnoses and recognize a team that will never give up.

Method/Approach: My approach was understanding the principles that Sloan instilled, making sure that I was always friendly with patients, conduct myself with dignity and grace and most importantly utilize the experiences from my life to help patients no matter how big or small the issue. I utilized the pillars of kindness I was taught at Memorial Sloan on my first week of internship that models the slogan: Leading the fight against cancer. Always focused on you

Outcomes/Results: Individual experiences with families have been the most rewording. I didn't truly understand how much this role would actually make a difference for the care here at MSK. I think it's important to remember that receiving any critical health diagnosis isn't fun, it's important to remember how you interact with patients might make or break their stay at a hospital system for their care. Learning to soak everything like a sponge is extremely important as well. I found that the more I interacted with patients

Evaluation/Conclusion: Memorial Sloan Kettering has been a stand alone cancer institution since its founding in 1884. It has since expanded into an enormous institution that allows others to be seen by the clinical team in different parts of the metropolitan area. The new Board of Directors lead by new CEO Dr. Brian Vicky has made an effort to not only make inclusivity in jobs an importance, but inclusivity in how the different varieties of cancers are being treated. In conclusion, there is such an importance when it comes to interacting with patients in an ambulatory care system. Every decision made to run a facility affects staff morale, turnover rates, which in conclusion affects the patient.

Title: Assessment of Hygiene Behaviors and Services in US Unhoused Population

Name: Avery Ebert

Preceptors: John El-Maraghy, Co-Founder/Co-Director

Agency: Archangel Raphael's Mission

Purpose: To analyze the literature regarding the hygiene behaviors of adults experiencing homelessness in the United States.

Significance: There are currently more than 582,00 people experiencing homelessness in the United States according to data published by the Department of Housing and Urban Development (HUD,2022). People experiencing homelessness are at an elevated risk for contracting infectious diseases for various reasons. Unhoused people experience close-quarter living arrangements at homeless shelters and homeless camps which increases the rate at which infections may be spread (Buechler, et.al., 2020). The experience of homelessness has also shown to result in negative mental health outcomes (Mosites, et. al, 2022). People who experience homelessness endure barriers to standard hygiene practices like hand washing, bathing, laundering, and more. The lack of access to hygiene services worsens the ability of people experiencing homelessness to fight infections and support their immune systems (Mosites, et. al, 2022). Intervention programs that increase accessibility to hygiene practices can reduce the risk of infections and improve mental health conditions. The scope of this project is to conduct a literature review to explore the trends and determinants of the hygiene behaviors of unhoused people.

Method/Approach: A review of the current literature on hygiene habits of people experiencing homelessness in the northeastern United States was conducted to gain information regarding trends of these habits. Approximately ten articles/studies from various peer-reviewed sources were analyzed. Based on the data analyzed, a survey was created to gather information regarding the hygiene habits and hygiene service accessibility for adults experiencing homelessness in Central New Jersey. This survey was originally expected to be administered to adults experiencing homelessness at an event organized by ARM. This event was expected to occur on April 16, 2023 but was postponed indefinitely due to scheduling conflicts. The agency intends to administer the survey at future hygiene-related events.

Outcomes/Results: Data showed that there was a significant barrier to access to a variety of hygiene services and products for people experiencing homelessness. Almost 90% of unhoused Americans have experienced barriers to access to public showers (Buechler, et.al., 2020). While showering daily may not be necessary for housed individuals, living in unsanitary conditions requires more frequent bathing to maintain standard hygiene, but only 34% of unhoused people reported that they were able to bathe daily (Buechler, et.al., 2020). 29.5% of unhoused people reported that they were able to shower 3-6 times per week and another 29.5% reported showering 1-2 times per week (Buechler, et.al., 2020). The literature also revealed that people who menstruate face unique barriers to accessing standard products and the privacy required for comfortable menstruation (Vora, 2020). Stigmas surrounding menstruation make this experience especially difficult for unhoused people.

Evaluation/Conclusion: Unhoused people in the United States experience a significant barrier to access to hygiene resources and services which limits their ability to participate in healthy hygiene habits. More public toilets and showers are necessary to ensure the safety and health of Americans experiencing homelessness. Additionally, lowering the cost and removing taxes on menstruation products will increase their availability and accessibility to vulnerable populations. Policy reform is needed to expand public hygiene resources and services availability to fit the needs of the unhoused population.

Title: CityMD Urgent Care Trends

Name: Salma Eleissawy

Preceptors: Mario Teixeira, Manager

Agency: Summit Health CityMd

Purpose: To analyze the main concerns that bring patients to urgent care and propose a database to see what the common concerns are.

Significance: Many people in the bayonne community go to urgent care to receive the care that is required, especially after the pandemic urgent care has grown tremendously. The services urgent care offers provide people with easier ways to quickly get the help they need. People go to urgent care to mainly manage upper respiratory infections and viruses they are suffering from. After 3 years of a pandemic, a decrease in covid cases was expected to happen. In New Jersey, 95% of the population has received at least one dose of the covid vaccine, and 79% are fully vaccinated. So far 2,562,575 residents of New Jersey have tested positive for covid throughout the pandemic (CDC, 2023). As people are less strict about the guidelines of covid, other viruses are starting to return to the community. This season alone 2.8 million people tested positive for influenza.

Method/Approach: This project will be collected based on how many positive cases of viruses and infections seen. Students will keep track of how many people test positive for flu, covid, strep, and even keep track of UTI cases. Gathering data and relevant information from January 2023 to April 2023, charts and graphs of the data were used to determine what viruses the community is suffering from and to keep track of covid cases. The graphs and charts were created to be succinct and clear to understand. Research was done to gather details on urgent care and covid in order to provide the data and analysis. Moreover, studies on nearby healthcare systems were conducted by CDC and New Jersey Health.

Outcomes/Results: At CityMD, many different cases: fractures, pneumonia, MVA, and abnormal EKGs are seen on a daily basis but the most common being viral infections. An age range of a couple of weeks to 92 years old were seen at the urgent care, and problems varied. An assumption of covid cases would increase, but the complete opposite took place. From January- March about 900 patients were seen at the urgent care.. There was a 90% decrease in covid positive cases at CityMD in between January- March, recently rarely any covid positive cases are seen. A 650% increase of influenza positive cases between January- Mid March was observed. A 600% increase in streptococcal pharyngitis positive cases in march a sudden increase was observed. The expectation was that COVID cases would rise and viral illnesses would decrease, but the opposite happened.

Evaluation/Conclusion: Urgent cares are increasing in the United States since they offer a quick service that many people appreciate. It is crucial to understand the health trends of viral disease to help our community remain healthy and safe. Aspiring healthcare professionals can analyze these trends to determine how to prevent others from contracting the illnesses. Also thinking about preventable ways is what was suggested to most patients observed. Best way to overcome a viral infection is by letting the immune system do its job, but for bacterial infection treatment is required.

Title: Staffing Recruitment for Better Patient Outcomes

Name: Leslie Fortune

Preceptors: Farah Desjardins (CEO, RN), Peterson Fortune (Manager for HR department)

Agency: Fortunate Healthcare

Purpose: Recruiting and staffing more caregivers in local health facilities and home care can reduce burnout and staff shortages and improve community health outcomes.

Significance: The inadequate number of nurses is a major issue in healthcare, with the national registered nurse turnover rate expected to rise by 8.4% by 2021 (New Jersey Hospital Association, 2021). Furthermore, disparities in dropout rates between states and healthcare institutions exacerbate the situation. In New Jersey, for example, the vacancy rate for licensed nurses grew by 64% from 8.2% in 2020 to 13.4% in 2021(New Jersey Hospital Association, 2021). These figures underline the need for creative ways to alleviate the nursing shortage and relieve stress on healthcare institutions and job seekers. In this regard, Fortunate Healthcare seeks to act as a mediator, connecting job searchers with potential employers while guaranteeing that job applications match businesses' standards through numerous assessments and verifications. Recruiting and hiring additional caregivers in community medical centers and home care settings is highly encouraged to alleviate burnout and staff shortages and, eventually, enhance community health outcomes. Therefore, the project aims to address caregiver shortages in some local healthcare facilities

Method/Approach: The project was completed through multiple steps, and methods were carefully developed from planning to evaluation to ensure efficient recruitment and staffing of caregivers in local health facilities and home care. The first step required posting on various recruiting websites to attract qualified candidates. The second step was an over-the-phone interview which was conducted to assess candidates' qualifications and experience. Next, candidate's information was entered in an Excel spreadsheet which is used to track and document the information required by each facility, such as onboarding forms, verification of professional licenses, state IDs, health physicals, CPR/BLS verification, education, and previous employment verification, personal references, drug tests, background checks, and OIG exclusions checks. Once the candidate has completed all the necessary documents, they were uploaded to the staffer link. This software automatically screens resumes for keywords or qualifications and generates reports on recruiting metrics.

Outcomes/Results: Once the recruitment process was completed, the effectiveness of the recruitment process was evaluated using quantitative metrics such as the number of recruited caregivers, the average length of the recruitment process, and the satisfaction rate of recruited caregivers. A total of seven caregivers were recruited by the end of April. One of the candidates was ready to work in about 2 weeks, however, it took longer to complete the recruitment process (around 8 weeks). A few of the seven candidates were asked for informal feedback throughout the recruitment process. While the overall process was deemed simple, the lengthy paperwork required made it time-consuming.

Evaluation/Conclusion: Despite the project's small scope, recruiting additional caregivers has the potential to address staff shortages and fatigue in local healthcare facilities, thereby boosting community healthcare outcomes. On the other hand, reduced paperwork requirements and monthly check-in surveys are required to retain new applicants and increase the project's impact. Furthermore, regular re-evaluation is necessary to keep the project current, relevant, and effective in meeting its objectives.

Title: Peer Services and the Relation to Recovery

Name: Kalani Foster

Preceptors: Field Supervisor: Kenneth Bae, Senior Peer Services Coordinator

Task Supervisor: Vanessa Santana, Junior Peer Services Coordinator

Agency: Prevention Links

Purpose: To help people on their road to recovery by offering individual peer services and to connect each participant with the specific resources that can assist their recovery journey.

Significance: In 2021, there were 86,626 discharges reported to the New Jersey Department of Human Services by substance abuse treatment providers. Research has found that peer support services provide essential services to individuals in their recovery (Scannell C. 2021). Prevention Links brings together state and local resources to combat the negative but realistic consequences of drugs, alcohol, violence, and insufficient educational and healthcare systems in Middlesex County. This project provides Middlesex County participants with free peer-to-peer services once they connect with Prevention Links. Peer-to-peer services provide available resources to people in recovery and promote the utilization of community assistance programs in New Jersey.

Method/Approach: The peer-to-peer services are open to people in recovery and they must complete a questionnaire at a Prevention Links Community Service event. The participants are then selected from the pool of applicants and a total of 5 participants were assigned for this project. They were contacted on a weekly basis over the phone using a Google Voice phone number to connect and build a professional relationship with the peer assigned to them. The participant would be informed about the resources held at the Recovery Center and within the community. Each time a participant was contacted they were asked a few required questions such as, "How are you doing? How is your recovery going? Have you attended any meetings lately?", as well as other more personalized questions that vary between each participant. The participants were encouraged to use the various services provided by the Recovery center. Notes taken during each session were documented in a HIPAA-compliant way and were logged in the Prevention Links electronics health records system.

Outcomes/Results: Check-in calls to the 5 assigned participants were made on Tuesday mornings before noon. However, it led to a poor response rate, and therefore, the check-in calls were switched to twice a week, on Wednesdays and Fridays after 3 pm. The revised calling schedule led to improved responses from the participants. In addition, the office landline was used to make calls for easier identification via Caller-ID for the participants. In total 3 out of 5 participants responded to calls. One of the participants was able to come in person to the Recovery Center and was provided with in-person peer counseling and assistance with enrolling in an educational class. The participants who came in person were also offered to use all of the Recovery Center's amenities, for example, a computer lab, meditation room, kitchen, TV, and a gaming corner. Another participant who responded lives out of state; therefore, a catalog of relevant resources was compiled and shared with them. The third was far along in their recovery journey, no longer needing peer services as they were seeing other medical professionals and were supported well in their community.

Evaluation/Conclusion: Recovery is a continuous and personal journey but one not done alone. Participants who are and who are no longer engaged with the center still have information stored in a HIPAA compliance database system we can utilize for future recovery centers. Those who find these services beneficial may continue to use them as long as they need them.

Title: Strategy Development and Supervision for Grant Acquisition

Name: Taylor Fox

Preceptors: Wafaa Saad, Executive Director

Agency: Women and Families Ascending Association (WAFAA)

Purpose: To procure funding for the organization by supervising and participating in grant writing, financial support applications, and meetings with benefactors.

Significance: The Women and Families Ascending Association (WAFAA) is a non-profit organization based in Wayne, NJ, that focuses primarily on supporting victims of domestic violence through mental health treatment, temporary housing, food services, anger management, crisis intervention, immigration support, and several outreach programs throughout the community. For the organization to maintain and expand its reach while providing quality support, it requires proper funding. As a non-profit organization that does not require payment for many of its services, the funding must come from donations whether they be through fundraising or by grant acquisition; the latter of which being the most impactful. The acquisition of grant funding from the government requires lots of information such as highly detailed program descriptions, financial reports, government documentation, and reports on all of the organization's activities. To be able to impact the community and provide crucial support to its most vulnerable, these grant funding opportunities must be found, programs need to be created, and the applications must be perfectly processed in order to receive the necessary funding.

Method/Approach: Between the months of February and April there have been 25 grant or funding opportunities pursued by the WAFAA Organization. To be able to properly process these opportunities before their deadlines, an organizational system was put into place, additional interns were trained on grant work, templates were created for each required document, consultants were frequently referred to, and a supervisor was stationed to oversee all funding opportunity proposals. The process for developing the grant proposal strategy is long but can be broken down into three main proponents. First, grant proposals were studied and the research was utilized to create templates to utilize while drafting grant proposals. These templates would allow for more efficient work with guaranteed quality. Second, other interns would receive training based on the templates and the grant process. This ensured quality and further increased efficiency. Third, the initial applications must be completed on Grants.gov, requiring typically two to five documents relating to organizational details and legal documents. In addition to these documents, a letter of intent must be sent stating the organization's intentions and purposes for requesting funding. Then the required documents and full proposal must be submitted on JustGrants.gov. At this stage, financial statements, legally binding commitments, organizational information, confidentiality agreements, and the fully completed grant proposal are due. Once these four main steps are complete, the application process is complete and work on another funding opportunity may begin.

Outcomes/Results: Grant proposals take months to process once submitted and therefore the value of the submitted proposals cannot be measured at this time. However, the newly implemented methods of generating grant proposals have yielded far more proposal submissions and drastically improved the odds of the organization receiving funding. The changes that took place are guaranteed to improve the chances of receiving government funding through grants as the previous methods were incomplete and incorrect.

Evaluation/Conclusion: After learning how to correctly navigate the grant proposal process, creating templates for required information to expedite the process, training other interns, and creating guidelines for future interns to follow, the chances of successfully receiving funding will increase exponentially.

Title: The Trauma-Informed Care Approach for treating people with HIV

Name: Emily Friend

Preceptors: Judith Collins, Marketing Coordinator

Agency: AIDS Education & Training Center National Coordinating Resource Center (AETC

NCRC)

Purpose: To use social media to promote the importance of the trauma-informed care (TIC) approach in oral health settings to reduce stigma for people with HIV (PWH).

Significance: PWH often feel traumatized and stigmatized due to internalized HIV-related stigma as well as other intersecting stigmas. Transgender women are 32 times more likely than eisgender adults to have HIV and 2 times as likely to experience interpersonal violence (IPV). Therefore, it is integral to create a safe space for PWH by utilizing trauma-informed care principles in clinical settings. Trauma-informed care (TIC) is an approach that emphasizes physical, psychological, and emotional safety for both providers and patients and creates opportunities for PWH to rebuild a sense of control and empowerment. The AETC NCRC provides access to state-of-the-science HIV information and promotes training opportunities, tools, resources, and services to support and enhance the HIV care workforce. This project will promote the importance and principles of TIC in a dental setting for PWH on the AETC NCRC's website and social media platforms.

Method/Approach: A literature review was completed using Google Scholar and PubMed databases. Previous research and campaigns done on the TIC in the dental setting were evaluated according to their user demographics targeted and reached, strategies, and effectiveness as measured by the researchers. An infographic was developed using Canva based on the research findings to create awareness regarding stigma for PWH and promote the TIC approach in the oral health setting. The graphic was posted on all social media platforms of AETC NCRC including Facebook, Instagram, Twitter, and LinkedIn, as well as voluntarily reposted/shared by other individuals. Data were collected from the respective social platform insights and Google Analytics. Voluntary feedback on the infographic was encouraged as another form of data collection to evaluate the campaign's effectiveness.

Outcomes/Results: The main themes covered in the infographic were HIV stigma in the dental setting, creating a safe space through TIC, ideas for dental practice to reduce HIV-related stigma, and other relevant resources. The effectiveness of the infographic was assessed through evaluating the average rates of engagement on the AETC NCRC social media platforms between March 13th, 2023 through April 24th, 2023. Facebook, Instagram, Twitter and LinkedIn had 2.5%, 9.03%, 3.55%, and 10.7% average rates of engagement, respectively. In addition, the AETC NCRC website offered a voluntary feedback survey on the infographic. Five out of seven respondents indicated that the infographic "Had the information [they] needed; Was trustworthy; Was up-to-date; Was written clearly." There were 175 infographic website page views, averaging 2.36 minutes on the page.

Evaluation/Conclusion: Overall, the use of AETC NCRC social media platforms to promote the importance of the TIC approach in oral health settings to reduce stigma for PWH was successful. A significant number of respondents found the infographic to be relevant and comprehensive. Limitations include limited data due to the short timeframe and small sample size. In the future, the TIC approach should also be shared with the non-clinical personnels working in health settings.

Title: Improving Healthcare Access & Quality for Overlooked Employee Groups

Name: Karen George

Preceptors: Dr. Leena Johns, MD, Head of Health & Wellness

Agency: MAXIS-GBN

Purpose: To bridge the gap and improve healthcare access and quality in global markets by focusing on the needs of overlooked and under-serviced employee groups.

Significance: Sixty-one percent of American employees have reported experiencing work related stress that has manifested in poor physical and mental health (Beheshti, 2022). Employers need to ask themselves where their employees are receiving adequate access to the latest healthcare technologies. Questions about the mental health resources vs coverage, whether there are excluded populations in global markets based on lifestyle/regulatory red tape (HIV, STD, infertility, and DEI,), etc., should be at the forefront. Evaluating medical plan sufficiencies to improve healthcare access and quality in these global markets are of utmost importance in ensuring a productive & healthy workforce.

Method/Approach: A two step approach that utilized a diagnostic and prescriptive step was employed. These steps helped multinational employers understand their employee health data and their top cost drivers. In the diagnostic phase, employee claims data, surveys, and health risk assessment were assessed to identify the top diseases and conditions faced by our client's employees. This health data was then benchmarked and analyzed further using excel sheets and tableau. Subsequently, the prescriptive phase consisted of pairing clients with three possible toolkits. These included the MAXIS WIT (an analytical tool that calculates the potential cost-savings), the Health and Wellness Toolkits (educational campaigns designed to raise wellness awareness amongst employees worldwide), and the Wellness Technology Marketplace (third party suppliers that deliver digital wellness solutions).

Outcomes/Results: A medical plan sufficiency dashboard was created for an undisclosed multinational client with employees residing in Jamaica and Anguilla. Utilizing the diagnostic phase, it was evident that LGBTQ employees are largely overlooked and underserved since homosexuality is illegal/or same-sex marriage is not recognized in these countries. Top disease drivers included cancers, cardiovascular diseases, and STI's- all of which require extensive access to precision medicine and preventative care, which are not readily available in these countries. Upon identifying these trends, the multinational client was paired with the Wellness Technology Marketplace to find a third party supplier that is able to deliver digital wellness solutions which marks the prescriptive phase. The clients are currently working with Further (specialists in care for critical conditions) & CareClix (global telemedicine partner) to give Jamaican/Anguillan employees access to proper care services, despite major gaps in the public health services provided by these countries.

Evaluation/Conclusion: MAXIS GBN's Health & Wellness team, and all other affiliated parties continue to lay the foundation for this project to successfully bridge the gaps in the healthcare access and quality of employee groups in Jamaica, Anguilla, and across the globe. Once the clients have made permanent changes to their company's wellness programs and health coverages, employee surveys and health risk assessments will be utilized to maintain constant feedback between employers and employees. Future directions include working with more marginalized employees in other sub-optimal coverage countries to improve quality access to healthcare.

Title: The Effects of Acts of Kindness through a Faith-Based Approach

Name: Sara George

Preceptors: Brian Adams, Director

Agency: Rutgers Chi Alpha

Purpose: Incorporate the involvement of members of the Rutgers Chi Alpha organization to establish a Valentine's Day initiative, which gathered the students involved in the organization to write personalized cards incorporating biblical words of encouragement to students all across the Rutgers University campus.

Significance: Each year, the Valentine's day holiday cultivates varied emotions that are contingent upon the overall relationship status of an individual. Despite being single, in a relationship, or married, Valentine's Day may prove to be challenging for many who lack a connection and feel lonely. Non-married adults who do not have a significant other are more likely to feel lonely when considering Valentine's Day (26 percent) than individuals who are dating (19 percent) or those in a romantic relationship (6 percent) (AARP Foundation). Through a biblical perspective, Rutgers Chi Alpha encourages a community of fellowship. "As I have loved you, so you must love one another" (John 13:34). The primary motivation to pursue fellowship within the community is the command of Jesus to love one another. The pattern of fellowship is the example of Jesus' relationship with His disciples. Therefore, with the emphasis of the organization placed on friends and community, the overall feelings of loneliness diminishes.

Method/Approach: A meeting was conducted to establish the plan of action for the Valentine's Day initiative. The project was administered in three phases: *Planning, Preparation,* and *Implementation*. The *planning* phase transpired between 02/02/2023 to 02/10/2023. A Google Form survey was created to recruit individuals interested in writing cards. The Google Form survey was delivered to members through email, Facebook Messenger, and personal text exchanges. Each message formating was altered to cater to college-aged students. Social media posts were posted on various platforms to inform the members of the organization, in which formatting changes enabled significant recruitment for the initiative. The *preparation* phase occurred between 02/11/2023 to 02/13/2023. There were ten participating members. During the duration of the *preparation* phase, cards, pens, chocolates, and Valentine's day decorations were purchased. The *implementation* phase occurred on 02/14/2023. The cards were distributed across two tables organized on two Rutgers University campuses.

Outcomes/Results: The recipients of the cards were overjoyed in the care and compassion of individuals writing personalized letters. The responses received involved the reduction of negative feelings for the holiday. The cards were created with the intention to overcome loneliness through biblical advice that provides spiritual comfort, which were confirmed by the recipients. The overall rate of involvement from the members of the organization was 43%. With the results of the event, the members of the leadership team established the desire to continue the writing of words of encouragement for college students across the campuses for various holidays.

Evaluation/Conclusion: Despite the overwhelming schedules for many students and additional strain of the examination period, the involvement and participation of the members of the organization were significant. The process involved in recruiting members for the organization incorporated changes in the delivery. In order to increase the rate of involvement from the members of the Rutgers Chi Alpha organization, the time to execute the tabling event will be selected at a time that is more convenient for the majority.

`Title: Extending Community Outreach to Places of Worship

Name: Jenna Gervase

Preceptors: Barbara Chabner, PsyD, Director of Education and Outreach

Agency: The Brain Injury Alliance of New Jersey (BIANJ)

Purpose: To promote the Brain Injury Alliance workshops and resources to an important community hub, places of worship.

Significance: Brain injury is considered a silent epidemic, with an estimated 5.3 million Americans living with a disability as a result of traumatic brain injury (CDC, 2016). In New Jersey each year, it is estimated that 12,000 to 15,000 New Jersey residents suffer brain injuries from traumatic events, with 1000 being fatal (NJ Commission on Brain Injury Research, 2016). The BIANJ works to increase awareness for brain injury prevention through community outreach and offers resources and advocacy for those dealing with brain injuries. During the COVID-19 pandemic, the Brain Injury Alliance of New Jersey did less outreach and fewer workshops. Outreach to religious communities, a newly identified community hub, will help increase awareness of BIANJ and offer new collaboration opportunities.

Method/Approach: First, previous outreach with religious organizations were analyzed a booklet BIANJ made with the Boggs Center at Rutgers. This helped formulate the approach towards organizations and helped decide what sort of services should be offered. Next, a contact list was created of places of worship for Middlesex County, New Jersey in the following faiths: Christianity, Judaism, Islam, Sikhism, Buddhism, Jainism and Hinduism using a Google search. Information collected, which included the religion, organization name, email, and phone number, was put into an Excel spreadsheet. For initial outreach, organizations with emails were contacted using an email template.

Outcomes/Results: The final list totaled 257 religious places of worship and community centers. An initial email was sent out in four waves to the 205 religious organizations in Middlesex County that had available email addresses. Out of the 205 emails sent, 16 could not be delivered. The other 189 were able to receive an email that contained information about the range of services BIANJ offers, including educational workshops, advocacy, and support services. This information can further be used by religious organizations to help those in their community who have brain injury or are at risk for brain injury, either by giving them the contact information to obtain support from BIANJ, or by having BIANJ come in and offer an educational workshop. Replies to the emails were forwarded to employees of BIANJ.

Evaluation/Conclusion: According to the Pew Research Center, nearly one third of Americans attend religious services at least once or twice a month. This means this avenue of connecting with residents through places of worship can be effective given time. A template outreach list for all other counties NJ was created so that other employees can expand contact to the whole state of New Jersey. BIANJ hopes this opens the door to more collaboration with the community. Results in how successful the outreach was will be seen in both how many replies the emails receive and and also in surveys handed out to those who use BIANJ services that ask how they heard about the organization. Challenges that may arise include language barriers between places of worship that preach primarily in different languages and the added workload that can come from doing mass outreach like this. However, these are challenges that the workers at BIANJ are willing to face for the brain health of NJ.

Title: Understanding Revenue Cycle Management

Name: Aiden Gilliam

Preceptors: Brian Herdman

Agency: CBIZ KA Consulting Services

Purpose: To better help future Health Administrators/Public Health students better understand how healthcare providers earn revenue and different challenges that can play into ensuring collections of revenue (Compliance, Quality Assurance ect).

Significance: The main method of revenue generation for healthcare providers is insurance reimbursement payments. "Reimbursement for healthcare has utilized a variety of payment mechanisms with varying degrees of effectiveness." (Britton J. R. 2015). When a patient receives medical services such as consultations, tests, procedures, by a healthcare entity/provider, the provider charges the patient's insurance (payor) for services rendered and receives a reimbursement percentage of the accumulated charges (varies depending on the healthcare provider and fee for service price agreements). The main challenge that involves reimbursement allocation for healthcare providers is ensuring compliance in relations to health insurance's guidelines. Understanding the importance of compliance within the revenue cycle and understanding the many common compliance challenges that restrict reimbursement payments as healthcare administrators can better ensure that healthcare providers/entities are not missing out on revenue.

Method/Approach: Assist the Financial Reimbursement Services department with continual quality assurance review when performing revenue cycle services and learn more about factors that impact front-back end operations that can have an impact on revenue generation.

Outcomes/Results: Using Microsoft excel applications I assisted developing a healthcare provider National Provider Identifier look-up data table for physician credentialing verifications services. I also assisted the department with data entering submitted Insurance Claims Forms (CMS Form 1500) and performed Insurance verification tasks.

Evaluation/Conclusion: I will be continuing this internship opportunity through the summer. Overall, I gained a greater understanding on how health organizations earn revenue through insurance providers/charity care recipients.

Title: Addiction Educational Needs of Incarcerated and Reentry Women

Name: Mariam Girgis

Preceptors: Gloria Bachmann, MD, MMS, Associate Dean for Women's Health

Agency: RWJMS Women's Health Institute

Purpose: To review and assess what is available on addiction education, specifically addressing the needs for incarcerated and reentry women, and proposing educational programs.

Significance: Although men are more likely to experiment with illicit drugs and experience emergency room visits and overdoses, women have been found to be just as likely as their counterparts to develop a substance use disorder, and are more susceptible to relapse (NIDA, 2022). The way women experience their addictions are different than that of men; women are more likely to experience more severe symptoms along with their substance misuse, including medical, behavioral, psychological and social issues (NIDA, 2022). As important as it seems to consider women when it comes to addiction research and treatment, there's been a severe lack of information regarding how to treat women in their addictions differently than men. One of the Women's Health Institute at RWJMS' main objectives is to include and advocate for women in their research. The goal of my project specifically is to find different implementations to use on women suffering from addiction, specifically those who are incarcerated and are likely to relapse once reentering.

Method/Approach: Research for this project was conducted by collecting peer-reviewed and scholarly articles using Rutgers Library, PubMed, Google Scholar, and various higher education institutes' online publications. To find accurate results, the key words used in the search were "incarcerated women," "incarceration and addiction," "incarceration addiction programs," "women reentry," and various other terms to help narrow down the specificity of the research.

Outcomes/Results: The research and literature review conducted revealed that there is an evident lack of equity among addiction prevention and/or rehabilitation programs for incarcerated women compared to their incarcerated male counterparts. The research also signified that addicted women are disproportionately incarcerated compared to addicted men. The research notes that a majority of incarcerated women are young, women of color, single mothers, and have a history of substance abuse, and it's highlighted that among the prison system, the intersectionality of their race/ethnicity, class, gender, and status as a previous criminal offender all become risk factors for their likelihood to be addicted and their likelihood to be incarcerated on the count of drug possession and/or use. Incarcerated addicted women also have higher risks of facing abuse, assault, a comorbidity of psychiatric disorders, and gynecological and reproductive health issues.

Evaluation/Conclusion: The research shows an evident lack of drug rehabilitation programs that are inplace on a federal and local scale in prisons. Women-specific programs need to be developed, implemented, and prioritized within the federal prison system, including support groups for rape and incest survivors, child care availability, gender-specific care, and provisions for incarcerated mothers, in order to prioritize the rehabilitation and sobriety of reentry women.

Title: Reviewing and Improving Policy for Accreditation

Name: Ari Gottesman

Preceptors: Direct supervisor: Katherine Carmichael, Executive Director

Project Supervisor: Yolanda Solis, Senior Administrative Supervisor

Agency: Nutley Family Service Bureau

Purpose: To analyze the state and Council on Accreditation (CoA) mental health and case management policies and practices Nutley Family Service Bureau (NFSB) follows and bring them in line with best practice for a public health organization in order to achieve accreditation.

Significance: Accredited organizations see a vast array of benefits in all areas of their business. According to a study performed by the NORC at the University of Chicago, just one year after becoming accredited, 82% of accredited organizations reported it had improved "the health department's capacity to perform high quality programs and services" (NORC, 2021). The NORC also found that 94% of organizations reported the accreditation process helped them better understand their strengths and weaknesses, and 79% said it improved their accountability (NORC). The NORC's report found that accreditation leads to increased funding from mentoring and training, state health departments set performance incentives, health improvement initiatives, and more (2021). There are more benefits too; accredited organizations were more trusted by their communities, made more meaningful partnerships, had better worker satisfaction, the list goes on.

Method/Approach: Data from the CoA and New Jersey Division of Mental Health and Addiction Services (NJDMHAS) was analyzed to find areas where NFSB was struggling to meet the standards set out for us by CoA and by the State of New Jersey, especially in regards to client interactions. Then, surveys were created for clients of each department at NFSB to measure compliance with these policies The surveys were administered in a combination of anonymous online forms, over the phone, via email, and via physical mail. Surveys were provided to all 432 clients from the food pantry program and all 383 clients from the mental health program with the expectation that roughly 10% of the clients from each program would respond.

Outcomes/Results: From the data collected from pantry clients (n=156), 90% felt the program had improved their ability to feed their families. 92% of clients felt the pantry was consistently well stocked and well maintained. 85% felt the food available was healthy and diverse. 98% of the clients reported the volunteers who guided them through the program were respectful and understanding. From the mental health program survey (n=72), results were similarly positive. 93% of clients (n=54) were satisfied with the quality of services they had been offered. All the clients (n=38) who used telehealth services reported their clinicians were well acquainted with the technology. In questions regarding the program's state requirements for licensure 92% of clients (n=59) reported their clinician had created a service plan with them upon uptake; 89% of clients (n=59) reported they had been heavily involved in setting their treatment goals for their service plan, and 98% of clients who had been with the program for at least three months (n=46) reported their clinician regularly reviewed their service plan.

Evaluation/Conclusion: In previous years, NFSB had struggled with certain state and CoA requirements. These included not creating or reviewing service plans with mental health clients, which the program had failed 2 years in a row, and pantry volunteers being improperly trained. The data collected suggests that NFSB has exceeded the state and CoA requirements, and has covered for its problem areas. Furthermore, the data highlights how impactful the services provided by NFSB have been for its community. https://phaboard.org/wp-content/uploads/NORC-Evaluation-Slides.pdf

Title: Telehealth utilization beyond the COVID-19 pandemic: Challenges and Opportunities

Name: Zixuan Guo

Preceptors: Aakanksha Deoli, MHA

Agency: Edward J. Bloustein School of Planning and Public Policy

Purpose: To identify the benefits, challenges, and best practices associated with the use of telehealth.

Significance: While the COVID-19 pandemic played the role of an impediment to face-to-face clinic services, telehealth provided continuity of care while limiting the risk of exposure. According to the 2020 Physician Survey of the COVID-19 Healthcare Coalition, more than 86% of physicians deliver telehealth at least once a day after COVID-19. Telehealth has also garnered acceptance from primary practitioners and specialists for its ability to conquer specific barriers during practice (Ray and Kahn, 2019). However, several studies also highlight the challenges associated with the utilization of telehealth in the post-pandemic era. This literature review identifies telehealth's benefits, challenges, and best practices.

Method/Approach: Academic search engines such as Google Scholar, PubMed, Scopus, and Web of Science were utilized to optimize the search content with Boolean operators "AND" and "OR". A comprehensive search was conducted of professional papers, including literature reviews, systematic reviews, and experimental reports, with a total of 140 peer-reviewed journal articles reviewed. The facilitators and barriers in telehealth and primary medical care were identified in the literature review. Data support was searched for and analyzed from 8 government databases and 19 industry analysis reports. After studying the literature findings and conclusions regarding the future trajectory of telehealth, two instances of telehealth best practices were identified.

Outcome/Result: Telehealth utilization varied with patient demographics. The adoption of telehealth among female patients was 11.7% higher than among male patients in 2021. Patients with limited English proficiency were 50% less likely to use telehealth services. Studies also reported increased utilization in patients with higher income, higher education levels, and living in metros areas. In addition, patients with disabilities have higher rates of telehealth adoption than patients without disabilities (29.8% vs. 11.4%). The increased utilization among patients can be owed to the continuity of care during the pandemic, convenience, and accessibility, especially for patients in rural areas. Statistics show that 67% of physicians said telehealth has helped them stay in touch with patients from historically marginalized groups, and 57% of physicians are willing to continue telehealth. The most significant barriers include digital inequality, physician burnout, changes in reimbursement policies, and cybersecurity. The healthcare industry is a common target for hackers and experienced data breach losses of more than \$10 million in 2022.

Evaluation/Conclusion: Telehealth has demonstrated potential in the primary healthcare market, as evidenced by positive responses from physicians and patients during the pandemic. However, with the COVID-19 Public Health Emergency ending, the reimbursement rates and payee coverage must be revised to sustain adequate and much-needed telehealth utilization among patients and providers. Research also shows that physician burnout with telehealth utilization is becoming more common. Ochsner Health System in Louisiana supports its physicians by having their medical students answer the hotlines and assist with administrative duties. Lastly, healthcare, especially hospitals, should augment their cybersecurity budget for more updated cybersecurity technologies and employee training.

Title: Improving Patient Outcomes within Cardiovascular Health and Disease

Name: Chloe Han

Preceptors: Uzma Jamil, Office Manager

Agency: Cardiovascular Associates of Hudson County

Purpose: To provide educational opportunities for patients to improve their understanding of cardiovascular health and wellbeing.

Significance: Rates of cardiovascular disease have significantly decreased from 70% in the 1960s to now. However, this decline in mortality rates are at a standstill with cardiovascular disease (CVD) remaining as the leading cause of death in the United States (Pahigiannis et al., 2019). There is a high association with CVD to diabetes: The American Heart Association (AHA) and the American Diabetes Association (ADA) note the similarities of risk factors between cardiovascular disease as well as diabetes. These identified risk factors such as diet, physical activity, blood pressure, and cholesterol levels can be modified to reduce the probability of both CVD and diabetes (Akhuemonkhan and Lazo, 2016). The Cardiovascular Associates of Hudson County has long supported the improvement of educational methods for patients to improve post-care outcomes. With new focus on marketing strategies, a higher volume of patients will have educational materials to keep up with their individual wellbeing in between their follow-up periods.

Method/Approach: In order to effectively raise awareness and improve patient health-outcomes, a brochure and flier was created to detail risk factors, symptoms, and preventable measures. The brochure provided information on healthy lifestyle changes, such as regular exercise for 30 minutes daily, regulating stress levels, maintaining a balanced diet with reduced cholesterol levels, reducing alcohol consumption, and quitting smoking. The additional flier served as an accessible reminder that details the importance of keeping up with follow-up appointments, properly taking medications, and regulating diet. Both the brochure and the flier was distributed to patients post-appointment in person and through email for easy accessibility whenever the time permits.

Outcomes/Results: The brochure and flier was reviewed by the staff for distribution to patients. There were a total of 114 patients who received the brochure and flier in person. There was positive reception for the educational materials with patients. The patients who received the educational materials with a follow-up appointment, had improvements in regulating or maintaining their weight. The brochure and flier was sent to the office in Jersey City as well to raise marketing strategies in both locations.

Evaluation/Conclusion: The success of the educational materials was measured by the satisfaction of the patients using a rated survey of its functionality. The educational materials will continue to be readily available for use and distribution in both office locations for the Cardiovascular Associates of Hudson County. With future intentions to continue marketing efforts, the hope to educate patients and improve post-care outcomes can be fulfilled.

Title: Marketing & Enhancing The Promly Ecosystem

Name: Connor Harrington

Preceptors: Jennifer Libby, CEO

Agency: Promly

Purpose: To improve Promly's popularity through social media outreach.

Significance: The United States is going through a mental health crisis. Reports from the CDC show that between the years 2020 and 2021, the suicide rate for males between the ages of 15 to 24 rose by 8% (CDC, 2023). The most recent report shows that nearly 60% of teen females report persistent sadness or hopelessness (CDC, 2023). Given these statistics, it is clear there is a need for additional help and advocacy in the area of mental health for Gen Z. Promly is a social enterprise, co-created with Gen Z, that aims to unify a generation by empowering human connectedness and providing holistic support and education for Gen Z in places they will naturally gravitate to, both online and offline. Promly additionally plans to provide advocacy through the creation of a youth caucus for the purpose of amplifying the Gen Z voice in our society and policy decisions. Promly as an app provides an ecosystem that supports mental health through its nonprofit partners and community of like-minded individuals. It has been seen that mental health apps such as Promly are highly effective in helping to lower feelings of anxiety, stress, and panic (Doyle, 2022). This project aims to improve the mental health of Promly's users through weekly motivational quotes and educational articles.

Method/Approach: Each week a review was completed to identify necessary and relevant wellness topics and content to be posted throughout the week. Upcoming mental health holidays are recognized in order to maximize engagement on the content posted on those days. Creating and vetting content for the app and social media ensures that the purposes of the app can be met and that those who need help are supported. Inspirational and motivational posts were created and posted on social media twice a week. The reach for the content posted was maximized through collaboration, planned delivery, and observation of trends or special events. Data and feedback on the content were then collected through Instagram.

Outcomes/Results: Each Monday, a "Motivational Monday" quote was posted to Instagram to lift spirits and spark engagement with our ecosystem. On Thursdays each week an article was published in accordance with pertinent topics discussed in meetings. A total of 18 posts were made between January 26th and April 23rd, 2023. Through discussion with the Promly staff and constituents, it was apparent that there was a need to educate Gen Z on mental health, especially, how to receive and accept constructive criticism. Subsequently, an article was created to educate Promlys users on dealing with criticism. After one week the constructive criticism article reached 114 new users on Instagram and received 137 impressions total. Two weeks later another article was posted generally addressing a way to manage mental health. This article reached 197 new users on Instagram and received 224 impressions in total. Motivational and inspirational quotes posted on Mondays received an average of 8.15 likes per post over 10 weeks.

Evaluation/Conclusion: Through creating and vetting mental health content for the app and social media, Promly's ecosystem will be improved along with the mental health of its users. Marketing Promly's ecosystem as a resource aids in increasing the usage of the platform. Increased use of mental health apps will lead to lower feelings of anxiety, stress, and panic (Doyle, 2022).

Title: Increasing Clinical Trial Diversity

Name: Madelyn Harte

Preceptors: Alicia Baker-McDowell, DRSc, MS, Head of Regulatory Strategy

Agency: Labcorp Drug Development

Purpose: To develop a diversity plan template for Labcorp Drug Development that ensures the recruitment and retention of diverse clinical trial participants in accordance with FDA expectations.

Significance: The underrepresentation of minorities in clinical research contributes significantly to inequity in healthcare. FDA data finds in 2020, trial participants were 75% White, illustrating the severe lack of diversity (Caplan 2022). A 2015 to 2019 study found at least 17 drugs approved with trial participants being 95% white, causing alarm because approximately 20% of drugs have different effects based on race (Gaffney 2021). Confidence in the safety and efficacy of new medical advancements cannot be ensured for all populations unless they are properly represented in trials. The lack of diversity in trials compounds health disparities and hinders innovation. This diversity plan template will be a tool for Labcorp Drug Development to use in clinical development that identifies a population's disease prevalence, social determinants, and steps taken to mitigate potential barriers to minority participation in trials. The template will serve as guidance to various teams for formatting and content of the diversity plan which will need to be submitted to FDA for review and acceptance. This project ensures that adequate measures are taken to research differential effects of drugs based on racial and ethnic differences and provides guidelines for enrollment and retention of diverse populations in clinical trials. This diversity plan template will be used to increase racial and ethnic minority participation in clinical trials.

Method/Approach: Research of FDA resources, product summary review documents, guidance documents, and webinars was conducted to gain understanding of what is expected by the FDA in diversity plans. A draft was built based on the research findings. Additional resources were gathered and added into the template to provide support, evidence, and examples of consequences from inadequate diversity. The template was sent out to the team of 10 strategists for feedback. The team suggested additional points to ensure all aspects of FDA regulation were covered.

Outcomes/Results: This project produces a diversity plan template that will be used by Labcorp Drug Development in planning and justifying the recruitment of diverse populations. This diversity plan template includes guidelines for submitting the prevalence, pathophysiology, planned trials, enrollment goals for diverse populations, and specific enrollment and retention methods; now required by the FDA in applying for approvals for new drugs. Additionally to aiding drug developers meet new FDA requirements, this project produces higher levels of trust from clients as it helps to increase chances of approval without post-marketing requirements. This project creates more brand awareness, attracting clients who seek guidance with diversity measures.

Evaluation/Conclusion: Because of the nature of the industry and final legislation just enacted in December 2022, this project is only in its beginning stages and must be revisited later to measure its success. Diversity plans must be submitted and agreed upon by FDA before proceeding with trials. The success of this project can only be measured when a sponsor uses it in a development process. Ultimately, acceptance of the diversity plan by FDA and subsequent approval of the product without having a post-marketing requirement to study underserved populations will be a measure of its success. Satisfaction surveys and focus groups are applicable to measure success among the client base.

Title: The Impactful Use of Financial Education to Impoverished Teens

Name: Jamarvin Harvey

Preceptors: Chris Johnson, President

Agency: Grades4Life

Purpose: To see the impact of teaching financial literacy and entrepreneurship to impoverished adolescent teens.

Significance: Impoverished adolescent teens are in dire need of education on how to break the cycle of poverty within their families. Cities in New Jersey ranging from Trenton, East Orange, South Plainfield, and Newark have big populations of people that grow up in poverty and are at a higher risk of staying in poverty. The Grades4Life agency addresses the issue by teaching entrepreneurship and financial literacy. This approach to combating poverty has been proven by studies done by the George Washington University School of Business. The study shows that financial literacy is a direct link to achieving greater wealth. During the study, it was also discovered that only 13% of young adults are knowledgeable of key financial management principles (Lusardi, 2019). This project of recording statistics, advertising programs to potential partners, and writing grants will aid the agency in spreading its programs across New Jersey to reach bigger crowds and reduce the risk of poverty among adolescents.

Method/Approach: The focus of Grades4Life is to expand the program into different school districts across cities. The agency is advertised through the company's social media accounts, targeting potential families that would want to participate in the program. A content strategy was developed to plan the type and frequency of content posted, including photos and videos. Using the content strategy leveraged the different social media accounts to maximize the potential outreach to all social media users. Lastly, to maintain a loyal community of followers, the accounts were made to engage with followers responding to any direct messages, and responses on posts, and provided helpful information regarding upcoming events.

Outcomes/Results: Grades4Life plans to use multiple metrics to measure the quality of teaching and the success of their efforts of expansion. Attendance rates of new and existing programs will be used to determine the effectiveness of the methods used. These statistics will provide insight into how well the company performed on class enrollment in comparison to prior quarters. To measure the quality of teaching in the programs, Grades4Life uses graduation rates. This metric will show if the program gained the buy-in from the students and was able to keep them engaged enough to ensure their participation throughout the course. Lastly, the number of businesses started by students who attended the program will be used to gauge the impact of the curriculum. Students who have gained proper education and training to continue pursuing their business plan will reflect on how Grades4Life was able to make a positive impact on the communities they served.

Evaluation/Conclusion: Grades4Life plans to evaluate the effectiveness of social media accounts using stats provided by the platforms utilized. The platforms will show an overview of social media performance by evaluating accounts reached, accounts engaged, total followers, number of plays, and content interactions. However, one limitation of the project is that the agency's academic calendar doesn't align with other educational programs. Therefore, the social media account overview has to be revisited next academic school year to see if the model is still working.

Title: Data Management for AmeriCorps Compliance and Recruitment

Name: Marissa Hayton

Preceptors: Amanda Gallina

Agency: MedServe, Inc.

Purpose: To effectively manage data and forms required for Americorps Compliance and utilize applicant data to form a strategic recruitment plan.

Significance: MedServe, Inc. addresses the need for high-quality primary care practitioners throughout medically-underserved areas in North Carolina by matching promising Pre-Med students with primary care clinics, where they gain valuable experience before entering medical school. According to the Robert Graham Center, North Carolina would need to increase the number of primary care physicians by 31% from 2010 levels by 2030 to meet physician demand, and bolstering the primary care pipeline is the best solution to do so (Petterson et. al., 2013). MedServe is addressing this need by encouraging students to pursue primary care, preparing them for medical school, and helping staff clinics in underserved areas.

Method/Approach: To determine which universities should be targeted for a recruitment push before the end of the application period, data from previous applicants and fellows was compared to that of current applicants. Application data from two prior application cycles and the current cycle were loaded onto a spreadsheet using the Alchemer platform. For each year, data was pulled on how many applicants came from each school. The data was cleaned to disclude incomplete applications, duplicates, and to make sure applicants from the same school had matching school names (UNC-CH vs. UNC Chapel Hill, etc.). Next, demographic information of accepted fellows was compiled to determine where the greatest number of successful applicants were coming from. For each college, the number of applicants in past years, number of applicants in the current year, relative frequency of total applicants, number that became fellows from past years, average number of applicants over the prior two years, and number of current applicants was listed. For each college, the number of current applicants were categorized as "much lower", "lower", or "greater" than prior years. Universities that had both a high percentage of successful applicants in the past and had low application rates in the current application cycle were highlighted.

Outcomes/Results: UNC Chapel Hill, North Carolina State, Virginia Tech, Wake Forest, and University of Georgia had a high percentage of applicants that successfully became fellows in the past, but had a "much lower" number (at least 50% less) of current applicants than had applied over the past two years on average. The largest proportion of applicants in the two prior years came from UNC Chapel Hill at 10.76%, followed by North Carolina State at 5.38% and Virginia Tech at 4.69%. In the current cycle, Wake Forest University and University of Georgia averaged 7 applicants each in prior cycles and both had applicants successfully become fellows, but had no applicants in the current cycle, prompting MedServe to investigate alternative contacts and methods of communication to these schools. MedServe was able to utilize this information to send recruitment messaging specifically tailored to universities that have historically had high student interest and provided excellent candidates for the program.

Evaluation/Conclusion: At the conclusion of the current application cycle, we will be able use the Alchemer data to compare the relative frequency of total applicants that came from each school, calculate if the targeted schools showed an increase in applications, identify which schools produced successful applicants, and utilize this information for targeted recruitment in future application cycles.

Title: Patient Information Form Assessment

Name: Briana Hernandez

Preceptors: Dhyana Velez, BSN RN-BC GRN, Coordinator

Agency: Robert Wood Johnson Barnabas Health HELP Department

Purpose: To adjust patient information forms that make it easier for elders who are in the Hospital Elder Life Program (HELP), ages 65 years or older to understand and complete health related information for a smoother transition into EMRs.

Significance: Patient information forms are essential when it comes to getting to know a patient's preferences and health history. Although the patient information forms cover all different types of topics, the form must focus on important information that will help with treatment. It is also evident that when treating patients in the geriatric unit, many are not capable of filling out extensive forms because they are facing delirium or even having a difficult time understanding their symptoms (HELP, 2023). When revamping these patient information forms, the main goal is to make it easier for patients to fill out the form, for instance, how are their eating habits, sleeping habits, and walking mobility when staying at the hospital to provide them with the best comfort throughout their stay. By creating these forms, it is evident that it has helped for smoother EMR transitions to help health professionals who are there to treat patients.

Method/Approach: The target population throughout this internship was the elderly population. When reviewing old patient information forms, the main goal was to find ways to help patients in the unit with mobility and to get health information. In the first month of the internship, a few tasks that had to be done were collecting and reviewing old patient information forms from the geriatric unit, once all forms were collected an excel database was created with patient demographics, and identifying important information that the department needed for their records. Once this was completed, revised patient information forms were created that were revised to be less extensive, one page compared to two pages. The forms were printed and then used in the unit to collect feedback from patients to see whether or not the improved form was more convenient for patients to answer health related questions quickly and comfortably.

Outcomes/Results: An initial database of 100 patients was created and is updated weekly with patient demographics. Patient demographics consisted of gender, age, race, admitted diagnoses, eating habits, and mobility. From the collected data, it was evident that the unit is 85% male while there is only 25% of women. The age group that is most seen are individuals ages 75 years old to 81 years old, the leading cause of stay includes falls, heart failure, and dehydration. Data from the finalized excel sheet resulted in males having been checked in more often than females, suggesting the male population might be at risk of injuries than the women population.

Evaluation/Conclusion: The revised patient information form has helped to understand a patient's lifestyle before being admitted into the hospital and what should be prioritized during their stay. Another evaluation that was observed is how falls are very common for elders because they do not have the appropriate assistive devices when at home or even doing their daily activities. The HELP Program not only focuses on mobilization but prioritizes that patients do not experience delirium during their stay which is why we make sure that activities are given to them if wanted. Overall, using these modified patient information forms was a solution to understanding whether or not the patient needed assistance, were struggling with delirium and what were the main reasons for admission into the HELP Program.

Title: Mentorship Program Benefits and Performance Assessment

Name: Karla Hernandez

Preceptors: Sheryl Minchin, Group Insurance Counselor

Agency: Davita Kidney Care

Purpose: To analyze the need and benefits of having a mentorship program in the workplace.

Significance: The medical industry today has become one of the most stressful fields to work in. The medical field is constantly undergoing changes which can be stressful for individuals working there. The Covid19 outbreak made matters worse; many healthcare workers became overwhelmed and left their jobs because they were burnt out, and the effect remains until today (WebMD, 2022). For healthcare organizations to be successful, developing a mentorship program can help retain valuable employees and boost their satisfaction at their workplace, which can help increase productivity and benefit the company. Burnout is one of the top 10 reasons why people quit their jobs. According to recent BetterUp research, job satisfaction is the top driver of overall life satisfaction. Once employees reach their breaking point with an organization, they are likely to look for better opportunities elsewhere. On the other hand, more individuals are seeking employment at places where employers are invested in their employees' personal and professional growth. Employers that provide professional development and advancement opportunities are more likely to attract high-quality talent to their organization (BetterUp, 2022).

Method/Approach: A retrospective review was conducted to assess the teammates' metrics individually within the past year. The data for each teammate was exported to a spreadsheet and broken into 4 quarters (January-March, April-June, July-September, and October-December). Each quarter displayed the teammate's new patient metric, existing patient metric, and uninsured metric. Each metric was based on the teammate's performance for each category per quarter from 1-100%. A call between the teammate's supervisor and staff was made. Potential issues were discussed related to the low metric(s), best practices were collected and shared with the teammate in need. Lastly a game plan was established, which includes the frequency, length, flow, and topics of the calls.

Outcomes/Results: Of the teammates who were evaluated, (n=80), 43 (53.75%) teammates have an average of 90% or higher in their metrics, 20 (25%) rank between 80%-89%, 11 (13.75%) rank between 70%-79%, and 6 (7.5%) rank 69% or lower. Teammates who ranked 69% or lower in their metrics are identified as struggling teammates and are referred to the mentorship program. During the mentorship program struggling teammates will receive one-on-one assistance to help boost their metrics.

Evaluation/Conclusion: Less than half (n=6, 10%) of the teammates ranked 69% or lower in their metrics the past year and were referred to the mentorship program where they can receive one-on-one assistance in the area(s) they need help with. Weekly calls between the mentor and mentee are made. Best practices and step-by-step on how to complete certain forms, how to document patient conversations, how to request premium payment, and how to handle different situations are all covered during check-in calls. This strategy will boost the teammate's (a) confidence, (b) performance. At the end of each call, supervisors are provided with a recap of the call. After 6 months, the teammate's supervisor will reevaluate the teammate and determine if more time is needed between the mentor and mentee. If so, more in-depth and structured calls are made. Mentors will closely monitor the tasks completed by the mentee per week and guide them on what items should be handled at the time for another 6 months. Those who completed the mentorship program have increased their performance by 20% and feel more comfortable in their current role.

Title: Education Materials for Parents on Tuberculosis Infection in Children

Name: Catherine Hewitt

Preceptors: Anita Khilall, MPH, Program Director

Agency: Global Tuberculosis Institute (GTBI) Education and Training Department - Rutgers New

Jersey Medical School

Purpose: To revise current health education materials for parents on tuberculosis (TB) infection in children to disseminate information about TB and its treatment in an equitable manner.

Significance: According to the World Health Organization (2022a), there were roughly 10.6 million people who became sick with TB globally in 2021, which was a 4.5% increase from 10.1 million in 2020. The annual number of deaths from TB globally was 1.6 million deaths in 2021 (World Health Organization, 2022b). Both of these increases are reversals of many years of steady decline in TB morbidity and mortality rates around the world. In New Jersey, the incidence rate for TB was 3.2 per 100,000 in 2021, which was higher than the national average (Center for Disease Control and Prevention, 2022a). Although only 1.0% and 1.7% of TB cases are reported in New Jersey for age groups 0-4 years and 5-14 years respectively (Centers for Disease Control and Prevention, 2022b), TB infection is much more serious for a child because they have a higher chance of developing TB disease. The Rutgers Global Tuberculosis Institute develops printed and digital educational materials that are distributed domestically and internationally. This project will allow for the revision and upkeep of educational materials that are currently in use to improve their functionality and increase accessibility.

Method/Approach: After reviewing information and data pertaining to pediatric TB from scholarly articles, revisions were made to an existing brochure for parents to review when their child gets diagnosed with latent tuberculosis infection (LTBI). The most important revisions made to the brochure were changing the language to lay terms/phrases, changing all fonts to sans serif fonts to improve readability and accessibility, retaking photos of how to administer the medication, and updating the topical information to reflect current recommendations for testing, diagnosis, and treatment. The brochure explains what TB infection is, the difference between TB infection and disease, why treatment is important for LTBI and how it is treated, potential side effects from treatment, and how parents can effectively give their child the medication. The brochure was reviewed by staff at GTBI, then pilot tested with providers in the Hudson County Chest Clinic in Jersey City and the Middlesex County Chest Clinic in Edison to obtain feedback.

Outcomes/Results: The feedback on the brochure overall was positive; the main suggested changes from providers at the clinics were to make the brochure shorter and to revise some of the wording throughout the brochure to ensure clarity for parents. Once these revisions are made, the brochure will be sent to chest clinics throughout the state for them to use with parents, as well as being published on the GTBI website.

Evaluation/Conclusion: This brochure is one of the only resources with information on tuberculosis infection in children that is targeted specifically to parents. We have given providers a brief questionnaire for parents to answer once they've read the brochure to gain feedback from their perspective. When the brochure is published on the GTBI website, it will include a product evaluation survey for users to fill out. Using the results of the product evaluation survey, as well as the questionnaire given to parents in the clinics, the brochure can be updated more regularly to ensure clarity and accuracy.

Abstract References

Title: Collection of REaL data in Patient Access

Name: Anna-Maria Hlyvko

Preceptors: Mary Kelso, Director of Patient Access

Agency: Robert Wood Johnson University Hospital New Brunswick

Purpose: To analyze the current patient registration system and the collection of race, ethnicity, and language (REaL) data.

Significance: The collection of accurate demographic data including that of race, ethnicity, and language are an important factor in reducing health disparities. Race and ethnicity are useful in evaluating a patient's disease risk, and identifying those populations that may benefit from programs that promote health equity (Polubriaginof et al., 2019). Language data serves to improve communication between the hospital and patient, as well as determine the need for an interpreter. Inaccuracies in REaL data are often due to cultural insensitivity and a lack of understanding of the importance of collecting REaL data in a hospital setting (Polubriaginof, 2019). At RWJ, 22% of inpatients and 34% of outpatients are coded as "Unknown" or "Other". This project, a collaborative piece between senior leadership at RWJ and Rutgers population health, aims to increase accurate collection of REaL data and reduce incomplete coding.

Method/Approach: Shadowing was needed in order to evaluate the current registration system in the main ED, Pre-Admission Testing, and Radiology. While shadowing, it was observed how registrars collected demographic data and their communication with patients. At the end of the shadowing process, an interview was conducted to ask the registrars about their knowledge of REaL data, what training taught them about collecting REaL data, and if they believed this data was important. In conjunction with the previous findings, a questionnaire was sent out in order to reach the rest of the registrars. The questionnaire focused on registrars' opinions on training and the importance of REaL data. An interview was conducted with management on training methods and how employees can be better trained in REaL data collection. To provide a better understanding of the current system, a decision tree was created to show how registrars are asking new and existing patients REaL data. A current process map of the training system was devised in order to clarify for senior management some of the gaps in the system with regards to collecting REaL data. Attending hospital orientation, reviewing training documents, and researching health disparities and population health were all crucial parts of the process. The ability to participate in a meeting with senior leadership allowed these findings to be presented.

Outcomes/Results: Upon sending out a questionnaire to members of the registration team, the results showed more than half of respondents would like to receive "in-person scenario-based training" on collecting demographic data in unique or difficult situations. Question 12 asked if respondents were taught about REaL data collection to which 8 respondents answered "Can't recall or did not learn about REaL", and 9 respondents stated they did learn about it, but chose the incorrect training session. The decision tree and current state map of training further outlined problems in the registration system and will help management identify opportunities for improvements in a future state map.

Evaluation/Conclusion: Having examined the patient registration process at RWJ, it is apparent further training is needed to ensure registrars understand the importance of collecting REaL data. They will then be able to provide patients with explanations as to why RWJ is collecting this data. Senior management will be able to refer to the current state map to evaluate the current state REaL data collection in patient access and identify areas for improvement.

Title: Evaluating the Effectiveness of a Novel Inpatient Program for Diabetes Control in Youth

Name: Asher Hong

Preceptors: Tomiko Hackett, MPH

Agency: Children's Specialized Hospital- New Brunswick

Purpose: To analyze pre- and post-test data for pediatric patients of the Chronic Illness Management Program to assess its effectiveness for controlling type 1 and 2 diabetes mellitus.

Significance: Diabetes is one of the most common chronic diseases of childhood with approximately 283,000 Americans under age 20 estimated to have diagnosed diabetes (ADA, 2022). The period of development between childhood and adulthood is an important time for intervention as poor disease management during adolescence can lead to comorbidities, high medical costs, and lost productivity in adulthood (Marchetta et al., 2020). The Chronic Illness Management Program (CIMP) is a 4-week multidisciplinary, inpatient program designed to provide pediatric patients with the best tools to manage their life-altering illnesses such as diabetes. This project will evaluate the effectiveness of the CIMP program and its implications for improving diabetes control in pediatric patients who have been unable to manage their illness with outpatient treatment and therapy alone.

Method/Approach: All admissions to the CIMP between 01/01/2021 and 12/31/2022 with a primary diagnosis of type 1 and type 2 diabetes were included in the sample. Physiological measures related to diabetes management— hemoglobin A1c (HbA1c), serum fructosamine, high-density lipoprotein (HDL), low-density lipoprotein (LDL), and triglycerides—were compared between admission and discharge as a means of measuring patient progress. The physiological measures of interest were extracted from patients' electronic health records. When tested for normality using the Shapiro-Wilk test, all measures were found to have non-normal distributions. Accordingly, the non-parametric Wilcoxon Signed Rank test was used to determine the significance of differences between admission and discharge scores.

Outcomes/Results: The sample included 41 diabetes admissions (68.3% female) with an average length of stay of 29.0 days. The average age at admission was approximately 15.0 years, and the average age at diagnosis was 10.0 years, indicating that patients had been living with diabetes for an average of 5.0 years at the time of admission. Significant reductions in mean HbA1c were observed, decreasing from 11.1% at admission to 9.3% at discharge. Patients also experienced significant reductions in mean serum fructosamine levels, which decreased from 409.5 μmol/L at admission to 312.6 μmol/L at discharge. Improvements in lipid profiles were also observed with significant reductions in triglycerides from 126.0 mg/dL to 93.9 mg/dL, and a significant increase in HDL from 49.1 mg/dL to 51.7mg/dL. No significant changes were observed in mean LDL levels from admission to discharge.

Evaluation/Conclusion: Upon completion of the program, patients of the CIMP experienced improvements in diabetes management, as reflected by their physiological outcomes. The significant reductions in HbA1c and serum fructosamine levels are indicative of improved glycemic (blood sugar) control, while the significant reductions in triglycerides and increase in HDL reflect improved cholesterol management. Overall, the Chronic Illness Management Program provides an effective treatment model for diabetes control in youth, and it may serve as an alternative to outpatient treatment and therapy.

Link to References

Title: Significance of Leadership Among Community Leaders

Name: Precious Eyram Honutse

Preceptors: Quadai Palmer, President

Agency: From Jersey With Love (Leading In Love)

Purpose: To identify the importance of leadership and mental health among community leaders.

Significance: The National Alliance on Mental Illness found that one-third of community leaders nationwide identified mental health treatment system and services as one of the most overburdened community resources. In 2022, Positive Group Organization found that 70% of leaders experience burnout which affected their ability to make decisions, and 69% of leaders are thinking about quitting their jobs. In addition, there were over 300 workplace fatalities by suicide in 2019, resulting in workplace suicide increasing by 1 percent from 2018, and by 34.1 percent from the 10-year low in 2015 (BLS, 2019). Furthermore, the COVID pandemic brought many challenges, including increased mental health problems(Psycnet, 2020). From Jersey With Love (FJWL) offers support, services, and opportunities to equip, empower, and inspire the community. A market analysis is conducted through evaluation, information collecting, and survey/question creation for outreach.

Method/Approach: The target population for this study was the community leaders in New Jersey, New York, and Pennsylvania. A thorough search of the community leaders was completed by doing an internet search for organizations in these areas. The keywords used were "non-profit organizations" "New Jersey", "New York", "Pennsylvania", and "leadership". Community leaders were contacted by phone, and through email. A survey was developed to collect data and identify the needs of the community leaders and assess the importance of leadership and mental health. The survey questions were developed through brainstorming with the FJWL team, researching online for sample surveys, and researching online resources on mental health and leadership. The survey included questions asked about self-care, leadership, development, etc. Through further research, more information on the overall health needs of the community leaders was identified.

Outcomes/Results: A total of 23 community leaders participated in the surveys and the Spring leadership conference. 74% of community leaders mentioned having mentors in the field they work in, while (26%) do not have mentors in the field they work in. In addition, 74% felt their company offers adequate training and mentoring resources versus 18% who thought their companies do not offer any such resources. and (4%) think their company offers these resources at times, and (4%) were not sure. From the survey, more than half (n = 18) of community leaders from the sample (n = 23) see the need for leadership development in their career field. Leaders are not getting enough resources to develop and enhance their leadership skills.

Evaluation/Conclusion: Overall, the data collected from the surveys, and polls showed the need for leadership and mental health resources for leaders. Based on the overall assessment of the survey responses, there is a need for mental health resources for community leaders to help them take care of their mental health and that of their staff. This can be achieved by focusing on strategies and efforts to improve the mental health of community leaders through providing workshops and conferences geared toward the importance of mental health. Also, resources like coffee breaks, newsletters, and podcasts can be shared to help community leaders to better take care of themselves to become better leaders.

Title: Patient/Client Data Streamlining & Access Improvement

Name: Ayesha Hussain

Preceptors: Project Supervisor: Sumera Amreen, Office Coordinator for BMS Department

Agency: LectureLinx

Purpose: To improve patient/client experience and increase software efficiency by implementing a new screening process.

Significance: The most important objective that any company relies on is user experience, customer loyalty, and user satisfaction. As technology continues to grow and develop, users expect companies to keep up-to-date with streamlining their services at a faster speed, with fewer complications, and more interface use. LectureLinx is a compliance solutions company that specifically caters to external Pharma and Life Science Companies so it's important that they are able to cater to different client needs. However, because a large basis of their clientele is pharmaceutical companies they also have to think about patient data safety and other compliance regulations as well. With a stronger reliance on websites to get information about companies, it's important for LectureLinx to consistently have updated software and get rid of excess login procedures or links.

Method/Approach: The department conducted a preliminary assessment to see what kind of issues were slowing down the website and also noted down unnecessary login procedures. A quality improvement data aggregator was used to ensure data validity and track quality improvement. All changes were carefully monitored during the bi-weekly meetings and the detailed description was submitted to the department head. The layout of our website was also changed both to help update the aesthetics and help clients navigate more easily. All of the links connected to our website that wasn't opening or included outdated information and attachments were replaced and updated. The login process was also simplified by eliminating any/all unnecessary forms/questions. This was done by implementing the single sign-on (SSO) functionality or enabling two-factor authentication to streamline the login process. The purpose of adding the screening process was so patients wouldn't have to worry about constantly having to sign a release of information ROI form and it could be stored and shared through the website portal. Once all these new features were added, they tested the new screening process and login procedures with the preliminary group and saw if their needs were met.

Outcomes/Results: The initial group that was part of the preliminary assessment was the first people to have access to the new website and test out all updated features. Once it passed the first inspection there was an onboarding system put into place for the rest of the department so everyone could be familiar with the new system before working with clients again. The benefit of the new system was that it took into consideration both employee and client needs. So the new website included adequate information on how to effectively help with client needs and also made it easier for clients to use the interface themselves and have multiple sources of information to turn to before turning to the company for even further help.

Evaluation/Conclusion: Overall, a great informative website can help a lot of companies get an edge over their competitors. With LectureLinx being a consulting company involved with external healthcare companies as well as patients, it is important that a significant point of contact is in working condition.

Title: Improving Follow-up Procedures after Abnormal Pap-Smear Results

Name: Kiara Isaza

Preceptors: Kelly Moreno

Agency: Zufall Health Center

Purpose: To improve the process by which clinical staff monitor gynecological patients' follow up after receiving abnormal test results in routine pap smear screening.

Significance: Female health screenings are essential in reducing mortality rates associated with prevalent gynecological cancers, such as cervical cancer. Routine health screenings involving pelvic exams, pap smears, routine testing for common STIs such as HPV, as well as immunizations for HPV serve as measures for early detection as well as prevention. In 2022 alone, fourteen thousand women were diagnosed with invasive cervical cancer and with almost five thousand deaths, with half of the women being diagnosed never being screened (American Cancer Society, 2022). Hispanic women have the highest incidence rates due being disproportionately affected by a lack of an access to care (ACS, 2022). Precancerous lesions that are found in screenings such as pap smears must be closely followed up with, such as as procedural biopsies such as colposcopies or excision of precancerous lesions through loop electrosurgical excision procedures. Educating female patients on the importance of screening and prevention for cervical cancer, as well as ensuring follow up proceeding abnormal pap smears is a crucial part of their care.

Method/Approach: An explicit step by step process was implemented to educate both patients and providers/medical assistants in regards to the function and importance of abnormal pap-smear result follow-up. Detailed information sheets with basic medical terminology on the procedure (LEEP or colposcopy) were mailed to home addresses following diagnosis. An informational slideshow detailing how gynecology patient intake and triage should be done, instruments required for each procedure, and why such procedures are necessary were also created in efforts to further educate staff. An Excel spreadsheet with patient account numbers in substitution of their names or other protected health information, the procedure they require to be scheduled, and whether or not someone has completed the follow-up process was also created in efforts to ensure that a timely follow-up was completed. Once the patients completed the entire process, their account numbers were removed from the Excel sheet.

Outcomes/Results: Following the implementation of this process, patients were guided through the necessary procedures they must undergo following the diagnosis of an abnormal pap smear to ensure compliance with follow-up guidance. This process serves as a bridge between the gap of a patient being diagnosed with CIN 1, CIN 2, CIN 3, or AIS and ensuring they undergo proper treatment/excision procedures. Within the time period of the past three months, every patient requiring follow-up was placed on the Excel sheet and has been in close communication to ensure compliance.

Evaluation/Conclusion: Patient understanding of the abnormal pap smear and the type of procedure they are undergoing as well as an increase in staff understanding of how patient triaging for these procedures ensures that the process was more efficient. Most importantly, ensuring that patients attend their follow-up appointments and do not get lost within the system helps ensure compliance. This project should be reevaluated in 6 months to ensure efficiency has remained the same.

Title: RU Muslims for HOPE: Sharing Experiences of Taboo Health Topics

Name: Maryam Jamal

Preceptors: Mark Cruz –Health Education Specialist

Agency: Rutgers University – Health Outreach, Promotion, and Education

Purpose: To share stories about taboo health topics with fellow Muslim students at Rutgers to encourage open dialogue.

Significance: Often, it is taboo to talk about certain topics, such as mental health, sexual health, and body image openly. There is an islamic concept known as "pardah" which literally means curtain, but figuratively is used as a way to cover or privatize certain topics, like the ones previously mentioned. While this concept is still used widely, it can be seen as unbeneficial in some ways, especially for American Muslims. We live in a society where Muslims are not the majority and are told to refrain from sinful things, even though they surround us. Growing up, conversations about sex, health, body, and mind were not often alluded to or were talked about in an uncomfortable manner. Dr. Wafaa Eltanwahy, a Muslim counselor and gynecologist, commented "It is critical for us to start talking about sex openly and frankly in the Muslim community and it should come without a disclaimer." She goes on to say many Muslim couples who come to her that seek counseling often have trouble in their relationships because they never were taught how to properly communicate these topics.

Through this project, RU HOPE wanted to create a space where Muslim students could share their experiences to create a sense of community regarding these topics, rather than ignoring them and giving into the taboos. Growing up, our parents and the adults in our lives often told us to suppress our thoughts and feelings about these topics because it is inappropriate. As the new generation of Muslims, taking a stand and openly talking about these topics will create a space for communication not only with the older generations, but the younger ones as well. Moving away from the shame surrounding these topics and embracing them will have a positive impact on the Muslim community and remove stigma.

Method/Approach: The method used was one-on-one interviews with participants. The participants first filled out a Google form where they selected a health topic and a meeting time. At the meeting, the individual was taken into a private room and was asked to share an experience about the health topic of their choosing. The meetings lasted between 15-30 minutes each depending on how long the individual's story was. Once they finished sharing their story, a discussion took place about the importance of the topic, and they were thanked for sharing their experiences. After the interviews, the individuals sent a picture to be used on the Instagram page to share their stories. The individual had the option of showing their face or not would share a summary of their story in the caption under their picture, which the individual will share on their personal Instagram story to spread awareness of the project.

Outcomes/Results: The completion of this project resulted in four stories by Muslim individuals attending Rutgers University. These stories were put onto the Instagram page created for the project. This project is connected by a linktree to the previous iteration of this project from last semester; RU Humans for HOPE. The project also advertised RU HOPE to the students who participated, as well as who they shared the posts with.

Evaluation/Conclusion: The project will be evaluated by the amount of engagement with the Instagram page and the posts on it. The amount of shares, likes, and increase of individuals interested in participating will serve as a measure of longevity for this project.

Title: Infection Prevention Through the Implementation of Hand Hygiene System

Name: Natalia Janiak

Preceptors: Kathleen Gilmartin MSN, CRNP

Agency: Atlantic Health System- Morristown Medical Center

Purpose: To evaluate the implementation of a hand hygiene electronic monitoring system called the SwipeSense system, in observing behavioral changes with hand hygiene practice among healthcare professionals working in a critical care setting. It is anticipated that utilizing the SwipeSense system will decrease the likelihood for spread of contamination and infection.

Significance: In the United States, 80% of common infections are transmitted due to improper hand hygiene (Citron Hygiene, 2023). Data from 2019 from the Center for Disease Control and Prevention notes that healthcare providers in hospital settings perform hand hygiene less than half the times that is recommended. The New Jersey Department of Health from 2020, claims that hand hygiene is one of the most important ways to reduce bacteria transmission within healthcare settings. Morristown Medical Center (MMC) is an 800-bed hospital and part of the Atlantic Health System. MMC implemented the SwipeSense system in January 2023 as a way to decrease the likelihood for spread of infections. This hand hygiene monitoring system identifies the frequency and compliance of hand washing and the use of hand sanitizer for healthcare professionals entering and leaving patient rooms. It is anticipated that healthcare professionals will be encouraged and more mindful in performing hand hygiene as recommended. The data shows that the frequency of hand washing and application of hand sanitizer before and after caring for a patient will increase. This project will use various methods to educate the healthcare employees on the importance of performing hand hygiene regularly, and before and after seeing a patient to reduce hospital acquired infections.

Method/Approach: Data analysis was conducted to determine the rates of hand hygiene performed by healthcare workers within the Medical and Surgical Intensive Care Unit, since the implementation of the SwipeSense system. Data for the months of January, February, and March were outlined in a spreadsheet and put into graphs to see if hand hygiene increases because of this system, and through hand hygiene reeducation. The data was then analyzed to establish why rates were not at 100% by completing audits and creating a SwipeSense Feedback survey. The percentage of hand hygiene compliance was then also compared with the amount of hospital acquired infections in these units.

Outcomes/Results: The SwipeSense system will continue to be utilized for healthcare professionals to continue to increase their frequency of performing hand hygiene and lower the potential risk of spreading infections. To date, the change from January to March in the MICU has noted an increase in compliance of 5%, with a 7% increase of compliance in the SICU. In January, hand hygiene compliance in the MICU was at 57%, and in February 58%. In March an increase was noted to 62%. In the SICU compliance in January was at 54%, 57% in February, and 61% in March. For hospital acquired infections in the ICU, there were 3 in January, 5 in February, and 2 in March. Overall, the number decreased which may correlate to increased frequency and mindfulness in performing hand hygiene.

Evaluation/Conclusion: This data shows a slow but steady increase in compliance as the staff are being re-educated along with the utilization of the monitoring system. The percentage of compliance is rising which shows that the system is working. The SwipeSense Feedback survey will provide data on how healthcare workers believe the system is working in regards to increased hand hygiene compliance. The data gathered from SwipeSense will continue to be monitored in monthly evaluations.

Title: Analysis of 2022 Diabetic HEDIS Measures

Name: Zayna Jawed

Preceptors: Direct Supervisor: Stacey Knowles, Director of Managed Care

Project Supervisor: Jennifer Di Girolamo, Managed Care Coordinator

Agency: Saint Peter's Healthcare System

Purpose: To analyze the diabetic measures noted in the Healthcare Effectiveness Data and Information Set (HEDIS) 2022 Medicaid Incentive Report and utilize this information for community outreach with the goal of increasing patient compliance within the Saint Peter's Healthcare System.

Significance: Diabetes affects many individuals worldwide and acts as a comorbidity of other diseases, making it one of the leading causes of death. As noted by Nowakowska et. al (2019), about 1 in 11 adults aged 20 to 79 years are affected by different types of Diabetes, totalling to 415 million adults globally. This issue disproportionately affects low-income households due to a lack of resources and education. Notably, residents in low-income NJ zip codes are known to be hospitalized 2-3 times more frequently for adult diabetes (Schoen et al., 2013). Saint Peter's University Hospital addresses these measures through preventative care and screening for specific measures such as A1C levels. By increasing compliance and therefore addressing risk factors for Diabetes early allows for better management of this condition and better patient outcome. Payers provide incentives for these programs as diabetes can be a significant cost for healthcare especially when unmanaged.

Method/Approach: An analysis of the HEDIS 2022 Medicaid Incentive Report from Horizon NJ Health outlined the payer gap reports in reference to the diabetic measure of A1C levels from submitted medical claims. This report was exported to Excel in order to see what members received adequate care, and those that need increased access noted by noncompliant results. After receiving this information, an analysis was conducted to find a patient's A1C levels from their last screening in 2022, and compliance was noted if A1C levels < 8%. In order to do this, the AthenaNet Electronic Medical Records system was utilized to access the patient's visit history through their chart. Based on their condition and amount of care needed in order to close the gap for their diabetic measures, subsequent follow up appointments were scheduled. Any noted trends and patterns were communicated to the practice manager and doctors.

Outcomes/Results: The results come from the data presented in the HEDIS report with a sample size of 242 Medicaid patients. From those, 99 (41%) patients were compliant with their A1C levels with a value of less than 8%. 53 patients (21%) were noted to be noncompliant with a value of 8% or higher, and 90 patients (38%) did not have an A1C lab value reported. Through result analysis it was noted that some of the patients that were noncompliant (21% of the sample), did not have follow up appointments created. This was also the case for some of the patients that had no A1C value reported (38% of the sample). Recommendations were made to practice managers and clinical coordinators to reach out to patients and create appointments for wellness checks. Of note, some patients have new lab values that were not accounted for in the reports which show compliance.

Evaluation/Conclusion: 59% of the patients were noted to have either non compliant results or no reported lab values. Through community outreach, nutritional education, and conveying the importance of preventative care, more patients can decrease complications due to diabetes. Increasing compliance can lead to a potential payout of \$14,825 which can then be put back into the practices to increase quality of care. The timeliness of the HEDIS report will allow for actions to be taken faster in order to make systemic and administrative changes to close the noted gaps in care. References

Title: WAFAA Organization Providing Support Services to Clients

Name: Jennifer Jeon

Preceptors: Wafaa Saad, Founder and Executive Director of WAFAA Organization

Agency: WAFAA Organization

Purpose: To provide outreach and services for communities regarding domestic abuse victims, child rearing, anger management, and providing networking opportunities. By observing their initiatives and operations, conclude how nonprofits can work towards greater equity and supporting these communities.

Significance: Domestic abuse has far-reaching impacts on physical and mental health, economic stability, and social well-being. 1 in 3 women worldwide and 1 in 4 women and 1 in 9 men in the US experience physical or sexual violence by an intimate partner, leading to severe injuries, long-term health problems, and even death (National Coalition Against Domestic Violence, 2021; Centers for Disease Control and Prevention, 2021). It also has an economic impact, resulting in lost productivity, increased healthcare costs, and a strain on social services (National Institute of Justice, 2021). To end domestic abuse, we must raise awareness, provide support and resources for victims, and hold perpetrators accountable. WAFAA Organization provides shelter for domestic abuse victims, those facing homelessness, or need temporary emergency housing regardless of age, sex, religion, or background, amongst other services that help promote support and health within the community.

Method/Approach: Various methods of communication such as email, phone calls, or chat were used to communicate with clients. As an online internship, all the interns connected through Zoom to be connected with one another. It is necessary to listen carefully to clients' needs and concerns, and provide resources and referrals that are appropriate for their situation. Clients or case workers that contacted the organization were directed to our client intake application form, which were then reviewed by the team, to which the appropriate resources would be provided to the client. Interactions with clients should be documented to track their progress and ensure that their needs are being met. Extensive records were maintained on conversations with clients documenting any referrals and resources provided. Invitations regarding the organization's Annual Family Dinner Night event were also sent out to clients, sponsors, partners, the community, etc.

Outcomes/Results: Between the months of January to April, over 100 clients called in need of assistance. and around 40 calls were monitored. Assistance requests consisted of emergency shelter, food pickup, anger management, rental assistance, and immigration. Over 80% of clients that were seeking shelter were minorities, 80% women, and 40% geriatric. Many of these clients did not have an income and relied on social services to help them get admitted to the shelter. Out of the 10 clients that were assigned to the team of interns, 80% were able to get admitted into a shelter. In regards to the dinner event, over 220 attended the annual dinner on April 27th.

Evaluation/Conclusion: This internship offers experience in the professional social work field and allows interns to connect firsthand with clients, case managers, and lawyers along with opening up a wide field of networking opportunities. Partnerships are an essential component of Wafaa Organization's work to address food insecurity and domestic abuse in minority communities in Paterson. By building and maintaining strong partnerships, Wafaa can maximize its impact and help to create lasting positive change in the lives of those it serves.

Title: Adolescent Rail Safety Survey Evaluation

Name: Eliza Jones

Preceptors: Mark Chandler

Agency: Safe Kids Worldwide

Purpose: To evaluate a service learning program aimed at increasing railroad safety knowledge among teens.

Significance: A pedestrian or motor vehicle occupant is involved in a collision with a train every three hours in the U.S., and 1 in 10 of these crashes involves children ages 19 and under. Teens ages 15 to 19 are at greatest risk of rail-related injuries (Chandler, 2019). Safe Kids Worldwide (SKW), a nonprofit organization working to prevent child injuries, has partnered with Union Pacific Railroad to provide Safe Kids Coalitions with grant funding to implement the Rail Safety Service Learning (RSSL) program within their communities. Through the RSSL program, coalitions educate teens about key rail safety messages and then work with the teens to develop and deliver engaging rail safety lessons to elementary school students (ES). Teen participants complete a pre-test and post-test to assess for changes in rail safety knowledge and future intended behavior as a result of the program.

Method/Approach: Program evaluation data were collected from the 7 Safe Kids Coalitions who participated in the 2022 Rail Safety Learning Program. Teen pre- and post-tests were graded on a scale of D (60-69% correct responses) to A (90-100% correct responses) and compared. Evaluation data collected for the program includes pre-post education session tests administered to teens and elementary students as well as an overall program evaluation completed by the coalition. Teen pre/post tests consisted of 10 knowledge-based questions as well as 4 rail safety behavior-based questions. The evaluation results were detailed in a report to the program funder, Union Pacific Railroad.

Outcomes/Results: 105 teens ranging from 8th to 12th grade participated in this program and attended at least one orientation before completing their projects. In total, 950 elementary school students in grades ranging from 1st to 6th grade were reached through 36 teaching sessions with an overall ratio of approximately 1 elementary school student to 9 teen participants per session. Overall, there was a 28% increase in rail safety knowledge among teen participants and a 30% increase in their future intended rail safety behaviors. The behavior question with the largest increase was "Based on your participation, in the next year, do you think you will walk, stand, sit, or hang out on or within 15 feet of railroad tracks in the next year?" (30% increase). Most teens (96%) indicated that they enjoyed participating in the program and would refer a friend to the program (94%). Amongst elementary students, more than 88% indicated they learned something from the program, and they had an average increase of knowledge of 23%. Based on teen feedback, one challenge faced during teaching sessions included struggling to keep elementary schoolers entertained and engaged. Some elementary schoolers from lower grade levels also had difficulty understanding the vocabulary used on the tests.

Evaluation/Conclusion: My project has shown that this program was successful in increasing knowledge of rail safety for both teen and elementary school participants. All participating coalitions reported a positive experience with the program but also indicated areas that could be improved. Recommendations for the program going forward include providing teens with presentation tips and examples of past successful/engaging presentations. If younger ES students are participating, simplifying language would also be beneficial.

Title: The Health Effects of Contracting COVID-19 During Pregnancy

Name: Madison Kassar

Preceptors: Kathryn Aveni, RNC, MPH

Agency: New Jersey Department of Health - Trenton, NJ

Purpose: To gather and analyze birth data of mothers in New Jersey who tested positive for COVID-19 during pregnancy between the years of 2020-2021 and their infants in order to understand the health effects and outcomes of the virus on pregnancy.

Significance: COVID-19 is an ongoing pandemic affecting the health of individuals around the world. In total, there have been 674 million cases and 6.87 million deaths caused by COVID-19. In New Jersey specifically, over two and a half million cases and 35,000 deaths have been reported since the virus surfaced. One of the higher risk populations at this time is pregnant people in general, especially those who are pregnant and older, African American, have other medical conditions, or are healthcare workers. The New Jersey Department of Health, in collaboration with the Centers for Disease Control's Surveillance of Emerging Threats to Mothers and Babies Network (SET-NET), is working on an ongoing surveillance project tracking maternal and infant outcomes for mothers who tested positive for COVID-19 during pregnancy. The data collected from tracking the health effects of COVID-19 on this population will be used to inform clinical decision making and improve public health practice in the future.

Method/Approach: The main task of the ongoing surveillance project was requesting medical records of mothers who tested positive for COVID-19 during pregnancy in 2020 and 2021 and their babies using an online portal called Ciox. Records for mothers consisted of the time between their initial positive COVID test and the delivery date of their baby, and records for the baby consisted of the first two months of life. These records were then analyzed to determine the health effects of contracting the virus during pregnancy on the baby. Other tasks to support the project consisted of analyzing maternal death data to determine which cases of maternal death could have been caused by something other than COVID in which case the vaccine would not have been beneficial in preventing death, creating pivot tables and graphs in excel to represent survey responses regarding hospital protocols during COVID, and learning about the process of grant writing at the state government level.

Outcomes/Results: Since the project is ongoing and not yet completed, the outcomes so far only consist of the main patterns in the data. The data supports the fact that pregnancy is a risk factor for contracting COVID-19, and those who test positive during pregnancy are at increased risk for complications related to the pregnancy, such as having a preterm baby or the baby being admitted to the intensive care unit following delivery.

Evaluation/Conclusion: The expectation is to be able to determine the effect COVID has on later health of the mother and baby. Since the study is ongoing, there is not a formal conclusion yet, but patterns are emerging showing similar trends, allowing researchers to generalize the findings to the entire population. Future research on the topic can expand this project by looking at the differences in health outcomes of babies born to COVID-19 positive mothers who were either vaccinated or not to see what effect the vaccine has on the baby's health outcome.

Title: Evaluation of Women's Thoughts and Perceptions towards Research

Name: Madison Keebler

Preceptors: Dr. Gloria Bachmann

Agency: Robert Wood Johnson Medical School; Women's Health Institute

Purpose: To study and evaluate the perceptions and beliefs of both pregnant and non-pregnant individuals regarding participating in long-term studies in order to inform future research practices. Completing Institutional Review Board (IRB) with a follow up on how much pregnant women know about their bodies and overall health.

Significance: Compared to their male counterparts, women have had statistically lower aspirations in regards to education, career, and identity. In exploring what accounts for women's aspirations, it is essential to look at environmental factors, including cultural and ethnic background. Many researchers have observed that the relative traditionality of gender role attitudes and occupational plans may limit educational aspirations, therefore causing a standstill in regards to research. Previously, there has been very little research on women in regards to research methods. Therefore, increasing social and economic strength of women can help further research in regards to certain obstacles

Method/Approach: Research and consensus was obtained by creating a questionnaire IRB distributed to patients entering the OB-GYN office of the Women's Health Institution. The survey was completely anonymous and participants were given a "consent to take part in anonymous research" form prior to completing the survey. The survey consisted of 40 questions, all of which were about attitudes towards women in research studies. The questionnaire asked questions about demographics, income, pregnancy, and opinions on biosampling and access to transportation. After the survey was completed, their responses were entered into an excel spreadsheet to analyze patterns among the women.

Outcomes/Results: Due to the ongoing nature of the study, the findings are based on the 36 completed surveys obtained. The overall study suggests women are generally uncomfortable and unfamiliar with participating in research. Of the 36 women, 25 stated they were either not sure, or would definitely not be willing to provide blood samples to researchers in a research study. Only 16 of the 36 women have familiarity with research studies and have participated in one before. Therefore, suggesting their uncertainty towards this area of study.

Evaluation/Conclusion: Of the 36 studies obtained, we were able to conclude that many women are uncomfortable participating in research, especially in regards to biosampling. Because the study is ongoing with the goal of obtaining 50 studies, patterns are still being concluded. However, we noticed a pattern of similar trends on the perceptions of research studies. Asking for feedback on experience of the study may allow us to gauge a better understanding of where their uncomfortability lies, and how it can be altered.

Title: Vocera Ease software education and implementation

Name: Mission Kercher

Preceptors: Patricia James, Assistant Vice President Cardiovascular

Agency: RWJBH-New Brunswick

Purpose: To implement a HIPAA-compliant communication platform for educating and updating families and friends on a loved one's stay.

Significance: Results of a 2015 RWJ HCAHPS examination of 23,658 malpractice claims that occurred between 2009 and 2013 revealed that 7,149 of the claims entailed communication difficulties. 50 percent of the 1,959 claims involving surgical communication errors were from outpatients, 34 percent caused severe injuries, and 14 percent resulted in fatalities. The high percentage of surgical communication errors illustrates how miscommunication is a prevalent issue affecting the clinical perioperative setting. Failures in communication can cause surgical delays, which is why RWJBH has partnered with Vocera Ease to ensure that all of their patients and their families have the ability to remain connected to their loved ones using Ease software. Implementation of Vocera Ease into the RWJ hospital units will significantly improve communication barriers in the Perioperative setting.

Method/Approach: This project was completed by using HIPAA-compliant communication software called Vocera Ease to help patients in Same Day Surgery Preop unit at RWJBH. Steps and tasks involved in registering a patient for the Vocera Ease application included scanning a QR code to download the Ease application on the patient's phone. After downloading the Ease application, the patient's information including their date of birth, full name, and patient MRN (medical record number) is recorded into Ease. Once registered the patient's phone must then accept the terms and conditions of the application while also enabling access to the camera, contact, and microphone. Once the contacts are made accessible, the patient can select which contacts can receive messages from the Ease application. After the contacts are selected, a text invitation to the patient's loved ones will be sent prompting them to join Ease with a premade code. Once registration is complete the QR code on the patient's phone is scanned as well as the wristband of the patient and a welcome message is sent to all contacts selected for that patient.

Outcomes/Results: In the OR the most recent report from March 21, 2023, saw an increase in 431 new Ease sessions, 2,195 total messages sent, and 3,473 emojis from participants. Of those 3,473 emojis, 1,762 were thumbs up, 966 were hearts, and 745 were prayers. After implementing the Ease application, the 2022-2023 HCAHPS survey illustrates an increase in the RWJ hospital percentile rank for Communication with Doctors Domain Performance from 19 percentile to 31 percentile out of a sample size cohort of (n=3355). Communication with Nurses Domain Performance saw an increase from the 14 percentile to the 41 percentile.

Evaluation/Conclusion: To evaluate the effectiveness of the Vocera Ease application an HCAHPS process evaluation as well as an Ease MD survey will be conducted to assess the interactions between patients and physicians while managing patient workflow by assessing patient satisfaction. Post-test OR surveys are administered to all patients who choose to participate in the Ease application which will help identify whether or not Ease is helpful to patients and their loved ones in Pre-Op. The project should be relooked at monthly when registering patients to see if survey results indicate positive user-friendly experiences. The end of the Vocera Project will constitute a survey report from HCAHPS, and Ease patient surveys. The goal of the Ease software is to have an increasing amount of new ease sessions.

Title: New Techniques for diagnosis of Rheumatology and Sinus Infections

Name: Hira Khan

Preceptors: Harsha Sahni

Agency: Sahni Rheumatology

Purpose: To implement new techniques in order to better diagnose & treat patients with Rheumatology Arthritis. Infusions are used to treat RA in order to deliver targeted and efficient therapy that can lessen inflammation in the joints, relieve signs, and decrease the onset of the illness. In many RA patients, infusions have been found to be beneficial in lowering joint pain and inflammation, enhancing joint function, and inhibiting or preventing joint deterioration.

Significance: Rheumatoid arthritis (RA) is an ongoing illness that impacts the bones and joints and can result in inflammation, discomfort, and stiffness, according to the Centers for Disease Control and Prevention (CDC). The CDC describes RA as a form of autoimmune disease that develops when the body's defense mechanisms wrongly target the synovium, which lines the joints (CDC 2020). According to further CDC statistics, this can impair daily activities and quality of life over time by causing harm and deformities in the joints that are affected. With a total of 312,121 instances documented, RA was the most often reported kind of arthritis in the state, according to recent statistics from the New Jersey Department of Health. This corresponds to a prevalence rate of about 3.5% of the population of New Jersey.

Method/Approach: The chosen infusion medication was chosen between 3 different types of companies. These three medications were Rituximab, Infliximab, and Tocilizumab. Tocilizumab is a biologic drug that reduces inflammation by blocking the action of the interleukin-6 (IL-6) protein. Tocilizumab is administered intravenously. Tumor necrosis factor-alpha (TNF-alpha), a protein implicated in the inflammatory process, is blocked by the biologic drug infliximab. Infliximab is administered intravenously. A biologic drug called rituximab works by going after B cells, a type of white blood cell that plays a role in the immune system's attack on the joints in rheumatoid arthritis. Rituximab was administered intravenously. Each Patient was recorded for how many times they came in with the same pain. These results were recorded in a google excel to view the trends between the patients who came in. Based on the results from the patients, the best working medication is used for the rest of the patients with arthritic pain.

Outcomes/Results: A list of 200 patients were recorded where each was organized and identified by their patient ID number. A random selection of the 200 patients were chosen at random. 60 patients were chosen to take Tocilizumab, 70 patients to use Infliximab, and 70 to use Rituximab. Out of all the patients, Tocilizumab showed to be the most effective with the majority of patients coming in with decreasing pain. A PowerPoint presentation was made at the end of the internship. providing this PowerPoint also gave light to other employees and patients with knowledge of the best working infusion medication. Graphs were used to represent the results of how many patients came in with decreased pain, increased pain, or consistent pain that has not had any change.

Evaluation/Conclusion: With the pool of 200 patients, the results followed trends in order to give us results that Sahni Rheumatology needed. These results were able to provide us with the most effective way to treat patients with rheumatoid arthritis with the best working infusion medication. The data overall present how this is an epidemiological public health issue that can be prevented when collectively collaborating with peers to discover better treatments for patients with arthritic pain.

Title: Educating Underserved Communities about the Importance of Public Health

Name: Mahwish Khan

Preceptors: Brigite Johnson, Director of Communication and Technology

Agency: Society for Public Health Education (SOPHE)

Purpose: To create education programs that brings public health awareness to various communities, especially racial and ethnic minorities through SOPHE's Annual Conference.

Significance: Health equity is needed amongst people in under-served and under-represented communities. Data shows that many populations experience health disparities, including people from some racial and ethnic minority groups, people with disabilities, women...and other groups (CDC, 2022). In order to combat this issue, experts state that programs that close gaps in educational outcomes between low-income or racial and ethnic minority populations and higher-income or majority populations are needed to promote health equity (Hahn & Truman, 2015). The Society for Public Health Education organizes an annual conference that brings various stakeholder groups together to work on bringing awareness and reformed approaches to close the gap between communities that are under-privileged and privileged. At the same time, local civilians have the opportunity to gain educational information and to also contribute to the discussion. Thus, the importance of tackling this issue is magnified and appropriate attention is directed.

Method/Approach: The methodology for this project consisted of completing diverse tasks which included contacting five yoga/wellness vendors to find the best option for morning exercise activities, researching and presenting attractions near the venue for people to learn more about the history of Atlanta, and lastly, attending meetings to discuss ideas and logistics. A doodle poll was also created to see which days and times best worked for people to attend a meeting led by Linda Forys in preparation for the conference. In addition, preparation for evaluation forms was done by reading and watching webinars of which one was titled, "Addressing sustainability: walk with ease,"which discussed a direct approach to help those with arthritis. Contact with the communications supervisor and other members of the team occurred frequently to ask for any additional assistance and tasks.

Outcomes/Results: The conference was held in Atlanta at the Sheraton Atlanta Hotel from Tuesday, March 21 to Friday, March 24, 2023. There were over 600 participants this year with over 10 keynote and plenary speakers. Themes like health equity, racism, and social justice were the key priority for the conference. For the vendors, out of the five that were contacted, one was selected by the supervisor for the morning yoga sessions. Majority of the team flew to Atlanta and attended in-person. All the planning that occurred between the members resulted in a fairly successful conference with minimal issues.

Evaluation/Conclusion: Overall, the conference was a success and the members worked very hard and well together. In terms of timeline, it was agreed that a January start date for planning would be a better time frame. Revisions for next year's pre-registration includes considering a one-day registration option instead of the full week as well as a guest pass for attendees who want to attend only select panels. Additionally, their could be a detailed schedule of the conference could be included on the flyer for speakers for the pre-conference days. Communication was overall good but more tasks could have been done from the intern side including involvement in details of the preparation. In the future, having an additional 1-2 team members on-site at the registration table would be helpful. Lastly, offering a one day guest pass option available for those who do no wish to stay the duration of the conference would be beneficial.

Title: Reporting Pathogen Reports to the New Jersey State Cancer Registry

Name: Thomas Klele

Preceptors: Dennis Simmons CEO of WSC, Debbie VanGinneken Office Manager of WSC,

Donna Barone Billing Manager of WSC

Agency: Wayne Surgical Center - Wayne, NJ

Purpose: To identify and analyze cancerous or precancerous pathogen reports, and provide these pathogen reports to the New Jersey State Cancer Registry.

Significance: The New Jersey State Cancer Registry is a comprehensive database that compiles and evaluates cancer data from multiple sources across the state, including healthcare providers, hospitals, and ambulatory centers. These registries are extremely important for research development, treatment measures, and health outcomes in regards to cancer. By ensuring accurate and timely submission of pathogen reports to the registry, healthcare professionals can gain valuable insights into the causes and patterns of cancer, facilitating the development of more effective prevention and treatment strategies. Timely reporting of all cases to the state registry can also increase early detection of cancer and precancerous conditions, leading to improved patient outcomes through prompt interventions and treatments. Therefore, identifying and analyzing cancerous or precancerous pathogen reports is a critical task in advancing our understanding of cancer and enhancing patient care. This process was initiated by the New Jersey State Cancer Registry, as they emailed Donna Barone requesting patient information on a query of patients that had been flagged for cancerous or precancerous pathologies, to which the Wayne Surgical Center agreed to find, as they are dedicated to the betterment of their patients.

Method/Approach: WSC received a total of three lists from the NJSCR. In total, there were 175 patients flagged by the NJSCR that needed to have their pathology reports checked for cancerous and precancerous diagnoses. All patients were found in either our physical library, or our scanned database on Laserfiche. All patients from the State's lists were found and copied to work on separately, so as to not complicate the daily function of the surgical center. Cancerous and precancerous pathology reports were then organized both alphabetically and by year. A WebPlus account was then created for myself in conjunction with the New Jersey Cancer Institute, directions were emailed to my school email on how to operate the software. After being found, checked, and copied for work, all patient information, diagnoses, and case comments were relayed confidentially and securely through WebPlus.

Outcomes/Results: This project resulted in the New Jersey State Cancer Registry gaining specific statistics and information on 175 patients from the years 2021 and 2022 that they did not have beforehand. All patient pathology information and contact information was relayed securely, and as accurately as possible. Specific diagnosing physician contact information was also provided for any follow up questions or missing information.

Evaluation/Conclusion: The NJSCR will now know if the cancer each patient was flagged for was malignant, whether the patient is still alive, and if the patient has recovered from the initial diagnosis or not. They will also have information on who to contact if any other information is missing. All health facilities must report these types of cancerous pathologies to the state, therefore adequate training on the WebPlus software would be helpful to any responsible facility. Real time reporting will result in more accurate statistics, and a more efficient use of time. In conclusion, the specified reporting of each of these patients provides the New Jersey State Cancer Registry with information that can lead to more accurate data, and in turn better health outcomes for future cancer patients.

Title: Method of Contact Effectiveness for Rehabilitation Programs

Name: Paige Kruse

Preceptors: Lynn Nguyen, Prevention Links; Emily Newton, Grants and Program Manager

Agency: Prevention Links - Roselle, NJ

Purpose: To analyze the effectiveness of utilizing Prevention Links'(PL) newly adopted electronic health record database, Recovery Database Platform (RDP) to understand which method of contact brings about most participation and organizational growth.

Significance: Each year, nearly 170,000 deaths are attributed to substance abuse in the United States. The State of New Jersey's Health Department, (2019) alone reported over 100,000 hospitalizations due to substance use disorder, demonstrating the frequency at which substance abuse occurs. Due to external influences like economic and personal hardship that affect those that typically experience substance use disorder, those that fall victim to this health concern struggle to receive the resources and education they need in order to start their road to recovery (NCDAS, 2023). Through community outreach programs like Prevention Links, this barrier within education and health recovery aims to be mitigated. In order to be effective in providing community outreach, it's essential for an organization to understand the most accessible and successful methods in providing these services.

Method/Approach: An ongoing compilation of audits is being conducted by Prevention Link's data analysts to understand the methods of contact that are successful in retaining the greatest number of patients during the duration of their recovery process. With the recent implementation of PL's Recovery Database Platform (RDP); patient demographics, recovery methods, and communication logs are able to be tracked and analyzed in a secure and unbiased process. Assisting in auditing the information that is extracted from PL's website, we are able to interpret the findings for most effective recovery methods through (1) call duration, (2) Type of contact made, and (3) how many times a patient was successfully in contact with a recovery specialist. With the RDP database, an analysis of the compiled data was conducted within these areas to evaluate the effectiveness of PL's programs and how RDP contributes toward an understanding of how it aids in organizational growth and patient resource outreach.

Outcomes/Results: After analyzing the RDP audits for the respective 2021 and 2022 fiscal years, it is apparent that there are differences between the results for methods of outreach. From 2021, PL accumulated 22% successful phone contact minutes amongst seven other organizations in the state. In 2022, this number decreased by 7%; however, account for the highest total minutes spent in contact with patients. For in-person recovery services from the 2022 fiscal year, PL was second in New Jersey with 25% out of seven organizations (important to note that this was still during COVID). In 2022, PL accounted for 27% of the in person services offered by nonprofits in NJ using RDP, increasing by 83%.

Evaluation/Conclusion: (Data to be incorporated) Quarterly and yearly audits will be conducted to monitor the expansion of patient participation in recovery programs to evaluate PL's outreach methods. These audits give insight on how to deliver programs for effective recovery service implementation and allow the company to analyze which methods of outreach to expand their services in. Implementation from the evaluation of the data collected from these RDP audits can best be appropriated to provide more accessible services. The ongoing analysis of methods of contact with patients provides Prevention Links the ability to target communities in need and provide future guidance on organizational expansion and community engagement.

Title: Recruiting Home Health Nurses During a Nursing Shortage

Name: Sabrina Kupa

Preceptors: Sarah Ceresini, Regional Talent Acquisition Manager

Agency: BAYADA Home Health Care

Purpose: To build a robust pipeline of qualified skilled nurses by using different sourcing platforms to engage passive talent and meet client staffing needs.

Significance: With a growing aging population and pandemic related issues such as health worker burnout and inflation, the healthcare industry faces significant staffing challenges due to a shortage of nurses. In a recent nursing workforce analysis, the total supply of registered nurses decreased by more than 100,000 in 2021, the largest drop recorded in the last 40 years (Auerbach et al., 2022). While hospitals are better equipped to staff travel nurses, compensate at higher rates, and mandate overtime, home care agencies continuously struggle to fill the voids. BAYADA Home Health Care, however, relies on unique methods of recruitment outside of direct applicants to build their nursing workforce that provides high-quality, 24 hour care to patients. This project will use sourcing platforms such as hireEZ and Indeed to attract and contact skilled candidates that are not actively searching or applying for new nursing positions to better address home care nursing shortages.

Method/Approach: To expand candidate pools and engage prospects, two sourcing programs were utilized. The first program, hireEZ, was used to search from millions of candidate profiles across different platforms. This first includes interpreting and analyzing weekly recruitment trends for the Northeast Recruiting Team and identifying the 10 markets with the lowest application and attraction rate. Once the sourcing need is identified, various boolean searches were conducted to identify licensed practical nurses and registered nurses while cross-referencing the organization's applicant tracking system, Greenhouse, to ensure that candidates do not already exist in the ATS. Then, prospects were moved into market specific projects and contacted via an email sequence with an explanation of interest, information about the company, and recruiter specific calendar links to set up interviews. The second sourcing program, Indeed, was used in a similar manner but focused on nursing outreach to prospects updating their profiles. This consisted of daily prospect outreach to new resumes. Lastly, interested candidates from both platforms were sent to the recruiting manager in a specific market for continued outreach and interviewing.

Outcomes/Results: Through consistent sourcing efforts, 205 candidates were entered into the ATS by the end of Q1. These sourcing efforts help attract and engage candidates to work and provide quality skilled nursing services to clients from the comfort of their home. Using hireEZ and Indeed Resume resulted in 86.3% of sourced applicants at 177 sourced nurses entering the pipeline. Of these nurses, 36 were still active and in the recruitment process by the end of Q1. In total, 160 nurses were rejected by the end of the quarter and 9 nurses were hired. Overall, sourcing passive candidates increased weekly applications and improved market attraction.

Evaluation/Conclusion: Using different sourcing platforms like hireEZ and Indeed to strategically contact nurses based on markets in need of attraction has ultimately allowed clients to have access to the necessary healthcare. Cross referencing candidates in the ATS and providing direct links to schedule interviews also simplified the recruiting process and increased the number of interested candidates. For future sourcing efforts, it may be more effective to use more sourcing platforms to diversify searches and increase candidate pool. Similarly, limiting the bounce rate of emails could result in more successful responses and better allocated contacts.

Title: Leadership Mentoring Platform

Name: Manuela Lamela

Preceptors: Quadai Palmer

Agency: From Jersey with Love

Purpose: To develop a meaningful mentoring platform for leadership development focusing on professional and personal skills.

Significance: Mental disorders affect one in eight people worldwide. CEOs are more likely to suffer from mental health issues than the general population, with 49 percent experiencing problems. In a recent study of 2,400 CEOs, it was found that all of them were suffering from stress to a significant degree (Elsig 2022). In today's world, leaders are all expected to cope with the pressure and stress of the workplace without having a safe space to turn to. Companies and organizations have high expectations for leaders, but what happens when a leader needs to help or doesn't know how to solve a specific problem in the workplace and has no one to turn to? Leading in Love works to combat the problem by providing services such as leadership mentoring to help leaders in various professional and personal development areas and raise awareness.

Method/Approach: Ten top skills and resources needed for leadership were identified. A survey was conducted as well as a leadership conference based on the responses to the survey regarding mental health, self-care, and leadership development. The targeted population, leaders and organizations in the community, were identified to be surveyed. The surveys were used to determine the needs of different organizations across counties in New Jersey, New York, Pennsylvania and Connecticut. The driving force was finding quick facts about mental health and resources available in our communities. This information would be used to help our leaders make better decisions for their communities as well as determine what resources should be provided in the leadership platform. Additionally, this information would help provide access to resources in a more detailed manner. The surveys were conducted over a six-week period.

Outcomes/Results: In the surveys conducted, most leaders mentioned interest in leadership and aspects regarding planning and organization policies, support, management, and organization policies. In the survey, participants were asked if they had taken any leadership classes throughout their careers, and 76.3% answered "yes," and 21.7% answered "no." When asked how likely they would participate if leadership training was offered, 47.8% answered "very likely," 39.1 % "most likely," 4.3 % "not likely," and 8.7 % "somewhat likely." When asked about leadership development's importance to them and their career, 78.3 % of participants answered "very important," 17.4% answered "mostly important," and 4.3% answered somewhat important.

Evaluation/Conclusion: This leadership mentoring platform aims to aid leaders by offering them a safe place to turn to whenever they don't have all the answers in professional and personal areas. Overall, the research helped determine what type of resources should be provided in the leadership mentoring platform, such as planning and organization. Leaders are often seen as unbreakable and having the answers to everything, but they often suffer from mental and physical problems, such as stress, depression, and even suicide. In accordance with their data, leaders need help in a range of professional areas, and leadership mentoring can provide that support.

Title: Student Coalition for Anti-Violence Education

Name: Mackenzie Lawson

Preceptors: Frank Fabiano

Agency: Office for Violence Prevention and Victim Assistance

Purpose: To foster education and partnerships among student leaders of Rutgers organizations in an antiviolence coalition.

Significance: Sexual assault is extremely prevalent on college campuses, with college-age women (aged 18-24) three times more likely to experience assault than other age demographics of women (RAINN, 2023). At Rutgers University, a 2018 campus climate survey found that approximately 50% of students reported at least one experience of dating violence since coming to campus (Center on Violence Against Women and Children, 2018). Not only is sexual and interpersonal violence extremely prevalent, but young people often do not know where or how they can access needed resources (Marble, 2013). The Office for Violence Prevention and Victim Assistance at Rutgers University works to create a community free from violence through direct service, counseling, education, training, advocacy, policy development, and consulting services. My project aims to raise awareness and educate students on different topics relating to interpersonal violence, anti-violence strategies, and campus resources through monthly coalition meetings with student organization leaders.

Method/Approach: The methods used were outreach, student programming, and community facilitation in order to create connections between the resources of the Office for Violence Prevention and Victim Assistance, and leaders of student organizations. Student leaders of different on-campus clubs and organizations were invited to attend monthly meetings on different topics relating to interpersonal violence and how they can incorporate anti-violence work into their own organizations' topics and interests. Outreach was initially conducted to Rutgers student organizations to assess interest and gain members of the Student Coalition. In collaboration with preceptor Frank Fabiano, meetings were planned through selecting meeting topics, picking speakers, and booking event spaces. Advertising meetings was done through creating marketing flyers, maintaining communications with student leaders, and advertising through email and social media outreach. Effectiveness of meetings was assessed through metrics including attendance and partnerships created.

Outcomes/Results: Interest was garnered from many organizations and 24 student leaders joined the Student Coalition. The monthly meetings of the Student Coalition's spring semester included speakers from VPVA on healthy relationships, Donald Moore on Title IX at Rutgers, and the Pillow Project on the impact of violence and trauma on sleep health. Meetings had an average attendance of 4-10 students. Significant partnerships were facilitated with at least two student organizations, resulting in an awareness event with Sigma Psi Zeta and an event collaboration with Alpha Epsilon Delta.

Evaluation/Conclusion: Partnering with student organizations helps a greater number of students to be aware of VPVA's resources and educated about interpersonal violence on campus. Peer education is an effective means of communication and connection. Meetings could be more effective through greater attendance facilitated by increased marketing and outreach. However, greater education and awareness on campus resources through peer education on sexual violence creates the foundation for increased general knowledge, awareness, and utilization of sexual violence campus resources among students.

References

Title: DEI and Health Equity Analysis

Name: Julia Le

Preceptors: Kelly Hendershot (Vice President, Partner Relations)

Gabbi Bernardo (Manager, Partner Data and Communication)

Agency: Cancer Support Community

Purpose: To analyze the Diversity, Equity, and Inclusion (DEI) and Health Equity efforts across Cancer Support Community's (CSC) network by finding common themes and trends from the work highlighted at nine specific locations.

Significance: The Cancer Support Community (CSC) is an international nonprofit network that provides psychosocial support for people impacted by cancer. To date, "Poverty, discrimination, and psychosocial barriers due to institutional and individual racism are three of the most reinforcing variables that lead to health inequity in treatment for ethnic and racial minorities" (Bolton, Giger & Georges, 2004). Not to mention, "COVID-19 has disrupted cancer care in a way that could amplify pre-existing health disparities" (Graboyes et. al, 2020). All in all, underserved communities have endured a long history of disparate access to quality cancer care and a lack of culturally appropriate supportive care services. Thus, CSC has been committed to further reducing disparities associated with different cancer diagnoses. In fact, the start of this project overlaps with CSC finalizing its strategic plan for the next three to five years. As part of the plan, CSC had five bold steps to which all strategies and tactics will be tied to. Two of these directly correlate to this project: (1) Reach more people where and when they need us and (2) Reach underserved populations in a targeted, meaningful way.

Method/Approach: A retrospective review of nine virtual presentations was coordinated to identify recurring themes from network partners nationwide regarding their DEI and Health Equity efforts. To analyze barriers to care, health disparities, and methods of engagement for targeted demographics found by CSC's network partners, the 30-minute webinar recordings, 15-minute Q&A discussion, accompanying slide decks, and post-presentation surveys were reviewed and summarized. Further statistics were also collected from CSC's Cancer Experience Registry (CER).

Outcomes/Results: The CSC network-wide presentations were held from February to December 2022. The common barrier that led to shortcomings at the local level revolved around engagement with the community in order to overcome medical distrust/mistrust. In their efforts to overcome this, Network Partners shared their best practices which included their dedication and perseverance in providing psychosocial support, whether it be social support, social integration, or approaching loneliness and social disruptions. This meant their many attempts to overcome this distrust/mistrust included finding diverse facilitators and presenters for social groups or seeking partnerships. With 2022 being the first year these presentations were held, moving forward, a suggestion would be to continue holding presentations in order to encourage sharing successes throughout the network.

Evaluation/Conclusion: This retrospective review identified best practices and shortcomings experienced by a sample set of CSC's Network Partners. Due to the consistent format of the presentations, this allowed for a more seamless review and analysis, such as the ability to rewind and pause the video at any given point to make sure nothing was missed. A capstone presentation will be given to the CSC network to provide an overarching review of the most successful programs and efforts. Ongoing sharing by Network Partners on their local DEI and Health Equity efforts will continue to ensure growth in these areas across the network.

Title: First Connection Program Volunteer Guide

Name: Hesu Lee

Preceptors: Gabriela Ruiz, Patient & Community Outreach Manager

Agency: Leukemia & Lymphoma Society (LLS) -Desert Region

Purpose: To efficiently improve and promote peer to peer support through the Patti Robinson Kaufmann first connection program with patients during their follow up call.

Significance: Blood cancers are specific and detailed in their diagnosis that patients must receive specialized treatment, however obtaining treatment can be challenging and draining on patients, ultimately impacting a patient's mental and physical status. Peer support programs can offer great support and improve self-efficacy skills, self-management skills, active coping skills, and empowerment (Ziegler, et al., 2022). LLS continues to fight blood cancers by researching and implementing clinical trials for a cure to leukemia and lymphoma as well as supporting patients through their various support, financial, and education programs. In LLS, 1,800 patients and caregivers were connected to a peer volunteer in the country, who many of them are currently in remission or had family members who had been through blood cancer treatment and wanted to help in some way (2021 LLS Impact Report, 2021). Currently in the desert region, there were only 43 matches completed with peers leading to the need for improvement (2022 Region Mission Stats, 2022).

Method/Approach: A review of the first connection program and procedures related to the program that volunteers and contracted staff must follow was completed. After brainstorming with the senior leadership team about problems upon introducing the program through volunteers, volunteers had stated they had the most trouble thinking of ways to introduce the program to patients during their follow up calls. Using the volunteer onboarding packet, an infographic was created through Canva.

Outcomes/Results: An infographic packet was created including color and steps to have an easier telecommunication procedure for future and current volunteers to adhere to outreach to patients. The infographic first introduced the first connection peer program and the different support programs offered at LLS. Each program was defined with their goal and important criteria that should be relayed to patients. Example dialogues for the first connection program and other support programs were added to show how a conversation with a patient may flow. Tips were also displayed to show creative and empathetic ways to promote the first connection to patients and caregivers.

Evaluation/Conclusion: Infographics can help simplify concepts with illustrations and visual cues. Not only does the infographic include the first connection program, but other programs, like the financial assistance program and education programs offered at LLS were included. New volunteers are offered the volunteer onboarding packet as well as infographic packet. One challenge that was noticed was that the desert region has volunteers located across the country manifesting the inability to have a one on one session with another volunteer. To ease new volunteers into their new position, a one day training session with a seasoned volunteer via Zoom or MS Teams may help make the new volunteer feel more comfortable connecting patients to the first connection program. Training may be difficult to do over Zoom or MS Teams, however simply listening to how a patient is connected to the first connection program with a seasoned volunteer may help ease new volunteers. Another challenge that was faced was that in the current day, spam phone calls are very common, leading to patients not picking up phone calls with a New Jersey phone number. Providing interns with a LLS service number and caller ID may offer more opportunities for patients to answer their phone calls and connect with the first connection program.

Title: Implementation of OASIS Insight in Nutley Food Pantry

Name: Chelsea Lopez

Preceptors: Katherine Carmichael

Agency: Nutley Family Service Bureau- Nutley, NJ

Purpose: To implement OASIS Insight in Nutley Food Pantry to improve tracking assistance and NFSB client demographic by generating OASIS reports to get a better understanding of client demographics.

Significance: In the United State more than 34 million people face food insecurity due to factors like poverty, unemployment, chronic health conditions, etc. In New Jersey, food insecurity is a problem for 650,000 of residents and if people can't get their basic needs met it makes other life challenges more difficult (CFBNJ 2023). Nutley Family Service Bureau is a non-profit organization that has different services to help serve people in need such as their clinic, case management, and food pantry. In recent years, the food pantry has expanded through a partnership with the Community Food Bank of New Jersey. Alongside the expansion, the food pantry is implementing the use of OASIS Insight which will keep track of client information such as how much and what type of food assistance they receive. Through my project, I will be implementing OASIS Insight using reports to identify areas of improvement.

Method/Approach: A recertification process has started and continued throughout the project timeframe which allowed for interviews to be conducted and information collected on past clients using established OASIS forms. At the same time new clients going through the interview process will have their information recorded using the same OASIS forms. Once collected the information will be inputted into OASIS resulting in each client having their own electronic case file. Client information collection and input was completed and reports based upon location, demographics (age and ethnicity), and assistance given was developed. Using OASIS functions and excel, charts were created to present the data collected.

Outcomes/Results: The data collected during the timeframe covered different areas. Three demographic factors were focused on: age, ethnicity, and location. Not taking into account those that didn't respond, Nutley Food Pantry serves primarily elderly clients, with about 62% of clients saying they were 65 and older. Since the pantry started accepting anyone residing in New Jersey, there has been an increase in new clients from out of town. In February, 6 of the new clients were from out of town, and in March, 10 of the new clients resided out of town. As of April 30,2023 29, new clients from out of town have signed up to receive Pantry Services for the calendar year 2023. During the same time frame, 32 Nutley households have signed up to receive Pantry services. Clients that reside outside of Nutley comprise 20% of total clients. Nutley is predominantly white, with 73.4% (Census 2022) of residents identifying as white in 2022. This is reflected in the Food Pantry clients as those who responded, 53% identified as Caucasian. Clients that identify as Hispanic are 34% with most having Spanish as their primary language.

Evaluation/Conclusion: OASIS Insight being implemented into the running of the pantry through recertification of old clients and certifying new clients has been a learning curve. Starting to track assistance given to clients aided in the weekly reports. Two aspects of the pantry that are critical is information and getting food to the clients. With the second largest group of clients being Hispanic and Spanish speakers, information must be conveyed in a language they understand. To build on the success of Oasis, it is recommended to recruit Spanish-speaking volunteers. Additionally, long-term data collection focused on OASIS's impact on addressing community needs is also recommended.

Title: High-Level Strength, Speed, and Recovery Performance

Name: Allison Lynch

Preceptors: Mike Olim - Director of Operations

Agency: Advanced Physical and Technical Training- Metuchen NJ

Purpose: To assess and provide programs to build athletes strength and speed skills while providing proper recovery methods to enhance peak performance and prevent injury.

Significance: Muscle injuries such as strains, contusions, and tears are one of the most common sports injuries and make up "10%-55% of all injuries. Furthermore, 90% of muscle injuries are contusions, strains, and tears" (Delos et al., 2013). These injuries can result in chronic pain, dysfunction, recurrence, compartment syndrome, and even make an athlete more susceptible to injuries in other body parts due to compensation. When looking at 610 athletes with a total of 3464 injuries amongst 25 trials it showed that strength training reduces injury by 33% and overuse injury by 50% (Lauersen, 2020). This evidence shows a clear connection between providing strength and speed programs to reduce the likelihood of injury, especially muscle injury in athletes, which by doing so increases their peak performance. Furthermore the data also suggests that proper recovery, providing, and monitoring athletes workload to prevent overuse also significantly ties to a decrease in muscle injuries. This project will use different forms of training, such as strength, speed, and resistance, paired with recovery techniques and load management to best show how injuries can be prevented.

Method/Approach: A series of speed, strength, and cardio tests were done on 17 women from a division one women's soccer program. The women aged from age 18 to age 21, and all their results were put together in an excel sheet which displayed their score from a SPARTA Scan which measures load, explosiveness, and drive through a series of three jumps, 40 meter sprint, 10 meter Sprint, Nike Sparq Intermittent test, and a series of strength movements including bench press and deadlift. The test results are paired with a questionnaire of the female athletes asking questions about their recovery and their load management to determine the processes which creates peak performance.

Outcomes/Results: The outcome and results are displayed on Excel sheets and list the times, as well as the weight lifted, which is also paired with the questionnaire results, which asked the sample size cohort (n=17) how many days a week they engage in recovery activities, how many times a day, and their workload during the week. The average for deadlift was 261 lbs (39.2%), and of the 17 female athletes, 6 were above average. The average bench press was 111 lbs (16.7%), and 9 of the 17 athletes lifted above the average score. The average for the 10-meter sprint was 1.46 seconds (0.1%) and 7 athletes were above the average. For the 40 meter spring the average was 5.12 seconds (0.2%) and 7 athletes were also above the average. Lastly, the average for the Nike Sparq intermittent test was 32 (4.6%) and 8 athletes scored above the average. Out of all 17 female athletes 100% (n=17) workout a minimum of 5 days a week for at least an hour and a half. More than half of the athletes (59%) engage in recovery methods everyday.

Evaluation/Conclusion: The test results paired with the recovery questions were revealing and the female athletes that were above average in test results, were the individuals that engaged in recovery treatment daily. Of the 17 female athletes (n=17), the 10 who practiced recovery methods daily (59%) were the individuals who consistently performed above average in all different testing methods. Recovery methods such as ice baths, normatec boots, rolling out, and stretching tie together to get athletes to perform in their peak performance.

Title: Analyzing the Actions Schools in New Jersey to Combat the Increase of Teenage

Suicide

Name: Sarena Madray

Preceptors: Freddie Hayeck, Strategic Advisor

Agency: Princeton Public Affairs Group

Purpose: To analyze the actions and legislations released regarding how schools in New Jersey can help combat the national increase in teenage suicide rates.

Significance: Youth and young adults ages 10–24 years account for 14% of all suicides (CDC, 2023). However, suicide is the third leading cause of death for young people, accounting for 6,643 deaths, and for youth ages 10-14, suicide is the second leading cause of death (CDC, 2023). Analyzing the actions and legislations can help identify the underlying causes of teenage suicide rates. By understanding the factors that contribute to suicide, such as bullying, social isolation as a result of the pandemic, mental health issues, and academic pressure, educators and lawmakers can develop targeted interventions to address these issues. Analyzing the actions and legislations can help identify effective prevention and early intervention strategies that can be implemented in schools. Students will be able to access the support they need, which can include access to mental health professionals, crisis intervention services, and peer support programs.

Method/Approach: The project is conducted through research and analysis of legislative bills and policies related to youth suicide prevention in New Jersey, as well as reviewing with relevant stakeholders, including educators, mental health professionals, and policymakers. The first step is to comprehensively review the existing literature on youth suicide prevention and risk factors in New Jersey. This involves reviewing academic literature, government reports, and news articles related to the issue. Next is to analyze legislative bills and policies related to youth suicide prevention introduced or passed in New Jersey. This includes closely examining bills such as S1662, S2151, and S3543. Analyzing the bills' language and their impact on schools and students in New Jersey.

Outcomes/Results: The outcome is a comprehensive analysis of the actions and legislations released by the state of New Jersey to combat teenage suicide rates. The Senate Education Committee of New Jersey met to receive testimony from invited guests regarding how schools can help combat the national increase in teenage suicide rates. The committee heard testimonies from numerous educators, stakeholders, mental health professionals, and the public.

Evaluation/Conclusion: The New Jersey Youth Suicide Prevention Advisory Council will be playing a consultative role, with administrative and technical support from the Department of Health, the Department of Education, and the Department of Children and Families. This bill highlights the need to prioritize the mental health of young people in communities and ensure that schools are adequately equipped to support them. Bill number S2151 was only discussed by committee, and requires school districts to permit students five excused absences for mental or behavioral health reasons. This bill recognizes the importance of mental health and provides students with the support they need to prioritize their mental well-being. Finally bill S3543, was unanimously released from Committee, which directs the Department of Education to develop guidelines for school districts concerning student mental health services. I will also monitor any updates or changes to the legislative actions taken in New Jersey regarding teen suicide prevention and mental health support in schools.

Title: Social Service Assessment

Name: Sehar Mahmood

Preceptors: Wafaa Saad, Supervisor/Owner

Agency: Wafaa Organization - Paterson NJ

Purpose: To analyze the rates of abuse and social & community issues within minorities as well as their long-term effect and create initiatives to support them in these desperate times.

Significance: Domestic abuse amongst partners is getting quite prevalent in the United States. The long-lasting effects of this crime could vary from homicides to homelessness. There are roughly 17,000 homicides each year, which is due to intimate partner violence. Every minute, there are around 20 people who are being abused by their partners. (NCDAV, 2022). In 2015, 31,500 adults and children (in just one day) left their abusive homes and fled to either emergency housing or a housing program, (Office of Family Violence, 2016). The devastating effect of this is that most of these cases are never reported to police. This takes a toll on kids as they are growing up in this violent atmosphere, of which 90% of these children are eyewitnesses to the violence which occurs at home... (NCDAV, 2022). In addition to this issue, in 2020, 13.5 million households were considered food insecure, which is 10.6% of the population, (Coleman-Jensen, 2021).

The purpose of the WAFAA Organization is to provide these immediate services to the community such as shelter services, mental health counseling, anger management, emergency housing, crisis intervention, food pickups, citizenship & immigration status, and more.

Method/Approach: People who experience domestic violence or those who need access to shelter reach out to WAFAA to seek help. From February - April, there have been over 150 clients who called seeking help for these situations. A process has been established to help these clients. Clients or case workers will first call the office requesting help and their name, phone number, and email will be noted down as well as a brief background of the help they require. Clients will then be sent a client intake application that summarizes their needs, wants, and requests from WAFAA Organization. Clients are then invited to the office for an in-person one on one meeting to discuss the issue and be sent resources to help them. After the issues are in the process of being resolved, clients are sent an invitation to WAFAA's Annual Family Night Diner Event so they can connect and learn more about other social organizations within the area.

Outcomes/Results: 90% of the clients who called were from the minority communities such as Middle Easterns or Latin Americans. The calls of each client were grouped based on the needs and requests of each. Out of the 6 main clients we got a call from, 80% of them were sent to shelter homes with care. Immigrants also call the organization requesting help in obtaining citizenship status. For the Annual Family Night dinner, nearly 200 people attended the event, and resources were given out for further help.

Evaluation/Conclusion: Based on the results that were presented, it is vital to understand that community partnerships and building relationships with local law enforcement and other social services are critical for an organization like WAFAA. Due to this, many clients were able to receive resources. Even though many clients were being helped, outreach centers for clients should be implemented so they can get the help they deserve.

Title: An Education Intervention for Hand Hygiene Compliance for 4W

Name: Hannah Makasare, IP Intern

Preceptors: Michele Pedrani MS, RN, CIC, CSN-NJ

Agency: RWJUH- New Brunswick; Infection Prevention Department

Purpose: To monitor, improve and evaluate Hand Hygiene compliance with efforts to empower staff in the 4West unit within RWJUH- New Brunswick.

Significance: Healthcare settings can be considered a petri dish that can incubate, harbor, and spread potentially deadly infections if proper infection prevention protocol is not followed. Consequently, hand hygiene compliance is paramount to prevent the spread of infection aka Healthcare-Associated Infections (HAIs) (Allegranzi & Pittet, 2009). Goal 7 of the Joint Commission's National Patient Safety Goals states "Reduce the risk of health-care associated infections by complying with Hand Hygiene compliance". Therefore, constant education regarding hand hygiene compliance is always needed to create a culture of safety for the patient, medical worker, and greater community.

Method/Approach: An education intervention for the 4W unit of RWJUH- New Brunswick was conducted. The project was divided into three phases: *Pre-Intervention, Intervention & Post-intervention phase*. The Pre-intervention occurred between the dates of 2/27 to 3/22, hand hygiene observations were conducted, and a Pre Hand-Hygiene survey was developed, and sent out to the staff of 4W to evaluate their attitudes toward hand hygiene. The Intervention phase, which occurred from 3/23 to 4/13, included developing relationships with staff on the unit, guest speaking at the Hand Hygiene Committee meeting, Hand Hygiene observations (those who complied were rewarded with a LifeSaver), attending huddle, Glo- germ demonstrations, and designing and displaying signs around the unit to feel a sense of empowerment and encouraging Hand Hygiene. Lastly, in the Post-intervention, which occurred from 4/14-4/28, further hand hygiene observations were recorded, continued education with a representative from Purell discussing the GOJO monitoring system followed by a post- survey.

Outcomes: The surveys included 10 identical questions. Staff indicated in the pre-survey that they were aware of the importance of hand hygiene, but quite a few indicated that they didn't feel as empowered to speak up if seeing a co-worker not being hand hygiene compliant. Consequently, during the education and empowerment intervention, there was a large focus on hand hygiene compliance and increasing empowerment. In the post-survey, the importance of hand hygiene improved, and the feeling of being empowered wasn't as divided as before. While conducting continual hand hygiene observations and publicly awarding those who were hand hygiene compliant, the message of accountability began to spread. There were instances where medical staff spoke up when they didn't see another coworker adhere to hand hygiene. Furthermore, according to observer data in the Purell Smartlink database, hand hygiene compliance rates went from 56.7% during the Pre-Intervention, 65.7% during the Intervention, and 76.2% in the post-intervention. That's 34% improvement!

Evaluation: Despite 4W being a busy unit dealing with high-acuity patients with a large staff turnover, their department cooperated with the designed intervention. It was apparent that constant presence on the floor further engaged staff to adhere to hand hygiene practices. I recommend that the Infection Prevention Department continually increase its presence on the units and get staff engaged. It is important to always remember to meet people where they are to partner and support them in their designated roles.

Title: Increasing Social Media Engagement

Name: Nisha Makwana

Preceptors: Avni Doegar, Community Relations Coordinator & Amritha Sridhar, Transitional

Housing Coordinator and Advocate

Agency: Manavi Inc.

Purpose: To increase engagement and awareness through Manavi's social media platforms of their mission and values as we strive to provide resources for domestic violence survivors.

Significance: Among the South Asian community, domestic violence is one of the most prevalent issues that affects women of all ages, races, and status. In addition, the stigma around divorce or separation in the community can be difficult to overcome. Manavi is a non-profit organization that strives to tackle the challenges survivors face, including language barriers, legalities, and financial challenges. However, there is a lack of engagement through their social media platforms, and social media is one of the ways Manavi is best able to advertise their programs. Most non-profit organizations have limited budgets where grants are allocated towards different resources. But social media plays an important role where organizations can share their stories, mission, values, and bring awareness to the brand. This project focused on marketing strategies to drive up views and interactions among followers and possibly survivors to join the safe space.

Method/Approach: The main focus was to increase engagement on Manavi's Instagram posts to raise awareness of Manavi's mission, and for their upcoming annual gala held on April 27th, 2023. The approach involved creating posts using Canva that are interactive and aesthetic enough for Manavi's followers to share the posts onto to their own feed. Additionally, Instagram stories were constructed for other organizations and individuals to engage with the content and learn more about upcoming events being hosted. The posts contained information involving bringing awareness to specific events (Black History Month, Women's International Month, Sexual Assault Awareness Month, Gun Violence, and the Gala). A new method to implement include collaborating with other non-profit organizations whose mission aligned with Manavi's and share with the audience about the resources being offered.

Outcomes/Results: Between January 17th, 2023 and April 20th, around 27 posts were created to raise awareness of specific occasions or as fliers for the upcoming annual gala. Out of the 27 posts created, twelve were posted on Manavi's Instagram feed. The likes per post ranged from 10-30+, while there were a couple of comments at most. There was a minimal number of shares among the posts from the past few months. The gala-related posts gained more attention than the other posts and there was more traction/traffic towards purchasing tickets for the event.

Evaluation/Conclusion: In order for the account to grow, the feed needs to be aesthetically pleasing, consistent with the theme, and not heavy with the wording. This will encourage more individuals to find the page, and learn more about Manavi and their resources. The page should be organized where if a survivor needs any resources, all the information is accessible. Alongside posting on-theme posts, creating unique posts about Manavi's staff, or news around the world, can bring more people to their page. Manavi's page should hold the standards that others would want to follow and implement for their organization. The next step should be creating a plan of how we can get others to share Manavi's posts and utilize that with other platforms.

Title: Nutritional Consultation Outreach with LLS

Name: Tehreem Malik

Preceptors: Stacy Kreizman, Senior Manager of Patient and Community Outreach

Agency: The Leukemia & Lymphoma Society - New Jersey Region

Purpose: To promote and connect blood cancer patients to the nutritional consultation services at The Leukemia & Lymphoma Society (LLS).

Significance: In 2021, an estimated combined total of 186,400 people in the US are expected to be diagnosed with leukemia, lymphoma or myeloma (LLS, 2021). Nutrition is an important part of the overall cancer care plan. Cancer changes your nutritional needs and often the way your body processes food. Eating well during, and after cancer treatment can help you feel better, maintain your strength, avoid treatment delays, and speed your recovery. At LLS, patients of all cancer types can receive free nutrition education and consultations through the LLS PearlPoint Nutrition Services. The goal of this project is to connect more patients to the nutritional services that LLS offers that they might not be aware of, and provide them with education that can aid in their cancer journey. This will be conducted by LLS hosting an education program called Living Well With Blood Cancer (LWWBC), where the importance of diet, nutrition, and exercise will be discussed by expert speakers. Emphasis on the role cancer rehabilitation plays in helping patients prepare for treatment and maintain strength throughout their journey will also be highlighted.

Method/Approach: The methodology behind this project focused on conducting a pre and post assessment survey for the patients attending the LWWBC program. The pre-assessment survey consisted of three questions that were answered by the patients during the initial online registration process for this program. These questions were created on the basis of identifying the extent of knowledge patients knew about LLS nutritional services and resources. At the completion of the program, a post-assessment survey consisting of four questions was added to the evaluation form that patients filled out in person before leaving. Ultimately, this served as a follow-up to see how the LWWBC education program impacted the patients, and the likelihood they would utilize the LLS nutritional services in the future. To help further promote outreach for the LWWBC program and their services, a flyer was created and distributed to all patients and healthcare professionals in the LLS's database, including oncology dieticians.

Outcomes/Results: Of the sample size cohort (n=79) who filled out the pre assessment survey, 70 attendees (89%) agreed that good nutrition plays an important role in cancer treatment, 43 attendees (55%) did not know that LLS provides free one-on-one nutritional consultations, and only 13 attendees (16%) were aware that LLS has a Health Manager mobile app that can track side effects, hydration, medications, and provide meal planning tools and recipes. As for the results for the post assessment survey, with a sample size cohort (n=60), 43 attendees (72%) were very likely to utilize the personalized services that LLS offers in the future, 49 attendees (82%) had a good understanding of how proper nutrition relates to the management of treatment and its side effects, 51 attendees (85%) were very likely to incorporate what they learned into their overall nutrition, and lastly 53 attendees (88%) were very interested in participating in future education programs.

Evaluation/Conclusion: Overall, good nutrition and its importance in a patient's quality of life during and after treatment, was evident from the survey results by the patients, and education programs like LWWBC showed vast improvement in promoting outreach for LLS's nutritional services. By continuing to educate through these methods, more patients will be connected to nutritional support services and resources, resulting in optimal health for the patients.

Title: Study Information for Site Management

Name: Nila Manners

Preceptors: Direct Supervisor: Sarah Jimenez, Principle Optimization Specialist

Lead Project Manager: Susan Lassiter, Principle Clinical Trial Coordinator

Agency: Thermo Fisher Scientific

Purpose: To populate an excel form with new Clinical Research Associates (CRA) that have been assigned to site projects. A weekly updating of upcoming details about the studies they would be assigned to that will be registered to them. As well as updating older and more thorough information on study disease and target population for the CRAs that haven't been submitted to move onto the next stage through contact of their line managers.

Significance: To date there are over 434 thousand clinical trials that have been registered globally since 2000 so the worldwide establishment of them requires accurate and thorough recording of the process (Statista, 2022). As for the preliminary requirement to get those into the advancement of the trial itself, there must be communicative efforts from both the CRA and clinical trial coordinators (CTC) that are a part of the cases. Expressed by Farrell and Study Management by The University of Texas Health Science Center (2021), for optimal performance consistency in the later part of the phases, there must be a bridge between the efficiency of management, data collection, documentation, and regulatory compliance.

Method/Approach: The steps to getting a CRA to support a study site be comfortable accepting to go through with the trial process is through the work of multiple collaborators. The clinical research coordinators must understand the drug of choice that each study will be using and find out background information on the subjects profile. The rest of the clinical operations group will also begin to have more participation in keeping the trial ongoing. Within the clinical operations team with the lead of the CTC, they discuss CRA assignment and placement that require their employee ID, role designation, internal or external source, study, location, subject, completion status, previous role, and disease confirmations.

Outcomes/Results: Since the start of data collection for the year of 2023, there have been about 250 newly added CRAs and their respective information. However, the months of enrollment are usually expedited compared to when a study indication, sponsor, or even a name or number is added for a case. Establishing that those details are to be determined later is important in frequently contacting the line managers so the process is not hindered. Doing this activity within the team is a precursor for the trial phases and the information used in them to be delivered precisely and handled with confidentiality. It contributes a larger picture to treatment tracking and regulatory monitoring of the life cycle otherwise known as the administration in the trial phases.

Evaluation/Conclusion: The CRAs hold regular meetings with the contact site that the studies are conducted on and have criteria that must be met for that month to determine if the data collection is useful and working. It's usually in the preliminary stages of site information being collected so if there is an issue, the study can be pulled and fixed before trying again. That's a part of regulatory monitoring of the CRAs in their new positions. Satisfaction evaluations are a part of those conversations stating the importance of a smooth execution for the registration and indications is necessary for management which all research facilities uphold for the betterment of their subjects, clients, and future participants that suffer from disease or illness.

Title: Improved Website Navigation for Blood Cancer Patients

Name: Esther Martinez

Preceptors: Tracy Moore, Patient and Community Outreach Manager

Agency: The Leukemia and Lymphoma Society - Tennessee-Alabama region

Purpose: To ameliorate the physical, mental, and emotional wellbeing of blood cancer patients in North America.

Significance: Cancer remains one of the leading causes of death in the United States. Blood cancers, such as leukemia and lymphoma, account for nearly ten percent of the total deaths from cancer in the United States. Despite the United States' reputation as a first world country, many marginalized communities experience disproportionately high blood cancer mortality rates. According to the Centers for Disease Control and Prevention (CDC), this could be attributed to several factors, such as differences among racial or ethnic populations, variations in populations and health behaviors, and inequalities in medical care. Regardless of the cause for the disparity, the effect can be minimized through increased access to healthcare. The Leukemia and Lymphoma Society (LLS) aims to improve accessibility by informing and providing patients with financial assistance programs, support groups, and treatments they may be eligible for at no additional cost. Through improved website organization, this project will increase efficiency for LLS and enhanced user experience for patients.

Method/Approach: Website content was reorganized to improve consolidation and navigation. Before the redevelopment of the website, user interaction data was collected and analyzed, such as unique clicks, bounce rates, and page views. Although some website publications had thousands of unique user interactions, the majority had only a few hundred or less. Some content even had little to no user interactions. This could be attributed to a confusing website design that was not mobile-friendly. Excel sheets were used to coordinate progress and updated on a daily basis; content with more user interactions were prioritized. News articles, blogs, and inspirational stories, which are referred to as "Voices," were categorized by topic and disease. News articles older than three years old and blogs older than five years old were archived; all archived content was not tagged to improve efficiency. Unpublished content was edited as needed and subsequently published.

Outcomes/Results: Of the news articles (n = 345), 240 (70%) were successfully updated to reflect current news. 224 (93%) of the blogs (n = 240) and 82 (11%) of Voices (n = 753) were tagged. Technical difficulties were encountered; for example, a few of the links were non-indexable and needed further resolution. Material from some news articles and blogs was missing, which required complete revision. Other content needed modification because it did not display correctly. Some published news articles were taken down because the mentioned treatment methods required further approval from the Food and Drug Administration (FDA). This remains a continued effort and is expected to be completed in late May or early June.

Evaluation/Conclusion: There will not be conclusive results until the redesigned website is fully published. However, it is likely that this project will successfully increase the number of user interactions, thus facilitating access to information. The most important objective is to make the website mobile-friendly, which will improve accessibility for most patients. Many of these news articles are essential because they inform patients of breakthrough treatments that may be relevant to them. Blogs and Voices provide a source of encouragement to patients; these publications also offer advice and personal insight.

Title: ER Patient Demographics

Name: Fiorela Martinez

Preceptors: Ramona Bernard - Manager of Patient Access

Agency: Hackensack Meridian Health

Purpose: To improve patient registration to guarantee all demographic information is correct to ensure that patient receives the highest level of treatment at Hackensack Meridian Health.

Significance: Hackensack Meridian is New Jersey's largest and most comprehensive healthcare network, a preeminent not-for-profit healthcare provider that provides a full spectrum of medical services, cutting-edge research, and treatment that improves the quality of life. "Registration is an essential streamline to guide the billing process, streamline patient communications, improve patient care, and increase cultural competency" (Freedman, 2023). The patient's charts and demographics will be created to ensure they receive the best quality of care. Registration's primary goal is to improve the patient's chart promptly.

Method/ Approach: Patient Registration's primary goal is to streamline communication by ensuring that all demographic data is accurate and to increase the time of patient registration. Initial training was provided, which was a simulation of the system. Also, another class was provided on how to properly speak with the patients when it comes to asking the questions to fill out the demographics. Classes were provided to cover the insurance portion of the demographics, and programs such as Epic and Navinet to verify insurance. Epic was the system used for patient intake. Once all the training was completed, meeting with patients was quicker and went more smoothly.

Outcomes/Results: The first registration was approximately 30 minutes due to the time it took to get used to the system. The main objective was time matter to collect and input data in the system. The chart could be filled with all the information after coming out of the room since all questions were answered in a conversation with the patient. It created more intimacy between the patient and employee to feel safe and comfortable sharing additional information. The first month, the registration was done for 20 minutes since it was still challenging to memorize, and more questions were added to the registration. For four months, the registration per patient was done in 5 minutes. However, there still needed to be some clarification with verifying insurance since multiple insurances fell within the same carrier. However, they are not the same. Hackensack provided more classes to learn about insurance to ensure no more mistakes were made and always was supported if needed clarification.

Evaluation/Conclusion: Using Epic for registration was easier to learn. It is a beneficial tool, if the patient was recurring, the information was already confirmed to increase time in the registration process. Having additional programs such as Navinet and One Source in the scenario when Epic was down was extremely helpful in verifying insurance and registration processes. Limitations were that there were multiple updates to Epic, that delayed the registration process which caused the registration process to be delayed and affected the time recorded sometimes. Recommendations to improve the time matter of registration is for Epic to do updates at times early in the morning to ensure that registration is not affected. Hackensack, after the visit, should create benchmarks to ask customers to rate their service based on their experiences and allow them to benchmark their customer satisfaction ranking. Patients can evaluate wait times in which registration is done and demographics, all to ensure patient satisfaction.

Title: Marketing the Benefits of the Outpatient Scribe Program

Name: Jocelyn Martinovic

Preceptors: Orr Dayan, Senior Account Manager

Agency: ScribeAmerica

Purpose: To promote the outpatient scribe program and their efforts on improving clinical outcomes and reducing medical care team clerical burden to improve the quality of care given to patients.

Significance: Electronic medical records (EMRs) are attributed to creating a stressful environment leading to burnout by 75% of practicing physicians (Li, Parpia, Sriharan, & Keefe, 2022). The most common unintended consequence of utilizing EMRs is the decrease in healthcare provider workflow which affects the quality of care given to patients (Shultz & Holmstrom, 2015). In order to combat this burnout, medical scribes are being integrated into the healthcare system to reduce healthcare providers' clerical burden and improve the quality of care given to patients. ScribeAmerica provides medical scribe programs in a variety of healthcare sectors to train scribes on how to take on the responsibilities of documenting patient information on EMRs. This project will use a brochure marketing strategy to increase the number of people that apply to the program which will help reduce the documentation burden for healthcare providers and increase the quality of care given to patients.

Method/Approach: A new brochure marketing strategy was created to promote the outpatient medical scribe program to increase the number of applicants. The brochure was created using a graphic design platform that specifically creates social media graphics and presentations called Canva. In order to reach a wide range of potential applicants the brochure was circulated through multiple social media platforms. At the beginning of every week, the brochure was posted on Instagram, Twitter, and Snapchat with links attached for easy access that potential applicants can view.

Outcomes/Results: The brochure is a tri-foldable paper filled with a brief explanation of the duties and responsibilities of an outpatient medical scribe, information on the training process including each step taken during the process, and how becoming an outpatient medical scribe is beneficial to the applicant and improves the quality of care given to patients. The first social media posts of the brochure started on February 20, 2023, where the Instagram post received 138 views, the Twitter post received 535 views, and the Snapchat post received 371 views. The latest posts were uploaded on March 27, 2023. The Instagram post received 349 views, the Twitter post received 724 views, and the Snapchat post received 596 views. After only one month there was a 39.5% increase in views on Instagram, a 73.9% increase in views on Twitter, and a 62.2% increase in views on Snapchat. As a result of the brochure's social media posts, 24 new potential applicants requested additional information on the outpatient medical scribe program and referrals to apply.

Evaluation/Conclusion: The 24 new potential applicants and the considerable increase of views on each of the social media posts of the outpatient medical scribe program clearly show the effectiveness of this marketing strategy. Posting the brochure on various popular social media platforms will serve as an effective and efficient strategy to promote the program's effort to reduce healthcare providers' clerical burden and improve the quality of care given to patients. Periodically conducting this marketing process throughout the life of the outpatient medical scribe program will keep the success and proficiency of the brochure relevant and accessible to a wide range of potential applicants. Marketing the brochure on social media will productively increase the exposure for the outpatient medical scribe program to ensure continued interest from applicants and improvement of quality care going forward.

Title: Rural Community Outreach in Northeastern Pennsylvania

Name: Nicole Mascarini

Preceptors: Stacy Kreizman

Agency: The Leukemia and Lymphoma Society

Purpose: To improve access to healthcare within rural areas in Pennsylvania and reduce health disparities within the communities.

Significance: Rural northeastern Pennsylvania faces a great amount of health disparities each year due to the lack of access to healthcare. There is a shortage of medical professionals within Pennsylvania Data shows that rural Pennsylvania has 74.5 primary care physicians per 100,000 residents as opposed to urban Pennsylvania that has 129.1 primary physicians per 100,000 (Pennsylvania Rural Health Association, 2016). There is also a lack of funding within rural hospitals who cannot afford the latest technology or hire as many physicians as they may need. It is important to have a strong understanding of the community and understand who they trust to discuss their healthcare. Targeting the community foundations and private hematology and oncology offices can help promote rural outreach and reduce the amounts of health disparities.

Method/Approach: A study was conducted to help increase the patient and community outreach within rural Northeastern Pennsylvania. Twenty four private practice Hematology and Oncology offices and cancer support organizations were contacted to discuss the resources that the Leukemia and Lymphoma Society has to offer and can provide to their patients. After contacting social workers, office managers, and financial advisors, staff will collect data to evaluate whether or not the enrollment numbers within rural Northeastern Pennsylvania have increased based upon the outreach program.

Outcomes/Results: I do not have my results to my study yet. However, I predict that the enrollment in both adult and pediatric programs/services at LLS will increase. I have connected with various large cancer support organizations to promote the resources that LLS can provide to their patients and caregivers. Especially since a lot of patients in Northeastern Pennsylvania have a lack of resources due to many rural health disparities. LLS can provide both emotional support along with financial to their patients.

Evaluation/Conclusion: The period of observing the enrollment numbers of the patients could have been longer. I did have a switch in the region I was working in which caused a shift in the focus of my project in the middle of the semester. Additionally, more private Hematology and Oncology offices and cancer support organizations could have been contacted to further spread the awareness of the services that LLS has to offer.

Title: The Effects of Sand Dredging on Fish Populations and the Environment

Name: Joseph Massari

Preceptors: Dr. Thomas Grothues

Agency: Rutgers University Marine Field Station

Purpose: To analyze and address reactions to ongoing field research on fish response to sand dredging.

Significance: Sand dredging can harm marine animals and reduce their abundance and diversity, and impact the habitats of these marine animals. In areas that were dredged, the abundance of macroinvertebrates (small burrowing soft-bodied animals like worms, shrimps and clams that are important fish food) was reduced by 50-75%, while the abundance of fish was reduced by 30-50%. The statistical data highlights the significant negative impact of sand dredging on marine animals, beachgoers, coastal communities, and water quality. Through the Bureau of Ocean Energy Management, studies show that "the extraction of sand potentially conflicts with healthy functioning and continuation of marine ecosystems and fisheries. Considerations of the potential impacts of sand dredging and transport to shore include cumulative impacts, space/use conflicts with fisheries extraction, and essential fish habitat conflicts" (Grothues, et al., 2021).

Method/Approach: To study the effects of sand dredging on fish behavior and habitat, the first step was to research the question "What is the impact of sand dredging regarding fish and fisheries in the New York Bight region?" (Grothues, et al., 2021). Research was conducted and then a synthesis was conducted by Thomas M. Grothues, and his colleagues summarizes existing literature and identifies gaps in knowledge regarding fish and fisheries in the New York Bight region, as well as the sand features that support them. I examined this synthesis which covers a wide range of topics, including the physical oceanography of the region, the biology and ecology of various fish species, and the socioeconomic aspects of commercial and recreational fisheries. The document aims to provide a comprehensive understanding of the state of knowledge regarding the region's fish and fisheries, and to identify areas where further research is needed.

Outcomes/Results: "Sand dredging can negatively affect fish habitat, as summarized by a recent literature review (Grothues et al. 2021). Impacts covered by the review included loss of creatures that fish feed on, changes to currents they rely on, changes to sediment size used to bury in, fish gill clogging, and disruptive noise. It could also disrupt fishers from fishing."The document identified several gaps in knowledge about the New York Bight region, including the need for more research on the biology and ecology of certain fish species, as well as the need for better understanding of the socioeconomic aspects of commercial and recreational fisheries. The dredging leads to a reduction in fish abundance and diversity, likely due to habitat destruction and pollutant release. Fish caught in dredged areas also showed signs of increased cellular damage and decreased immune function. More research is needed to fully understand and minimize these impacts.

Evaluation/Conclusion: The dredging leads to a reduction in fish abundance and diversity. This synthesis drove the design and implementation of a current in water study that follows an actual dredge site from before to after recovery and allows a workshop to be developed with fishers to help them understand what comes out of this new research. The workshop will happen around the middle of the study, probably late this year.

Title: The Effects of Manual Therapy on Patient Health Outcomes

Name: Justin Matos

Preceptors: Dr. Sarah Citro, DPT, PT

Agency: Profysio Physical Therapy

Purpose: To analyze the efficiency of orthopedic manual physical therapy practices in physical therapy settings and determine how its implementation can be measured through relevant literature.

Significance: Due to the recent widespread application of in-depth, comprehensive practice of orthopedic manual physical therapy (OMPT), its use and efficiency has been called into question and created discourse in health. OMPT is an effective approach to treating musculoskeletal disorders and improving patients' quality of life. Manual therapy is also a controversial treatment approach because of the lack of consistent evidence regarding its effectiveness and the potential for harm, such as adverse events and delayed recovery. This review focused on analyzing the latest research OMPT and its effectiveness in clinical settings.

Method/Approach: The approach used to gather the research included conducting a thorough search of electronic databases, such as PubMed, Medline, and CINAHL, to identify relevant articles published in peer-reviewed journals from 2016 to 2021. The inclusion criteria for the articles were randomized controlled trials, systematic reviews, and meta-analyses that evaluated the effectiveness of OMPT in treating musculoskeletal disorders. The articles that met the inclusion criteria were reviewed and analyzed, and the results were synthesized to identify common themes and gaps in the literature.

Outcomes/Results: The literature review identified a total of 20 articles that met the inclusion criteria. The majority of the articles were meta-analyses (n=10) followed by systematic reviews (n=4), and randomized controlled trials (n=5). Specifically, low back pain (n=7) was a significant condition improved by OMPT, especially in early intervention. Spinal pathologies of all regions (n=9) showed that temporary pain relief from OMPT was effective, but yet to show how long term pain performed with therapy. This called attention to how long term pain management and recovery (n=14) from OMPT was inconclusive or showed little improvement. There was a lack of standardization in the OMPT interventions used in the studies, making it difficult to compare results across studies. Furthermore, the review revealed a need for more research on the effectiveness of OMPT in specific populations, such as pediatric patients and individuals with certain medical pathologies that are not orthopedic or fit common inclusion criteria.

Evaluation/Conclusion: Review demonstrates that OMPT is an effective approach in treating musculoskeletal disorders, highlighting the need for further research to standardize interventions and evaluate their effectiveness in specific populations. Despite potential harm, OMPT offers a safe, cost-effective, and evidence-based approach to managing these disorders, making it valuable for patients and healthcare providers. Continued research and development of OMPT interventions are essential to meet the rising demand for non-pharmacological treatments.

Title: Improve Patient Experience Through Adherence to AIDET and Registration

Name: Kaitlyn McMahon

Preceptors: Mary Kelso, Director of Patient Access

Agency: Robert Wood Johnson University Hospital- New Brunswick, NJ

Purpose: To analyze the importance of adhering to the registration process, and assess how the use of AIDET impacts patient experience.

Significance: Robert Wood Johnson University Hospital is actively putting AIDET (Acknowledge, Introduce, Duration, Explanation, Thank You) into practice to ensure improved patient experience (PX). This project is an observational review of post AIDET training which took place from 11/1/22-11/30/22, to assess the impact on PX and identify gaps for future training. PX begins at registration, making the registrars' role critical. While PX remains top priority for many healthcare organizations, it holds the same ranking for patients. The Beryl Institute (2022) found that over 94% of the US population rates PX as "extremely or very important", but actual PX rates range from 66%-74%. This evidence indicates that there is a significant gap between patient expectations and patient satisfaction. Evidence-based PX practices will manage this gap to enhance patient experience.

Method/Approach: An observational review was conducted on registrars across 7 areas of outpatient services within the Patient Access department, assessing the effectiveness of PX post AIDET training. To better understand AIDET and its significance, training documents were thoroughly reviewed prior to making any observations. A formulated assessment was used in determining the frequency of which AIDET was demonstrated by registrars. Interviews were conducted with administration staff in Patient Access and the director of Patient Experience to better identify opportunities to improve Press Ganey (PG) scores. Examined the collected Press Ganey data from 11/1/22-3/20/23 that highlighted waiting time in registration, ease of the registration process, helpfulness of the registration person, and registration overall within Outpatient Services. Identified the gaps that contributed to the overall rating of registration based PX, improving future AIDET training and PG scores.

Outcomes/Results: On average, 453 patients that visited RWJUH for Outpatient Services from 11/1/22-3/31/23 answered the PG survey questions. The mean score for each of the 4 categories were 87 for waiting time in registration, 92 for ease of the registration process, 93 for helpfulness of the registration person, and 90 for registration overall. The observational study found that in 6 out of the 7 areas observed, the helpfulness of the registrar was exceptional. Inadequate communication skills and failure to walk patients through steps of the registration process arose 14% of the time. From the areas observed, 5 out of 7 yielded positive results for waiting time in registration. The insufficient use of AIDET observed negatively impacted PX as failure to answer questions or address waiting times occurred 29% of the time. Registrars that actively practiced AIDET were more likely to increase overall registration scores as facilitation of ease, addressed wait times, and helpfulness of registration staff occurred 83% of the time.

Evaluation/Conclusion: The observational review showed that there is a correlation between the use of AIDET and its effectiveness on Patient Experience and Press Ganey scores. Implementation of service recovery methods and communicative competence as part of training was included as recommendations to improve department wide use of AIDET, further improving PX and PG scores within Outpatient Services at Robert Wood Johnson University Hospital.

Title: Transitioning to Eco- Friendly and Sustainable methods to protect our Earth

Name: Aleena Mehdi

Preceptors: Lauren Kocur, Executive Assistant to the CIO

Agency: Ansell Healthcare Products - Iselin NJ

Purpose: To create, analyze and study the effects of how to improve the environmental efficiency in a corporate office.

Significance: Each year, 1 billion trees worth of paper is thrown away each year in the United States. Americans use 85 million tons of paper a year which ends up being 650 pounds per person. Because of printing mistakes, junk mails, billings, and packaging, the paper may comprise up to 70% of a company's total waste causing a great harm to the environment.(SCCMO, 2020) Additionally, NRDC states that "Of all trees harvested for industrial use, 42% go to making paper. The pulp and paper industry is also the largest industrial user of water, the biggest water polluter, and the third largest emitter of global warming pollution in most industrialized nations." (NRDC, 2006) Ansell healthcare provides tons of drive storage space to each of their employees to eliminate wasting paper. With the creation of new/unlimited storage space, we plan on removing all printing services from the office to help save the Earth as best as we can.

Method/Approach: A review was conducted to all employees in the Iselin office to figure out each of their printing needs while working a hybrid schedule. Data was reported and compiled into an excel sheet, which identified the needs for at home printing and if printing was necessary moving forward with their sustainability goals. The survey was conducted through Microsoft forms and the n = 95. After gathering data from employees, the office looked into the paper supply invoices from when it was closed during Covid and compared the results to what it is now to further clarify the amount of paper being used in the office.

Outcomes/Results: Of the employees (n=95) who contributed to the survey, 71 colleagues or approx 75% stated that printing is not a necessity for them. And 98% of employees admit that when printing, extra pages of paper are produced and thrown in recycling. Additionally, approx 80% of employees insisted on getting more space on their computers to prevent printing in the future. A surprising note and one that derived one of our ultimate/major decisions, 73 out of 95 employees or 77% confessed that removing printers from their cubicles would not affect the efficiency and success of their role in the company. At the conclusion of this survey, two major tasks were completed, removing all desk printers from employees' work stations and replacing them with larger 'community' printers in common areas of the office. Additionally, clearing/increasing the amount of storage in our general server, giving each department more space to cache documents on their computers.

Evaluation/Conclusion: Information was collected through a survey pre distribution of initiatives, to make sure this is constructive a post survey would be an effective starting point. Additionally, comparing the paper supply invoices every six months to figure out if less paper is being used by the company as a whole. An obvious evaluation to know if the project is working is by looking up how much space each department is using in the server. It would also be beneficial to get more employees involved in the surveys to get a more concise and consistent result from all of the members of the company. The project should be evaluated on a six month basis and should be taken into reconsideration sooner if employees find it to be disruptive or affecting their work productivity.

Title: Outreach to Veterans to Promote Veteran Dental Financial Assistance.

Name: Sara Mehta

Preceptors: Andrea Nangle, Manager of Patient and Community Outreach

Agency: The Leukemia & Lymphoma Society (LLS)- Metro NY Region

Purpose: Outreach to the Veteran community to promote the Veteran Dental Financial Assistance partnership between LLS and NYU Dentistry's Veterans Oral Care Access Resource (VOCARE).

Significance: U.S. Veterans have higher cancer diagnosis rates than non-Veterans (Health Services Research & Development). A potential reason for this could be their exposure to carcinogens related to multiple types of blood cancers, including Hodgkin's lymphoma, non-hodgkin's lymphoma, multiple myeloma, and chronic lymphocytic leukemia (Cancer Risk for U.S. Veterans 2022). These blood cancers cause gums to swell up, bleed, and can weaken the immune system making dental problems more likely (Full Implant Choice 2021). New York is home to 838,000 Veterans (NYHealth, 2018). LLS partnered with NYU Dentistry's VOCARE to help Veterans with blood cancer gain access to dental care. The Program will cover all the required dental costs as long as funding is available. This includes but is not limited to extractions, root canals, jaw surgery, dentures, cavity fillings, and gum disease. This project contributes to aiding Veterans in accessing financial assistance to get the healthcare they need and deserve.

Method/Approach: To maximize the number of Veteran patients registered for the Program, a ledger (excel sheet) was created listing Veteran centers, hospitals, homes, and contacts. Then email, call, and voicemail scripts were created to ensure effective communication when advertising the Program. These scripts were compiled into a folder to be shared with upcoming interns to ensure the project's sustainability. Several education coordinators and social workers in the oncology unit of these Veteran Centers/Hospitals were contacted about the Program and encouraged to refer their patients to LLS so they can apply for the Veteran Dental Financial Assistance. Flyers were then sent to those who agreed to receive them. Some of these interactions were also documented in Salesforce. Flyers were created using Canva to promote the Program, then sent out to the newly made partnerships, and attached to every email through Outlooks email signature feature. In addition, a contact list of Veterans already connected with LLS in the Metro NY region was pulled. Once the list was obtained, flyers and emails were sent out to each patient.

Outcomes/Results: Of the 30 Veterans contacted, only 2 (6.6%) responded and said they did not need financial assistance at the moment. Of the 17 Veteran institutes, only 4 (23.5%) oncology social workers agreed to receive flyers. A total of 400 flyers were sent out. New partnerships with veteran homes were created for future opportunities.

Evaluation/Conclusion: The project is still ongoing. Phone calls, emails, and sending printed flyers did not prove to be as effective as initially thought. Spreadsheet data and the folder with scripts was an effective method for efficiently transferring data to Salesforce and communicating with the leadership. Potential solutions could be to bring flyers to tabling events and blood conferences to try and spread it via word of mouth and post on community pages. Furthermore, a recommendation to better reach this community would be to partner with more Veterans to aid in outreach work in their community.

Title: Redesigning Community Brochures

Name: Abeera Memon

Preceptors: Colette Peteet, Assistant Administrator, CALA

Agency: The Bristal at Englewood/Woodcliff Lake

Purpose: To attract future residents by revamping the current brochure to better capture community relations, amenities, and residential experiences.

Significance: According to research, "More than 810,000 Americans currently reside in assisted living communities. With 7 out of 10 people requiring assisted living care in their lifetime, demand is expected to grow by an additional one million beds by 2040" (aplaceformom.com). Letting a loved one know that it is time to consider assisted living, may be a difficult conversation to have, but an important one. There are many uncertainties such as what is the best assisted living facility and will my loved ones be taken care of and happy? It's important to be able to reduce the stress of family members when looking at multiple assisted living facilities. The best way to reduce that stress, is to show them why or how your assisted living facility is the right choice. One of the ways The Bristal does this is by handing out brochures. Brochures prove to be a very informative guide and contain visually appealing graphics. But, the brochures that are handed out by The Bristal, are unable to capture the great experience that is created for residents. It is important to show compassion, genuine, and exceptional care towards residents. The goal is to redesign the current brochure so it can speak volumes for why The Bristal should be the first choice when it comes to assisted living.

Method/Approach: In order to be able to develop an informative brochure, it is imperative to research information about The Bristal, the amenities, the company culture and values, and incorporate that into the brochure. That way, families will be able to really see that The Bristal always delivers and exceeds expectations. In order to enhance the brochure, for the Englewood location, all images are from the Englewood location, rather than generic photos. Images have been included from resident activities and events. Research was done regarding amenities, programs, and different types of care being provided and was included in the brochure.

Outcomes/Results: The design of the current brochure was disregarded and a new one was created according to what family members would want to see and know right away. I put myself in other people's shoes and realized that the current brochure wasn't convincing. Therefore, the company's vision and mission statements, contact information on the front of the brochure, and pictures of the facility were added so residents and family can gain familiarity. Lastly, a picture of the executive director was included so that family members know who is in charge of making this facility the best it can be. There are pictures of events with residents and staff so they can see the efforts being produced to create a memorable experience for residents. I included information that would make family members and residents feel that moving into assisted living is the right choice to enhance their quality of life.

Evaluation/Conclusion: In order to create the brochure, all information and research that had been conducted was designed into a tri-fold brochure. Even if the designs aren't approved, it would be beneficial to customize the brochure according to the location where residents are looking to reside. It helps to gain a sense of familiarity, comfort, and feels very personal to the resident. It gives them and their families a better grasp of what might be a resident's future and potential home. It is important to be able to address any uncertainty or fear a resident may have so that they know they aren't alone in this next transition of their life and that our job is to make it as easy for them as possible.

Title: Your Health Kiosk Population Diversification

Name: Joshua Mendoza

Preceptor(s): Sabiha Hussain, MD, MPH & Carol Shu, MSW, LSW

Agency: Robert Wood Johnson Medical School - New Brunswick, NJ

Purpose: The objective is to bridge the gap between the healthcare system and the community it serves by providing easy-to-understand personalized health and wellness information and tips to improve the management of well-being across diverse populations.

Significance: According to Data USA: New Brunswick, in 2020, the number of White (Hispanic) residents in New Brunswick, NJ was 18.7k people, which was 1.23 times more than any other race or ethnicity. Conversely, Asians had the lowest population, with only 53 people residing in New Brunswick, NJ. L. Corscadden et al. (2018) found that one in five adults (21%) faced multiple barriers before accessing primary care, while an average of 16% of adults encountered two or more barriers after accessing care. These findings highlight the importance of providing essential resources to individuals of all backgrounds and ages without encountering physical or non-physical obstacles. YHK aims to provide these resources without any barriers and offers free, personalized healthcare guidance in real-time to all populations by identifying the necessary resources for those with limited knowledge.

Method/Approach: To broaden the reach of the program among a diverse population in New Brunswick, the team plans to adopt several strategies. Firstly, we will establish communication with local schools, churches, and organizations and set up a table at community events to attract attendees' attention. In addition, posters and flyers will be utilized to introduce the program's initiatives to residents. During these events, the team will collect information from interested individuals to gain insight into their health needs. Later on, we will follow up with these individuals to gather additional information to provide better support.

Outcomes/Results: Out of the 15 local communities, schools, and churches that were contacted, during this internship period three have responded to the call to help promote the program. The first event was held in partnership with Bayard Street Presbyterian Church, the second with New Brunswick Tomorrow, and the third upcoming event will be held at Rutgers Day, which the team hopes will help establish a strong presence among the diverse population of New Brunswick. During the events held with the Church and New Brunswick Tomorrow, it was observed that only older adults and Hispanic individuals showed interest in the program. The team faced language barriers and other programs that offered similar services, such as MyChart, which made it challenging to promote the initiative to bridge the gap between healthcare and the community. Additionally, it was difficult to grab people's attention, and team members had to physically approach individuals to assess their interest in the program. Even though there were tribulations, there is currently a count of 300 individuals interested in YHK, with 153 people added to the program since the start of the internship, in addition to the 147 who signed up prior to the internship.

Evaluation/Conclusion: To assess the effectiveness of the project, we will continue to enroll clients and gather necessary personal information to meet their needs. Since the project itself is still ongoing, there is insufficient data available to evaluate success at this point. However, I suggest that as the project progresses, there should be ongoing data collection on participation and satisfaction levels of the program for those who enroll.

Title: Impact of Physical Literacy School Programs

Name: Rabiah Mian

Preceptors: Erin Comollo, Ed.D

Agency: New Jersey Healthy Kids Initiative

Purpose: To analyze the effectiveness of school educational programs on physical literacy for students K-2 in New Jersey.

Significance: According to the CDC, there are many detrimental long term health impacts to being overweight or obese in childhood (2022). Specifically, the NJHA found that 1 in 3 children ages 10 - 17 are overweight or obese in New Jersey. The New Jersey Healthy Kids (NJHKI) initiative aims to address this through preventive intervention measures which includes providing nutrition and physical literacy programs to children. This program specifically uses the Rutgers Culture of Health School Program (RCHSP) to implement nutritional and physical literacy programming to students in grades K-6 to improve their knowledge on healthy eating and physical literacy while conducting pre and post surveys in order to evaluate efficacy of this programming.

Method/Approach: A quantitative pre survey was conducted with K-2 in four different schools in New Jersey to assess prior knowledge and skill level in physical literacy. After which, six lessons with accompanying activities were administered to the classes on physical literacy education. After completion of the course students took a post survey to measure any changes in physical literacy knowledge and skills. Additional data was collected by evaluating students' physical abilities to walk in a straight line for 20ft, skip for 25ft, and jump for one minute. The physical literacy physical assessments were measured on a scale from 1-3 where 1 means students were able to successfully complete the task and 3 means students were able to complete <50% of the task.

Outcomes/Results:

Based on survey data from the K-2 we had a total of 62 students tested, but only 30 students had consent forms to participate and of that, only 25 students had complete data from pre and post surveys. Of these participants, the average jump score improved from 1.4 to 1.28, the walk score improved from 2.04 to 1.52, and the skip score stayed the same at 1.12. The number of jumps from students went from 124.36 jumps to 127.76 jumps.

Evaluation/Conclusion:

Students from K-2 were able to improve on their jumping and walking ability while skipping remained the same indicating improvement in students' physical abilities after program implementation. Some limitations of the project include the reliance on parent consent forms to get data from the study. Without all or most consent forms the usable data becomes more limited even though the number of participating students was more than double. In addition, there is more data from other schools that have not yet been compiled and added to this set yet which would be helpful in further evaluating the effectiveness of the program. Overall the program did show some improvement and we anticipate through the results of the completed research that it will help improve the physical literacy programming to combat childhood obesity.

References

Title: Day One Client Satisfaction Survey

Name: Kimberly Miller

Preceptors: Lucia Rivieccio, Interim Director of Administration & Development

Agency: Day One

Purpose: The purpose of my project is to conduct an assessment to ensure youth experiencing dating violence are receiving the proper resources they need to maintain healthy relationships.

Significance: Dating violence is violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim. In the state of New York, 1 in 10 teenagers in NYC schools report experiencing physical or sexual violence in a dating relationship within the past year (NYC Health, 2017). In 2018, there were 59 intimate partner homicides; comprising 44% of females and 2% of male homicide victims 16 years of age or older (NCADV, 2020). Day One is a non-profit organization offering services to New York City youth, ages 24 and under. Founded in 2003, Day One aims to help end dating abuse and domestic violence through community education, supportive services, local advocacy and leadership development. This project will help identify how the services offered by Day One are aiding in the fight against dating and domestic violence; and see what needs to be improved.

Method/Approach: An anonymous Google Form was created by management to send to clients via Mailchimp. An excel spreadsheet of a total of 171 client emails was compiled with consent from three (3) departments: social services, relationship abuse prevention program (RAPP), and legal. The client emails were then entered into a subscribers list where it was sent out via email. Clients who decided to respond to the survey answered questions regarding their overall satisfaction, improvements they would like to see, likelihood to recommend Day One and their agreements and disagreements with services rendered.

Outcomes/Results: Of the sample size cohort who responded to the survey (n= 13), 12 clients (92.3%) strongly agreed that Day One staff listened and understood their needs and concerns; while 1 client (7.7%) agreed with this statement. 10 clients (76.9%) strongly agreed that they gained the tools and resources needed to increase their safety in relationships; while 3 clients (23.1%) agreed with this statement. On a 5-point Likert scale, (with 5 being the highest rating), 12 clients (92.3%) would recommend Day One to a friend or family member. 1 client (7.7%) would recommend Day One to a friend or family member at the second highest rating, which is a 4.

Evaluation/Conclusion: Less than 10 percent (n= 13, 7.6%) of clients participated in the survey. With the results that were recorded, it is apparent that Day One has the proper resources and abilities to educate their community on the importance of dating violence. Survey response rates can be increased by (1) identifying and focusing on active clients. Active clients have a higher chance of responding/interacting while services are recent. Recency of services rendered is a key factor in interesting response rates with quality feedback (Chung, 2023). (2) Personalizing the survey by addressing the clients by name. Customizing an email subject line can lead to a 26% increase in email open rate (Chung, 2023). According to Chung (2023), a study shows that 63% of consumers expect personalization, and 31% find it frustrating when brands treat existing clients as if they were new. (3) Following up and reminding clients to take the survey. By offering a gentle nudge to clients can demonstrate the value of the respondent's contribution. This could increase response rates by 36% (Qualtrics, 2022).

Title: Sepsis Prevention and Awareness

Name: Maaidah Mohyuddin

Preceptors: Joanne Wendolowski

Agency: Hackensack Meridian Fitness & Wellness Center

Purpose: To develop a patient education program regarding sepsis prevention and discussing the types of vaccines recommended for older adults for prevention of sepsis.

Significance: Sepsis is a life-threatening condition arising from the body's overactive response to an infection, leading it to injuring its own tissues and organs. It is the most expensive medical condition in the U.S., costing over tens of billions of dollars annually. Each year, according to the Centers for Disease Control and Prevention (CDC), at least 1.7 million adults in the U.S. develop sepsis, and nearly 350,000 adults who develop sepsis die during their hospitalization or are discharged to hospice. Nationally, sepsis mortality rates in hospitals range as high as 50 percent. New Jersey's rate fell from 32 percent to just under 25 percent in 2016. At Hackensack Meridian Fitness & Wellness (HMFW), the mission is to educate older adults about sepsis diagnosis and prevention in order to improve outcomes in the number of people who are infected.

Method/Approach: A patient education program called "Are Your Shots Up to Date?" was organized to discuss and educate the older adults about the importance of getting vaccines and the prevention of sepsis. The education program consisted of an overview of specific diseases and the vaccines that help prevent them, the importance of vaccines in aiding in prevention of communicable spread, sepsis, and death. It also included adult vaccination recommendations and timeline. Paper flyers were sent to "community residents" mailing addresses and residents can also call on the number to sign up for the program. Flyers were printed and placed in the main hall "of the hospital" along with other programs.

Outcomes/Results: The patient education program called "Are Your Shots Up to Date?" was held on April 26th at the Hackensack Meridian Fitness & Wellness Center. There was a post evaluation program survey presented to the audience and the questions were asked relating to the main objectives of the program which includes: I understand the importance of vaccinations, I have learned how vaccines play a major role in the prevention of many diseases, sepsis, and death, and I have learned how vital it is to stay up to date with vaccinations and you are never too old to get vaccinated. Towards the end of the survey there was a section which asked the patients about what they like and dislike about the program. There were 5 participants and 4 of them chose to complete the post evaluation program survey. One hundred percent of the participants agreed that they have a better understanding about the importance of vaccinations and sepsis prevention and 90% of the participants agreed that they are better equipped with the information regarding sepsis prevention.

Evaluation/Conclusion: Bringing awareness to the older adults will help in bringing down the number of hospitalizations and will also encourage them to check and see if they are up to date with their vaccines record since it plays an important role in prevention of sepsis. The patient education program can be presented at different long term care facilities, nursing homes, assisted living, and rehab centers to educate the older adults about sepsis prevention. Posters and infographics are another great way to help spread sepsis awareness since they are quick to read, with much of the information available at a glance. Based on the audience feedback, the patient educational program will be modified if necessary and positive feedback will lead to the execution of this program in many other departments and hospitals.

Title: To Assist Societal Needs To The Communities in Passaic County

Name: Karina Monterroso

Preceptors: Wafaa Saad, Executive Director

Agency: Women And Families Ascending Association (W.A.F.A.A)

Purpose: To assist women and families in Passaic County with emergency housing for domestic violence victims, food donations, shelter, insurance assistance, counseling sessions, legal aid, and bring awareness about anger management.

Significance: Domestic violence has increased by over 6% in NJ since 2019 (Brier). According to the New Jersey reports, Paterson had the highest incidence of domestic violence in Passaic County. Due to this incident, it has taken a toll on women's mental health. Studies show that 30-60% of women with chronic mental illnesses were reflected on domestic violence abuse(*The Relationship Between*). Domestic violence can be associated with chronic stress which can lead to chronic mental health conditions and substance abuse issues. To help victims from domestic violence abuse, many agencies in New Jersey have provided funding. The Division of Women is an example of an agency that has provided emergency housing and shelter directly towards victims and survivors of domestic violence.

Not only has domestic violence has been an ongoing issue but food insecurity has been another concern within Passaic County. The household rate of food insecurity was 9% in Passaic county, which is greater than the percentage of New Jersey in general (DCF). This has shown the lack of food access communities have.

Method/Approach: To be able to assist women and families, they are given an organization client intake application to fill out with their needs of assistance. Client intake application consist of background information, income, referral and medical history. With this data they are given an appointment in the office to speak one on one to address their needs, concerns and educate them with resources. The main purpose of meeting with the clients is to get more detailed on their needs and how to proceed with the process for emergency housing, shelter, food donation, counseling sessions and more. The applications are done based on the urgencies of the client situation. Most times shelter and emergency housing are the first applications to be reviewed. For those individuals who need counseling sessions, a counselor is given to them to proceed on working with them on goal-making and coaching. Our main source of food donations are given from local grocery stores. The fresh food donated is distributed equally into boxes for each client to be picked up or be delivered.

Outcomes/Results: The organization has seen a large increase in client application since January 2023 to April 2023. Within those few months we have been able to provide emergency housing and shelter to more than 15 clients. In addition we were able to schedule 20 new clients for counseling sessions, 6 of those clients were able to finish and were granted a certificate letter of completion. Lastly for minor urgent applications such as legal aid and food donation we were able to assist over 30 new clients. The organization joined new partnerships to assist with food distribution to the communities in Passaic County.

Evaluation/Conclusion: The client intake application has shown great results by assisting over 65 individuals with their societal needs within four months. The application allows clients to continue to have access to any services provided by the organization for a year. The organization continues to follow up with clients by phone calls and email to make sure all of their needs were met. WAFAA organization continues to work tremendously to support and assist women and families in Passaic county.

Title: The Significance of Telehealth on Providing Health Care and Treatment

Name: Theresa Mousa

Preceptors: Dr. Sarwat Takla, MD

Agency: Quality Medical Services, LLC

Purpose: To analyze the trends of telehealth within the past ten years and to conduct a complete literature review in order to understand the importance of telecommunication services.

Significance: Approximately 75 percent of Americans lack access or cognizance to telehealth in 2019 (Tahir, 2019). Between January and March 2020, 93 percent of patients sought telehealth for medical conditions other than COVID-19. COVID-19 related symptoms and diagnoses increased in telemedicine from 5.5 percent to 16.2 percent (Koonin, 2020). During the COVID-19 pandemic, 14, 551, 297 Americans could not acquire telecommunications services due to the deprivation of the internet of any speed (Boisvert et al., n.d.). Quality Medical Services, LLC. provides telemedicine to many health insurance companies, such as Medicare, Medicaid, Horizon NJ Health, and Cigna Healthcare. Screening for telemedicine trends, especially among low income and older populations, should be higher. This project will provide more awareness and policy development strategies on the importance of access to telehealth.

Method/Approach: A literature review was conducted using Google scholar and Rutgers Library with terms pertaining to telemedicine and racial health disparities. The research articles focused on observing admittance rate, type of health service, race, ethnicity, age, income, level of education, and gender in which the patient identified. A secondary analysis was done on a cohort study which was conducted by the New York University Langone Health on 140,184 patients of diverse races during the peak of COVID-19, March and April 2020. The findings from this research article are summarized in this paper.

Outcomes/Results: From the results of the literature review, there was a higher, young female population ranging from 20 to 45 years old seeking telemedicine (69.8%) in comparison to non-telemedicine related services (Chunara, 2021). Six of the research articles mentioned that the number of Black patients increased for all health care services during 2019 and 2020. The studies mentioned in their experiments that the most common concern in which patients seeked telemedicine was those with a history of cardiac health conditions from 2019 to 2020. In regards to the telemedicine cohort study based on COVID-19 diagnosis (N = 90,991), 28, 908 calls (31.8%) were conducted based on COVID-19 symptoms (Chunara, 2021).

Evaluation/Conclusion: Telemedicine is an essential tool used for immunocompromised patients, but there needs to be improvement in using telemedicine to combat the health disparities present among racial and ethnic groups. In order for the improvement to occur, there must be an increase in public health education, federal funding for health care, and a revision in insurance policy making. In addition, an increase in education focusing on digital literacy is needed for vulnerable populations. Medical training needs to be revised as explicit bias creates barriers from ethnic minorities from seeking health care, both virtually and in person. Medical interpreters are crucial in health care as they assist in voicing a patient's concern, but one of the research articles emphasizes there was a need for language interpreters during the COVID-19 pandemic.

Abstract Internship Sources

Title: Implementing a Sustainable and Affordable Micro-Transit Service in Trenton, NJ

Name: Amisha Mukhopadhyay

Preceptors: Ben Haygood

Agency: The Johnson Center for Learning & Impact at Isles, Inc.

Purpose: To implement a city-wide electric vehicle micro-transit service that will reduce socioeconomic inequalities and decrease private vehicle emissions in Trenton.

Significance: Trenton, New Jersey has a 27% poverty rate, and 30% of households are car-free (US Census Bureau). Moreover, residents are disproportionately impacted by air pollution, and the city experiences an average of 100 days of moderate to unhealthy air quality per year (Delaware Valley Regional Planning Commission, 2014). To combat these issues, Isles is collaborating with the City of Trenton to develop the GOTrenton! initiative, a ridesharing, carsharing, and shuttle program that will use electric vehicles to serve the Trenton community. This subsidized program will offer affordable rides to low-income residents and will help combat the high levels of pollution from cars that negatively impact the health of the city's residents. Isles will implement year 1 of the GOTrenton! this spring to increase residents' accessibility to affordable and environment friendly transportation.

Method/Approach: Current funding for GOTrenton! only supports implementation for the first year. To secure funding for year 2 and beyond, it was necessary to advocate for the program to state legislators. This was done by researching the social, economic, and environmental benefits of GOTrenton! as compared to alternative programs like providing rideshare vouchers to Trenton residents. The socioeconomic benefits of having an accessible, affordable, and reliable micro-transit system available to city residents was also researched, along with GOTrenton's impact on emission reductions. Cost comparisons were made between GOTrenton! and existing rideshare services used in the area, and this research and information was compiled into a report.

Outcomes/Results: The two-page report outlines why GOTrenton! is a more cost-effective program than a rideshare voucher initiative. GOTrenton! can complete up to 6 riders per hour, with each ride set to cost an average of \$6.92 per person. On the other hand, an average Uber ride in Trenton costs around \$10, while the average driver completes about 2 trips per hour (Ridester).

Evaluation/Conclusion: GOTrenton! is a community-driven, sustainable, long-term initiative that addresses the unique socioeconomic needs of Trenton residents while reducing the city's carbon footprint. The report on GOTrenton's benefits is intended to persuade state legislators to support the allocation of funds to GOTrenton's long-term implementation. With strong legislative and financial support, GOTrenton can become a permanent resource for the city of Trenton and expand to serve more New Jersey communities in the future.

Title: Developing Blood Cancer Education & Awareness

Name: Erin Mullican

Preceptors: Ruby Nava-Ramos, Patient & Community Outreach Manager

Agency: Leukemia & Lymphoma Society

Purpose: To plan educational programs for blood cancer patients that are focused on creating community outreach and awareness throughout the Eastern Pennsylvania/Delaware region.

Significance: Blood cancer accounts for around 9.5% of cancer deaths. Additionally, approximately every nine minutes, someone in the United States dies from a blood cancer (Howlader et al., 2020). Getting diagnosed with a blood cancer often leads to many patients feeling lost or overwhelmed physically, emotionally, and financially. Holding patient education programs helps to reach a wide audience and let patients know that they are not alone in their cancer battle. Continuing to spread the word about LLS and our services directly helps blood cancer patients while also raising awareness about the organization and its goals.

Method/Approach: After deciding on a name and focus, the early stages of program planning included securing a time, venue, date, and speakers for the main presentation. Afterwards, a flier, social media post, and email signature advertising the program and registration link were created and sent out to LLS staff to download and distribute. Community outreach was the primary method of spreading word about this upcoming program in order to reach the desired population. This was done by reaching out to other cancer or health organizations that the Leukemia & Lymphoma Society were partnered with, contacting patients who had previously connected with LLS, and distributing program information both electronically and in person. Leading up to the program date, follow-ups with registrants were required to confirm their attendance, offer the opportunity to invite a plus one, and check for any last minute questions.

Outcomes/Results: Out of the 20 total attendees, 16 completed a post-program survey. Of the 16 responses, 7 reported that the program was overall "Excellent," 6 reported that it was "Very Good," and 1 reported that it was "Good." 14 respondents agreed that the program was easy to understand, while 2 participants responded that it was "Somewhat" easy. From the true or false section, all 16 participants agreed that they had learned more about clinical trials and how they work, 15 felt better equipped to ask their healthcare team about seeking clinical trial opportunities, and 15 agreed they learned about other services and programs that can provide support during treatment and survivorship.

Evaluation/Conclusion: The evaluation of program success comes primarily from post-program surveys sent out to participants approximately one week after the event. The results were overwhelmingly positive, with the majority of program participants saying that the program was overall "Very Good" or "Excellent," however there was one response stating that having to eat the provided meal while the speaker was presenting made it slightly difficult to give their full attention to the program. To improve for future programs, it may be helpful to plan dinner outside of the speakers' presentation time so that full attention may be given. Overall, post-program survey responses are key to improving these informational programs and therefore are a good indicator of measuring attendees' satisfaction and overall success of the program.

Citation

Title: Increasing Community Outreach Efforts for Central Jersey Diaper Bank

Name: Amira Mustapha

Preceptors: Heather Nover, Executive Director

Agency: Central Jersey Diaper Bank of Anshe Emeth Community Development Corporation

Purpose: To provide diapers, formula, wipes, clothing and other baby essentials to families in need regardless of race, sex, religion etc. who reside in Middlesex county and surrounding areas.

Significance: Many families struggle to purchase diapers, formula and other necessities for their infants across the United States. Diapers can cost anywhere between \$70 to \$80 a month per baby, so for low-income families, this is a significant portion of their income. Central Jersey Diaper Bank works to combat this issue by providing baby essentials to families who may not be able to afford them otherwise. Parents should not have to worry about affording diapers for their infants. The purpose of this project is to advertise the diaper bank's mission to potential donors.

Method/Approach: In order to advertise the diaper banks' services to potential donors, physical flyers were created to post in OB/GYN offices, pediatrician offices, and banks. The flyers were standard 8.5 x 11 inches and created in Canva, a graphic design app. Thirty flyers were printed onsite. Flyers were distributed to four OB/GYN offices, three pediatrician offices, two banks and three train stations between April and May of 2023.

The selection of these locations where the flyers were distributed was a strategic approach to encourage people to visit the diaper bank's website (QR code can be scanned using a camera phone that will open the website link). Local banks and community organizations work well together to bring awareness to non-profit organizations dedicated to helping the less fortunate. Pregnant women and parents of young children may feel more inclined to donate since they have children of their own and may understand the financial burden purchasing baby necessities can be on a family who is socioeconomically disadvantaged. Bus stops and train stations are common areas where flyers were posted; people may come across something they're interested in learning more about while they are waiting for their mode of transportation.

Outcomes/Results: As a result of physical canvassing, the organization raised \$100 and collected 52 diaper donations from family members. Donors were able to scan the QR code on the flyer to access the donation link on the diaper bank's website. The little bit of money raised will provide a family with baby necessities such as diapers and wipes that they may not have been able to afford otherwise.

Evaluation/Conclusion: Community members were receptive to the idea of donating to the diaper bank which made me hopeful that the diaper bank will continue to receive donations, even after the completion of my internship. One challenge I encountered was trying to find creative and ethical ways to encourage community members to donate to families in need. I found that promoting on my personal social media accounts was challenging as well because individuals seemed uninterested in the content. Perhaps the use of bright colors on the flyer would have captured the attention of potential donors and other community members.

Title: Race-Based Participation in Genetic Testing.

Name: Mila Muzychak

Preceptors: Frances Di Clemente

Agency: Rutgers Cancer Institute of New Jersey

Purpose: To identify and evaluate perceived barriers to genetic testing in the African American (AA) community.

Significance: African Americans distrust in the healthcare and research system is valid based on historical abuse within this population. For the AA population, which already has low rates of participation in genetic research, exclusion contributes to the lack of benefits of personalized treatment and an exacerbation of cancer burden. Currently, AA face the highest cancer burden with an incidence of n=202,260 and a mortality of n=73,030 cancer cases per year (JCO, 2021). Genetic testing awareness and genetic literacy are particularly low among underserved populations (NIH, 2020). AA comprise only 3% of genome-wide association studies (GWAS) (NIH, 2015). This can be attributed to GWA studies' use of cohorts from a single population, mistrust and a limited access to research studies in the AA population. Existing perceived barriers need to be addressed in order to allow more diversity and warrant a more significant inclusion and representation in precision medicine research.

Method/Approach: A literature review was conducted using peer-reviewed articles from the Journal of Clinical Oncology and the National Institutes of Health. A survey developed by the Rutgers Cancer Institute evaluating population distrust, barriers and participation in genetic testing was distributed through a social media campaign. Survey data was analyzed using a standard statistical model. Weaknesses in population participation were identified.

Outcomes/Results: Literature reviews using six articles demonstrated that culturally sensitive education about the benefits of genetic testing that is accessible and targeted may be beneficial to underserved populations. According to the survey, a total of 80 individuals participated and only 9% of responders have gotten genetic testing. Of the responders that have gotten genetic testing, 72% were White, 14% were Latino, 14% were Asian, and 0% were AA. Of the responders that selected distrust in investigators as a barrier to genetic testing, 4% were White, 27% were Latino, 0% were Asian, and 69% were AA. Of the responders that selected fear of discrimination as a barrier, 0% were White, 11% were Latino, 0% were Asian, and 89% were AA. When asked how comfortable they were with providers having their personal and/or genetic information on a scale from 1-5, White and Asian respondents answered 4, while Latino and AA respondents answered 3, on average.

Evaluation/Conclusion: The results from the survey showed that the greatest difference in participation and perceived barriers to genetic testing were between White and AA responders. Due to this, two social media advertisements were created, one to target the general population and one to target those that identify as AA in order to promote genetic testing. AA participation in genomics is essential to the diversity and inclusivity of precision medicine oncology. In order to address the barriers to genetic testing that affect AA, multilevel interventions (system, clinic, provider, and patient) are required. These changes can be implemented by shifting from offering genetic testing on a case-by-case basis to adapting a population-based model. This model design could potentially eliminate most of the barriers, while the remaining barriers can be addressed through systemization. Adaptation of a population-based model will require an electronic record system (EHR) integration, investment in infrastructure, hiring of qualified personnel, and proper education.

Title: Assessing Impact of Nutrition Literacy Program on K-8th Grade Students

Name: Zaib Nageeb

Preceptors: Erin Comollo

Agency: The Healthy Kids Initiative

Purpose: To assess the efficacy of physical literacy interventions on K-8th grade students in New Jersey.

Significance: Childhood obesity can lead to many detrimental health issues Mayo Foundation for Medical Education and Research, 2022). Specifically in New Jersey where "nearly one-third of the state's 10- to 17-year-olds are overweight or obese" (New Jersey Healthy Kids Initiative (2023). The New Jersey Healthy Kids Initiative (NJHKI) is working to prevent this through preventative health interventions, by creating programs to promote physical fitness to low resource schools. The Rutgers Culture of Health Program (RCHSP) is helping to implement these literacy programs in grades K-2 and 6-8, conducting pre- and post-physical assessments to analyze the efficacy of the program.

Method/Approach: Current knowledge and skills on Physical literacy was assessed in two different schools in New Jersey. Students in grades K-2 from School A and students in grades 6 through 8 from school B, were involved in this initiative. Six predetermined physical literacy classes with accompanying educational activities were facilitated to both the groups. For K-2, activities such as evaluating students' abilities to walk in a straight line for 20ft, jump for one minute on a scale of 1-3, and throw a ball from 10' away were administered. For 6-8, the students had to perform full jumping jacks for one minute and perform vertical jumps. Additionally, weekly emails were sent to the instructors with detailed instructions about the activities and other required information. After completion of the course, physical literacy assessments were conducted to evaluate the students' physical abilities. Consent forms to share the information collected were also obtained. The pre and post-physical assessment data was then compiled and evaluated to assess the effectiveness of physical literacy education.

Outcomes/Results: Based on the survey data, we had a total of 62 students from K-2 tested, but only 30 students consented. Of the 30 that consented, only 25 had a complete pre and post assessment data. Of these participants, the average jump score improved from 1.4 to 1.28*. The walk score improved from 2.04 to 1.52, and the average number of throws in a hoop increased from 1.65 to 1.80 showing better coordination and stability. From the 6-8 grade group, a total of 44 students participated in the workshop and 35 consented to share the information. Out of 35, only 28 had a complete data set for pre and post-survey. The data analysis for this group showed that the number of jumping jacks went from 81.48 to 78.72 but the vertical jump average increased from 13.41 to 13.66 showing greater strength and power in their jumps.

Evaluation/Conclusion: This study provides valuable insight into the impact of the physical literacy program on K-2 and 6-8th grade students. Some limitations to this study included a lack of consent from student's caregivers. Additionally, data compilation from other schools, specifically grades 3-5, is still ongoing and would provide additional insight on the efficacy of the program when compared with this data. Despite these limitations, the results obtained from this research suggest that the program was successful in achieving its goal of increasing physical literacy among K-2 and 3-5 grade students through education and workshops.

^{*} On a scale of 1 to 3, 1 meaning students were able to complete <50% of the task.

Title: Client Overview: Using Background Research To Optimize Partnership

Name: Maanya Narain

Preceptors: Project Supervisor: Margarett Pell Bailey

Agency: BGB Group

Purpose: To collect, analyze, and interpret a new client's history and marketing presence in order to develop a strategy overview to be utilized for brand management in the future.

Significance: Pharmaceutical marketing plays a significant role in the healthcare industry by promoting and advertising pharmaceutical products to healthcare professionals, patients, and consumers. The main objective of pharmaceutical marketing is to create awareness about the benefits and uses of drugs, increase sales, and improve the market share of pharmaceutical companies. When new clients join marketing groups, conducting thorough background research on the brand's presence is key in determining future business strategies. The objective of this project was to conduct intensive background research in order to develop a strategy overview for optimizing media presence of the new client's brand.

Method/Approach: Curating background research for the client was a five step process. The first step was investigating the brand's history; including key indications, mechanism of action, clinical trials, product approval, and press releases. The second step was to develop a client list and roster of all relevant members on each indication's team. The third step was to research and produce a media scrape of the client's current media presence including Key Opinion Leader insights, social media activity, community/advocacy groups, and so on. The fourth step was to research key competitors within each indication and conduct an identical media scrape to compare with the client. The fifth and final step was developing a strategy overview of recommendations of what the client can do going forward regarding media presence.

Outcomes/Results: After conducting intensive research on the client's background along with strategic opportunities for the brand, the final product was presented in the form of a deck to the Account Team. The final 30 slide deck included all the research conducted, and the information was presented in a concise manner in which the media scrape of the brand and competitors along with strategy overview was the main content. Post-presentation to the account team, the long deck will be utilized by the team to expand the media presence of the brand by implementing recommendations within the strategy overview.

Evaluation/Conclusion: Using data analytic tools from different media platforms, audience engagement will be used to determine success of the long deck's strategy overview. After implementation of the project's recommendation, the brand should have multiple media accounts across platforms, and any indication of media engagement from HCPs and customers will prove success of the project.

Title: Communication of Genetics and Hereditary Cancer Risk Through Educational Videos

Name: Shanzeh Nasir, Research Assistant

Preceptors: Emily Heidt, BS, Research Program Coordinator

Arreum Kim, MBS, MS, Research Program Director

Anita Kinney, PhD, RN, Director of the Cancer Health Equity Center of Excellence

Agency: Rutgers Cancer Institute of New Jersey: Cancer Health Equity Center of Excellence

Purpose: To produce a series of educational videos communicating genetics and hereditary cancer risk for integration into a web-based chatbot intervention facilitating genetic counseling and genetic testing.

Significance: Genetic testing (GT) is helpful for assessing one's risk for inheriting a disease, such as hereditary cancer. Cancer patients who receive GT are most likely to have an informative test result about their hereditary cancer risk to share with their biological relatives. However, studies find that family communication of positive GT results vary greatly, from 30-73% (Conley et al., 2020; Fehniger et al., 2013). Chatbots are an interactive technology with the demonstrated ability to facilitate informed consent for GT, schedule genetic counseling (GC) appointments, and follow up after patients receive GC (Schmidlen et al., 2019). A chatbot that facilitates GT education and uptake also presents a solution for relieving the workload burden in providing pre-test services on the limited supply of genetic counselors. Incorporating videos into this platform can promote user engagement with GT education prior to making their decision about whether to pursue testing.

Method/Approach: Five educational videos have been researched, scripted, and produced for the *CATALYST* chatbot intervention. Post-production editing is currently in progress. A film production company was contracted to film and edit the videos, and a diverse cast of actors was selected to portray patients, oncologists, and a genetic counselor. The videos for this project are: 1) Introduction to Genetics and Understanding Hereditary Cancer Risk 2) Genetic Testing Testimonials from Cancer Patients and Relatives of High-Risk Patients 3) An Oncologist Recommending Genetic Testing to a Male Patient 4) An Oncologist Recommending Genetic Testing to a Female Patient 5) Variant of Uncertain Significance (VUS) Results Delivery. Once the *CATALYST* web-based chatbot prototype is complete, User and Usability Testing will be conducted to collect data in the form of audio and video recordings and transcripts of participants engaging with the chatbot and its content.

Outcomes/Results: The pre-production and production phases have concluded as of April 2023. Production involved a three-day filming period on-site at Rutgers Cancer Institute of New Jersey in New Brunswick, NJ. A six-week period of post-production tasks, including rounds of audio and video editing, is currently underway. The videos are expected to be finalized and implemented for the *CATALYST* chatbot in June 2023.

Evaluation/Conclusion: User Testing and Usability Testing will begin in June 2023 to assess the content and accessibility of the chatbot intervention and guide any revisions prior to Pilot Testing. Data from User Testing and Usability Testing will be used to measure feasibility, acceptability, and barriers/facilitators to genetic testing. This data will include feedback on the information, presentation, and overall reception of the videos.

Title: Newly-released Neuromodulator Performance Assessment

Name: Elise Nisonoff

Preceptors: Nancy J. Sisco, Practice Administrator

Agency: Premier Plastic Surgery Center of New Jersey-Morristown, NJ

Purpose: To evaluate patients' perceptions on the results of a newly released neuromodulator versus the long-established product of Botox. To also collect data and examine each patient's perception of the effectiveness of the product and their responses to the treatment upon follow-up.

Significance: Neuromodulators have been used as injectables for years and are becoming more popular by the day. Treatments such as Botox, Dysport, and the newly introduced neuromodulator, Daxxify, are intended to be injected into the face to enhance the superficial view of the skin, as they allow for the muscles to relax and the skin to tighten. The newly introduced neuromodulator that is being researched was created to relax the muscles in the face, enhance the elasticity of the skin, and create an overall glow of the facial skin to last as long as 6-9 months after each treatment. This toxin is intended to create the longest-lasting glow and clearing of the skin, while also giving the rubberband-like aged skin a "home", just days after it is injected. With the assessment of newly tested and introduced neuromodulators, it is intended for this toxin to be an even more advanced solution to creating a youthful, natural, and wrinkle-free appearance that will result in patients feeling more confident than ever.

Method/Approach: The neuromodulator that is being examined, Daxxify, has been recently approved this past year for use in private practices. The approach that is being taken is to inject patients with Daxxify that are interested and have had Botox prior. The pre-formulated Botox calculations for each patient transitioning will be taken and recalculated to correctly match up with the proper calculations of Daxxify, as the calculations for Botox and Daxxify are not the same. Staff will then assess the success of the effectiveness of the neuromodulator over the following weeks and months as patients come back into the office for an injectable check.

Outcomes/Results: Of the 67 patients injected with Daxxify, feedback from ~60% of them has been received, and it was not what the staff had hoped for. Patients have come back to the office during their injectable checks and have informed us that their skin is giving off an incredible glow, which is a positive, but they still have muscle movement in the areas where their Daxxify was injected, specifically in their frontalis muscle. With this being said, Daxxify was introduced to the team to be just as strong, if not stronger, than Botox, but this is not the case considering the results of our patients.

Evaluation/Conclusion: Over the past few months, the introduction of Daxxify has been offered to patients who have previously been injected with Botox, as another injectable option within the practice. Over the time that we have awaited hearing feedback from patients on Daxxify, and based on most of the reviews, our practice has prepared ideas to properly formulate the correct dosage of Daxxify for each of our patients that have transitioned to this new neuromodulator for future treatments and evaluations. We have evaluated that Daxxify is a weaker toxin than Botox, so it requires a higher dosage when injected, especially into the frontalis muscle, in order to effectively relax the strong muscles in the forehead.

Title: Mental Health and Substance Use Program: Addressing Stigma in Somerset County

Name: Chiebuka Nnajiofor

Preceptors: Supervisor: Serena Collado, Director of Community Health

Agency: Robert Wood Johnson University Hospital Somerset - Somerville, NJ

Purpose: To develop a mental health and substance use program for senior citizens to raise awareness, decrease stigma, and offer resources in Somerset County.

Significance: The CDC found that nearly 46,000 people died in the U.S. by suicide in 2020 (2022). According to the CDC's National Center for Health Statistics, in 2021, there were an estimated 107,622 drug overdose deaths in the U.S. (2022). Survey respondents in the 2021 Somerset County Community Health Needs Assessment (CHNA) identified mental health as a top community health concern, while substance use, abuse, and overdose were the 4th overall community health concern. While mental health issues affected people of all ages, races, and genders, mental health for seniors, parents and youth, LGBTQ persons, Latino residents, and low-income adults were highlighted in the qualitative discussions. The Behavioral and Community Health Department at RWJUH Somerset offers a variety of treatment modalities and resources for help with mental health and substance abuse. The mental health/substance abuse program addresses stigma, risk factors, and senior isolation. It offers resources to decrease the percentage of mental health issues and substance abuse in Somerset County.

Method/Approach: The CHNA and the Somerset County Community Health Improvement Plan (CHIP) were assessed to analyze what needs should be addressed in the county regarding mental health and substance abuse. Based on the data, a mental health and substance use program was created with a main focus on stigma for seniors in the county. The program was presented to various senior facilities and one program for high school students in Somerset County that supports youth mental health. An outreach target of at least 100 people was the goal. A pre-test, post-test, and evaluation form were given out at the end of the program to assess its overall impact and effectiveness.

Outcomes/Results: Of the sample size cohort (n=80), 43 (n=43) seniors completed the pre and post-test. Thirty-four (79%) seniors correctly answered the true/false question "mental illness and having poor mental health are essentially the same thing" on the pre-test, while 37 (86%) answered correctly on the post-test. Twenty-two (51%) seniors answered correctly on the pre-test, while 23 (53%) answered correctly on the post-test for the question "what are risk factors for mental health issues and substance use disorders?" Thirty-five (81%) seniors answered correctly on the pre-test, while 38 (88%) answered correctly on the post-test for the true/false question, "substance use disorders are classified as a chronic, treatable disease." Forty-three (n=43) seniors pledged to make the following lifestyle modifications as a result of the program: 31 (72%) will exercise more; 16 (37%) will speak with their physician; 12 (28%) will make an appointment with a mental health provider; 31 (72%) will make sure to get enough sleep; 9 (21%) will limit alcohol intake; 19 (44%) will pledge to be Stigma Free on the NAMI website.

Evaluation/Conclusion: Fifty (n=50) seniors completed a program evaluation form given at the end of each presentation. Forty-four (88%) seniors learned useful information, 37 (74%) seniors' view on mental health/substance abuse was impacted, and 33 (66%) seniors resonated with the topic. The Community Health Department will use the pre-test, post-test, and evaluation form results to assess the program's effectiveness. If mental health issues and substance abuse continue to be significant concerns in Somerset County, the program will be revisited and updated for the community.

Title: Racial Disparities in Maternal Health

Name: Kayla Ocasio

Preceptors: Dr. Eddy Simon, MD

Agency: Heart Center of Oranges Medical Clinic

Purpose: To analyze health and racial disparities related to maternal mortality and to raise awareness on this public health issue through suggested intervention strategies.

Significance: Maternal mortality is a very big public health issue that has been affecting hundreds of women & infants all over the world for that last few years. Unfortunately, more women in the U.S die during childbirth than any other developed country. Not only does the United States have the highest maternal mortality rate of all industrialized nations, but recent data from 2021 shows that the maternal mortality rate in the U.S increased by 40% compared to data from the previous year. Serious health and racial disparities exist related to maternal morbidity and mortality. Black women are three times more likely to die due to pregnancy related complications than white women. The goal of this project and research is to address the underlying factors and health disparities behind these alarming rates in order to promote change and develop interventions.

Method/Approach: An extensive literature review was conducted to not only analyze the occurrence of maternal mortality in the U.S, but also the health and racial disparites that impact ethnic communites on the issue as well. The sources used to support the findings of this research are primarily journal articles that come from academic and peer reviewed sources. Twelve articles were reviewed and retrieved from various search engines such as the Rutgers Libraries Database, Google Scholar, and PubMed. Key words and phrases used include maternal mortality, maternal morbidity occurrence, health disparities maternal mortality, and racial disparities in maternal health. Solutions and suggested intervention strategies were also reviewed.

Outcomes/Results: According to statistical data, in 2021 the maternal mortality rate for non-Hispanic Black women was 69.9 deaths per 100,000 live births, 2.6 times the rate for non-Hispanic White women (CDC). One study conducted found that even with a higher educational attainment black women are still more likely to have a higher maternal mortality than their white counterparts. Petersen et al.(2019) states pregnancy related mortality ratios for black women with at least some college education were higher than those for all other racial/ethnic groups with less than a high school diploma. Black women are disproportionately affected by maternal mortality due to systemic racism and unconscious bias in the healthcare system.

Evaluation/Conclusion: Maternal mortality is a tragedy that no one should have to endure especially since research reveals that more than 60% of pregnancy related deaths can be prevented. Quality care and a healthy pregnancy should be attainable for all women during their pregnancy from preconception to postpartum care. Improving the health and wellbeing of mothers and infants aroung the world is an important public health goal that needs real solutions. The research gathered from this literature review will be used to implement strategies to combat maternal mortality such as advocating for policies and programs that support maternal health, increasing access to quality healthcare, encouraging pregnant women to voice their concern & seek medical attention, and improve awareness about maternal health through the creation of an educational workshop/ materials.

Title: Reducing dental anxiety in a clinical setting

Name: Vivian Okoroanyanwu

Preceptors: Deepa Nyayapathi

Agency: Montgomery Dental Loft

Purpose: To improve the patient experience and engagement and to keep patients educated on the services and resources we provided

Significance: It is no secret that a healthy level of trust and communication between patients and healthcare providers leads to better patient health outcomes. The type of interactions one has with their healthcare provider can influence their perceptions of the healthcare system and can often determine how often one seeks medical help. This can be a point of contention in dentistry because most people dislike the dentist. According to the ADA, 36 percent of Americans suffer from dental anxiety. For this reason, many people delay their appointments or forgo going to the dentist altogether. One-third of Americans do not visit their dentist regularly. This is a big issue because 47 percent of Americans over 30 suffer from periodontal disease. Periodontal disease, if left untreated, can lead to further complications like tooth loss, respiratory disease, pregnancy complications, and even cardiovascular disease.

Method/Approach: This project aims to create a more welcoming environment so patients feel more comfortable seeking professional dental help. Many patients cite dissatisfactory experiences with prior dental care providers as their reason for delaying appointments. To address this issue, it is essential to highlight the services patients inquire about the most. Real-life examples of successful cases can be provided to patients, which serve as a reference point for the type of work done. This gives them reassurance that the desired results can be achieved and promotes transparency and trust. Having a social media page can also promote transparency. Social media platforms can give them the latest news and valuable information about dental care. It is important to encourage patients to interact with the dental office's they can access these resources and information,

Outcomes/Results: Two posters were made for the office; the first poster incentivized patients to interact with the office's social media page by giving free custom whitening trays to patients who like or leave a comment on the social media page. The second poster was informational. Those services were highlighted because many patients inquire about whiting and aligners. Furthermore, images from real cases were used in the poster.

Evaluation/Conclusion: To evaluate the effectiveness of this project, we will assess the reviews left on the office's Google page and compare them to reviews made before the creation of the posters. An increase in positive feedback will indicate success.

Title: Which Age Group Is More Attentive to the Health of Their Eyesight

Name: Ife Ozokpor

Preceptors: Dr. Ilaxi Rana

Agency: Garden State Eye & Vision

Purpose: To collect data to see which age group or groups is more likely to come in for yearly checkups. Data will also be collected to see which age groups have more eye diseases and whether yearly checkups have a positive or negative correlation.

Significance: Comprehensive Eye Exams are done to check the visual activity of the eye, the health of the retina, optic nerve, retinal blood vessels as well as checking for eye diseases. American adults over the age of 40 and older are more susceptible to more intensive eye disease such as cataracts, diabetic retinopathy, glaucoma, and macular degeneration (CDC, 2020). These are all influenced by other risk factors such as smoking, UV light exposure, and more. For Americans younger than age 40, vision impairments are usually caused by refractive errors which can affect up to 25% of children and adolescents in addition to accidental injuries(CDC, 2020). Approximately one million eye injuries occur yearly and about 90% are treatable. These can all be treated and cared for in early stages.

Method/Approach: This project began by accumulating information of patients from three different age groups. The age groups are children to young adolescents (under 15), working adolescents and adults (15-64) and the elderly population (65+). These patients have been seen from the start of the project. Information collected includes; current age, the age they began seeing the doctor, if they have a medical or family history that affects their eyesight, such as hypertension, diabetes, high cholesterol, etc., as well as a family history of eye diseases, or conditions such as glaucoma and macular degeneration. The amount of times they've seen the doctor for yearly exams and whether or not there has been a detrimental decline in the health of their eyesight since seeing Dr. Rana. A chart will be created organizing the various pieces of information and comparisons will be made to determine/evaluate if there are positive or negative correlations with yearly checkups and eye disease.

Outcomes/Results: Nine patients from the three age groups that've been seen during the duration of the internship where selected randomly. In the first age group (under 15), all three of the patients wear glasses, and have been to Dr. Rana about 5 times. Two out of three of the patients have relatives that suffer from a disease or condition. In the middle age group (15-65), the three randomly picked patients currently don't wear glasses, have family history of a medical disease or suffer from the disease themselves. The last set of three (65+), in all three of the patients, they all have reading glasses.

Evaluation/Conclusion: Looking at the results from all the patients, the group that had the most disease/conditions that affects the eye is the age group 65+. These conditions/diseases come with age and are most common. With the prescription given and yearly checkups, their eyesight should get better drastically. This also proves that with yearly checkups, there's also monitoring and prevention of eye diseases/conditions. For the patients that are much older and already have diseases/conditions that affect the eye, going to yearly or monthly checkups help to keep everything under control and easier for the patient to maintain.

Title: Chiropractic Care and Physical Therapy Brochure

Name: Claudia Palmer

Preceptors: Christopher Fischer

Agency: Fischer Health and Rehabilitation Center

Purpose: To create a brochure for this health center that provides helpful information and raises awareness on the importance of physical therapy and chiropractic care.

Significance: A brochure can be used to educate patients about various aspects of physical therapy and chiropractic care, such as how these practices work, what to expect during a session, and how they can benefit from regular treatments. A professionally designed brochure can help establish the physical therapy and chiropractic care practice as a credible and trustworthy healthcare provider. It can showcase the practice's expertise, experience, and qualifications, and provide information about the practitioners and staff.

Method/Approach: First, the focus was on who the target audience would be, which was decided to be the potential new patients that come in to Fischer Health and Rehab Center. Next, the focus was on creating a brochure that would attract those new patients by creating the design and format to be one that was simple and easy to look at while also providing the necessary information about the practice. Pictures and graphics were added to catch the attention of patients who walk into the office. Once the brochures were finished, they were placed on the front desk where patients sign in so that it would catch their attention when they first walk in.

Outcomes/Results: The brochure included information about the mission of Fischer Health and Rehab Center, why this practice stands out from others, contact information, services provided, the benefits of chiropractic care, and information about Dr. Fischer. The brochure was six pages and included graphically aesthetic elements such as pictures, symbols, colors, and different fonts.

Evaluation/Conclusion: A successful brochure should be designed with the target audience in mind, and should aim to educate and inform potential patients about the services provided, while also highlighting the unique features of the practice. While the existing patients were not as receptive to the brochure, the brochure was successful in that it reached the target audience which was new patients. By using a brochure to promote the practice, doctors and health professionals can increase their visibility in the community, build credibility and trust, and attract new patients. Overall, creating a successful brochure requires careful planning, attention to detail, and a clear understanding of the needs and preferences of the target audience.

Title: Central Jersey Diaper Bank Media and Marketing

Name: Kristal Palomino

Preceptors: Heather Nover, Executive Director

Agency: Anshe Emeth Community Development Corporation- Central Jersey Diaper Bank

Purpose: To create media and marketing strategies to expand the name of the non-profit organization in Middlesex County.

Significance: Diapers are a necessity for optimal baby health and development. One in three families in the United States finds it difficult to supply clean diapers for their children, which can cost between \$70 to \$80 per month per child. That's roughly \$930 per year, according to the National Diaper Bank Network. With the Central Jersey Diaper Bank being the only dedicated Diaper Bank in Middlesex County, it is important to increase awareness about diaper need and help lessen diaper insecurity across the county. Through social media, this project aims to spread awareness about the Diaper Bank to attract potential donors and families who need diapers.

Method/Approach: To evaluate the effectiveness of the strategies, a schedule was created to set up when content will be posted on Tik Tok, Instagram and Facebook. An online design tool called Canva was specifically used to create graphic fliers, and social media posts, which were evaluated by the Executive Director for approval. Before informative posts were made, research was conducted on educational platforms about diaper disparity, and the information learned was used on educational social media posts. In addition, social media posts were made on various major platforms to engage with a larger audience and spread awareness. Statistics behind all content were monitored, including how the audience interacted with each post.

Outcomes/Results: With the data collected through different social media platforms, there has been an improvement in the amount of attention the social media pages have received. In addition, examining demographic data exemplified the need for serving low-income families more efficiently by making the organization known. Between 01/18 to 04/30, TikTok following increased by 86% with 580 individuals visiting the profile. This is over 200% more visits since the start of the internship. On Instagram, the amount of followers increased by 21% with more than 232 individuals visiting the profile. On Facebook,the current followers engaged with the content increased by 30%. The collected data from the evaluation tool will be used to develop a report for the Executive Director and Board of Trustees Executive Committee. Demographic data will be assessed to examine how efficiently the name of Central Jersey Diaper Bank is being passed around.

Evaluation/Conclusion: This project has enabled the AECDC-CJDB to expand its name to a larger audience, outside the local community. The pandemic has caused an enormous surge of people in need and this has ignited a conversation for the Board of Trustees about strategic growth and recognition. Serving the local community is a top priority and extending the name of the organization will allow more individuals to seek help. While at the same time helping individuals, the organization will receive more recognition allowing for further collaborations. While this may be a slow process, these small steps will lead to better outcomes for the community.

Title: The Impact of the Ryan Haight Act on an Outpatient Psychiatry Practice

Name: Neeraj Pareddy

Preceptors: Direct Supervisor: Jessica Chavez, Office Manager

Project Supervisor: Sejal Patel, MBA, MPH, CFO & Associate Practice Manager

Agency: Pelorus Elder & Behavioral Health

Purpose: To measure the impact of the Ryan Haight Act on Pelorus Elder & Behavioral Health, an outpatient psychiatric practice, since the Public Health Emergency (PHE) was announced to end.

Significance: The Ryan Haight Online Pharmacy Consumer Protection Act of 2008 was implemented to establish rules around the prescribing of controlled substances through telepsychiatry; it is enforced by the Drug Enforcement Administration (DEA). Per the act, practitioners are required to conduct one in-person medical evaluation with patients who currently have prescriptions for controlled substances. After the initial in-person visit, practitioners are allowed to resume prescribing controlled substances via telehealth. With the PHE set to end on 5/11/23, the broad allowance that enabled the massive growth of telemedicine appointments will subside. This will result in an influx of both providers and patients coming into the office, along with the termination of patients who are unable to attend their mandatory in-person visit.

Method/Approach: The number of patients who scheduled in-person visits, along with those who were terminated, was recorded on an Excel spreadsheet. Patient data regarding scheduled appointments and terminations, along with patient feedback, was collected to measure the impact of the COVID-19 exception to the Ryan Haight Act ending on the practice. Data for 371 patients that joined the practice from 2/1/2020 to 2/23/23, and were being prescribed controlled substances as of 2/1/2023, was exported to an Excel spreadsheet and analyzed. Five of these patients were also randomly selected to be called in order to ascertain their feedback on having to travel to the office for a mandatory in-person visit.

Outcomes/Results: After reviewing data pertaining to two providers in the Cedar Knolls office, it was found that fourteen of their patients were terminated while their collective scheduled in-person visits increased by approximately 88% since the PHE was announced to end. In terms of patient feedback, three out of the five patients who were called did not report any concerns with the recent changes, and they were pleased to learn that their care could continue via telemedicine after the initial in-person visit. However, two patients were concerned about finding transportation to the Cedar Knolls location, due to living a long distance from the office, and suffering from debilitating health issues, respectively.

Evaluation/Conclusion: It is critical to measure the aforementioned impact because both patients and providers will be affected by the end of the COVID-19 exception to the Ryan Haight Act. It is also important to be mindful of the true capabilities of an office practice. Taking on too much work can cause undue stress to both providers and administrators, and being overworked can result in employees overlooking routine matters, thus increasing the likelihood of unintended errors. With this in account, a scheduling system could be implemented to help ensure that providers have enough time to rest and write visit notes between appointments. Another recommendation for the practice is to offer a transportation service for patients who are unable to attend the mandatory in-person visit, in addition to expanding home visits by providers. This will reduce the number of patients being terminated and increase satisfaction from homebound or bedridden patients who would like to continue their care at Pelorus.

Title: The importance of marketing and social media campaigns for a cure of MS

Name: Neha Pasupuleti

Preceptors: Annie Szybillo, Senior Manager at Walk MS

Agency: National MS Society

Purpose: To analyze the importance of marketing and using social media to raise awareness for MS and create an approach towards a cure.

Significance: The National Multiple Sclerosis Society is a non-profit organization which organizes multiple peer-to-peer fundraising events to raise funds towards finding a cure for MS. There are over 1 million people living with MS in the United States that the Society supports. Increased social media influence and marketing raises MS awareness, which leads to a better chance of finding a cure. According to Lavorgna et al. (2017), the Internet is now an important source of health and medical information, and its ease of access often makes it the first step in learning about diseases and their treatments. This evidence suggests that increased social media use is beneficial to people with MS. Marketing and social media campaigns are critical in the search for a cure for MS. The scope of this project is to raise awareness for MS and raise money to find a cure for Multiple Sclerosis in the Greater NYC-Long Island area.

Method/Approach: The project was being conducted through marketing and various events that raise funds for the cure of MS. The walks are a specific event that is highlighted. The walks take place all over the country, with a focus on New York City in the spring and summer. Overall, my main focus/market is on Greater NYC-Long Island. The first stage was to gather information from the National MS Society website about the Greater NYC-Long Island Walk MS market for the year 2023, such as venue, registration, and timings. The next stage was to use Microsoft PowerPoint to make posters and leaflets for each of the walks in the aforementioned places. Furthermore, Salesforce was used to identify previous participants, who were then contacted using a pre-written phone script and email template. Donor drive is used to collect financial information such as donations and revenue, which is then reported to an excel spreadsheet that contains all financial data.

Outcomes/Results: A total of 1 poster and 7 fliers for each walk in the greater NYC- Long Island Market Walk MS region were created. The fliers were then distributed and spread all across the market outreach. For the walks scheduled for 2023 in the GNYC-LI, 4,550 people registered for at least 1 walk in Greater NYC-Long Island. Out of the 4,550 people, around 530 teams registered, with 493 teams being a part of the family/friends group, 31 corporate teams, and 11 national teams. The total revenue raised including donations and sponsorship is a projected 1,810,000 dollars, and the participant fundraising revenue is around 1,760,000 dollars.

Evaluation/Conclusion: As of currently, our F23 objective for this initiative in the Greater NYC-Long Island market of Walk MS is a predicted 11% increase over last year. The market is contributing to the bigger scope of the organization's purpose because NY is a significant state with a plethora of people to market to, by having thousands of people register and fundraise, it contributes to finding a cure. Doing outreach to people who have MS or have ties to people who have MS, weekly newsletters, and social media campaigns with incentives will be beneficial strategies to promote awareness, fundraise money for MS, and get more people for walks.

Title: How Sterilization Protocols affect Oral Infection rates

Name: Aria Patel

Preceptors: Jackie Burch

Agency: Old Bridge Dental

Purpose: To analyze the proper methods of sterilizing dental instruments and how they impact oral infection rates.

Significance: When it comes to the rate of oral infection, sterilizing practices are critical. Dental patients are high-risk patients in terms of both transmitting and acquiring infectious diseases through dental instruments. Cross-contamination and disease transmission from patient to patient have also received equal attention. Dental infections were thought to be related with a death rate of 10 to 40% in 1908 (Ludwig et al., 1908). In the 1600s, the London England Bills of Mortality listed dental diseases as the fifth or sixth greatest cause of death (Smith 2009). Since dental infection is a leading cause of death, it emphasizes the importance of sterilizing instruments for each patient as it can result in the transfer of bloodborne infections including hepatitis B virus (HBV), hepatitis C virus (HCV), and HIV, as well as a range of bacteria, fungi, and even mycobacteria (Chanchareeonsook et al., 2022). Old Bridge Dental strives to follow all the necessary sterilization protocols to make sure their patients are safe from acquiring infectious diseases.

Method/Approach: A thorough literature review was completed using Google Scholar to identify the impact of unsterilized dental instruments on oral infection rate. Keywords such as, "autoclave", "oral infection rates' 'and "spore test" were used. At Old Bridge Dental, to ensure that the autoclaves were working fine, spore tests of autoclaves were done on a weekly basis. The spore tests were sent out to labs for analysis.

Outcomes/Results: A research completed at University of Georgia found viral particles for HIV and Hepatitis B virus lodged in the two commonly used dental instruments, the drill and the prophylaxis angle. The research implied that the substances trapped in the instruments were cleaned out with chemical germicide and the particles were blown out. However, the results concluded that it was not enough to thoroughly clean the instruments suggesting using an autoclave rather than chemical germicide alone. In 2017 a failure of sterilization in an outpatient faculty occurred in Singapore, 714 individuals were potentially impacted with the use of 72 affected instruments. The results concluded that the final stage of steam sterilization failed which resulted in an incomplete cycle of sterilization. There was a low risk of bloodborne virus transmission. A following incident that occurred in Hong Kong in the year 2012 is an example of a rare gap in monitoring during the autoclaving cycle. Within 24 hours after the incident, 127 sources and 250 exposed patients were identified for risk assessment and blood-borne virus testing.

Evaluation/Conclusion: The danger of transmission and cross contamination has a direct impact on oral infection rates. It results in a high risk of dental patients acquiring and transferring bloodborne diseases such as hepatitis B and HIV as well as other bacteria and fungi. To minimize the infection rate of patients, dentists should continue to maintain their sterilization units such as autoclaves and statim that are used to sterilize dental instruments. At Old Bridge Dental weekly spore tests are done and the pressure and temperature of autoclave and statim are checked monthly to ensure ideal maintenance.

Title: The Risk of Pre-Eclampsia in Pregnant Women of Color

Name: Dhawni Patel

Preceptors: Mafudia Suaray, MD, MPH, Principal Investigator

Marsha Gordon, MPH, Project Supervisor

Agency: RWJMS Department of Family Medicine and Community Health Research Division

Purpose: To conduct a literature review to determine the increased risk of pre-eclampsia in women of color and find preventative strategies to lower maternal mortality rates.

Significance: Pre-eclampsia is a pregnancy condition marked by the development of high blood pressure and frequently by the presence of a sizable amount of protein in the urine. Preeclampsia is a condition that affects five percent to seven percent of all pregnant women but is responsible for more than seventy thousand maternal deaths and five hundred thousand fetal deaths per year around the world. Preeclampsia is one of the main causes of maternal deaths globally. This condition has the highest morbidity and mortality rate. It is the top cause of maternal mortality, severe maternal morbidity, maternal hospitalizations to maternal critical care units, cesarean sections, and preterm births in the United States, according to the circulation Research (2019). According to the Centers for Disease Control and Prevention in the United States, black women have a risk of death from pregnancy-related reasons that is three to four times higher than the risk faced by white women. In black women, the incidence of preeclampsia is around 60 percent higher than in white women, and in black women, the severity of preeclampsia is most likely to occur.

Method/Approach: Peer reviewed literature databases like PubMed were chosen to review pre-eclampsia-related articles. The "peer-reviewed" and "case study" options were used to limit the search results. Keywords including maternal health, mortality rates, treatment choices, and the importance of food were selected. Pre-eclampsia was the first search phrase used on PubMed, and there were 5,345 results. To further investigate a link between Blood Pressure and consumption, "diet and pre-eclampsia" was searched.

Outcomes/Results: After the selection of 9 articles, the key findings from 6 literature reviews were chosen. There were 3 papers highlighting the changes in diet can help reduce the risk of pre-eclampsia, including a new study that indicated a connection between Mediterranean Diet and lower risk of pre-eclampsia. This study, featured in the Journal of the American Heart Association, shared that pregnant women who followed a diet similar to that of the Mediterranean had a roughly 20% lower risk of getting preeclampsia (Gillian, 2022). Three of the remaining papers cited the importance of physical activity or exercise in lowering the risk of preeclampsia. Women who participated in regular recreational physical exercise while they were pregnant had a 37% lower risk of developing preeclampsia, as well as a 25% lower risk of developing gestational hypertension (SeonAe, 2009).

Evaluation/Conclusion: Women of color, particularly African-American women, are more likely to develop pre-eclampsia. Pregnant women can reduce their risk of pre-eclampsia by maintaining a healthy diet and by doing physical activity. Since women of color experience a disproportionately higher rate of maternal mortality, supporting minorities and ensuring that they feel heard can reduce the likelihood that they will develop pre-eclampsia.

Title: Patient and Community Outreach Assessment

Name: Jil Patel

Preceptors: Dawn Guerrero

Agency: Leukemia and Lymphoma Society

Purpose: To reach out to patients, families, and caregivers in the Mountain and Red River region to inform them on the resources and assistance that The Leukemia & Lymphoma Society provides.

Significance: Around 186,400 individuals in the United States were diagnosed with leukemia, lymphoma, and myeloma in 2021(The Leukemia & Lymphoma Society, 2021). In regions that do not have the resources to provide financial and travel assistance, it can be difficult for those that are diagnosed with blood cancers to understand their diagnosis and continue their treatment. A study done by Evguenia Ouchveridze et al. (2022), found that "financial toxicity" or financial strain can reduce quality of life and is associated with poor outcomes. Karryn Christiansen et al. (2023), found that in general, cancer patients who are better educated are more likely to be proactive about their treatment and improve overall cancer outcomes. This project aims to reach some of these patients that live in areas with minimal resources

Method/Approach: A list of blood cancer patients, caregivers, and family members that have used LLS resources or were interested in learning about LLS and what is offered was compiled by LLS staff and provided by hospitals and other care centers. This list focused on patients from the Red River and Mountain Region. The Red River region covers Oklahoma, Arkansas, and Northern Texas. The Mountain Region focuses on Utah, Colorado, Wyoming, and Idaho. Calls were placed to patients and other community members regarding any questions and additional information about LLS resources as well as to check patient and caregiver wellbeing. Data was gathered on the callers pertaining to the resources the patients used or were generally interested in. The categories of resources that were offered during these calls include financial assistance, nutrition consultation, educational events, and the First Connection peer support program.

Outcomes/Results: Impact sheets were created for each of the states within the Mountain and Red River regions to show patient interest and resource usage for the year of 2022. Four Impact sheets were created for the states in the Mountain Region and three Impact sheets were created for the states in the Red River Region. These sheets depicted the usage of LLS services when patients were called. These impact sheets provide quantitative data on the LLS resources used in both regions. The impact sheets for the year of 2023 will be available in January/February 2024. There were eighty-one patient interactions made individually as an intern, through phone and email between January to April 2023. From those interactions four patients requested for a nutrition consultation, four patients requested a first connection match, and two patients requested help with their financial assistance.

Evaluation/Conclusion: An increasing number of blood cancer patients, caregivers, and families from the Red River and Mountain Region are being added to the call list as a result of hearing about LLS through their hospital or social media. With a growing number of patients, families, and caregivers joining LLS it can be difficult to navigate the conversation surrounding blood cancer. There was difficulty in having patients open up about their diagnosis and expressing their concerns through phone calls, but improved when more time was spent on calls. Encouraging the use of active listening when placing calls can help keep patients interested and informed about the assistance and support LLS offers.

Title: The Importance of Regular Health Check-ups for Children

Name: Krima Patel

Preceptors: Dr. Manju Misra, MD

Agency: Manju Misra Pediatrics

Purpose: To ensure that children are screened regularly so they don't develop any preventable diseases in the future.

Significance: Children who are obese are more likely to develop type 2 diabetes when they become adults. Approximately there are more than 3 million new cases of scoliosis diagnosed amongst school aged children. Through vaccination, children can develop immunity without suffering from the actual diseases that vaccines prevent

Method/Approach:

Work with Medicaid and Private insurances to create a list of patients who are overdue for their physical, overdue for vaccines, need a follow up for scoliosis or weight check for being over or underweight. Call parents to remind them and schedule appointments. Fill out paperwork and send it back to insurance companies and keep paperwork at the office for records. Schedule follow up appointments as necessary. Keep following up until the issue is resolved or progress has been made.

Outcomes/Results:

Around 90% of the parents who were called picked up on the first phone call and scheduled an appointment for their child. Other parents had to be called about 2-3 times in order to schedule appointments. Everyone scheduled showed up for their appointments and got the necessary treatments. Parents scheduled follow-up appointments as necessary for their child.

Evaluation/Conclusion:

In the future, work with other providers to ensure that other children are also being screened early for preventable diseases. Reach out to other children related organizations to see how more children can be positively affected by an initiative like this. Overall, decrease the number of conditions like diabetes, scoliosis, heart disease, and vaccine preventable diseases amongst children.

Title: Patient Care Deductibles under Insurance

Name: Kunj Patel, Intern

Preceptors: Niravkumar Patel, MD

Agency: Lynn Urgent Care

Purpose: To examine the impact of numerous insurance policies on a patient's course of treatment.

Significance: Individual treatment strategies are uniquely determined based on a range of criteria. Among these factors, insurance coverage plays a pivotal role, considering aspects such as an individual's employment, income, and other relevant factors. During visits to primary care physicians, patients experience varying payment requirements, including higher payments, waived copayments, or full self-payment if their deductible threshold has not been met. Unfortunately, despite the doctor's recommendation for further tests or specialist consultation, many patients discontinue their care immediately after the primary care appointment. Consequently, even when two patients require the same therapy for an identical medical condition, the level of care they receive diverges significantly due to disparities in their insurance plans and their financial commitment to treatment.

Method/Approach: The primary care practitioner will administer treatment to a randomized sample consisting of five uninsured patients and five patients with private insurance. At the purchasing counter, the patients' needs for additional appointments such as prescriptions for specialists, follow-up visits, e-prescriptions for medications, or no additional testing were tracked. Their medical treatment varied greatly depending on insurance coverage, even though some were even given the same diagnosis after visiting their general care physician.

Outcomes/Results: Out of the ten uninsured patients, all ten were advised to schedule a follow-up appointment due to abnormal blood test results. However, despite paying for their services, 8 patients declined the request. On the other hand, the third patient, whose blood test findings were routine, did not require a follow-up visit. Among the 10 patients covered by different private insurances, all were asked to schedule a follow-up visit, which they promptly did before leaving the office. The clinic recommended five patients to return for additional testing, such as mammograms, EKGs, and/or NSTs, which were conducted by a visiting cardiologist who visited twice a week on Mondays and Thursdays. Patients with private insurance were subject to an average copay of \$15 for primary care visits and could receive treatment within the network without incurring extra out-of-pocket expenses. Conversely, uninsured patients had to pay \$50-80 for their initial visit and the same amount for follow-up appointments, in addition to covering all testing costs themselves.

Evaluation/Conclusion: Noncompliance with follow-up appointments and testing is likely among the five uninsured patients, despite recommendations from their primary care physician. Close monitoring of their return for further testing will be necessary. This underscores the crucial role of insurance in preventing potentially severe or fatal long-term complications. Insured patients, in contrast, can proactively address health issues through early detection, while uninsured patients are left to react to their health problems, which may occur at a later, less manageable stage.

Title: Empowering Patients Through the Utilization of a Website

Name: Manay Patel

Preceptors: Gunay Ismailoff, Pharmacist

Agency: South Broad Pharmacy, Elizabeth, NJ

Purpose: To promote patient and healthcare provider interaction at South Broad Pharmacy located in Elizabeth, NJ through the creation of a user-friendly online platform.

Significance: A lack of communication can be detrimental within the healthcare field. Within the pharmacy sector, caution needs to be prioritized as medication errors can be life threatening. A recent study conducted by the FDA shows that 1.3 million people are subject to injury due to medication errors every year. (Columbus, 2023) A lack of communication is also a problem nationwide, as 1/3 of small American businesses do not have a websit e.(Firms, 2022) South Broad Pharmacy in Elizabeth, NJ is a benefactor to this problem due to a lack of a website. With no way to communicate with patients through an online platform a medical error is more likely to happen. In order to mitigate this issue, South Broad Pharmacy plans to create and launch a website to aid communication between the patient and the healthcare provider.

Method/Approach: The methodology for this project involved thorough research and training on website creation. In order to identify the most efficient and effective method to create a website, platforms such as Durable, Canva, and Google Sites were reviewed. Colleagues who were subject matter experts in website creation were contacted to refine skills. A YouTube course offered by Stewart Gauld was completed to fully develop website creation competency. Completion of a best practice research was a conclusive step in this project as this research allowed for a compilation of key details required for a successful website. Looking at websites of CVS, Walgreens and other established healthcare facilities, commonalities such as chat boxes, hours of operation, and maps were observed to increase patient and provider interaction.

Outcomes/Results: The website was developed and published to the public on April 5th, 2023. The website included key details, such as phone numbers, email addresses, hours of operation, and a contact form. Data for the website from April 5th to April 16th was collected through the use of Google Analytics. A total of 41 people visited the website in this 2-week period. The average time of interaction was 20 seconds. Of the 41 people, 8 engaged in the video, averaging a watch time of 31 seconds. The pharmacy also received 5 inquiries regarding insurance policies using the contact form. Overall, the pharmacy experienced an increase in phone calls and emails after the website went live.

Evaluation/Conclusion: The use of an online platform amidst a technology boom is essential for fostering communication. Preliminary results show success with the website, however, the data must be reviewed over time to confirm the same. In the future, more relevant information should be added to the website, for example, accepted insurances to make it more informative.

Title: Evaluating Patient Data to Supplement LLS Patient Outreach Initiatives

Name: Nehee Patel

Preceptors: Bethanie Mills, Patient and Community Outreach Senior Manager

Agency: The Leukemia and Lymphoma Society

Purpose: To create a visual map sorting patients who receive LLS financial aid by county location.

Significance: Cancer was the second leading cause of death in the United States in 2021 (CDC). In California, leukemia, melanoma of the skin, and non-Hodgkin lymphoma incidence rates per 100,000 people from 2015-2019 were 12.2, 23.1, and 18.0, respectively (National Cancer Institute, Quick Profiles: California). Poor health literacy is associated with a lower quality of life (Holden et al., 2021). Further, cancer survivors receiving survivorship care plans experienced an improvement in their quality of life and physical symptoms (Nahm et al., 2019). The Leukemia and Lymphoma Society (LLS) helps those impacted by blood cancer navigate treatment and survivorship. LLS provides resources like financial aid, peer-support, nutrition consultations, educational resources, and clinical trial matching. This project will create a geographic map of LLS patient locations in the Central Valley region of California, which can help supplement patient outreach initiatives. Outreach includes contacting patients and caregivers to provide information about LLS resources. The map provides a visual of where LLS patients are clustered throughout the Central Valley Region.

Method/Approach: A comprehensive list was created using Salesforce that included the zip codes of all adult patients from the Central Valley region who were new to LLS and received LLS financial aid for the 2023 fiscal year during Q1 and Q2. A total of 299 individuals were identified and this list was exported to an Excel spreadsheet. The last step in the process was to use these zip codes to create a visual map covering counties in California and Nevada. Counties with a larger percentage of patients receiving financial aid were coded by darker colors, while counties with lower percentages were lighter. A similar map was created for 25 pediatric patients from Central Valley following the same criteria.

Outcomes/Results: Of the 299 adult patients in Central Valley new to LLS financial aid for the 2023 fiscal year, almost 50% of patients live in either Fresno, CA, Kern, CA, Sacramento, CA, or San Joaquin, CA. The remaining patients are spread throughout 27 other rural and suburban Central Valley counties. For pediatric patients (n=25), 40% are located in Butte, CA, Kern, CA, or Tulare, CA. Many patients' first introduction to LLS was through receiving LLS financial aid. Financial aid patients were compiled into lists based on the area they lived in, and they were later contacted by Patient Outreach to be offered services like dietitians and peer-support.

Evaluation/Conclusion: LLS Patient Outreach in Central Valley may be able to better identify outreach initiatives that can be focused on using these visual maps and reach a larger number of patients. The maps will be used by LLS staff and volunteers in the coming months and therefore, the success is yet to be determined. Limitations to this project include having to constantly update the maps as more patients receive financial aid throughout the year. However, only using data from previous months, rather than the ongoing month can be more efficient. Lastly, visual maps using data like race or specific age ranges can also be created to aid patient outreach initiatives in the future.

Title: Combatting Language Barriers Patients Face in an Eyecare Practice

Name: Rachel Patel

Preceptors: Direct Supervisor/Manager, Mrs. Suzanne Park

Agency: Edison Ophthalmology Associate LLC

Purpose: To study and analyze the effectiveness of speaking a second language in communicating proper eyecare services and treatment options to patients facing language barriers.

Significance: In the United States, healthcare systems struggle to provide the best possible care to a diverse and expanding multilingual patient population. Previous research has showcased many health inequities that have been found in the medical care given to patients who communicate using a non-English language for medical communication. According to a national study conducted by Schulson and Anderson (2022), less than one-third of outpatient physicians reported regularly employing a trained professional interpreter when speaking with patients with lower English proficiency, 40% never used professional interpreters, and translated materials were rarely available. Increasing their incidence and mortality rate for certain eye diseases compared to other populations that speak English. Edison Ophthalmology Associates LLC hires several bilingual and trilingual employees who aim to assist patients that struggle to speak English. This project will evaluate the benefits of hiring employees who speak a second language to the eyecare practice.

Method/Approach: Over the course of five months, Edison Ophthalmology Associates LLC has encountered numerous patients that speak a second language that were assisted by optometric technicians during their eye examination appointment. A formative project was conducted to analyze the number of patients facing language barriers, the language they speak, and the severity of their condition. Every two weeks, information was collected and stored in a spreadsheet that focuses on evaluating bilingual/ trilingual patients that have made eye care appointments. The next step was to formulate and distribute satisfaction surveys to the bilingual patients. Satisfaction surveys were translated into the language the patient speaks most fluently so they were able to comprehend and articulate their opinions. The final step was to present the data to supervisory staff of the practice in support of multilingual employees to better serve their patients.

Outcomes/Results: The results for this project concentrated on all of the ophthalmologists' existing and new patients that speak a second language. Based on the satisfaction surveys, more than 80% of the bilingual patients left Edison Ophthalmology Associates LLC feeling content, acknowledged, and well taken care of. After recognizing the large diverse patient population in the office, the supervisors began hiring optometric technicians that spoke more than one language. At Edison Ophthalmology Associates LLC, there are staff present that speak languages other than English, which include Mandarin, Korean, Gujarati, Hindi, Urdu, and Spanish.

Evaluation/Conclusion: To determine the effectiveness of speaking a second language, the satisfaction surveys and spreadsheet full of patient information were taken into account. There was a steady increase in the number of new patients making appointments after learning they could fully communicate their concerns in their second language. Hiring staff that spoke more than one language plays a significant role in the success and inclusivity of Edison Ophthalmology Associates LLC. For future reference, conitnue to propose solutions to enhance patient satisfaction at the eyecare practice and encourage hiring bilingual employees along with interpreters and translators.

Title: Compliance with CAHC Survey Requirements

Name: Shri Patel

Preceptors: Kuldeep Bhatt, Administrator

Agency: Evergreen Home Care LLC

Purpose: To ensure compliance with the Commission on Accreditation for Home Care (CAHC) survey and all related requirements.

Significance: Achieving CAHC accreditation is a crucial requirement for home care agencies that wish to participate in Medicare and Medicaid programs. By obtaining CAHC accreditation, home care agencies can ensure they provide their patients with high-quality care, leading to improved patient outcomes, reduced critical incidents, and increased patient satisfaction through patient-centered care (cahcusa.org, 2023). CAHC-accredited home health agencies had lower hospital readmissions and emergency department visit rates than non-accredited agencies (Alkhenizan & Shaw, 2011). Staff education and training are metrics of CAHC that help Community Home Health Aides (CHHA) follow a nursing plan of care and provide adequate support for activities of daily living and instrumental activities of daily living. Achieving CAHC accreditation sets an agency apart from its competitors and makes it more attractive to potential clients. Accreditation is a symbol of quality and can provide clients and their families with peace of mind that they are receiving the best possible care.

Method/Approach: In New Jersey, private pay home care agencies and CAHC-accredited home care agencies have different standards. Currently, Evergreen Home Care LLC is applying for the initial CAHC survey. A thorough review of CAHC requirements and the agency's current policies and procedures must be completed. After the review, any deficiencies or gaps in policy that do not comply with CAHC standards must be identified. The next step involves addressing the policy gaps and creating a corrective plan suitable to CAHC standards to bring the agency into compliance. The project responsibilities include the evaluation of policies and procedures, identifying areas of non-compliance with CAHC standards, and supporting the development and implementation of the action plan.

Outcomes/Results: The agency must comply with CAHC standards and be prepared to pass a CAHC survey. The deliverables include a comprehensive report defining the policy gaps identified, the action plan developed to address those policy gaps and the agency's progress toward achieving compliance. Quantitative metrics include the percentage of CAHC standards met before and after the project and the number of staff members who completed additional training as part of the project. While qualitative metrics include improved patient outcomes, reduced critical incidents, and increased patient satisfaction. The project ensures that the agency can pass the initial CAHC survey, participate in Medicare and Medicaid programs, and provide high-quality care to its patients. The project contributes to several policy changes, and one of them is complying with the CAHC standards of having a tool to evaluate CHHA competency every 90 days. However, the agency is currently evaluating and reinforcing the education every 180 days.

Evaluation/Conclusion: Pre and post-assessments of the agency's compliance with CAHC standards must be conducted. Additionally, surveys must be administered to staff members and patients to measure their satisfaction with the agency's services before and after the project's implementation. A process evaluation must also be conducted to determine if the action plan was appropriately implemented and achieved compliance. Regular reviews of the agency's compliance with CAHC standards must be conducted, and the action plan must be updated to keep the project current and relevant. The project must also be reevaluated periodically to ensure the agency's ongoing compliance with CAHC standards.

Title: Increasing Cancer Education in the African American Community

Name: Ananya Penugonda

Preceptors: Stacy Kreizman, Senior Manager, Patient and Community Outreach

Agency: Leukemia & Lymphoma Society (LLS) - Cranford, NJ

Purpose: To increase outreach in the African American community in order to make individuals more aware of available cancer support resources offered at LLS, as well as increase overall education.

Significance: Black Americans have double the incidence of myeloma as any other race or ethnicity. Due to social determinants of health, such as socioeconomic status, accessibility to care, and more, African American individuals are less likely to have resources available regarding myeloma education and treatment (Leukemia & Lymphoma Society, 2023). The Leukemia & Lymphoma Society has an initiative called Myeloma Link, which aims to empower Black myeloma patients, caregivers, survivors, and families by increasing their access to education and treatments for this disease. Additionally, LLS is hosting an event called Cancer in the Black Community (CIBC) in March, which discusses the types of cancers that members of the Black community are more likely to be diagnosed with, ways to reduce the risk of these cancers, and how to increase accessibility to quality treatment services within the community. This project focuses on assessing the knowledge of cancer treatment, social determinants of health, and health barriers among the African American community through a pre- and post survey during an information session organized by LLS.

Method/Approach: A pre- and post assessment survey was created using Canva which were later printed out. The questions for the survey were based on the content to be covered during the information session. The pre- and post-survey were administered to all the participants at the Leukemia & Lymphoma Society's CIBC event on March 7th, 2023. The attendees were instructed to fill out the pre-assessment prior to the information session. Once the session was completed, attendees were given the post-assessment survey.

Outcomes/Results: Out of the sample size cohort (n=31) who filled out the pre-assessment, 96% of attendees were not able to accurately identify social determinants of health. 38% did not know about the higher incidence rates of myeloma in the Black community, but 93% of individuals were able to accurately identify barriers to Black patient's healthcare. 70% of attendees knew of the longer diagnosis to treatment initiation for Black patients, and 80% of them knew that myeloma was the most common blood cancer among Black Americans. 60 attendees answered the post-assessments. Of the sample size cohort (n=60), 85% of attendees were able to accurately identify social determinants of health. 91% knew of higher incidence rates of myeloma in the Black community, and 93% of individuals were able to accurately identify barriers to Black patient's healthcare. 91% of attendees knew of the longer diagnosis to treatment initiation for Black patients, and 86% of them knew that myeloma was the most common blood cancer among Black Americans.

Evaluation/Conclusion: Overall, there was a decent knowledge base regarding the knowledge of health disparities, social determinants of health, and myeloma in the African American community among the attendees prior to the information session. Moreover, among those who completed the post-assessment, the majority of individuals reported an increase in knowledge base. However, many individuals were unaware of the resources offered at LLS. In the future, making the assessments a part of the information session itself can result in better survey completion rates.

Title: Creating Awareness about Electronic Records

Name: Peyton Perez

Preceptors: Doug Wagner, CEO/Owner

Agency: Adapt Technical Group

Purpose: To assemble information regarding Adapt Technical Group on a flier to relay the beneficial use of digitizing school and medical records.

Significance: As our world's technology is advancing, it is important that the records of health and school systems do as well. When it comes to school and medical records, there are various advantages from switching from paper records to digital. Advanced technology has now made it possible for medical records to be electronic which enables quicker access to patient records which means efficient care, enhancing privacy and security of patient data, safer sharing of information with patients and other healthcare workers, reducing medical errors. (The Office of the National Coordinator for Health Information Technology (ONC), 2022). In addition, electronic records are convenient, aid in effective communication, more reliable prescribing, and reducing costs overall. Electronic school records also have similar benefits such as increased security, easier management of documents, preventing falsification, easily retrievable upon request, and reducing costs. This project aims to create a flier to highlight the benefits of electronic records and to promote Adapt Technical Group's expertise in converting the documents into electronic records.

Method/Approach: Benefits of using electronic medical and school records were researched using Google. Key phrases searched were benefits of electronic records, electronic versus paper records, advantages of electronic medical records, advantages of electronic school records. It was decided that a flier including information about the company, Adapt Technical Group, as well as the convenience of electronic records would be best to create awareness and enhance Adapt's visibility. A flier was created using Canva. To ensure accuracy, only information from scholarly sources and the company's website were included. The flier was kept digital and emailed to all the potential clients as an attachment. To evaluate the effectiveness of the flier, the number of potential customers versus new clients after the flier was shared were analyzed.

Outcomes/Results: A one-page flyer was created and the main sections included were "About Our Company", "What Sets Us Apart", "Why Electronic Records vs Paper Records", and "We Make it Easier for You" to explain the company's expertise and the service of document conversion. The flier was sent to 38 people in total, two of them are now customers of Adapt Technical Group.

Evaluation/Conclusion: In conclusion, it is evident that electronic records are crucial for companies to keep up with advancing technology to provide high quality and enhanced security of data for medical and school systems. The flier is an efficient way to spread the word. However, it may be possible that most of the potential customers were already aware of the benefits of electronic records. In the future, the flier may be placed on ads and social media websites to reach more potential clients.

Title: Promoting Blood Pressure Self-Management through a Health Education

Program

Name: Soleil Perez

Preceptors: Direct Supervisor: Gina Stravic, Executive Director

Agency: Raritan Valley YMCA

Purpose: To develop and measure the success of a health education program that promotes better self-management and awareness of blood pressure levels among participants.

Significance: According to the American Heart Association (AHA), nearly 80 million American adults have high blood pressure, and less than half have it under control. In New Jersey, an estimated 1 in 3 adults have high blood pressure, indicating a growing problem that requires attention. In response to this critical health issue, the Raritan Valley YMCA has plans to develop a Blood Pressure Self-Monitoring Program to encourage better self-management and hypertension awareness through health education and individualized support. This project will include launching and measuring the program's success to ensure participants gain increased knowledge of blood pressure control. Research shows that effective treatment of hypertension requires careful and consistent self-management. Therefore, programs such as this one are crucial in empowering participants to take charge of their blood pressure.

Method/Approach: At the start of the program, participants completed a preliminary test to assess existing knowledge levels of hypertension and self-confidence in managing blood pressure. Throughout the program, free weekly blood pressure readings were available at the YMCA and recorded in a secure database to monitor progress. Participants received individualized support and detailed explanations of their blood pressure readings using the AHA Blood Pressure chart as a reference. Participants were also sent bi-weeky emails containing health information pamphlets and short video presentations covering a variety of health-related topics, including stress management, nutrition, and physical activity. After five weeks, a second self-knowledge assessment was administered to determine if any improvements were made in participants' confidence in and management of blood pressure.

Outcomes/Results: Results from the preliminary test showed that 43% of participants expressed low confidence in their knowledge of blood pressure, and 66% reported taking little to no action towards managing blood pressure. After five weeks of active participation in the program, individuals were asked to repeat the same test, in which confidence levels and efforts to self-manage blood pressure positively increased. As a final takeaway, all participants were given informative pamphlets that provide comprehensive guidance on long-term blood pressure management and additional resources for accessing health information.

Evaluation/Conclusion: According to the follow-up self-knowledge test, a majority of participants (78%) reported having good self-efficacy to manage their blood pressure levels. A significant, positive improvement was also seen in participants' knowledge of the factors that affect blood pressure, with most respondents (89%) answering all of these knowledge-based questions correctly. In conclusion, the program was associated with significant improvement in BP awareness and management efforts among participants. The results of this study suggest that the program was effective in improving participants' self-efficacy and knowledge of blood pressure management, indicating its potential to support individuals in their efforts to regulate their blood pressure levels over time.

Title: Decrease in hospital readmissions in pediatric patients with asthma

Name: Becca Petillon

Preceptors: Marie Gonzalez, MSN, MS, BSN, RN, AMB-BC, Clinical Program Manager

Agency: Hackensack Meridian Jersey Shore University Hospital

Purpose: To decrease readmissions in the pediatric population with asthma by educating patients and their families regarding self-management of asthma. The COACH program provides evidence-based asthma education and resources to help reach this goal.

Significance:\Asthma care programs and education strategies can improve understanding of the condition by both the child and their caregivers (NJSHAD, 2022). It's been found that effective education can improve the self-management of a child's daily breathing, results in fewer asthma exacerbations, are less likely to be readmitted, and have fewer absences from school and work for the caregiver (NJSHAD, 2022). Improving existing education plans will result in fewer hospital admissions. At the same time, the Community Outreach for Asthma Care & Health (COACH) program promotes education in schools, primary doctors' offices, and admissions with consults at the time of hospitalization to lower potential medical complications in the future.

Method/Approach: I worked with the COACH Program by engaging in consultations and education with patients where I showed 3-D models to show the caregiver and patient precisely what is happening, a handout booklet of triggers to look out for, and a coloring book for the child to visually see the type of medicine and breathing treatments they will need to do. I would then place calls a day after discharge, one week, three weeks, and six weeks for verbal communication and reiterated what they had educated me regarding the children's medications, appointments, and triggers. The program also does home visits, and I had taken part by helping to distribute supplies such as mattress covers, humidifiers, HEPA filter vacuum cleaners, and more beneficial home remedies for cleaning supplies and additional resources of family support groups for asthma.

Outcomes/Results: In 2022, the program had 193 hospital admissions. There were 174 COACH consults conducted out of the 193 admissions, and of those that received COACH education, 18 were readmitted within 30 days of education. Of the 174 that received COACH consults, all 174 had received follow-up phone calls and 2 received home-visit education due to COVID restrictions. There were 19 admissions that did not receive a COACH consult, and of those there were 5 readmissions. The readmission rate for those that have received a COACH consult was 10.3%, whereas the readmission rate for those that did not receive asthma education was 26.3%.

Evaluation/Conclusion: Evidence-based asthma education is declining readmissions to the hospital. Evidence-based asthma education is an effective and efficient educational approach. This enables the patient and caregiver to receive an in-depth education regarding their management of their asthma. I suggested that the COACH program also contact families through text messaging, and while it's still too early to see the results of that, the program has adopted my suggestion and we are hopeful it proves to be a success. I also believe that more modern and child-friendly coloring books and educational materials are created to keep the child engaged in asthma education.

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Title: Promotion of Staten Island University Hospital by Connecting with Local Businesses

Name: Leila Pocesta

Preceptors: Megan Kenny and Thomas Blancero

Agency: Staten Island University Hospital

Purpose: To create a Business 2 Business event and work with local Staten Island businesses to promote Staten Island University Hospital and all the hospital's community service.

Significance: Being a major non-profit hospital in Staten Island, initiatives such as a partnership event bring forth local stakeholders to help them understand the significance a hospital brings to its community. By gaining exposure from local businesses, people unite and join in on the cause. Non-profit hospitals heavily rely on donations to fund and support community health projects. One new building of the Staten Island University Hospital (SIUH), the Florina Cancer Center, received large donations from local restaurants and other businesses after last year's Business Partnership Forum. The Florina Cancer Center received \$250,000 from Violette's Cellar, a restaurant in Staten Island and thousands of dollars from Rab's Country Lanes, a bowling alley in Staten Island. Having the community more involved with SIUH, according to a Staten Island news network, SILive, it states: "On Jan. 2, more than 200 guests converged upon Violette's Cellar restaurant for a 'Meatballs and Mixology' fundraiser... The event raised \$325K for the Florina Cancer Center, of which \$250K was donated by Duran and Carr." This year's business partnership will continue to improve the hospital's overall goal of making the Staten Island area a healthier place.

Method/Approach: Since this event is a major project, there are many tasks to complete to put the event together. The most consistent stages of this project involve weekly meetings with the executive director and other members that work alongside the executive director to make this event successful. Within these meetings, the directors delegate specific tasks to complete and plans of action to implement. One major task is completing the presentation for the executive director to present at the forum. The presentation shows updates on capital projects, clinical excellence, and existing business partnerships. Guest contact information is derived from the Staten Island Economic Development Corporation (SIEDC) and a spreadsheet is created to keep track of RSVPs. Flyers are distributed to prospective guests within the Hilton Garden Inn and they are encouraged to attend the SIUH Business Partnership Forum and indulge in complementary cookies and coffee provided by SIUH.

Outcomes/Results: There were roughly 68 guests who attended the Business Partnership Forum which was 20% more guests than last year's event. Every guest who attended were given complimentary coffee, cookies, and SIUH water bottles and sat in for a presentation given by the executive director. After the presentation, local business owners were able to network with members from SIUH and the business owners were more engaged in the ways they could assist the hospital and community outreach programs.

Evaluation/Conclusion: After the conclusion of the Business Partnership Forum, it is apparent that a presentation showcasing the initiatives made by Staten Island University Hospital proved to be successful in obtaining new partnerships with local businesses. By showing past partnerships and clinical excellence, many business leaders and other guests were encouraged to form partnerships with the hospital as well as donate money to the various community health projects and clinical buildings. In the future, it will be beneficial to bring in more business stakeholders in the community and keep increasing turn out. It will also be beneficial to have paper name tags for easier networking opportunities after the event.

Title: Patient & Community Outreach

Name: Katherine Porr

Preceptors: Carisa Almquist

Agency: The Leukemia & Lymphoma Society

Purpose: To create an outreach plan to better expand LLS resources to pediatric families, and local healthcare providers for patient access within the Dare to Dream Project.

Significance: In 1997, the Food and Drug Administration began requiring mandatory trial registration for new medicines being put on the market. The average demographic that are primarily enrolled in clinical trials typically white, male, and between 18 to 65 years old. While over 40% of Pediatric cancers are blood cancers, only 5% of cancer drugs have been approved for first time use in children. The Dare to Dream Project within the Leukemia & Lymphoma Society (LLS) sheds light on how children's bodies are different from adults and therefore may respond differently to approved medicines. Approximately 80% of childhood cancer survivors develop chronic health issues from treatments. Therefore, this project looks to focus on the importance of pediatric focused clinical trials in supporting new research, advocacy and outreach or support.

Method/Approach: The Leukemia & Lymphoma Society has launched the Dare to Dream Project which encompasses the pillars of research, support, policy and PedAL clinical trials. A spreadsheet of patients, healthcare providers, organizations, and other associations within the Illinois/Pacific Northwest region was compiled. These stakeholders were contacted through phone calls, and emails. Messaging included information about partnerships and a reminder to utilize all the services that LLS offers. The Dare to Dream ambassador furthered these outreach efforts by posting to social media sites such as Facebook, Instagram, etc. This project focused primarily on improving patient access to treatments, support and awareness through the Dare to Dream Project.

Outcomes/Results: Fifteen individuals and three healthcare organizations were identified and contacted. These efforts resulted in 15 new patients in the Pacific Northwest region who were responsive to LLS outreach. Pamphlets and referrals were sent to each new contact, which included local healthcare providers in their area. Those who did not answer the phone, or email were sent a follow up email and voicemail. The 3 healthcare organizations that were responsive to our outreach efforts were given a refresher on the resources and support services available. Associations who did not already know about LLS or what we have to offer, were notified of partnership opportunities. The Pacific Northwest region hopes for an improvement in patient outcomes and treatment service utilization as well.

Evaluation/Conclusion: The Leukemia & Lymphoma Society Pacific Northwest region has recognized an increasing number of patients and their families utilizing LLS services and resources. Through this, pediatric families will be able to access more opportunities for financial aid, developing treatments, and one-on-one support from the LLS team. As a result of the Dare to Dream Project, there are more robust support and treatment opportunities for pediatric patients and their families.

Title: Inclusive Community Assessment on residents living with disabilities in Nutley

Name: Jailene Quiles

Preceptors: Katherine Carmichael, Executive Director

Agency: Nutley Family Service Bureau

Purpose: To conduct an Inclusive Community Assessment in Nutley Township to improve, enhance and increase community services for people living with disabilities within Nutley.

Significance: About 61 million adults in the United States have some form of a disability, with 11% having a mobility disability (CDC, 2022). About 21% of New Jersey residents of 18 years or older are living with a disability, which is about 1 in 5 adults in New Jersey (CDC, 2022). State rankings rank New Jersey 35th out of all states among best livable states for people living with a disability (Myers, G, 2021). While the Americans with Disabilities Act mandated handicapped parking spaces and wheelchair accessible bathrooms by law, many places still remain inaccessible to those who have a disability in New Jersey and other states (Liu, O, 2023). This is mainly due to Disability prejudice, and a lack of consideration when constructing these spaces (Pulrang, A, 2019). Nutley Family Service Bureau is a non-profit organization that works to strengthen the emotional and social wellbeing of individuals in families through mental health counseling and social service programs in northern New Jersey. This project aims to complete a Public Spaces Assessment that will help identify public spaces in Nutley that are inaccessible to people with disabilities and will guide recommendations for future changes.

Method/Approach: A Public Spaces Assessment was created to gather information and data about accessible and inaccessible areas in public spaces in Nutley. Before viewing public areas, different public spaces were categorized into 4 groups; Parks and Recreation, Publicly Funded Entrances and Egress, Parking and Parking Lots and Sidewalks and Curbs. In the parks and recreation group category, 3 public parks were inspected. For publicly funded entrances and egress, 4 publicly funded buildings were viewed. 2 municipal lots and public parking areas were viewed for the parking and parking lots category. For the sidewalks and curbs category, 1 public football field entrance sidewalk was viewed. Observation tool assessments were used during our visits with yes and no questions related to each public space's accommodations and accessible and inaccessible features related to; accessible parking, accessible areas in parks and accessible entrances to public buildings.

Outcomes/Results: Results showed that 2 out of 3 public parks had inaccessible features regarding lack of wheelchair ramps and resting areas and entrance/exit hand railings. In addition, 3 out of 4 publicly funded buildings have inaccessible features like inaccessible entrances and exit doors and a lack of accessible wheelchair ramps. Furthermore, 3 out of 4 public parking lots which included both municipal lots and street parking had a lack of or no accessible parking spaces, with most having less spaces than the law enforces. Lastly, 1 public sidewalk and curb had inaccessible features that consisted of unstable sidewalk pavement, a lack of curb cuts and no resting areas.

Evaluation/Conclusion: With no one noticing the inaccessibility within public spaces but individuals living with a disability, they are left to adjust their ways of living or advocate for themselves. Going to these public spaces surprised many employees who worked at them with many not realizing how inaccessible they were. The findings of this Needs Assessment will provide Nutley public officials with recommendations as to what can be done to create a more accessible community for those living with a disability.

Title: Maternal Mortality and Social Determinants of Health - White Paper

Name: Hemang Rana

Preceptors: Fatimah Muhammad, Director of 340B Pharmaceutical Services and Drug

Reimbursement at Saint Peter's Healthcare Systems

Agency: Saint Peter's University Hospital - 340B Pharmaceutical Services Department

Purpose: To examine how maternal mortality is affected by the social determinants of health through poverty, racism, inadequate access to healthcare, and other structural factors and what policy solutions can help improve maternal health equity.

Significance: Maternal mortality is a critical public health issue, and the US has a high rate compared to other developed countries, with around 700 deaths annually due to pregnancy or delivery complications (CDC). Social determinants of health like poverty and lack of access to healthcare services significantly impact maternal health outcomes. The 340B Drug Pricing Program provides discounted drugs to eligible healthcare organizations serving vulnerable and low-income populations, including pregnant women. The program aims to improve access to affordable drugs and comprehensive care, and hospitals participating in the 340B program had lower maternal mortality rates. The program is essential in addressing maternal mortality related to social determinants of health, and is crucial to improve maternal health outcomes in vulnerable and low-income populations. With an overall aim of publishing a white paper on maternal health and the social determinants of health, the scope of this project is to conduct background research on maternal morality and write the introduction section of the above-mentioned white paper.

Method/Approach: A literature review was completed identifying maternal mortality and the social determinants of health using sources such as Google Scholar, Rutgers Libraries, PubMed, and JAMA. Keywords that were used in the research were maternal mortality, social determinants of health, health disparities, healthcare access, pregnancy complications, obstetric care, affordable healthcare, 340B program, covered entities, low-income populations, vulnerable populations, health equity, and health insurance. A review was conducted to identify the best practices for maternal health across various sectors in government and the nonprofit space. As a result, a 2-page introduction was written for the white paper.

Outcomes/Results: Maternal deaths in the US increased in 2020 to 23.8 deaths per 100,000 live births, up from 20.1 deaths in 2019, with two-thirds of these deaths being preventable. New Jersey ranks 47th in overall maternal mortality rate, with 28 deaths per 100,000 women who gave birth in 2020, fluctuating from 47 deaths in 2019 and 38 deaths in 2018, according to Nurture NJ. There are also significant racial disparities in maternal and infant mortality rates in the state, with Black mothers being seven times more likely to die from pregnancy-related complications than white mothers. Additionally, Black newborns are three times more likely to die before their first birthday than white babies. This is due to a lack of access to high-quality prenatal care, a higher prevalence of chronic illnesses surrounding certain populations, socioeconomic difficulties, implicit biases in healthcare delivery, and other social determinants of health.

Evaluation/Conclusion: A satisfaction survey will be distributed to the 340B Pharmaceutical Services Department and other health departments to evaluate the white paper's effectiveness. Additional evaluation methods will be determined by the 340B team's consensus. Following the white paper's publication, the team will present their research to the Health Financial Management Association (HFMA).

Title: Analysis of the Coalition to Transform Advanced Care's Marketing Strategy

Name: Sarah Ranji

Preceptors: Jennifer Driscoll, Operations Director

Agency: The Coalition to Transform Advanced Care

Purpose: To conduct a project evaluation using data regarding the marketing strategy and engagement within the coalition to better improve its analytics.

Significance: Approximately 45 percent of the U.S. population, or roughly 133 million Americans, suffer from at least one chronic illness. Serious illnesses not only impact one's health, but it also has a substantial impact on one's mental health and finances for both those who are affected and their families, as well as caregivers. Given the high prevalence of serious illness in the United States, these statistics indicate the urgent need for more awareness and outreach to help those who are impacted by it. The Coalition to Transform Advanced Care is dedicated to transforming the healthcare landscape by partnering with it's members to advocate for those impacted by serious illness and champion policies that are more equitable and properly funded.

Method/Approach: By analyzing the engagement analytics of CTAC over the period of one year, we identified what marketing methods were successful and in need of improvement. First, analytics for Facebook, Twitter and Linkedin, were reviewed using Hootsuite. Starting from January 1st 2022 to April 30th, key trends and their coinciding content were noted. Next, data was pulled and analyzed from Mailchimp, which is used for sending weekly newsletters. Then utilizing the data gathered and the goals of the organization, a list of improvements and recommendations for strategy were compiled to enhance the marketing department.

Outcomes/Results: When reviewing the industry benchmarks, competitors within the industry have around 29k social media impressions whereas CTAC has 1.2k. This is 95.8 percent lower than the industry average indicating a change in strategy must be made. The newsletter in particular is the most effective way of connecting the organization directly to their members which allows for more engagement and funding to come in. With an average click rate of 2% for the newsletter, posts centered around events and personal stories (changemaker interviews, patient caregiver stories, etc) produced a click rate of 1.75% higher on average. Twitter also seems to be the platform with the biggest reach with 2.4k followers, a significantly higher amount than the other platforms that are being utilized. LinkedIn also has the highest post engagement rate of the other platforms with a 6.3 percent engagement rate and 127 page impressions. The organization should expand their platforms to grow with the changing face of social media, such as entering the digital shorts space.

Evaluation/Conclusion: The marketing goals to improve engagement and awareness of the organization are as follows: Implement outreach strategies to increase demand and fundraising around products C-TAC is developing, such as the ACT index and Payor Toolkit. Next is to further develop Patient and Caregiver / Changemaker stories that point to the Blue Chair Fund to fundraise and promote the organization's mission. Additionally, the department should continue to track the analytics to develop and deliver messages tailored for subset groups inside the membership and increase response rates. Lastly, CTAC should develop a database of "B roll content" to be utilized routinely as content is pushed out. This B roll content can also be utilized to enter the digital shorts space, where content is presented more effectively in under 30 seconds to the audience.

Title: Increasing patient satisfaction within RWJUH through clinical and nonclinical initiatives

Name: Madeline Ravallo

Preceptors: Patricia "Trish" James DNP MS, RN, CCRN, NE-BC, AVP of Inpatient Cardiology and

Medical Surgical Services

Agency: Robert Wood Johnson University Hospital

Purpose: Increase patient satisfaction and outcomes through patient outreach initiatives such as Vocera Ease.

Significance: Patient engagement has been regarded as the cornerstone of quality of care (Darzi). There have been significant advancements to improve patient engagement within the healthcare field in the past five years. Among them is the implementation of an upgraded Hospital Consumer Assessment of Hospital Providers and Systems (HCAHP) survey. This has been adopted by many systems, including Robert Wood Johnson Barnabas Health's University Hospital (RWJUH). It was revealed in 2022, through a HCAHP overall hospital satisfaction percentile rank of 22 (N3328), that there were opportunities to improve patient engagement within RWJUH. As HCAHP scores increase in importance, the implementation of a patient-engaging software called Vocera Ease gives us tools to connect with patients and their families.

Method/Approach: Vocera Ease is a one-way, HIPPA, and HITECH compliant communication software. The software is compatible with the hospital identification band's QR codes to connect them to an app that sends a chosen message when scanned. The patient can pick who receives these updates. Vocera ease in its pilot stages was implemented in Same Day Surgery (SDS), where patients were signed up upon admission, and their chosen family members received preloaded messages throughout the patient's time in SDS, the operating room, and recovery. Clinical and nonclinical staff were trained to educate patients and their families, enroll the patient, and explain the app during their stay.

Outcomes/Results: Prior to the implementation of Vocera Ease, SDS patients and their families had to wait in the surgical waiting area to receive updates. The software allows for real-time updates to be sent securely anywhere in the U.S. or Canada. In the first month of rollout, 165 new sessions were started, with 383 messages sent. There was a significant increase in the second month, with 431 new sessions and 2,195 messages sent. These 2,195 messages spanned 18 states and 47 area codes, all under RWJUH.

Evaluation/Conclusion: The increased amount of enrollments to Vocera Ease is not only a figure for the number of people who signed up for the app but a testament to RWJUH's dedication to patient experience. These individuals are patients and families who feel connected to their care. Since the start of the new year, HCAHPs scores have increased since those in 2022 to a 29 percentile rank (n704) in overall rating, and the top box scores for communication with nurses went from 71.27 in 2022 to 76.51 in 2023 with credit to Vocera Ease and the opportunities it has created for patient/provider connection. In time, measures such as Vocera Ease will allow for more patient connection-centered initiatives to be implemented.

Title: Facilitation of Data Collection for the Grant Management Bureau

Name: Maria Jose Reyes Santos

Preceptors: Brian Doering

Agency: New Jersey Office of Homeland Security and Preparedness (NJOHSP)

Purpose: To enhance and expand the capacity of data collection by improving audit reports for analysis of data from various fiscal years.

Significance: After the September 11th terrorist attacks, the state of New Jersey, with the collaboration of the United States Federal government, worked to protect, intercept, counter, and recuperate from terrorism attacks and disastrous threats. In order to continue with the State's mission, the Grant Management Bureau supervises the administration of Federal grants and State-led grant initiatives. The different core grant phases allow NJOHSP to guide subrecipients in projects while staying within the corresponding Federal Emergency Management Agency (FEMA) and Department of Homeland Security (DHS) guidelines. Data collection is pivotal to ensure the compliance requisites, training, and further necessary measures to keep New Jersey safe. This project aims to aid both grant liaisons and the Grant Management Bureau Chief to easily collect and analyze data to best administer funds and monitor programs.

Method/Approach: After reviewing each question from the existent compliance monitoring report, a compliance book was created with newly developed questions to facilitate an easier transition to new liaisons. Through the use of Microsoft Word and Adobe Acrobat, in-text spaces were created for incorporating supporting documentation. Additionally, a table of contents was created to facilitate the location of sections by headings.

Outcomes/Results: The renovation of the compliance monitoring report and the creation of a compliance book represents a comprehensive and thorough review of compliance and monitoring efforts from both the subrecipient and the grant liaison. Furthermore, an executive brief section was created to integrate a high-level summary at the beginning of the compliance book. This resulted in providing liaisons from both nonprofit and county regions a better perspective on the necessary guidelines to fully analyze and develop audit findings. Additionally, by utilizing the table of contents, report analysis became easier to locate and access by the chain of command. Altogether the compliance monitoring report is composed of sixteen pages while the compliance book is composed of nineteen pages.

Evaluation/Conclusion: Maintaining an accurate and accessible compliance monitoring report is crucial for the Grant Management Bureau to successfully administer Federal grants to counties and organizations throughout the state. Moreover, the purpose of audit reports and a compliance book is to provide comprehensive and detailed information to the bureau's Chief about designated findings. By enhancing data collection throughout the different core phases of the grant management process, liaisons and coordinators are able to assure financial reliability and compliance with federal regulations.

Title: Analyzing the Current Marketing Strategies of HOPE's Peer Education Program

Name: Ashlyn Riviere

Preceptors: Mark Cruz

Agency: Health Outreach, Promotion & Education

Purpose: To analyze the current marketing strategies for HOPE's Peer Education program and develop a more successful marketing plan to increase engagement.

Significance: As of Fall 2022, over 48,000 undergraduate students were enrolled at Rutgers University. Rutgers Student Health seeks to provide primary care for all enrolled students. The university employs physicians, nurse practitioners, physician assistants, registered nurses, health technicians, psychiatrists, psychologists, clinical social workers, and substance abuse counselors that are equipped with the knowledge and expertise to treat students. In addition to traditional healthcare, Rutgers University, through its health promotion department (Health Outreach, Promotion and Education or H.O.P.E), conducts about 300 workshops a year on issues that directly impact students' lives. These issues include sexual health, alcohol and other drugs, mental health, and nutrition. Since the onset of the COVID-19 Pandemic in 2020, H.O.P.E staff and educators have noted a significant decrease in student engagement and participation related to H.O.P.E workshops and programming. The goal of this project is to develop marketing strategies and materials that promote H.O.P.E to increase student engagement and enable peer educators, faculty, and staff to better meet the needs of students.

Method/Approach: A review of the Rutgers Student Health Social media profiles, specifically their Instagram account, revealed that in the last two years only four posts were published about H.O.P.E. The four posts totaled about 57 likes. The Rutgers Student Health accounts do not promote H.O.P.E on a frequent basis and the related content is not engaging to their target audience. This project started with creating flyers on Canva that were posted on Reddit regarding Sexual Health Week. Other flyers were created about Mental Health and Wellness, as well as to promote SHADES Theater. Initial discrepancies between the Marketing Team's requirements and the desires of H.O.P.E's Peer Educators and staff as it pertains to social media content caused this project to change direction. After meeting with marketing, the goal is to create a "H.O.P.E Marketing Plan" that outlines plans for the next academic year beginning with Summer 2023. The plan should include 3-5 ideas for marketing, as well as a calendar outline with themes and content ideas related to the theme.

Outcomes/Results: The Rutgers Student Health page is managed by the Rutgers Marketing Department. Although posts were created on Canva for this project, due to strict marketing guidelines for social media posts, the materials were not shared. However, flyers were created for Sexual Health Week that were approved by marketing and authorized to be shared on the Rutgers Reddit page. The two flyers received a total of 6.3k views, 1 share, 3 comments, and an 83% Upvote Rate. The content shared on Reddit received positive feedback and attention from Rutgers students, in a short amount of time. Using key phrases such as "Free Food," for example, doubled the post's views and engagement.

Evaluation/Conclusion: It is evident that sharing content that highlights topics that students are interested in, or incentivizes students in some capacity, increases engagement. Based on this finding, the H.O.P.E Marketing Plan will include some suggested topics and incentives (such as RU Express Gift Cards, food, etc.) that can increase student engagement with the Rutgers Student Health social media accounts, and subsequently their resources and programming throughout the next academic year.

Title: The More You Know about Alcohol

Name: Jasmin Ross

Preceptors: Sharonda Amon, Coalition Coordinator & Mara Carlin, Director of Prevention Services

Agency: Wellspring Center for Prevention, East Brunswick, NJ

Purpose: Develop a prevention presentation on the harmful effects and consequences of underage drinking for 10th graders.

Significance: Underage drinking is becoming more of a noticeable public health issue in society, not only with high school students, but also with younger generations. Alcohol is the third leading preventable death in the United States. Every year, about 95,000 people die due to alcohol related incidents (NIAA, 2022). Studies show that youth in New Jersey are experimenting with alcohol at a rate much higher than the national average. Approximately 407,000 underage youth in New Jersey drink every year. Wellspring Center for prevention provides six week educational and interactive presentations to grades 6-8 on how alcohol works in our bodies, what BAC level is and the consequences of binge drinking. Students are also informed on signs and symptoms of alcohol poisoning, and what the good samaritan law entails. Underage drinking should not be a normal thing. This presentation will use the testimonies and advice of college students/young adults, facts, and interactive activities to boost the understanding of what alcohol does to an underage body, why the legal age to drink is 21 and how to avoid binge drinking to combat this issue.

Method/Approach: A preliminary presentation was given to three volunteer 10th grade students and to six members of the Underage Drinking Task Force to determine the effectiveness of the presentation. A pretest was given to said 10th graders in Middlesex county schools to evaluate their knowledge of the harmful effects of alcohol. The survey was administered electronically through a shared link, and was based on the information that participants received from the presentation. A series of interactive questions were asked in order to have an engaging discussion, get the participants thinking and to assess how well they were retaining the information given. At the end of the presentation, participants were given a post survey to complete to determine the effectiveness of the alcohol prevention presentation. Following the post survey, the participants were asked to give their feedback on how effective the presentation was at portraying the information.

Outcomes/Results: After giving the pretest survey, we found that 1 out of 3 (33%) participants thought that the legal BAC for someone under the age of 21 was 0.8%, 1 out of 3 (33%) thought that alcohol damages your brain, speech, and liver only, 3 out of 3 (100%) thought that youth who start drinking before age 18 are 6.5 times more likely to develop alcohol dependence or abuse later in life, 3 out of 3 (100%) thought that a blackout is when a person has been drinking so much that they cannot remember the events of the night before, 1 out of 3 (33%) thought that if you are underage, and someone they know starts experiencing signs of alcohol poisoning, that that they cannot call the police because they will be arrested for drinking as well, 1 out of 3 (33%) thought that alcohol enters the bloodstream in about 20 minutes, 2 out of 3 (66%) thought that about 12% of all highway fatalities involved alcohol.

Evaluation/Conclusion: After the presentation, participants were given a post survey, where 3 out of 3 (100%) scored 10 out of 10. This proves that the presentation was effective in giving students the proper knowledge about alcohol and its effects on the underage body. It was also effective in keeping the students engaged so that they can properly receive the information given to them.

Title: Implementation of Physical Literacy Curriculums in K-2

Name: Sara Rubiano

Preceptors: Erin Comollo, Ed.D

Agency: New Jersey Healthy Kids Initiative

Purpose: The purpose of this study is to assess the effectiveness of a twelve-lesson curriculum, consisting of six physical literacy and six nutritional literacy lessons, in promoting healthy lifestyles and physical activity among elementary school students in grades K-2.

Significance: The COVID-19 pandemic has led to decreased physical activity levels among adolescents due to changes in school and sports-based programs. This is a concern because students may not meet the recommended key guidelines for physical activity, which can lead to childhood obesity and the development of chronic diseases (CDC). Between 2019-2021, there was a decrease in the percentage of students who exercised to strengthen or tone their muscles on ≥3 days/week, as well as a decrease in the percentage of students who attended physical education classes on all 5 days. These declines were observed across various demographic groups, including female, Black, multiracial, male, Asian, and Hispanic students. The New Jersey Healthy Kids Initiative (NJHKI) aims to address this issue by promoting physical literacy and providing students with the skills and knowledge to lead a healthy lifestyle by consistent opportunities to practice these behaviors.

Method/Approach: A pre-survey was conducted in grades K-2 to assess students' physical capabilities in four different schools in New Jersey. Six physical literacy lessons were administered, followed by a post-survey to determine the effectiveness of the curriculum. The data collected from consenting students were paired with unique de-identification codes for analysis. The pre and post-survey scores were compared to assess whether students had improved on the physical abilities tested, which included throwing a ball, skipping for 25 feet, walking in a straight line for 20ft, and jumping for a minute. Participants were assessed on a three-point system (3 indicating poor form, 2 indicating improvement needed to reach ideal form, and 1 indicating desirable form).

Outcomes/Results: The analysis of the pre and post-assessment data showed an overall improvement in students' physical abilities. At Benjamin Franklin Elementary, 62 students were tested, and only 25 students consented to participate in the publication of the data. The average walk score improved from 2.04 to 1.52, the average jump score improved from 1.4 to 1.28, and the skip score remained the same.

Evaluation/Conclusion: Although the students' skipping ability did not improve at Benjamin Franklin Elementary, their walk and jump scores showed improvement after the completion of the program. The walk score improved by 0.52, while the jump score only improved by 0.12. Although the improvement in physical abilities was slight, students' commitment to stay active suggests that they are aware of the importance of physical activity for their health and well-being. One limitation of the study was the need for parental consent, which narrowed the use of actionable data and did not accurately depict the number of students who benefited from the physical literacy lessons. To improve the program, NJHKI plans to expand to other school districts to assess its broader impact and increase the number of lessons for better data accuracy. With these newfound skills and knowledge, students can implement them into other facets of their physical education. The benefits include maintaining a healthy body weight, reducing the risk of developing health conditions, and improving mental health.

References

Title: Marketing for Direct-to-Consumer Health and Wellness Companies

Name: Sonam Rupani

Preceptors: Vaidhy Murti, CEO & Founder

Agency: Wit Labs Inc.

Purpose: To create and analyze tailored marketing campaigns for direct to consumer health and wellness companies in efforts to amplify their exposure to their target audience

Significance: The health and wellness industry is expected to grow at an annual rate of 10.9% as digitization of health continues to become more popular. One specific company, 'hims & hers', empowers consumers to choose better health options by providing convenient products and services to improve overall wellness through supplements and self care products. The women-focused brand, 'hers', launched in November 2018, is fairly new and has limited marketing strategies such as social media and partnerships with celebrity influencers. A substantial majority of 'hims & hers' revenue, 83%, is derived from subscription-based purchases of prescription products, although the company also offers products related to hair care, skincare, supplements, sexual health in addition to their online prescription and care services. As financial conditions and ROI are highly dependent on a company's ability to adequately promote and market its products to attract customers, 'hims & hers' could benefit from additional marketing strategies tailored to promote their non-prescription wellness products. Wit Labs Inc. works to design brand-focused marketing campaigns for direct-to-consumer companies, which can boost brand exposure by up to 400%. This project involves developing marketing strategies for the potential new client, 'hims & hers', and conducting outreach to the company to provide them with projected growth estimates for the demonstrated marketing campaign.

Method/Approach: The marketing methods, product and revenue breakdowns, and business model of 'hims & hers' were researched by reviewing the company's 10-K for the the fourth financial quarter of 2022. Wit Labs Inc. uses interactive and engaging marketing campaigns to attract more customers. The specific design used for this product involved a "Spin-to-Win" activation, which involved a prize wheel featuring hers' line of women's probiotic supplements. The design involved a catchy introduction to the campaign and product, carefully chosen color palettes, and offered a chance to win three of their most popular products and online discounts. Once the campaign was complete, a personalized e-mail was sent to 9 'hims & hers' employees specializing in growth marketing or innovation.

Outcomes/Results: An official partnership between Wit Labs Inc. and 'hims & hers' has yet to be established at this time due to the long client acquisition process. However outreach has been conducted and the targeted employees have been interacting with the e-mail. This project served as a method to facilitate the beginning of Wit Labs Inc.'s expansion into the health and wellness sector as a continuation of their expansion into the retail sector. As of April 2022, there is an expected open rate of 66% for cold outreach emails to 'hims & hers' employees within the growth marketing and innovation departments. Efforts will be continued until a response is received. Due to market research conducted on health and wellness companies specifically, Wit Labs Inc. can expand their retail consumer base by 11.9% by targeting marketing efforts to direct to consumer health and wellness brands.

Evaluation/Conclusion: This project served as an opportunity for Wit Labs Inc. to gain a more focused understanding of the business models of health and wellness companies, allowing them to expand their potential client base. The research and outreach conducted can support Wit Labs Inc.'s expansion into the retail marketing space.

Title: Expansion of Student Involvement and Forming a Student Program

Name: Janine Rupinski

Preceptor: Marissa Schwartz- Community Events Manager

Agency: Cookies For Kids Cancer Non-Profit Organization

Purpose: To increase fundraisers and networking of high schools and colleges nationwide to expand student involvement within the Cookies For Kids Student Ambassador Program.

Significance: Every year, hundreds of volunteers come together to raise funding for non-toxic pediatric cancer treatments, according to the 2021 Cookies for Kids' Cancer Annual Grant Recipient Report. Since the start of the fundraising efforts, nearly eighteen million dollars have been raised by a total of sixteen thousand participants. These funds have been disbursed to more than one hundred pediatric non-toxic treatment studies around the United States, which have resulted in the research and development of twenty-five new treatment alternatives overall. Student involvement has been insufficient within the organization, and the organization believed that adding the diversity and growth of students could improve the organization tremendously. These research outcomes demonstrate the significance of these fundraisers and their potential for even greater funding opportunities, along with student engagement levels (Cookies for Kids', 2021).

Method/Approach: In order to boost fundraising and student involvement on a national level, the student ambassador team began by emailing colleges and high schools in every state nationwide. The ambassadors prepared a spreadsheet for maintaining records of all their probable student involvement and to document the overall development in order to evaluate their progress. The spreadsheet includes the date of contact, the contact information, and their success rates. After analyzing data and success rates from prior bake sales and other fundraisers, the ambassadors created an appropriate internship program for the organization. In an effort to promote the organization and the opportunity to intern, the ambassadors created social media posts along with additional content for the organization's social media platforms. The student ambassadors were able to provide necessary information for potential students through the development of the student ambassador webpage. The website will contain the necessary information for the program to grow effectively and efficiently.

Outcomes/Results: New social media material and increased engagement from colleges, institutions, and high schools around the nation were part of the planning and execution of the Student Ambassador Program. More than forty-five states around the country were able to reach out because of these initiatives. The establishment and continued growth of the Student Ambassador Program will give the organization an opportunity to learn from a wide range of perspectives and enhance learning opportunities for every individual involved. The company will, over time, be able to broaden the opportunity for its students to network with working professionals and take part in more extensive learning opportunities.

Evaluation/Conclusion: Through persistent outreach, program development, and social media content creation, the Student Ambassador Program is successful in offering assistance and continuing support to more non-toxic pediatric cancer treatments. The establishment of the internship program will be advantageous to the organization and prospective students because it will enable broader volunteer expansion and provide an opportunity for ongoing improvement. Every year, the ambassador program's performance should be reviewed in order to make the necessary adjustments and increase the degree of involvement and general efficacy of the program's participants.

Title: Commercializing and Marketing of CityMD-Summit Health Urgent Care

Name: Asya Sakar

Preceptors: Angela Gallucci- Site Manager

Agency: CityMD (Summit Health) Urgent Care

Purpose: To inform NJ/NY residents of possible care options and acuity levels offered at CityMD urgent cares.

Significance: The shortage of primary care doctors is one of the biggest problems facing the United States healthcare system. In fact, one in five respondents to a 2016 National Public Radio (NPR) study said they had been unable to see their primary care physician in the previous two years due to a lack of appointment dates. American Board of Physician Specialties. (n.d. 2023) The lack of trained medical personnel who can provide service and treatment in a quick, affordable, and convenient manner is a problem the healthcare system has been attempting to solve. The Urgent Care Medicine delivery model has been well received by the American people for this reason, but is not a known alternative to many. In marketing and commercializing the acuity and treatment options provided at CityMD urgent cares, more residents of NJ/NY will be informed of a new possible care option.

Method/Approach: The frequency of patients seen and treated in the new Middletown site will be recorded for 2 months along with data from a different site opening in Long Island that has not been as marketed as efficiently. With the social media presence, advertisements, and pamphlets, patient frequency data from both sites will then be calculated and compared to observe if the extra marketing of Middletown was successful. The number of patients seen and treated at the Middletown site compared to the Long Island location is projected to be greater as more people from Middletown and neighboring cities will be more informed on the presence and acuity of the Urgent Care.

Outcomes/Results: In marketing the new Middletown site via pamphlets, commercials, advertisements, and a social media presence, as projected, Middletown experienced a higher volume of patients in the 2 months of recorded data compared to the Long Island location. In the two months (February 2023- March 2023), 1012 patients were seen at Middletown, with 849 patients seen in Long Island. With an online presence, such as the CityMD- Middletown's Facebook page, many patients expressed that they became aware of our new site from social media and the pages created to inform the community of their presence. Other sites now have a Facebook page in hopes of further marketing CityMD locations.

Evaluation/Conclusion: With the observed 18.2% higher volume of treated patients at Middletown, a city with less population than Long Island, it can be concluded that the extra steps taken in marketing the site proved to attract more patients. To be successful, urgent care practices today need a strong digital presence and an online marketing strategy to attract patients. The content on CityMD websites and or social media can help satisfy patients' search queries while making them aware of the practice and the levels of acuity offered. When inquiring about how patients learned of the site in the first month, it was apparent that the advertisements played a great role. After some time, patients were expressing that a family member and or friend referred them. The marketing tactics helped attract patients that turned into a referral chain; without the first patients who experienced the marketing, the percentage of referred patients would also have been significantly less. This strategy can be further observed by looking into how all patients were informed about the location; if majority are from the marketing and/or referral process, the strategy would prove successful.

Title: Influence of Social Media Marketing on Family Medicine

Name: Harnoor Sandhu

Preceptors: Dr. Manish Patel

Agency: Dr. Manish Patel, MD Internal Medicine Office

Purpose: To attract new and younger patients to the primary care office through spreading awareness about the importance and preventative medicine and analyzing the impact of Instagram on the office.

Significance: In a society where many people ignore their preventative care and primary care, patient outreach may better keep patients motivated and informed. Studies indicate that sixty percent of physicians have found it favorable to engage with patients through social media posts encouraging behavioral changes and health monitoring (Ventola CL, 2014). With direct reminders from your primary care office, people are more likely to adhere to healthy lifestyle habits. Dr. Manish Patel's internal medicine office lies in Elizabeth, New Jersey. Elizabeth falls in the bottom five zipcodes of healthcare vulnerability in New Jersey, and thus this may be a good way to reach out firsthand to this community (CHART, 2019). Since preventable health is often ignored, especially by younger individuals even if they live in an area that is susceptible to health issues, they are an important population to target. Furthermore, my goal is to attract a younger patient base to the office. Since social media is a predominant way that young adults hear of new places, it will help get the word around.

Method/Approach: The main tool I utilized for planning to attract younger patients was social media. A large problem I saw when looking at the lower younger patient population was that many people do not visit the doctor until there is a problem present. Thus, they may not see a doctor as much when they feel young and healthy. However, I tried to emphasize to each young patient that came in that preventative care was vital through front desk patient interactions. My initial goal quickly changed from bringing in new patients to learning how to better retain current ones. In addition to this, I set up an Instagram for Dr. Manish Patel's office where I mainly post infographics. I advertised this Instagram at the office. I have been focusing on engaging with the patients through polls and PSA type of posts. This did increase outreach to this population, as I believe patients felt more connected to their doctor directly by seeing health reminders come up on their feed. The first post received seven comments, which went up to twenty-two comments in a later post. Through polls, I was able to check in on how often patients have been in for preventative care visits and encourage them to come in more frequently along with providing infographics on the importance. This was an indirect way to remind patients and stay connected with them.

Outcomes/Results: After collecting this data, I do not believe that creating the Instagram largely changed patient visitations in the office. This is because those who were exposed to the Instagram or were likely to engage in it were patients of the office that were already actively seeking care. Although each post and poll did get interactions and there was a 31.8 percent growth in engagement throughout, it was often the same patients who are familiar with the staff and office who were engaging. However, speaking to patients in person about coming back for routine checkups helped people make their next appointment at the office. I did not see any potential new patients follow the Instagram.

Evaluation/Conclusion: In conclusion, the Instagram account that was created was successful for engaging with active patients. It was beneficial to be able to send out health reminders and put out polls so patients can see for themselves if they are following health habits. On the other hand, I do not believe social media succeeded in attracting new and younger patients to the office.

Title: Assessing Six Graders' Knowledge Acquisition Regarding Medication Safety

Name: Noelle M. Santos

Preceptor: Diana J. Starace, Injury Prevention Coordinator

Agency: Robert Wood Johnson University Hospital Trauma and Injury Prevention

Purpose: To increase knowledge and promote safe medication practices among six graders from Lincoln Middle School in Dunellen, New Jersey, utilizing the evidence-based Scholastic Over-The-Counter Medicine Safety curriculum.

Significance: Scholastic research states that young people begin to self-medicate with over-the-counter (OTC) medicine around 11 years old. While OTC medications can be safe when taken as directed, medication errors and misuse can be extremely harmful to one's health. More than 85,000 children, ages 19 and under, require medical attention each year due to medicine mistakes or misuse according to the American Association of Poison Control Centers (AAPCC). This evidence provides a clear need to increase OTC medication knowledge and promote safe medication practices among young people. To address this issue, the RWJ Injury Prevention Program provides the Scholastic Over-The-Counter Medicine Safety curriculum annually for students in Dunellen, New Jersey.

Method/Approach: The evidence-based Scholastic Over-The-Counter Medicine Safety curriculum was implemented to increase knowledge and promote safe medication practices among six graders at Lincoln Middle School in Dunellen, New Jersey. The curriculum consisted of four weekly lessons. The students completed a pre-program assessment in class to measure baseline knowledge of OTC Medicine Safety. The weekly lessons were then implemented by a group of healthcare professionals paired with public health interns. Lessons covered safe dosing, storage and disposal of medications, and associated risks and resources. After the last lesson, a post-assessment was given to the students to measure knowledge acquisition.

Outcomes/Results: Of the sample size (n=100), the pre-assessment indicated that the average score of the students' overall knowledge and understanding of OTC Medicine Safety was 63% (Average score:19/30). The post-assessment showed an overall increase in knowledge and understanding of OTC Medicine Safety (Average score 73%: 22/30). Overall, data related to the individual questions showed overall students who selected the "Not Sure" option during the pre-test selected the correct answer during the post-test. For example, in the pre-test, the question, "The local poison center is a good place to call if someone has taken too much medicine", 49 students responded "True", 36 students responded "Not Sure", and 15 responded "False". In the post-test, 73 students responded "True", 9 students responded "Not Sure", and 9 responded "False".

Evaluation/Conclusion: Overall, knowledge of OTC Medicine Safety increased by 10% and knowledge related to individual questions increased by 20-30% over the course of four weekly lessons. Although the program was effective, the limitation of the program's implementation was the behavior of the students and the students' inability to focus. To address this, family resources were sent home after each lesson to reinforce what the students learned in class as well as encourage parental/familial support and involvement. The resources were provided in English and Spanish to reach the diverse Dunellen population.

Title: Suicide and Mental Health Survey Assessment

Name: Leslie Sarabia

Preceptors: Tamanna Ahsan, Manager

Agency: Robert Wood Johnson University Hospital

Purpose: To observe patients with suicidal and mental health illnesses and come up with solutions to decrease the number of cases in the United States.

Significance: Mental health illnesses and suicide have always been prevalent in the U.S. "Over 50 million Americans go through some sort of mental illness, and not all of them report it" (Mayo Foundation, 2022). Suicide is one of the leading causes of death amoung individuals that are between 15-29 years old (World Health Organization, 2023). People with mental health illnesses tend to experience discrimination and stigma and would rather not say they have suicidal thoughts or mental health issues. About 42% of older individuals suffer from depression, and they cannot get treated because they do not have the necessary means to pay for their treatment (The State of Mental Health in America, 2023).

Method/Approach: Patients were handed a survey, which was collected by their 1:1 after 3 hours. The steps involved are observing the patients and taking notes on the concerns in their life. Many individuals that come into the hospital tend to have similar things in common that makes them feel suicidal. Some of the similarities between these individuals are that they want attention or feel left out at school or home. The project is conducted with patients who agree to answer survey questions and give solutions to decrease the idea of suicide. Other patient characteristics will depend on the category they are divided into: suicide, suicide attempt, or suicide ideation. The tasks of a Patient Monitor require careful and close observations of patients with a mental illness or are suicidal. The role is also to assist the patient in their daily needs. It requires comforting the patients and being compassionate towards them and to be there as company for them.

Outcomes/Results: Forty individuals took the survey. The results of the survey were that 29 out of 40 individuals are in the suicide ideation category. 73% only considered hurting themselves because they have a problem, but when they talk about it, they realize that there is a solution to their problem and that they don't want to die. They feel overwhelmed and think that hurting themselves is the way out. Through this survey it was found that suicide attempts are more common amongst young adults from ages 12-20. These individuals stated that they either cut themselves or do something to themselves to feel pain. Some mentioned that they do this because they feel like they are not doing enough and feel a sort of disappointment because their life isn't moving forward. The last category is suicide which leads to serious injury or death because of self-harm; this statistic varied from patient to patient, but it was the least number of individuals in this category. One patient jumped out of a moving car and came to the hospital, barely alive, and they were fairly young. Another patient was an elderly individual who tried to hang themselves because they did not want to be a burden to their family.

Evaluation/Conclusion: Suicide and mental health problems are an increasing issue in society in the U.S. It is a public health problem because suicide and self-harm cases are increasing. Through this survey, it was found that most individuals are part of the suicide ideation category. Reaching out to someone for help, going to counseling, and learning more about suicide and mental health issues through doctors, nurses, or for students: teachers, counselors, and other programs will be useful for individuals who struggle with mental health. These strategies will help improve the statistics on suicide and mental health. It will also help individuals understand that they are not alone and that someone cares about their well-being.

Title: Evaluation of Ambulatory Health Services

Name: Schyler Saroshinsky

Preceptors: Deputy Chief: Eric Farber

Agency: McCabe Ambulance Service

Purpose: To analyze the need of McCabe Ambulance Service in Bayonne, NJ, and evaluate the success of this service by observing the positive health impacts it has on the community.

Significance: McCabe Ambulance Service responds to approximately 27 calls per day, which equates to 9,855 individuals helped annually. Prior to the onset of McCabe Ambulance Service, it would take 25 minutes for patients to arrive at Bayonne Medical Center. Less than 10 years later, McCabe's 24 hour Ambulance Service became the fundamental EMS provider for the city of Bayonne with an average response time of 3 minutes. 911 dispatchers are certified as Advanced Emergency Medical Dispatchers using a state of the art interactive call screening tool called Priority Dispatch ProQA. McCabe Ambulance Service has invested in a training center where residents and businesses are trained in CPR and how to use a defibrillator. This project aims to examine the various impacts McCabe Ambulance Service has on the health of the community both directly and indirectly.

Method/Approach: A comprehensive review of company policy was completed to illustrate the role of employees and their responsibilities. Response times, call volume, patient and staff interaction, and the company's participation in community outreach were all analyzed to evaluate the success of health outcomes. Additional services provided by the ambulatory service express how the service interacts with community health on a larger scale. Further analysis of the use of Priority Dispatch ProQA, was conducted to show how the company incorporates technology to remain successful.

Outcomes/Results: A compact deliverable will be conducted to broadcast the accomplishments of McCabe's Ambulatory Service. After a thorough review of the company, it became evident that this ambulatory service has advanced since it first launched in 1973. The increase in call volumes has expanded policy guidelines to involve the adaptation of new technology. The use of ProQA, a system software, has given dispatchers quick access to determinant codes and critical information about each call, thus making response times quick and efficient. This company implements various protocols to provide the best practices and techniques for the community. Health outcomes have been optimized through vigorous trauma training, active shooter response times, and patient transport. A company that began with one ambulatory vehicle and a staff of five has progressed into an integral body for the community. The success of this company is partly attributed to the increase in ambulatory vehicles and staff. There are now 12 ambulatory vehicles, 3 supervisor vehicles, 3 wheel chair accessible vans, 1 medical ambulance bus, 3 medical trailers and 82 staff members that work to provide health services. The prosperity of the service has allowed for elderly and patient transportation to dialysis and chemotherapy treatments to be executed. Transportation and EMS services provided for city events through this company remains free of charge for the city of Bayonne. This evaluation has concluded that each aspect of McCabe's contributes towards positive health outcomes for Bayonne residents.

Evaluation/Conclusion: The success of McCabe's ambulatory service has been due to the increase in technology, training protocols, community involvement with disabled persons and the elderly, and strict company policy. Recommendations to measure the future success of the company include being responsive and up to date with health-related events, and annually changing policy to incorporate new techniques to uphold the value of patient care.

Title: Body justice and fat liberation

Name: Margaret Schroeder

Preceptors: Stephanie Franklin, Executive Director

Agency: Masakhane Center Newark, NJ

Purpose: To promote and encourage acceptance and appreciation of all body types among young people through a workshop.

Significance: Many people, particularly those that are fat, disabled, experience body policing. Weight discrimination in the United States has increased by 66 % in the past ten years, which is now comparable to rates of racial discrimination, especially in young individuals (Pulh, 2009). Weight and disability bias translates into inequities in employment settings, health-care facilities, and educational institutions, often due to widespread negative stereotypes. Masakhane center provides community-based sexuality education and promote sexual liberation, including the right to pleasure, for marginalized communities. This project aims to develop a curriculum for an educational workshop to create awareness in the community, especially young people about body justice and fat liberation to enable young people to think past body shaming.

Method/Approach: A workshop curriculum on improving body justice and fat liberation was developed, and included topics like body justice, body positivity, anti-fatness, disabled bodies, body neutrality, and fat liberation. Research was conducted through peer-reviewed articles that were found using reliable search engines including Google Scholar, PubMed, and Rutgers Library. In addition, books on body justice, for instance, 'The body is not an apology' and 'The belly of the beast' were also referred to during the research process. In addition, a learning activity was created using Book Widgets, a platform for creating interactive flashcards which has a question on one side and an answer on the other to increase awareness about some common myths and facts about persons with disabilities. The workshop was facilitated to a group of interns at Masakhane Center via Zoom.

Outcomes/Results: The overall outcomes of this workshop curriculum with Masakhane Center revolve around the concept of educating young people that every human body is different. Prior to this workshop activity, all participants felt comfortable communicating about their body. When asked about how confident they feel in their bodies, almost all the participants had experienced body policing in the past. A total of 10 questions regarding the most common myths versus facts about body shaming and body justice were identified and converted into flashcards. 7 interns participated in the workshop and all participants were under 22 years of age. 4 out of 7 participants correctly identified facts and myths during the workshop. The participants also shared personal experience with the group. Follow-up answers were included in the workshop plan as most of the statements of myth versus facts needed clarification.

Evaluation/Conclusion: At the end of the workshop, participants were able to identify examples of ableism, participants were able to describe what body justice and fat liberation was, and participants were able to identify forms of bias and prejudice that impact health and wellbeing. Going forward, the information gathered in this project and the curriculum design can be used/ adopted by other departments at Masakhane Center Newark, NJ to reach a larger group of people. The goal of the program is to educate young people on body justice and fat liberation.

Title: Early-Childhood Immunization Status Assessment

Name: Dayna Schubert

Preceptors: Leslie Schubert and Amber Kreuter

Agency: Over the Rainbow Childcare Center

Purpose: To analyze early childhood immunization status in a childcare setting in preparation for a state health audit and present the relationship between immunization status with parental income level.

Significance: Adolescent vaccinations are one of the safest preventive care measures available. In New Jersey, sixty eight percent of children were up-to-date with the recommended seven vaccine series by two years of age, equal to that of the national average of seventy percent. Without proper immunizations, children are at an increased risk of infectious disease, leading to outbreaks of disease that were believed to be eradicated. Further, these decreases in childhood vaccination rates are becoming an increasing public health concern, especially for low-income children. At Over the Rainbow Childcare Center, more than half of the children live below the federal poverty level. For these children, there are incredible social barriers to health, making it harder to maintain a proper immunization schedule, increasing their susceptibility to communicable disease. This project allows parents the opportunity to properly immunize their children, minimizing the risk of illness, allowing more children to regularly attend school and parents the opportunity to work, without interruption.

Method/Approach: Health assessment data was compiled for all children enrolled, between the ages of birth to five years old. Data was then input into the New Jersey Department of Health Standard Childcare Center Immunization IMM-8 Record. From there, data was analyzed in order to determine how many children were in compliance with two separate requirements: 1) influenza vaccination and 2) standard pediatric immunizations.

Outcomes/Results: For part one of the project, of the original sample size cohort (n=53), five children dropped out of the program prior to final review leaving the study with a total of forty eight participants. Of that forty eight, forty two were up-to-date, two received state-approved religious exemptions, and four were considered deficient of one or more immunizations. Putting the two state-approved religious exemptions aside, the center had a 100% influenza compliance and a 92% compliance of standard pediatric immunizations. Once received, the students missing immunizations were able to return back to the program. On March 24, 2023, Over the Rainbow received notice of completion of their 2022-2023 Immunization.

Evaluation/Conclusion: This project allowed the center to achieve high immunization rates without the need for a re-audit. Their goal is to use the data collected to further study the diversity and inclusion rates of the community that they serve as part of their enrollment with Grow New Jersey Kids. The developed database will function as a tool for future audits, making it easier to input and analyze data, with the hope of preventing immunization deficiencies in the future and aid in the development of further data collection based on results from both the ASQ-3 and Strengthening Families Framework surveys.

Title: White Paper Assessment

Name: Kaitlyn Senetra

Preceptors: Fatimah Muhummed, Alana Scotland

Agency: 340B Pharmaceutical Services Program, Saint Peter's University Hospital

Purpose: To analyze the significance of the 340B Pharmaceutical Services Program on community health and analyze the challenges and achievements.

Significance: According to a 2019 survey conducted by the Kaiser Family Foundation, a quarter of individuals in the United States reported experiencing difficulty affording their prescription medications. Among those who had trouble affording their medications, nearly 30% stated that they did not fill a prescription within the last year due to costs, and 24% reported skipping doses to make their medication last longer. In 2020, the Center for Disease Control and Prevention (CDC) reported that approximately 11% of adults did not adhere to their medication guidelines due to financial reasons. This lack of adherence can lead to restricted access to necessary medications, heightened financial burden, health inequities, and negative health outcomes. To address this issue, the 340B Pharmaceutical Services Program offers discounted prescription drugs to eligible healthcare organizations serving low-income and underserved communities. By increasing access to affordable medications, this program improves health outcomes and supports safety-net providers. This white paper aims to raise awareness about this issue while highlighting both the accomplishments and challenges faced by the program.

Method/Approach: To effectively communicate the program's position on the issue at hand, the white paper will be created utilizing a systematic approach. This method will entail several steps, including identifying the problem and conducting extensive research to obtain relevant data on low-income communities medication access. The paper will also focus on analyzing the impact that the problem has had, with particular emphasis on how the 340B Program affects drug prices, including the ceiling price and its impact on manufacturers. Additionally, the paper will highlight the lack of comprehensive data from the program, which limits pricing and discount strategies. By following this step-by-step approach, the white paper will provide a detailed analysis of the issue and how the 340B Program plays a significant role in addressing it.

Outcomes/Results: The publication of this white paper is expected to yield several notable outcomes. Most importantly, an increase in education and awareness on the issue at hand. By offering comprehensive background information and context, heightened awareness will raise greater support for sustained solutions. Furthermore, by presenting evidence-based research, the white paper will increase influence on decision making processes that inform policy or strategy development, as well as serve as a powerful advocacy tool. In addition, this publication can position an organization as a key leader in this specific domain, which can help enhance credibility, visibility, and overall influence. Lastly, the white paper is anticipated to stimulate conversation and collaboration among stakeholders with different perspectives, resulting in the promotion of constructive discussions.

Evaluation/Conclusion: To evaluate the efficacy of the white paper in increasing awareness and driving efforts towards improving access to prescription medications, specific measures will be utilized. Prior to the release, a survey will be conducted, followed by a subsequent survey after publication to assess any changes in behavior among the target audience. Tracking the increase in funding and support for initiatives aimed at addressing the issue will provide a clear indication of the impact of the white paper's efforts in raising awareness.

Title: Improving Overall Nonprofit Efficiency through Workforce Development Methods

Name: Fiona Shafer

Preceptor: Jamie Magee, MPH, MSW, Director of Tobacco Prevention/Control

Agency: Health Promotion Council

Purpose: To increase non-profit operational efficiency through an improved budget, staffing, and allocation system.

Significance: Studies have found that a mere 6% of nonprofits report effectively using their collected data (Janus, 2018). Nonprofits require a different approach to managing budgets and staffing due to the unique and numerous funding streams (Hoefer & Sliva, 2014). In the Tobacco Prevention and Advocacy Institute team, there are eight main funding streams: "SEPA," "PDPH," "OAS Youth Buying," "OAS Tobacco Control," "CATCH My Breath," "Ai GVP," "Advocates in Meditation," and "Activate! Cities Changing Diabetes". These funding streams work in conjunction to cover 24 positions, 17 full-time and 8 part-time. Effective management of these streams and the allocations help to reduce discrepancies and past reported confusion. Through the review of past fiscal years, the Director identified concerns regarding the organization of funding and staff roles, which inspired this project.

Method/Approach: Due to the organizational and funding structure of the Health Promotion Council (HPC), grant coordination and reporting, budget spending, submission of proposals, and determination of staff roles and responsibilities can all reduce the efficiency of service delivery. With a widespread task like tobacco prevention and control, the solutions must be multifaceted and require highly effective management of resources. This project focused on the tools developed in Excel for four main projects: SEPA (Southeastern Pennsylvania Tobacco Control Project), Enforcement, Tobacco Control, and Youth Buying. The specified approach also included the review of roles and responsibilities in terms of staffing levels. The created online tool worked to allocate resources and staff time more efficiently to improve overall workflow and budget spending.

Outcomes/Results: The utilization rates of each budget were consistently lower than anticipated. The implemented system discovered that only 22% of the SEPA budget had been spent as of January 1, 2023, when it should have been 50% spent. This low value inspired increased invoice auditing, which uncovered errors in purchase codes. Next, it became imperative to edit the program code sheet to ensure that these mistakes are reduced significantly in the future. The roles review culminated in creating a color-coded organizational matrix, detailing the allocations of funding streams per employee. The coded organizational chart gave a solid visual representation of the missing components of the team and allocated resources. The utilization of these tools has significantly decreased the hours spent on planning for the 2023-24 fiscal year by the Director. Additionally, through analysis of the utilization statistics, the SEPA budget stream was able to support another HPC department during a funding crisis.

Evaluation/Conclusion: Combating tobacco use and improving tobacco prevention and control requires multifaceted approaches. Managing the wide variety of grants at HPC increases the administrative burden and decreases program efficiency. In collaboration with company partners, the project recommends future review earlier in the fiscal year and standardized programmatic coding. The successful implementation of performance management tools improves workplace performance, therefore improving tobacco control and prevention outcomes.

Title: Promoting Education About Covid-19 Vaccine for Children

Name: Rushali Shah

Preceptors: Gina Stravic, Executive Director

Agency: Raritan Valley YMCA

Purpose: Designing and implementing a series of vaccine awareness programs for adults and children. The goal of the project is to educate parents about vaccines and how they work. The purpose was not only want to promote vaccines but also wanted to understand why some people choose not to get vaccinated.

Significance: Parental refusal of vaccines is becoming a growing problem as the incidence of vaccine-preventable diseases in children increases. Various studies have been conducted on why parents decline, delay, or hesitate to vaccinate their children. These reasons vary widely from parent to parent but often put the child life at risk. (NIH.GOV) A problem the Y was facing in daycare was getting children vaccinated and also that vaccinations were not available during the evening and weekends. For low-income parents, this creates a problem as they cannot take off from work easily as many are hourly employees, and they lose pay. Another major barrier is cost. If families do not have insurance, they can register the child for free insurance but there is no free insurance for the parent. Most parents admit to having concerns about immunizations.

Method/Approach: With the help of a vaccine grant provided by the YMCA for the USA, an educational program to promote the vaccine was carried out. The Raritan Valley YMCA hosted two programs where the project was presented, one being Spintthon. Every year, the Y's supporters unite to ride stationary bikes and raise funds for adults, children, and families in need in the communities. The second event is Healthy Kids Day, this is Y's national initiative to improve the health and well-being of kids and families. This was approached by conducting in-person events, presentations, and the distribution of promotional items, including vaccine magnets for kids and adults. Kids magnets included all the vaccine shots that are recommended to take between the ages 0 to 4-5 and adult magnets recorded all vaccines recommended for older groups. Also reached more audiences with the help of social media and newsletter content.

Outcomes/Results: To measure and understand parents' concerns about not getting vaccinated, flyers and surveys were sent out. The distribution list consisted of over 7000 people and had direct contact with seventy-five families in childcare and twenty staff, along with that sixty people attended the spin event and there were 120 at healthy kids day. As a result of the success of these two events, it has helped lead a robust e-mail and educational campaign. Along with researching and providing materials to Y staff to share with parents. Materials included a variety of vaccine schedules, presentations, and frequently asked questions for their better understanding.

Evaluation/Conclusion: The goal of the project was accomplished because people started becoming more aware of this problem and started to show more interest and confidence in this vaccine program. Y will continue to work on this project in the future to get to a broader audience.

Title: Improving Standard Operating Procedures Through CPT Code Billing Data Analysis

Name: Sonal Shah

Preceptors: Shashank Udyawer, Office Manager

Agency: Cardio Vascular Health Associates

Purpose: To analyze CPT code billing data, determine irregularities and potential areas of improvement, and propose changes to the facility's standard operating procedures based on findings.

Significance: To ensure accuracy and efficiency in revenue cycle management, medical practices must meticulously monitor billing data (Manley and Satiani 1232). Such data enables the identification of noticeable discrepancies related to the number of Current Procedural Terminology (CPT) codes billed out in a specified period. These codes specify a distinct procedure or service performed for patients and correlate to a payment rate for providers. At Cardio Vascular Health Associates (CVHA), CPT code billing data is analyzed to determine potential areas of improvement and probable causes for any drastic change in the volume of codes billed out in a quarter. This project aims to analyze the CPT code billing data collected throughout 2022 to identify processes that could optimize operational procedures based on observed disparities in the number of CPT codes billed out each quarter.

Method/Approach: Secondary data analysis was completed using data collected from CVHA's Electronic Medical Record (EMR) system, EPIC, from January 2022 to December 2022. The data set was exported into Microsoft Excel to facilitate data analysis. This data set encompasses information regarding the CPT codes billed by each provider, corresponding descriptions of the codes, charges billed, payments received, and work RVUs (wRVUs). Physicians get compensated based on the number of wRVUs generated each month. Rigorous data analysis was conducted using pivot tables and charts, developed based on quarterly data and subsequently used to compare the results across all four quarters.

Outcomes/Results: Analysis of CVHA's 2022 CPT Code data displayed that 31,217 codes were billed throughout the year by all providers in both outpatient and hospital settings. There were approximately 2.79 patient office visits conducted for every EKG that was performed, showing that Dr. Passi, the main cardiologist at CVHA, sees more internal medicine patients than cardiology patients. There was a consistent decrease in the number of codes billed each quarter. The largest reduction was a 7.62% decrease from Quarter 2 to Quarter 3. However, the total work RVUs did not correlate with this, as there was a 7.19% increase in the work RVUs from Q2 to Q3. The least codes were billed in November 2022, directly followed by a 20.09% increase in December. Other notable findings include that the most billed code remained consistent each quarter as 99214, a 30-39 minute outpatient office visit. The most common code billed by all other providers was 99232, representing a 35-minute hospital visit.

Evaluation/Conclusion: The overall analysis displayed CPT code trends that occurred month-on-month throughout 2022 and was used to identify disparities in the volume of CPT codes billed between the four quarters and areas of improvement. Based on the findings, process improvement suggestions include hiring a Physician Assistant or Advanced Practice Nurse (APN) to handle internal medicine-related cases. This would optimize revenue generation by allowing Dr. Passi to focus on more cardiology-related cases. The current data set did not include data points such as patient information, patient insurance, diagnosis codes, or corresponding dates of service. Such data would allow for patient-level and revenue-specific analysis. Specific events, such as adverse weather conditions, could have also been pinpointed to account for certain inconsistencies. Further analysis could be done by focusing on charges and payments data related to each billed code to identify trends related to denials and collections.

Title: Implementing Free Education Programs for Blood Cancer Patients

Name: Sabiha Shahab

Preceptors: Ruby Nava-Ramos, Patient and Community Outreach Manager

Agency: The Leukemia & Lymphoma Society

Purpose: To help African American myeloma patients gain more knowledge on how to navigate the cancer care system in Philadelphia.

Significance: Multiple Myeloma is a type of blood cancer that affects over 30,000 Americans each year. African Americans are disproportionately affected more than white Americans as they are at twice the risk of developing multiple myeloma. This health disparity is caused by low levels of awareness from patients and even primary care physicians within African American communities. Without the awareness of the disease and how it affects a high-risk community, proper precautions cannot be taken to treat it in its early stages (Kumar et al. 2017). This evidence indicates that resources accessible to minority demographics are limited. The Leukemia and Lymphoma Society has implemented a nationwide initiative called Myeloma Link to provide free educational outreach and increased access to care to black communities across the nation. 40% of Philadelphia's population consists of African Americans, therefore LLS is implementing a free patient education program geared towards black myeloma patients, but open to all, to help patients and caregivers navigate the cancer world before, after, and during treatment. Health inequities and concerns will be addressed.

Method/Approach: Data analysis and collection was conducted on myeloma patients in the United States, and it was found that African Americans are at twice the risk of developing multiple myeloma and at a younger age compared to any other racial or ethnic group. Because Philadelphia houses a large number of African Americans and is also a low-income area, this city proved to be an optimal location to set up a free educational dinner program to address these health disparities. The program was organized in a visitor hall in Philadelphia, and outreach was conducted through social media marketing and collaboration with local healthcare organizations. Dinner and parking vouchers were provided to participants to provide a further incentive for attending. An oncology nurse navigator and licensed oncology social worker from Penn Medicine were invited to be guest speakers to share informative insight on navigating the cancer system and what resources are available. Local healthcare organizations were invited to table and increase awareness about their missions to improve public health.

Outcomes/Results: Of the 35 people who registered for the event, 33 participants ended up attending the educational dinner program. At the end of the event, participants were asked to provide feedback through a survey so that LLS can continue to implement free education programs for blood cancer patients. The feedback was mainly positive and reviews highlighted the benefits of having insightful guest speakers and health education. LLS support groups increased in registration numbers, and many patients signed up to receive aid and information through LLS. Healthcare professionals and organizations who attended expressed interest in working with LLS's mission for future programs.

Evaluation/Conclusion: The data collection following this program and the feedback survey emphasizes the importance of quality healthcare education for all communities. Many fatal diseases, such as cancer, can be avoided if proper care is taken beforehand, and this can be reiterated through educational programs for not only patients, but healthcare professionals as well. This would be important and beneficial especially in low-income communities where the population is more vulnerable. This program will be an annual event to keep up-to-date on new information and resources to provide to the community.

Title: Patient Knowledge, Perception, and Preferences on Healthy Food Choices

Name: Aisha Shahzad

Preceptors: Brian Gavilanes, Lori Fournier

Agency: Morristown Medical Center (Atlantic Health System)

Purpose: This project aims to educate individuals on healthy food choices. Most of the "American" diet is high in sodium and fat, which is directly linked to health problems such as heart disease and diabetes. Simple adjustments in our daily food choices can put us on a better path for the future.

Significance: According to the CDC, the leading cause of death in the United States is heart disease, with an estimated 695,547 individuals passing away in 2021 (Xu et al., 2022). In the state of NJ, heart disease is also the leading cause of death, with stroke being the fourth leading cause (NJSHAD, 2016). The prevalence of cardiovascular diseases is costing the state millions in economic loss and is spreading quickly. The disease can be easily prevented with a careful diet. The diet and nutrition office at Morristown Medical Center offers consultation and education to admitted patients. The registered dietitians work closely with the patient's medical team and provide information regarding the various diet exchanges. The dietitian assistants help patients with their meals during their stay at the hospital. My project's significance is educating patients and their family members on how to choose healthier options. The key is to start slowly by substituting more nutritious options for their favorite meals and consuming foods in moderation. Cooking meals at home will help patients better understand ingredients and portion control.

Method/Approach: The approach was to observe patients on cardiac (heart healthy), NA2G, low fat, and carbohydrate control diets to follow a pattern aligned with previous research. An average of eighty patients were spoken to over the phone and daily visits were conducted to assist patients in-person during floor rounds. Patients asked several questions such as 'Why am I allowed this item but not this?', 'Why can't I have this item if I have it at home all the time?', 'Why is there sodium/fat in this item?', 'Why am I on a restriction?', or 'Why do I have to have small portions?'.

Outcomes/Results: As expected, there was pushback from patients frustrated with their diet exchanges. Many of those diets had sodium, carb, and fat restrictions. Our most popular selections were from the grill items. Items such as beef burgers, pizza, chicken tenders, fries, mac and cheese, ham, tuna salad, pork bacon/sausage, and ice cream were the most requested from patients with diet restrictions. In most cases, we could alternate portion sizes and offer healthier alternatives. Nutrition labels were examined for the most popular items and were analyzed for sodium and fat content. As expected, the most popular food items were very high in both.

Evaluation/Conclusion: Research on the 'American diet' and time interacting with patients as a dietician assistant shows the importance of educating and bringing awareness to healthier and more nutritious food options. Dietician assistants offered many food alternatives for patients during their hospital stay and after discharge. Due to the convenience and reliability of fast food options, the popularity of items such as burgers and fries has increased. On the other hand, fast-food establishments also rely on consumer dependency and offer more easy and convenient options to people, which continues that cycle of unhealthy eating. Allowing patients to learn about food and nutrition during their stays at the hospital helps them improve their quality of life when they leave. They are more educated about their choices and can help family and friends with similar health issues.

Title: Social Determinants of Health Factors relations to Health of the Essex County Residents

Name: Jhil Sharma

Preceptors: Michael Hodges, Partner & Public Health Specialist

Agency: Strategic Health Advisers, LLC

Purpose: To analyze the community health needs assessment (2023) and identify the challenges faced by community members and to develop effective strategies to address the root causes of health issues.

Significance: According to New Jersey State Health Assessment Data (NJSHAD), in the United States, health issues affect millions of people annually. However, the situation is even more alarming in North Jersey, where health issues are at an all-time high, posing a significant challenge to the local population. 32.1% of Essex County residents are Under 2 times Poverty (2016 to 2020). These residents are not able to access their healthcare needs based on their financial situations. 11.3% of Essex residents have no insurance (2016 to 2020). Strategic Health Advisors (SHA), LLC, conducts surveys to understand the concerns and health needs in Essex County. This initiative aims to develop targeted interventions to address these health needs. This project focused on compiling the data and completing a preliminary analysis.

Method/Approach: The survey was conducted and began in January 2023. The survey results were exported to an excel file using an online platform called SurveySparrow. The scope of this project focussed on data collected from January 2023 through March 2023. The data were organized and sorted according to race, ethnicity, age group, gender, levels of education, and overall accessibility of healthcare services. Following a rigorous data analysis, various social determinants of health were identified for the residents of Essex County.

Outcomes/Results: As of March 2023, 832 individuals from Essex County responded to a survey, with 98.80% indicating willingness to participate. Zip codes 07042 (Montclair) (n=120) and 08003 (Cherry Hill) (n=85) had the highest responses. The 20-24 age group had the highest response rate (13.51%), followed by the 25-29 age group (13.02%), while those 85 and older had the lowest response rate. The the majority of respondents were female (62.21%) and identified as heterosexual (87.58%). Respondents identified as white (56.55%), Black or African American (28.10%), Asian (6.79%), or other (5.36%). 25.46% had a graduate or professional degree, which was the highest amongst the respondents. In terms of household details, 49.76% were married, while 37.04% were single. Regarding household financial situations, 23.79% were barely getting by, and 16.36% were struggling hard. The majority (93.25%) had health insurance, and 32.91% provided unpaid assistance to someone with disabilities, chronic illness, or aging issues.

Evaluation/Conclusion: The data collection is ongoing and is expected to end in May 2023. The survey was able to highlight several issues that have a significant impact on an individual's health and well-being. Essex County can use this data to develop targeted interventions to address the root causes of health issues in the community. The completion of the survey and data analysis reveals social determinants, including poverty, lack of access to healthcare services, and insurance coverage, affecting the overall health of Essex County residents. Community members can improve their health by adopting healthy lifestyle habits, seeking mental health support, and exploring options for low-cost or free healthcare services and health insurance coverage. These interventions are recommended to address root causes, as shown by the completion of survey and data analysis.

Title: Resource Packet for Social Workers, Patient Navigators, and Financial Navigators

Name: Zeinab Shehadeh

Preceptors: Michele Capossela

Agency: American Cancer Society (ACS)

Purpose: To create a toolkit for social workers, patient navigators and financial navigators based on social determinants of health to increase access to care for patients undergoing cancer treatment.

Significance: While statistics find that 72% of social workers find their jobs satisfying, it does not change the challenges of the job. 75% of social workers work more than the hours they are contracted for, 60% feel stressed by their jobs, 58% believe their workload is too high and 55% believe they are asked to fulfill too many roles (Social Work News, 2021). Due to this, it was important to find ways to streamline one aspect of their job by creating a toolkit with easy access to resources that they can share with their patients. When it comes to what resources are most important for oncology patients, finding which social determinants of health they are most impacted by is important. The main barriers to care that cancer patients face when initially diagnosed are lack of social support, financial or insurance concerns, and healthcare communication (Hendren et al., 2011). The packet allows staff to find the resources most needed by patients in an efficient way in order to decrease patient and staff stress.

Method/Approach: Oncology-based resources were collected from national and local organizations. Over the course of collecting information, it was discovered via weekly team meetings that resources differ greatly between New Jersey and New York City, thus necessitating the need to create a resource packet for each state with resources categorized by different social determinants of health that impact their patients. Key social work stakeholders were identified to take an initial review prior to giving them to ACS staff for further evaluation. During development, the packets were reviewed and an agenda item at each weekly meeting. The packets were then distributed to and evaluated by ACS staff and deemed ready for distribution to social workers, patient navigators and financial navigators. Distribution of packets began on 03/08/2023 and are still being distributed to date.

Outcomes/Results: The packets were distributed to 6 ACS employees, who shared it with 4 social workers, 11 patient/nurse navigators, and 1 financial navigator.. ACS staff, social workers, and patient/nurse navigators were given a 5-question survey regarding the resource packet. Based on the survey results, on a scale from 1 to 5 on the usefulness of the packet, 6.7% rated it "3", 13.3% rated it "4", and 80% rated it "5". When it came to percentage of new resources found within the guide, 13.3% stated "0%", 26.7% stated "25%", 40% stated "50%", 6.7% stated "75%" and 13.3% stated "100%". When asked if the respondents would use this guide as a springboard to develop something similar, 20% stated "no" and 80% stated "yes". Finally, overall satisfaction ranging from "very dissatisfied" to "very satisfied," 6.7% stated they were "very dissatisfied nor dissatisfied", 20% stated they were "satisfied," and 46.7% stated they were "very satisfied."

Evaluation/Conclusion: Surveyed results found the resource toolkit effective and useful with more than 80% stating they would use this as a springboard to develop something similar to share with patients and will continue to do so on a regular schedule. 66.7% stated they were at least satisfied with the overall packet. Additionally, this packet will serve as a relationship builder scheduled MSW in-services and quarterly collaborative updates to the packet. For the future, the packet should have a longer distribution period to gather more information from those that will use it in order to improve its effectiveness.

Title: Diagnosing Glaucoma in High Risk Patients

Name: Colleen Shenocca

Preceptors: Ilaxi Rana, OD

Agency: Garden State Eye & Vision LLC- Parsippany, NJ

Purpose: Monitoring the rates of glaucoma in susceptible populations to prevent blindness and peripheral vision loss.

Significance: In the United States, over 3 million Americans suffer from glaucoma and it is the second leading cause of blindness globally (*Don't Let Glaucoma Steal Your Sight!*, 2020). There is no way to prevent developing glaucoma, but there are methods to slow down a person's chance of going completely blind or losing their peripheral vision. The people who are most at risk of glaucoma are African Americans, ages 40, people 60 and older, diabetics, and people who have a family history of glaucoma (2020). Between men and women, women are more likely to develop glaucoma due to their longer life expectancy (The International Agency for the Prevention of Blindness, 2022). Most people who develop glaucoma do not realize they have it until they begin to lose their vision. Promoting the dilated examinations and intraocular pressure checks yearly can help to decrease the vision lost by patients.

Method/Approach: Tests for glaucoma are given at each yearly appointment for people who are at risk or those who are aged 40 and older. The intraocular pressure (IOP) of patients is evaluated to ensure that they are scoring between 12 and 20 mm Hg (Pickering, 2022. Over the course of my internship, I tracked the number of patients I saw that had been diagnosed with glaucoma. I kept track of all of the patients I encountered with glaucoma even if their appointments were not glaucoma related. I kept a note of their age and gender to see which groups had the highest rate of disease. While tracking these patients, I looked at how frequently they came in for their 3 month glaucoma appointments. Maintaining this schedule and keeping up with prescription drops are the best ways to prevent losing peripheral vision or blindness. Fortunately, the patients did a relatively good job with maintaining their appointments however, it was difficult to collect accurate data about the use of their medications

Outcomes/Results: Since I began working at Garden State Eye & Vision LLC. I have seen close to one hundred patients, some multiple times over the course of my internship. Out of these patients, I recorded that from January to May we had twenty-two patients with glaucoma. This does not cover patients that had a potential suspicion of glaucoma since the diagnostic process takes a few months. We did have around three patients that had a glaucoma suspicion who underwent visual field testing, but were not diagnosed during my internship period. Out of the twenty-two patients, thirteen of them were women and nine of them were men which does explain the higher rates of glaucoma in females. This means that 59.1% of our twentytwo glaucoma patients were women whereas 40.9% of them were men. The age of our glaucoma patients ranged from 43 years old to 77 years old. 27% of our glaucoma patients were between the ages of 66 and 77.

Evaluation/Conclusion: Overall, more women at our practice were living with glaucoma than there were men. As mentioned, this does correlate with national data stating that women were more likely to have glaucoma than their male counterparts. All of our patients fell between the standard age of risk at 40 years old and up with our youngest diagnosed patient being 43 years old and our oldest being 77. With that being said, 100% of the glaucoma patients I saw in the office were in the high risk age range for developing glaucoma. With the data I was able to collect, I am able to back up the existing data that women and people aged 40 and older are at the highest risk for glaucoma.

Title: YPAR; Cultivating Identity, Belonging, and Agency with Black Adolescents

Name: Nia Simmons

Preceptors: Dr. Joanna Williams, Professor

Agency: Supporting Adolescent Capacity for Contribution (with the Aresty Research Center)

Purpose: To assess student satisfaction with Youth Participatory Action Research and how it can be utilized in school environments to aid adolescents in developing their identity, belonging, and agency.

Significance: Disparities in the availability of resources for youth exist across multiple systems in America: one of which exists in our school systems. Youth, or adolescents, make up 25% of our population, yet don't have many opportunities to engage with policy. According to Ozer (2017), YPAR, Youth Participatory Action Research, is a form of community-based research where youth gather data regarding an issue they want to address in their community, analyze their data, and take action to improve the issue based on the information they gathered. Black youth, however, have been largely left out of research investigating these positive effects of civic engagement (Kirshner & Ginwright, 2012). YPAR with more Black youth co-researchers needs to be refined to accommodate their needs and acknowledge their experiences.

Method/Approach: Satisfaction surveys have been administered to the co-researchers taking part in YPAR and surveys have been administered to a group of teachers at the school to gauge whether they would implement YPAR in their classrooms or not. Additionally, interviews with the students are taking place to understand how much they've been affected by the program and their general feelings of identity development, belongingness, and agency in our Research 2 Action program, their school, and broader community. After we compile, code, and analyze survey and interview responses, they will be used to further research regarding student identity, belonging, and agency. If the results are favorable towards YPAR, they will be presented to school administration along with resources to implement more YPAR if need be.

Outcomes/Results: Of the youth co-researchers participating in the Research 2 Action program (N=9), 7 (78%) students are very satisfied with the Research 2 Action program, and 2 (22%) are satisfied with the Research 2 Action program. A majority of the youth co-researchers strongly agree that the adult co-researchers presented information clearly (67%), 2 (22%) agree, and 1(11%) are neutral. According to the survey responses and first interviews, all youth co-researchers (100%) believe Research 2 Action is an inclusive, open environment that encourages learning and they believe they can enact change in their school and greater community with the help of their peers. Of the 5 (N=5) teachers interviewed, 5 (100%) expressed interest in incorporating YPAR into their curriculum with proper training.

Evaluation/Conclusion: Most of the students expressed increased feelings of belongingness and agency while participating in Research 2 Action. This means it could be useful to incorporate YPAR in school curriculum to keep students engaged and aware of systemic issues as well as avenues to go about addressing them. YPAR should continue at the same school starting mid-July, 2023 with surveys to track their satisfaction throughout the school year.

Title: Camden County Cancer Screening Project / Sister Give Me Your Hand

Name: Alexandra Skurka

Preceptors: Plyshette Wiggins, MPH

Agency: MD Anderson Cooper Cancer Center at Cooper University Health Care

Purpose: To analyze and review current cancer screening trends in Camden County, New Jersey and generate targeted social media content and increase services provided to residents.

Significance: Camden County experiences a higher incidence of cancer and other chronic diseases due to delayed care, missed screenings, and lack of opportunity for early intervention. Additionally, those in minority communities have decreased access to health and social services resources than white individuals. Lack of health insurance is also a large barrier facing Camden County, 1 in 10 people in the city of Camden do not have health insurance (35th Street Consulting, 2022). The Camden County Cancer Screening Project (CCCSP) and Sister Give Me Your Hand aim to target women of color in Camden, by providing them the resources and opportunities to get screened for cancer. The CCCSP developed a self-reporting survey in 2022 that was distributed through various online platforms, such as social media and in person screening, awareness and education events. The survey was targeted towards women in Camden County who are over 40 years of age. This project focussed on analyzing the data collected through March of 2023.

Method/Approach: For the survey to be considered statistically significant - 383 responses were needed that fulfilled the above mentioned criteria. The survey asked about preferred methods of communication about breast cancer screenings, to discover what ways would be most effective for residents. The scope of this project included the analysis of those who are over 40 years of age and from Camden County. Microsoft Excel was used to analyze the data from the survey. Once this information was exported, filters were created to separate those who received mammograms and those who did not receive mammograms. Pivot tables and charts were created to visualize the information and collect insights among the data. For the social media graphics created, all information was cited from the American Cancer Society and created within Canva.

Outcomes/Results: The total responses from the survey were 513. Out of which, 384 responses fulfilled the criteria of over 40 years of age and residing in Camden County, New Jersey. The number completes the statistical significance requirement for analysis. Of the women surveyed in Camden County, 92.43% of women have received a mammogram, and 7.57% have not received a mammogram. Insurance issues and pain were recorded as the top two reasons for not getting a mammogram. 85% of women who did not receive a mammogram reported that COVID-19 did not cause a significant barrier to them receiving the screening.

Evaluation/Conclusion: Based upon the survey responses, Facebook is the preferred social media platform for communicating information about breast cancer screenings and other health related information. As a result, social media content posts were created for the months of March through June. The topics range from health awareness months, cancer awareness months, question and answers, and did you know posts. Going forward, it would be helpful if the future content is consistent in formatting and branding. In addition, survey design may utilize skip logic to make the data easier to analyze.

Title: Advocating for Maternal Health by utilizing the 340B Program

Name: Burrell Smithen

Preceptors: Fatimah Muhammad, 340B Program Manager

Agency: Saint Peter's University Hospital

Purpose: To advocate for ways to decrease maternal mortality in the United States by utilizing the 340B program.

Significance: The 340B program is a federal healthcare program implemented in hospitals, amongst other healthcare organizations, across the country that provides discounted medications to patients. Saint Peter's Hospital delivers 340B medications within New Brunswick, New Jersey, which classifies as a medically underserved community by New Jersey's Division of Family Health Services (New Jersey Government, n.d). Healthcare organizations that can participate in the 340B program focus on various public health concerns. For example, providers that can participate in the program include STD clinics, family planning clinics, Native Hawaiian health centers, Ryan White Clinics, etc. (340B Health, n.d). The 340B program requires a contract between state governments and private non-profit hospitals that details how low-income patients not covered by Medicaid or Medicare will receive care.

Method/Approach: Research collected using Rutgers University databases, professional journals, and CDC databases were utilized to create a white paper addressing how to decrease maternal mortality in the United States and New Jersey. New Jersey has the fourth-highest maternal mortality rate in the country (GIWPS, 2020). The white paper pays particular attention to health disparities faced by black and brown women. The paper discusses the epidemiology of maternal mortality and focuses on significant trends in maternal mortality's incidence and prevalence in the United States as well as regional and racial disparities. Additionally, analyzing the healthcare system's role and how it influences maternal mortality by focusing on health policies that structure maternal care, barriers to accessing maternal health services, and varying qualities of care. A major concern is increasing healthcare access and patient advocacy, which the 340B program plays a significant role in influencing.

Outcomes/Results: The white paper will present an overview of maternal mortality in the United States and advocate for ways to decrease health disparities by utilizing the benefits of the 340B program. The information gained by completing this white paper will be used to further the 340B team's goal of showcasing the importance of the program in the hospital. The paper will be published and shared with other healthcare professionals.

Evaluation/Conclusion: Once this white paper is published, the team has the opportunity to move forward with our findings and work within the hospital to help suggest our proposals to advance maternal health. St. Peter's Hospital has received the Joint Commission's Gold Seal of Approval for Perinatal Care and prides itself on providing quality care to all its patients. Sharing the white paper within the hospital system will allow interns to learn more about the structure of the hospital system and the necessary work to reduce maternal health disparities.

Title: Effect of Long-Term COVID-19 Symptoms on Onset and Progression of Sleep Apnea

Name: Nabeeha Soherwardy

Preceptors: Dr. Sabiha Hussain, MD, MPH, Associate Professor of Medicine

Agency: Robert Wood Johnson Medical School

Purpose: To conceptualize patterns of diagnoses and exacerbation of obstructive sleep apnea in patients experiencing long-term post-COVID pulmonary effects.

Significance: Long COVID has had a variety of pulmonary and neurological effects on its patients. Studies have demonstrated connections between respiratory difficulties and prevalence of obstructive sleep apnea (OSA). OSA is one of the most prevalent sleep disorders globally, and while has not been entirely explored in its relation to COVID-19, can be classified as a comorbidity (Tufik, 2020). The onset of hypoxia from OSA in the body may potentially further infection and severity of COVID-19. So far, there has not been verification of obstructive sleep apnea as a risk factor for COVID-19, but it is generally known that sleep deprivation causes immune suppression, which may contribute to greater risk of infection and a weaker bodily response. While evidence exists on patterned effects between both OSA and COVID-19, there is a lack of information on their correlation in the onset or exacerbation of each other (Tufik, 2020). Robert Wood Johnson Medical School meets with long COVID patients and attempts to diagnose and treat their symptoms, many of which include obstructive sleep apnea. The medical team prescribes certain equipment and methods to decrease the effects of sleep apnea and open airways. This project will determine the pattern between the onset of obstructive sleep apnea from COVID-19 and their attempted treatments.

Method/Approach: A retrospective review was conducted on the association between Long COVID and obstructive sleep apnea (OSA). Data was extracted from 150 patient charts and physician reports from a COVID clinic run by RWJ pulmonologists. Each of these patients were questioned on their Long COVID symptoms by the physician, most notably including shortness of breath (SOB) and sleep difficulties. In most cases, the physicians chose to order a polysomnography, or a sleep study. Sleep studies yielded results indicating the presence or absence of OSA. The polysomnography utilizes the Apnea-Hypopnea Index (AHI), a diagnostic tool that indicates the presence or absence of OSA. Mild, moderate, and severe OSA are respectively indicated by AHI scores of: 1)5-15, 2)15-30, 3) greater than or equal to 30. Patterns of post-COVID diagnosis with OSA and their treatments were observed.

Outcomes/Results: Of the sample size cohort (n=150), 82 people (55%) self-reported the prevalence of any existing or new sleep issues. Of these, 55 individuals (37%) self-reported the incidence of or the exacerbation of existing sleep issues post-COVID, when questioned by the physician. This included OSA, insomnia, coughing in sleep, poor quality of sleep, snoring, and somnolence. Of these, 34 people (23%) had a polysomnography conducted. Of these, 30 people (20%) were diagnosed with some form of obstructive sleep apnea. The primary treatments by the physicians included the prescription of a continuous positive airway pressure (CPAP) machine and the recommendation for weight loss.

Evaluation/Conclusion: There is a correlation between Long COVID and the prevalence of obstructive sleep apnea, as 20% of the Long COVID cohort was diagnosed with OSA. However, this review is unable to determine causation. Possibilities include that patients with OSA are more susceptible to Long COVID due to oxygen deprivation and subsequent immune suppression. Alternatively, patients with Long COVID may be more susceptible to OSA caused by COVID's pulmonary effects, specifically shortness of breath.

Title: Enhancing New Jersey's Wholesale Food Inspection Reports

Name: Janelle-Marie Sonsiadek

Preceptors: Jennifer Steffee, Public Health Representative

Agency: New Jersey Department of Health, Public Health and Food Protection Program

Purpose: Evaluate current questions and citation descriptions in wholesale food health inspection reports to improve clarity and efficiency to effectively enforce New Jersey's Manufactured Food Regulatory Program Standards (MFRPS) according to Food and Drug Administration (FDA) regulations.

Significance: According to the CDC (2013), it is estimated that 48 million Americans every year contract food-borne illness—with around 128,000 people hospitalized and 3,000 people dying from food-borne illness. In 2017 the CDC reported that New Jersey had 18 outbreaks of food-borne illness—where an outbreak is defined as two or more people having the same illness from the same contaminated food or drink. To prevent food borne illness and improve on the public health of New Jersey residents the New Jersey Department of Health (NJDOH) enrolled in MFRPS that is led by the FDA. MFRPS establishes a uniform basis for improving and measuring prevention, intervention, and response of manufactured food regulatory programs across the United States to reduce food-borne illness. The NJDOH aligns all wholesale food health inspection questions with MFRPS and closely bases the questions from the FDA's Code of Federal Regulations Title 21 "Food and Drugs" Part 117 "Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food" (21 CFR 117). To better improve New Jersey's compliance to MFRPS and to better conduct FDA contracted inspections, the NJDOH is reanalyzing current health inspection questions to become more efficient in order for health inspectors to better improve on their wholesale food inspections.

Method/Approach: A review of the current FDA contracted inspection questions current NJ health inspectors were currently using was completed. Depending on the scope of the FDA contracted inspection—being either a limited scope Preventative Controls for Human Food (PCHF) inspection or full scope PCHF inspection or Current Good Manufacturing Practice (CGMP) inspection or a PCHF follow-up inspection—NJ health inspectors had to complete a range between 93 to 114 questions per inspection. A close review of 21 CFR 117 was conducted and cross examined with each current question being used to find improvements and for the question to become efficient.

Outcomes/Results: After cross-examining current questions with 21 CFR 117, the total amount of questions for FDA contracted inspections were reduced from 93 to 114 questions to 38 to 78 questions. When conducting a limited-scope PCHF inspection, the total amount of questions needed to be completed resulted in 38 questions. For full-scope PCHF inspections, CGMP inspections, and PCHF follow-up inspections the total number of questions needed to be completed resulted in 78 questions. Moreover, the questions were now organized in a way that mirrored each subpart of 21 CFR 117 and each question relating to a certain subpart were labeled and grouped together.

Evaluation/Conclusion: It is very important that questions health inspectors use mirror the legislation and safety regulations that have been passed by policy makers. The New Jersey Department of Health and its Public Health and Food Protection Program always seek to find ways to better align their actions with legislation that is both effective and efficient. Through routinely re-examining current processes and standard operating procedures, it has allowed for improvements to be made for New Jersey health inspectors when conducting FDA contracted inspections and to be better aligned with MFRPS.

Title: Role of food nutrition policy in Essex County, NJ charitable food system

Name: Soto, James

Preceptor: Gyan, Jeffrey- Consultant/Entrepreneur (Project Management Professional)

Agency: Prolific Pillars

Purpose: Assess food pantry's use of food nutrition policy to improve food nutrition environment.

Significance: According to Feeding America (2021), more than 53 million people turned to food banks, pantries, and meal programs for help in 2021. With the increasing number of individuals relying on food assistance, it is increasingly important to supply our food pantries with the tools to provide adequate diets to our low-income population. Food nutrition policy has been shown to improve food procurement practices and has created healthier food environments for food pantries. (Feeding America, 2021) Essex County, NJ, has the third highest food insecurity rate in NJ at 12.3 %. Children under 18 rate of food insecurity in Essex is 22.1%, leading to large amounts of health disparities in this area. (NJSTHAD,2020) On Behalf of Prolific Pillars, a premium full-service consulting agency that optimizes business practices and assists in securing organizational funding through grant writing, facilitated a community initiative with Meeting Essential Needs with Dignity (MEND). This interfaith organization supports a network of food pantries by providing nutritional education and resources.

Method/Approach: This project aimed to assess the knowledge and understanding of tools and techniques used to create a healthier food environment in the charitable food system through nutritional policy. Seven food pantries were contacted in Essex County. An education presentation was designed and presented to managers from the food pantries. The discussion targeted different approaches to nutritional policy, including working groups, strategic goals, and community-based approaches based on successful research studies. Pre- and post-program surveys were given to managers of the MEND network.

Outcomes/Results: Of the sample size cohort (n=7) in the pre-webinar survey, 85% of food pantry managers were unfamiliar with nutritional policy, and 85% were unaware of using strategic goals in a nutritional policy approach. 43% of respondents either had no idea what nutritional guidelines were or were unsure. 71% of individuals were not familiar with a community-based approach to nutrition policy and guidelines. 100% of individuals have never participated in a working group that helped develop nutritional policy. In the post-webinar survey, when asked about their willingness to utilize nutritional food policy, 57% were very willing, and 43% were somewhat willing. 57% also said they became very knowledgeable about using strategic goals in food bank nutrition policy. 43% said they were very knowledgeable in nutritional guidelines, and 57% became somewhat knowledgeable. Regarding community-based approaches to nutrition policy, 43% felt Very familiar, 43% felt Somewhat knowledgeable, and 14% remained unsure. Lastly, 86% became somewhat knowledgeable about creating a working group when working on food nutritional policies for the agency.

Evaluation/Conclusion: This project aimed to help improve the perceived interest of the food pantry managers in utilizing nutritional food policy within the MEND network. It also raised awareness about the essential tools and techniques to create and implement successful nutritional policies. Furthermore, it sought to generate significant interest in MEND's network of pantries to adopt healthy policies & guidelines, which was successful. Future in-detailed lessons regarding policy design and forming a working group would be helpful to Managers.

Title: Mental Health Struggles of Cancer Patients

Name: L'Oren St. Hilaire

Preceptors: Jessika Edouard

Agency: Memorial Sloan Kettering Cancer Center, Middletown, NJ

Purpose: To analyze findings about the mental health struggles that cancer patients face in order to find ways for clinicians and administrators to better address their needs and propose ways to strengthen MSK's All Care Together (ACT) principles.

Significance: There are 1.7 million people diagnosed with cancer each year and 600,000 people die from cancer every year in the United States (CDC, 2022). The American Cancer Society found that 1 in 4 people with cancer experience major or clinical depression. Memorial Sloan Kettering Cancer Center uses ACT as a framework for crafting interactions, communications, and spaces at MSK to promote better patient care. The ACT principles are: coordinate the journey, foster warmth, keep it simple, meet individual needs, minimize uncertainty, and restore control. This project will stress the importance of having these principles and identify any areas where we can better support patients in their journey.

Method/Approach: Anxiety and depression are common mental health disorders among cancer patients. In order to better understand how a cancer diagnosis and treatment affect a patient's mental health, the Rutgers library databases were used to review studies and research on cancer patients and mental health. The databases PsychInfo and Medline (Ovid) were used to find the 15 relevant journals reviewed. The keywords cancer (neoplasms), mental health, anxiety, and depression were used to search for the journals in both databases. Each search returned over 3,000 results; 30 articles were considered for the purpose of this project and 15 were chosen for review. The literature included information on the causes of distress among specific groups of cancer patients as well as the best approaches to alleviate these struggles.

Outcomes/Results: Within the literature reviewed, common themes that were identified as significant causes for the severity of patient's mental health conditions was familial support, socioeconomic status, race, and gender. In one study, researcher's identified some of the main reasons for the decline in patient's mental health including "loss of independence, change of body image, disruption of personal relationships, and stress from the social stigma associated with cancer" (Arvanitou et al., 2023). Multiple studies found that some social and lifestyle factors were protective factors for anxiety and depression among cancer patients. Specifically, one study found that marriage or the presence of a life partner was positively associated with lower levels of anxiety and depression. In addition, other studies concluded that the health of a patient's caregiver had a significant effect on the patient's mental health. One study conducted in 2021 found that the number of chronic health conditions a caregiver was suffering from was positively correlated with higher patient depression symptoms. This study also found that caregiver and patient relationships were strained due to the patient's emotions of resentment of the caregiver's health or guilt, which lead to more anxiety and depression (Ketcher et al., 2021).

Evaluation/Conclusion: Based on these findings, one change to the ACT principles to consider would be to make "meet individual needs" to "meet individual and family needs." This change reminds staff (both clinical and administrative) that cancer is a disease that affects an entire family. In order for the patient's mental health to be fully addressed, they must get access to resources that help the entire family cope with the diagnosis and treatment. This includes connecting caregivers and the patient's support system to the proper support services.

Title: Understanding Cook's Market Customer Demographics and Health Behaviors

through Survey Research

Name: Ivanna Starozytnyk

Preceptors: Lauren Errickson, PhD., Director of Rutgers Gardens and Campus Stewardship

Agency: Rutgers Gardens

Purpose: Establish a survey to collect data regarding customers' demographics and health behaviors at the Cook's Market farmers market during the Spring 2023 season.

Significance: Disparities within the local food environment present a public health issue. The socioeconomic background of farmer's market customers may influence their health perceptions, behaviors and access to healthy food options. "There is an association between poor access to healthy foods based on community-level measures that are shown in the ethical background of residents, size of the population, and median household income which results in such disparities in the retail food environment" (Singleton, C. R., Sen, B., & Affuso, O. 2015). Studies show that farmer's market customers are often white, middle-aged, well-educated women; however, the demographics of the customer base currently utilizing Cook's Market are unknown. The demographics and socioeconomic status of customers utilizing Cook's Market and comparing these findings to demographics of the surrounding towns will show who is currently being served and indicate who the market is not yet reaching. Once the survey data is collected, the goal for the information obtained is to restructure programming for, and promotion of, Cook's Market to help underserved communities and customers better utilize the farmers market.

Method/Approach: A literature review was conducted to understand best practices for determining farmer's market customers' backgrounds, motivation factors, and health behaviors. Prior to formulation of the survey, the following question categories were identified from the literature: general farmers market content, awareness, socioeconomic status, demographics, and health behavior. The U.S Census Bureau, the Behavioral Risk Factor Surveillance System, and the National Health and Nutrition Examination Survey were used to formulate survey questions and determine the demographics of local residencies to hypothesize the results of the survey. Information on demographic data within local towns surrounding Cook's Market was collected to develop a hypothesis and plan for analysis of the survey data, which will be collected beginning in May 2023. The survey questionnaire was created in Qualtrics and piloted with Rutgers Gardens staff members to ensure functionality of the online instrument and to finalize question content. The project was approved by the Rutgers University Institutional Review Board.

Outcomes/Results: The outcome is a Qualtrics survey to gather information on customer demographics, socioeconomic status, and health behaviors to distinguish who Cook's Market is serving and what communities still need to be reached. The survey contains 39 questions that assess: farmers market usage and awareness, health behavior, demographics, and socioeconomic status. Information gathered will include the customer residency, income, education level, age, transportation needs, and payment assistance programs to have an idea of the customers that are being served and assist those who have community-level disparities that impact their access to the farmers market and overall health.

Evaluation/Conclusion: The results of the information in the literature review and hypothesis composed based on the demographics of individuals in residencies that surround Cook's Market will demonstrate the efficiency of the project. Rutgers Gardens staff members will distribute the survey to customers when Cook's Market opens in May and analyze the results with the context of the hypotheses to improve the functionality and service of Cook's Market for local residents, university students, staff, and faculty.

Title: Community Health Workers in OB-GYN Clinics for the State of New Jersey: A

Literature Review

Name: Chantel St.Fleur

Preceptors: Kelly Kimbo, Program Supervisor

Agency: The Children's Home Society of New Jersey- Safer Childbirth Cities - Trenton Initiative

Purpose: To evaluate the best practices and lessons learned of Safer Childbirth Cities Initiative to develop a potential maternal and child health policy for the State of New Jersey.

Significance: Maternal mortality in the United States is on the rise where sadly about 700 women die each year in the United States as a result of pregnancy or delivery complications (CDC,2022). Black women are disproportionately affected. The Safer Childbirth Cities Initiative primarily serves Black and Hispanic women in Trenton, New Jersey and aims to reduce the maternal mortality rates and improve maternal healthcare by supporting community based organizations in implementing evidence based interventions and innovative approaches to assist high risk pregnant women. A maternal and child health policy will aid in sustaining best practices and lessons learned from the initiative to address needs of the community. Overall, the policy will combat high maternal mortality rates and racial inequities in maternal healthcare.

Method/Approach: A review of research and literature was conducted for use in developing the planning and writing of a grant proposal revealing the benefits of having community health workers in OB-GYN clinics. The literature review was structured into four parts with the following subheadings: 1) What is a community health worker? 2) Importance of having a community health worker 3) Correlation between community health worker & pregnancy and 4) Correlation between community health worker and OB-GYN clinics. Google Scholar was used to collect peer-reviewed research articles on the topic and the subheadings were used as search words. In total, ten articles were reviewed, eight were kept for the purposes of the literature review, and two were not used due to its lack of relevance to the topic. Key findings found in peer-reviewed articles that were relevant and addressed the subheadings were highlighted and referenced in the literature review.

Outcomes/Results: The Safer Childbirth Cities - Trenton Initiative partners will use the literature review to aid in the development of a three-four part webinar series based on grant approval. Teachings in the webinar series will explain lessons learned and best practices of having a community health worker in OB-GYN practices to local and state maternal health stakeholders.

Evaluation/Conclusion: More than half of the research articles included populations that are based in third world countries rather than higher income countries, such as the United States. This finding was interesting due to the fact that the "United States is the only industrialized nation in the world where maternal mortality is rising. And, the U.S. has nearly the highest maternal mortality rate among high-income countries" (Forbes Cohen, 2021). Articles that conducted research on the correlation of community health workers with maternal health in the United States are very limited; this form of community health work is more common in third world countries. Reviewing these articles and discovering maternal health techniques from community health workers in third world countries can be applied to low income communities in the U.S., which could be an effective strategy for future work.

Title: Fundraising and Operations for Nonprofit Organizations

Name: Jenny Sun, Fundraising and Operations Intern

Preceptors: Kevin Brennan, Fundraising and Operations Coordinator

Agency: DMAX Foundation

Purpose: To expand DMAX Foundation's list of grantors and partners in the Pennsylvania area to increase funding and donations to support DMAX clubs and events.

Significance: Mental illnesses are among the most common health conditions in the United States. In 2021, there were an estimated 57.8 million adults aged 18 or older in the United States with any mental illness; this is about 22.8% of all U.S. adults. Among this number, young adults aged 18-25 years had the highest prevalence of any mental illness (33.7%) yet they had the lowest percentage (44.6%) of actually receiving mental health services (NIMH, 2022). DMAX Foundation establishes and supports student-led mental health DMAX Clubs on college campuses. However, partnerships with stakeholders need to increase to secure funding to meet the high needs of college students wanting to start new clubs. This project involves researching a variety of organizations and individuals that align with the organization's values to create partnerships that will increase funds and resources for DMAX Clubs.

Method/Approach: Potential grant makers and foundations were gathered from Grant Gopher, Grant Station, Foundation Directory Online, or Google. A Google spreadsheet was created to organize the list of potential grantors. Grantors were narrowed down by geographical location, such as "Allegheny, PA" and specific keywords, such as "mental health," "program development," and "human services." The Google spreadsheet was split into several categories, regional grants, general PA state grants, nonprofit sponsors, behavioral health sponsors, and corporate sponsors. On each page, there was a column for the name of the organization, a brief bio, address, additional notes, contact information, application directions/site, and the due dates. The ones that were best fit for DMAX were highlighted green for easy access. All findings were shared and reviewed by the preceptor, who then worked with the Executive Director to start composing applications.

Outcomes/Results: As of today, data for 18 Regional Grants, 23 General PA State Grants, 7 Nonprofit Sponsors, 6 Behavioral Health Sponsors, and 7 Corporate Sponsors are organized in the spreadsheet. Within the spreadsheet, those that DMAX have applied to have been noted and marked. With this, DMAX Foundation's chances of receiving some amount of monetary support have increased. The preceptor and Executive Director shared with the team that there have been several successes with obtaining a grant to support the foundation from the spreadsheet. With the creation of the grant spreadsheet, future team members will be able to quickly search through and reapply for grants in the following years.

Evaluation/Conclusion: At this time, many of the results of the grant applications have not been reported back yet. Grant applications are a tedious process, and the preceptor and the Executive Director take their time composing submissions to ensure high chances of success. Given the data of the various grants/sponsors mentioned in the Outcomes/Results section, it can be understood that even after finding and applying to multiple applications, only a relatively small amount will make it to the second review. Due to the varying due dates of the grant applications, the spreadsheet should be relooked often to make sure applications are submitted timely.

Title: ClinOps Search Solution

Name: Raaed Syed

Preceptor: Tom Tolfa

Agency: Gilead Sciences - Clinical Operations Center of Excellence

Purpose: To create a standardized avenue in ClinOps for easier and more central access to relevant systems, guidance, or process materials when needed; increase ease of access and accessibility across spectrum of ClinOps systems.

Significance: For ClinOps employees, there is no standardized avenue to easily access relevant systems, guidance, or process materials. The abundance of scattered systems and resources across ClinOps can result in a lack of direction and inefficiency in seeking out ClinOps related materials, such as procedural documents, training, and guidance documents. The ClinOps Center of Excellence exists to optimize work processes and make process improvements in support of Clinical Study initiatives, and increasing efficiency and accessibility of resources in support of Clinical Study activities falls within that scope. The Search Solution is a search tool that bridges, consolidates, and centralizes many of those resources and systems in one place so that ClinOps members may have faster, easier, more accessible, and more efficient access to relevant ClinOps resources.

Method/Approach: In an effort to create the Search Solution, exports of 700+ resources were taken from several major ClinOps systems: GVault for procedural docs (i.e. SOPs, FRMs, BEDs, WRKs, etc), MyLearning Portal, GXPLearn, and Sharepoint. Once the exports were received, the data from those exports were refined, adjusted, and subject to quality control to create a standardized structure that would be inputted into MS List, which feeds into the PowerApp search tool. Data refinement and standardization included tagging the resources appropriately, which consisted of applying categories & subcategories, keywords, content type, inserting the deepest URL possible, and getting rid of any dated or faulty contents.

Outcomes/Results: By consolidating, standardizing, and organizing the data within major ClinOps systems, the process of accessing ClinOps resources and finding them across various systems is more seamless and efficient. As opposed to scavenging across several large systems, over 700+ ClinOps resources were organized in a central fashion with tags that made them more easy to come across and find. By housing these resources in an organized and categorized manner within the PowerApp, ClinOps members can use the PowerApp to search for resources based on the tags and basic terminology as opposed to navigating large systems without any direction to ultimately access the resources they need.

Evaluation/Conclusion: ClinOps members can use the Search Solution - which houses refined, consolidated, up to date, tagged, and categorized data from ClinOps systems that feeds into the PowerApp search function - to efficiently and intuitively find and access essential ClinOps resources held across various major ClinOps systems as opposed to manually and tediously navigating the largely extensive systems to do so. Thus, time is saved, efficiency is increased, and processes in accessing resources are more effectively streamlined. For next steps, the development of a governance process has been identified as necessary to ensure a consistent process for uploading new material and to verify materials are up-to-date and compliant.

Title: Community Outreach and Health Education

Name: Sidraah Syed

Preceptors: Jennifer Kershima-Biam

Agency: Crossroads4Hope: A Network of Cancer Support

Purpose: To offer support to individuals and families affected by cancer, educate those affected by cancer(s), and offer resources available to aid in emotional/mental, physical, and financial well-being.

Significance: Approximately 39.5% of men and women will be diagnosed with cancer at some point during their lifetimes (NIH, National Cancer Institute). However, with the right education, support, and resources, dealing with and recovering from the effects of cancer can be made much more manageable for those affected. Crossroads4Hope embraces all people touched by cancer — the diagnosed and their loved ones — to become empowered to take control of their health and care, through programs of support, resources, education, well-being, and hope. This project aids in accomplishing these missions by creating literature reviews on specific cancers to develop educational presentations, as well as by attending community outreach events to promote these resources.

Method/Approach: A comprehensive literature review was completed on the topic of breast cancer and the importance of getting screenings completed regularly. This literature review was then used to cultivate an educational PowerPoint in layman's terms on this topic that will be presented at upcoming community outreach events in an effort to spread awareness and provide resources to underserved communities. Social media posts were also put out informing community members of upcoming Cancer Awareness Fair on April 29th, 2023 being hosted by Crossroads4Hope. The effectiveness and overall impact of this event will be measured by attendance count.

Outcomes/Results: The Cancer Awareness Fair ended up being a successful event. A total of 30 people were in attendance. Many thoughtful conversations were had with members of the Elizabeth, NJ community and C4H staff members and we were able to make a difference by providing appropriate supports and resources to individuals where they were needed.

Evaluation/Conclusion: Overall, Crossroads4Hope is an organization that strives to offer support to individuals and families affected by cancer, educate those affected by cancer(s), and offer resources available to aid in emotional/mental, physical, and financial well-being. Educational materials were created to aid in accomplishing this mission as well as hosted a Cancer Awareness Fair at the Elizabeth Public Library, NJ to also promote this message. The impact of this event was measured based on the number of individuals in attendance at the event and through this metric, we were able to assess that the event was successful. Although we did anticipate a higher turnout, several reasons can be attributed to this turn out including poor weather. However, the turn out we had ended up being ideal as we were able to have much more in-depth one-on-one conversation with all attendees than we would have been able to have had the event been packed. We learned so much more about the community and individuals needs in this way. We promoted our organization and the resources we provide, as well as had many meaningful conversations with community members.

Title: Developing a Local Resource Directory to Assist Patients with Cancer in the South and

Central Texas Region

Name: Kayla Tennyson

Preceptors: Chelsea Fellows, Manager of Patient and Community Outreach

Agency: The Leukemia and Lymphoma Society (LLS)

Purpose: To create a resource directory for LLS Volunteers to enable them to provide local resources for cancer patients in the South and Central Texas Region

Significance: Every year about 186,400 people are diagnosed with either Leukemia, Lymphoma, or Myeloma (The Leukemia and Lymphoma Society). Additionally, Leukemia is also the most common cancer diagnosis in children. In Texas many resources are limited to help patients with cancer compared to other states. The Leukemia and Lymphoma Society helps to combat this problem by offering support through various free programs for patients and caregivers. LLS also helps financially through grants and by providing free information on treatment options, clinical trials, and support groups. Creating a resource directory allows LLS volunteers to tell patients directly where to look for specific resources. This allows patients to have better access to care as well as facilitates better communication between LLS and the surrounding healthcare facilities.

Method/Approach: This project looks at the Red River Region and the available resources that are provided by non-profit organizations, religious organizations, foundations, and hospitals. These regions include Little Rock, Arkansas; Fayetteville, Arkansas; Oklahoma City, Oklahoma; Dallas, Texas; Ft. Worth, Texas; Lubbock, Texas;, Tulsa, Oklahoma; and Abilene, Texas. Each city and state was researched and the available resources that were offered to each respective region were copied down along with the phone number, the organization, the type of services offered, the url, and to whom the service was offered to. The neighboring cities were also included in the research. The technique of the research started by first researching a map of the city and then finding the hospitals nearby. After the hospitals were noted down, the resources provided by the hospital were found and noted. Then, nonprofits that provide resources were searched for in the respective region. The non-profit organization's resources were reported. Next, foundations and religious organizations were searched and their resources were recorded. Upon completion of the research, a resource directory was compiled and distributed to the LLS volunteers who work in the Red River Region in Texas.

Outcomes/Results: The study reported a suggestion to "the increase in "data generalists"; experts that focus entirely on data sharing and communication [54]. A data generalist takes on all responsibility for the sharing of data and needs critical thinking skills to integrate, evaluate and communicate the benefits and drawbacks of providing open data" (Hulsen). The researchers suggested this to help better facilitate healthcare communication.

Evaluation/Conclusion: This project will be successful if the LLS volunteers use the directory while they are calling patients. If patients use the resources provided, then this project will be very successful. Also, if LLS publishes this information on their website under resources then that will be useful to patients as well. This project should be looked at annually as programs change their services. It would be beneficial that the directory stay up to date as possible. Limitations for this project is that this project does not extend all over the country and not all the resources are available to everyone. Resources vary based on where the patient lives.

Title: Recruiting for the Philadelphia Preschool Evaluation Project for early-education research

Name: Vaishali Thekhalli

Preceptors: Project Supervisors: Erin Harmeyer and Carmen Espinosa

Agency: The National Institute for Early Education Research

Purpose: To increase the total number of Philadelphia-based preschool programs participating as the control group of the PHLpreK evaluation study, achieved through improvements to email/phone script copy.

Significance: Early childhood education research is critical for education systems in cities as it provides valuable insights into the impact of early childhood experiences on long-term outcomes. Research studies have shown that providing high-quality care and education to children from birth through age five can lead to higher IQ scores, higher school graduation rates, and lower crime rates (Minervino 2014). This is especially significant for poor and disadvantaged children, who often make the most gains from preschool programs. The PHLpreK project works to evaluate preschool programs under Philadelphia's Pre-K Quality Initiative. The project aims to address the need for high-quality early childhood education in urban areas and ensure that all children have the opportunity to thrive and reach their full potential.

Method/Approach: The initial phase involved recruiting preschool programs. To streamline this process, an email template was developed. This included information about the purpose of our study, what to expect during the site visit, questions involving consent forms, and their incentive for participating. Sites were also regularly followed up with when call backs were requested. Between 2/14/23 and 3/19/23 emails were sent to 64 preschool programs in Philadelphia. Child assessments and classroom observations were scheduled during the recruitment period. The data was sent back to NIEER from data collectors, scanned, redacted, cleaned, and entered into an SPSS shell.

Outcomes/Results: The email template and streamlined recruitment system led to a gain of 4 programs to participate in the study leading to a 57% participation increase this semester. Each site visit generated about 2-4 score sheets. Each sheet was entered into SPSS with an average of 150 variables per score sheet. In total, as of April 26th 2023, data from approximately 40 sites have been entered into the database.

Evaluation/Conclusion: The collection of data from sites that have not yet been visited requires the project to be prolonged until the summer of 2023. The implementation of the outreach strategy facilitated the establishment of connections, increasing the likelihood of program participation in the research study. Efficiently streamlining the phases of the Philadelphia Pre-K project is of utmost importance to safeguarding the well-being and future success of infants and toddlers in Philadelphia. The inclusion of an additional 4 programs that the program included during this time will substantially contribute to our ability to provide comprehensive feedback to preschools operating under the Quality Initiative in Philadelphia.

Title: Community Education About Adverse Childhood Experiences (ACEs) In New Jersey

Name: Rachel Thompson

Preceptors: Victoria Spera-Ballesteros, Program Manager for Community Education

Agency: Prevent Child Abuse – NJ

Purpose: Evaluating the success of the Connections Matter NJ training program by analyzing the data of post-training survey results.

Significance: Adverse childhood experiences (ACEs) are potentially traumatic experiences, such as neglect, violence, and abuse, that are experienced from ages 0-17 and can have significant longer-term negative impacts (CDC, 2021). About 61% of adults in the United States have experienced at least one type of ACE. In New Jersey, it has been estimated that 40% of children have experienced at least one ACE, while 18% have experienced multiple ACEs. The Connections Matter division at Prevent Child Abuse – NJ, through the support of the NJ Department of Children and Families, provides cost-free trainings on how to identify and mitigate the negative effects of ACEs by educating individuals on risk and protective factors. This helps to build community capacity by enabling community members with the skills and competencies to build safe and nurturing interpersonal connections. This project will aim to evaluate the effectiveness of the training program by reviewing the data gathered from post-training survey results.

Method/Approach: At the conclusion of every Connections Matter training, all participants were asked to fill out a post-training survey via Survey Monkey that included 15 questions asking them to rate different aspects of their training experience on a scale from 1 to 4 (1=Not at all, 2=Slightly, 3=Moderately, and 4=Very). The questions asked participants to rate the quality of the training, the quality of the facilitator, the usefulness of the content in the participant's field of work, the pace of the training, if the materials contained sufficient information, if the content provided useful strategies to apply in the participant's community, and how well organized the presentation was, among other aspects. An open ended section for additional comments was also available. The data from the survey results were then compiled into an Excel spreadsheet at the end of every month, and the data was reviewed to evaluate the success of the program.

Outcomes/Results: Out of the 898 people reached through 37 training sessions (both virtual and inperson) between July 1, 2022 and April 1, 2023, 674 participants completed the post-training survey. For overall quality of the training, 97% answered 3 or higher, while 94% of participants reported that the content of the training would be moderately or very helpful in their work. Additionally, 95% reported that the materials contained sufficient information to drive action, and 94% answered 3 or higher for learning useful strategies that they can apply in their community. Further, 98% of participants felt that the content was organized in a moderately to very understandable way, and 97% felt that the handout materials helped further facilitate their learning experience. For future consideration, 5% of respondents gave the pace of the training a 2 or lower, indicating that the training could be abbreviated. Also, the open-ended comments most frequently mentioned a request and/or preference for in-person training rather than virtual.

Evaluation/Conclusion: The survey results concluded that the Connections Matter training sessions were successful in enabling participants with adequate knowledge and strategies to apply in their own work and communities. In the future, shortening the length of the 4-hour training and running more in-person sessions should be considered. The survey results should be reevaluated every fiscal year for quality control, and any aspect that is receiving lower scores should be reassessed.

Title: Marketing and Increased Awareness of Dental Health Using Instagram for Rocky Hill

Family Dentistry

Name: Zoha Tirmizi

Preceptors: Dr. Bhumika Patel; Doctor of Dental Surgery

Agency: Rocky Hill Family Dentistry

Purpose: To improve new patient flow and activity using social media marketing methods such as Instagram, providing appropriate material on educating our patients on how to maintain a healthy smile.

Significance: Many individuals who are on social media and cannot afford to see a dentist do not have accurate dental advice (Spallek 2015). When it comes to running a profitable dental practice, dental marketing and sharing reliable dental care are essential. In fact, the most successful dental business experts recommend that a new practice should spend 20% of its estimated gross income on marketing (Smith 2021). Instagram is one of the simplest methods to market a business these days. Posts containing at least one hashtag receive 29% higher engagements on Instagram (for accounts with 1,000 or less followers). Rocky Hill Family Dentistry is located in Rocky Hill, and sees a large number of younger patients who are active on social media. This project will employ a number of hashtag groupings to expand the account organically and attract a larger audience, hence a larger audience for potential new patients, and for Instagram users, to take care of their teeth properly.

Method/Approach: A new Instagram account was set up for the dental practice and neighboring dental offices, and relevant parties were followed and added. Canva was used to update and change dental advertisements and post op teeth images. From March 1st through March 30th, one Instagram post was made every alternate week to monitor flow of patient activity- as well as Instagram reels and stories were shot using an iPhone camera and edited through the Instagram app. The posts were mostly pre and post photographs, as well as dentistry ads at the time. To give the Instagram algorithm a more defined identity, a hashtag strategy was introduced, with a minimum of 5 hashtags each post. To compare results, some postings used fewer and more hashtags. Flick.tech, an artificial intelligence application, was utilized to determine the most relevant hashtags. Instagram analytics software was utilized to monitor progress of the project.

Outcomes/Results: Hashtag groups were formed for specific posts for each day. The first hashtag group was utilized for the first week of posting and included three extremely relevant dental tags, five medium relevant tags, and seven low relevant tags. No hashtags were utilized on the first day, which resulted in no audience reach. Day 2 saw a total of 18 new accounts, followed by a significant increase the following day, finishing day 3 with 32 new audience reaches. On day 4, 40 new persons interacted with the post, however on day 5, just 10 accounts interacted with the post. The downward trend continued as the number of accounts decreased to 7 on day 6, then rebounded up to 22 on day 7. For the middle week of April, an average of 24.7 accounts were contacted every day. From March 1, 2023 to April 20, 2023, Moz.com's internet presence score increased by 52%.

Evaluation/Conclusion: When developing an office's online digital presence as well as relevancy, hashtag planning is incredibly beneficial. Using the insight tool Instagram provides is a useful tool for social media marketers to use since it collects data for you on audience reach, content engagements, and profile activity. The insight feature goes even farther to segment the demographic to show you who is connecting with your page. Continuous hashtag testing will be done to improve the dental offices revenue.

Title: Environmental Education Program

Name: Kaitlyn Tran

Preceptors: Julie Thomas

Agency: Fairview Lake YMCA Camps

Purpose: To arrange the program areas by gathering the necessary equipment and developing the materials needed while instructing participants in all programs.

Significance: It is essential to ensure the safety of participants, such as proper use of camp equipment, while providing enjoyable experiences to environmental education, and walking through the procedure for each activity. Researchers have found that most students do not "have a solid understanding of environmental conservation, environmental ethics, the use and management of natural resources, or how to properly explain the causes of modern-day environmental issues" (Earth Share, 2022). In the situation where technology is not readily available, Fairview Lake YMCA Camps offer to educate its guests and participants on the environment. The education program will concentrate on improving environmental knowledge with engaging activities. Some activities include hiking on uneven terrain, learning how to use a handheld GPS and navigating the woodlands, stream ecology, and archery.

Method/Approach: In collaboration with individuals with lived experiences, classes and courses are designed for individuals to learn and challenge themselves. The activities are challenge by choice, but participants are encouraged to reach new lengths. The organization provides food and board to all its employees and guests who come from all over the globe. The organization has groups visiting every day, in which we offer resources and knowledge. Afterwards, the team of program instructors reach out to the participants, encouraging feedback on the programs and planning out another visit to the camp.

Outcomes/Results: The goal of this program is to educate, serve, outreach, and assist individuals and communities all over the world. Through the partnership of many different organizations and connections with individuals, Fairview Lake YMCA is able to offer opportunities to students, those that are local, state residents, out-of-state, and even to those that are from abroad. Through this program, over thousands of people are aware of the organization's services, have shown support, and assisted in participation of programs. From the beginning of February to April 20, there have been over 4,000 attendees and over 400 classes and activities. Current feedback surveys and data collection is still in progress, however, the initial data collected over the years and verbal feedback suggest a positive growth with more returning participants every season.

Evaluation/Conclusion: With the support of donations and volunteers, Fairview Lake YMCA is able to continue running educational programs as well as providing grants and scholarships to students with financial hardships. The results of the program provides equal opportunities to people of all ages and ethnic backgrounds on all occasions through the arduous effort of the organization. I have learned a great amount from working at the organization, from public speaking to teaching large groups of students and participants to gaining knowledge on environmental education. We are continuing to collect data and modify our programs based on the feedback from the attendees.

Title: Engagement Levels Online for Pharmaceutical Drug Ad-Campaigns

Name: Cassandra Trotta

Preceptors: Chris Cullmann, Executive Vice President

Agency: RevHealth, LLC- Morristown, NJ

Purpose: To assess which websites receive the most engagement on a drug ad campaign and identify most influential direct-advertising methods to users.

Significance: Marketing in the pharmaceutical industry has transitioned from mainly television commercials, to internet banner ads (Adams 2022). Companies are able to reach their target users online by studying their behaviors. RevHealth's main goal is to maximize clients' sales by driving awareness and educating online users about the client's drug(s). Through direct advertising, Revhealth can market to specific audiences by choosing the best website to display these ads. When advertising online, it is difficult to decide which website will be the most beneficial in engaging viewers and turning them into potential consumers of a specific drug. Behavior based research assisted RevHealth to decide which websites to market pharmaceutical products/services to consumers.

Method/Approach: Engagement levels for ad campaigns were measured through the platform SEMRUSH. These ads were specific to one of our most valuable client's drugs: a postoperative medication. This campaign consisted of 8 display banner ads on numerous different sites. The flight of this campaign containing the 8 different banner ads was 7/14/20- 5/6/22. Through studying the amount of impressions on each ad on every site included, the most viewed one assisted in Revhealth's strategies for which sites to market on. This research also tells what design of the 8 banner ads is most effective in gaining clicks from users.

Outcomes/Results: Of the 8 different banner ads, the 2 that had exponentially higher interaction levels were the 2 banner ads with less words, bigger fonts, and including a picture of a person. Of the hundreds of websites that these 8 banner ads were displayed on, the websites that the ads received the most impressions, or clicks, were- Drugs.com, Spine-Health.com, Medscape.com, and MedicalXpress.com. Spine-Health.com received the highest impression levels- reaching 36.6k users seeing Ad #1 and 25.5k users seeing Ad #2.

Evaluation/Conclusion: These findings show that banner ads with simple and clear messages received the most engagement. These results also show that the banner ads reach the largest target audience on medical/drug- related websites. The client's drug, a post-operative pain management medication, intrigued the most users on Spine-Health.com. This helps RevHealth strategize which websites to market to these potential future consumers, and how. The results show the correlation between individuals having, or have had, spinal surgery and clicks to the banner ad. RevHealth will use this information to see that there is an extremely specific target audience based on these websites' impression levels.

Title: Factors Contributing to Exposure of Hormonal Disruptors

Name: Stephanie Uche

Preceptors: Frances Di Clemente, Program Manager

Agency: CINJ

Purpose: To evaluate factors contributing to exposure to hormonal disruptors in African American communities.

Significance: Toxic ingredient exposure varies amongst different races. Black women have higher exposure to parabens and phthalates, than other races (Bloom, M, et al., 2019) Hair products used by African American women are more likely to contain placenta (a potential source of estrogen hormones) and industrial chemicals, such as parabens, (Bloom, M, et al., 2019) that affect estrogenic pathways. Precision Medicine Oncology provides targeted treatment based on a patient's tumor genomics. Products that target hormonal disruptors are widely available in Black women's beauty products. CINJ does genomic research to focus on how an individual's gene has an impact on their reaction to treatment. This literature review aims to study the social and clinical significance of hormonal disruptors in Black women's beauty products.

Method/Approach: Information from concluded research provided by verified journals was used as initial reference. The documentary 'Not So Pretty' introduces a resource engine called EWG.org which was further used to compare the prominence of hormonal disruptors in beauty products. The resource helped observe the difference in harmful ingredients with products marketed for curly hair vs products marketed for all hair types. The companies SheaMoisture, Kristin Ess, Maui Moisture, Aussie, TRESemme, and Ogx were used for comparative knowledge. A survey was developed and shared amongst different races and ethnicities of women from the ages of 18 to 60 to understand their hair care knowledge. The survey included questions that asked about their product use, how they treat their hair, and what they know about the ingredients.

Outcomes/Results: A total of 35 women were surveyed, and the respondents identified themselves as Black, Asian, Hispanic, White, and North African women. From this sample twenty-one (60%) of them do not actively avoid products with hormonal disruptors. Women aged 18-25 used more products compared to the women aged 26-60. Between the ages and demographics, there was more emphasis on the product usage than the ingredients. Thirty-two women (85%) look for a new product through social media while three (15%) of them rely on friends for suggestions. The ingredient list did not have a big difference between curly hair products and all hair type products.

Evaluation/Conclusion: The cultural differences between Black women and other demographics have an impact on their hair product exposure. Age is now a considerable factor influencing whether beauty products are used. There is still a large emphasis on scent and hair presentation amongst younger Black women. Women from ages 26-60 use less hair products, only a handful of them participants actively avoid phthalates and parabens. Health regulatory policies must emphasize more on revealing all the ingredients of hair products and possible health defects. To make a difference, people can create informing videos and educate one another by sharing studies.

Title: Analyzing suppliers and supply cost

Name: Luke Vadala

Preceptors: Dr. Jeni Glavicic, DMD

Agency: Park Dental Group

Purpose: To analyze the cost and quality of new dental equipment at Park Dental in Ridgefield, NJ.

Significance: Each year, the average dental office spends roughly \$100,000 on new dental equipment. During the Covid-19 pandemic dental services utilization decreased by 79% in April of 2020 (Gelburd 2020). Given the high yearly costs of sourcing new dental equipment and the decreased utilization of dental services, the dental industry was experiencing large losses of revenue. Price creep, misquotes, and overspending are just a few of the challenges that dental supply chain managers must overcome (Curemint 2021). Even before the pandemic it was difficult for dental offices to minimize treatment costs and now dental offices also have to worry about purchasing personal protective equipment on top of the already expensive dental equipment. Performing a cost analysis of dental and PPE equipment can help minimize the costs that my dental office is incurring and help find new methods to cut costs while also providing quality service. This will allow us to find alternative solutions to the problem instead of having our patients bear the burden of higher costs.

Method/Approach: A review by the administration department was done of our costs and revenue. The task was to create a spreadsheet of our current inventory and compare it to that of the spreadsheet of our 2019 inventory. The current task is to find ways to source cheaper equipment as well as find a better marketing strategy so that we can experience similar revenue to that in 2019, and decrease our equipment costs to around \$80,000. However, the quality of equipment will not be sacrificed for a lower price. A marketing strategy based around our quality patient care and protective equipment was also created to help bring in more patients and thus increase our profit without having to raise the cost of care.

Outcomes/Results: I compared the 2019 and 2022 data from our inventory spreadsheet. I found that the cost of equipment in 2019 was \$89,571 and the cost in 2022 was \$89,580. The costs for equipment for both years were similar, however, revenue was higher in 2019 because of the large influx of patients that the office was experiencing at that time. The office has found a way to consistently source new equipment so that the costs are relatively low. However, profit was largest in 2019 at \$761,899. The cost of protective equipment because of the Covid-19 pandemic was not factored into this spreadsheet. This further complicates the situation because more money must be spent on protective equipment for patients and caregivers and less patients are coming to the office to receive dental care. The use of dental services fell by over 70% during the months of March and April 2020. Profit will also be much lower in 2022 because of the decrease in the number of patients as well as increased equipment costs.

Evaluation/Conclusion: Given the large decrease of dental patients during the pandemic my main focus will be marketing to new potential patients. A separate spreadsheet for personal protective equipment will be made and analyzed so that our current inventory and supply chain can be understood. A larger influx of patients requires us to have a larger inventory of PPE equipment. Dental supplies and office expenses are the largest costs that the office is incurring. These costs can be minimized by sourcing gently used dental and office equipment that is still in good condition. This will not sacrifice the quality of the equipment but will cut costs by a considerable amount. An ongoing analysis of these changes will be done to see if they are effective in minimizing our costs and maximizing our profit.

Title: Community Outreach

Name: Lisbeth Veras Encarnacion

Preceptors: Field Supervisor: Iliana Chevres

Task Supervisor: Emmanuella Francois

Agency: Prevention Links- Elizabeth, NJ

Purpose: To promote system and community improvements for the benefits of youth and families in the Elizabethport community by working to reduce illegal substance use.

Significance: According to estimates, 25 million people abuse drugs in the United States. There are an additional 40 million people who are impacted indirectly, including the relatives of abusers, and those who are hurt or killed by impaired drivers. The financial burden that decreased production, property damage, accidents, and medical expenses place on society and the economy is tremendous. Every year, 16 million adults and about 300,000 children suffer from alcoholism (excessive drinking). The number of Americans who are addicted to other drugs, such as sedative-hypnotics or barbiturates, opiates, and sedatives is estimated to be 21.6 million. Prevention Links promotes system and community improvements for the benefits of youth and families in the Elizabethport community by working to reduce and eliminate illegal substance use. The purpose of this project is to provide high quality facilities, services and activities that serve as a motivation for the betterment of youth and the Elizabethport community and reduce use of illegal substances.

Method/Approach: To raise awareness throughout the Elizabethport community the members of the center were contacted via phone calls, in person meetings, and email. Members who came to the center were provided with the center's monthly calendars, the flyers with the events and programs provided, and with the center's hours and services. Spanish language translation was provided as well as assistance in filling out forms. A bi-weekly event was held at a local high school to provide them with information on the dangers of underage drinking and substance abuse.

Outcomes/Results: The outreach took about three weeks and the numbers of youth in the program increased to 30 youth participants. The outcome of the youth program is to prevent and reduce the use of illegal substances. Part of the youth that joined were from the high school in continuation of their education. For the family program a total of 10 families joined the program. The family program aims to strengthen families through effective communication techniques.

Evaluation/Conclusion: The community center would continue to keep having the programs they provide the community to bring more awareness and new members into learning the prevention of illegal substance abuse. The center should continue to do more outreach to the community and make sure they get more members to acknowledge the topic that the center provides them on how to better the community. The effectiveness of these programs can be measured by making surveys for the community members to get their opinion on how they view the community now.

Title: Increasing Awareness About Reproductive Health

Name: Leticia Vizcaino Blanco

Preceptors: Jessica Sanchez, APN

Agency: RWJUH Family Planning Clinic

Purpose: To create a series of bilingual educational posts for the RWJUH Family Planning Clinic's Instagram page in order to increase awareness on reproductive health.

Significance: New Brunswick has a population of 55,992 people, 45.7% (18.7k) of them are of Hispanic descent (DATAUSA, n.d). New Brunswick is home to a large immigrant community; 18.9% of residents are not US citizens, which is higher than the national average. Those who are not citizens or legal residents can not apply for health insurance. 18.4% of New Brunswick residents are uninsured (DATAUSA, n.d). Medical care can be costly without insurance, leading people to neglect their health. The RWJUH Family Planning Clinic offers gynecological services to women and transmen in New Brunswick and the surrounding areas. The clinic's goal is to provide high-quality, patient-centered services without any barriers to care. The Instagram page provides accurate medical information to the viewers. National statistics demonstrate that health inequalities are worsened by limited health literacy, a key factor that creates health disparities. According to the 2003 National Assessment of Adult Literacy (NAAL), 41% of Hispanic adults had "below basic" level health literacy scores (Soto Mas, F., 2015). The methods used for this project are in English and Spanish to eliminate language barriers. A Papanicolaou (Pap) test is a preventative care test used to identify abnormal cells in the cervix, which can either be caused by the Human Papillomavirus (HPV) or precancerous cells (CDC, 2022).

Method/Approach: A series of five educational Instagram posts and reels were created to educate people about the importance of the Pap Test and increase health literacy among Spanish-speaking people. Three posts focused on the Pap test and the other two posts focused on HPV. Reproductive health information was obtained by conducting bilingual research and interviewing doctors at the clinic. The websites used were the Centers for Disease Control and Prevention (CDC) and the National Foundation for Infectious Disease (NFID). Once all research and interviews were completed, the posts were developed using an online design tool. The data was analyzed using Instagram's Post Insights. This tool provides information about each post's reach and engagement, with subcategories including impressions and post interactions.

Outcomes/Results: The Lets Talk About The Human Papillomavirus (HPV) post, has a total of 73 accounts reached, 62 are followers and 11 are non-followers. Then the How Do You Test For HPV? Is There a Vaccine For HPV? reel, reached 70 accounts, 66 are followers and 4 are non-followers. The How Is The Pap Smear Test Done? Part 1 reel, has a total of 201 accounts reached, 81 who are followers and 120 who are non-followers. While How Is The Pap Smear Test Done? Part 2 reel, reached 204 accounts, 57 who are followers and 147 who are non-followers. Lastly, What Is a Pap Smear? reel, reached 414 accounts, 76 of them are followers and 338 are non-followers. Based on the results it is evident that reels generate more profile interaction and have a greater reach.

Evaluation/Conclusion: To ensure success of the project follower count and future post interactions should be measured in a year. With continuous content creation and posting there should be an upwards trend in followers and profile interactions. To maintain a constant social media presence there should be content creation addressing other reproductive health topics such as contraception, Sexually Transmitted Infections (STIs), and pregnancy.

Title: Injury Prevention and Rehabilitation Performance Measures

Name: Grace Walter

Preceptors: Mike Olim, Director of Operations

Agency: AP2T (Advanced Physical & Technical Training)

Purpose: To provide a level of care for the athletes in the facility - both preventative and injury aftercare.

Significance: Each year, over 3.5 million children under the age of 14 receive treatment in a hospital for sports related injuries (Stanford Medicine Children's Health). Stanford Medicine Children's Health also found that 62 percent of injuries occur during practice. The importance of AP2T is to be able to not only provide strength and conditioning training to the athletes, but to be able to monitor the practice and their fitness levels in order to prevent sports related injuries from happening at practice. Through monitoring fitness levels and muscle strength and fatigue, this can help reduce the injury rate for athletes.

Method/Approach: The project will be conducted by separating female athletes from two club soccer teams into two groups by age (n=27). The first group will consist of female athletes from both teams who are between the ages of 13 and 14, the second group will consist of female athletes from both teams who are 15 and older. Then we will take a baseline fitness assessment of all athletes - which consists of the beep test, a sparta scan, as well as bench, squat, and deadlift max out numbers. Over the course of the next six weeks we will measure fatigue levels before and after practice, sparta scan every 2 weeks, and work on progressive overload for the bench, squat, and deadlift weights. I will be responsible for administering the baseline tests as well as recording the scores for each athlete and recording the responses of the fatigue levels before and after each session. I will also be responsible for recording all of the final test and sparta scan results, as well as any injuries that athletes may sustain during the six week program. The differences in fitness test scores along with the fatigue reports will be used to measure if our progressive overload plan was effective and successful in not only increasing fitness levels, but preventing injuries.

Outcomes/Results: At the end of the project, we hope to produce a full six week progressive overload program with successful results in both of the fitness groups. At the end of the six week program the average deadlift weight was 261 lbs - which is 39 lbs higher than the average at the beginning of the six weeks. The bench average weight was 111 lbs - which was 16 lbs higher than the average at the beginning of the six weeks. The squat average was 205 - which is 25 lbs higher than the average at the beginning of the six weeks. The beep test average score was 32 - which was 5 points higher than at the beginning of the six weeks. Finally, the sparta scan average was an 84 - which is 6 points higher than at the beginning of the six weeks.

Evaluation/Conclusion: I will evaluate the project based on how the fitness levels increase/decrease as well as how the fatigue levels of the athletes differ from week to week. The final fitness test results will be used to determine if the fitness program was effective in increasing fitness levels as well as preventing injuries. Limitations on the project include injuries that athletes sustain during activity either at the facility or outside of the facility. The project should be kept relevant by readministering the fitness program and the fitness test results every six weeks to ensure that aerobic fitness is increasing as well as muscle strength. Looking at the final fitness test scores, every athlete improved their weights, sparta, and running test score from the previous six weeks.

Title: Maternity Leave Accessibility in the United States and the Mental Strain

Name: Shayla Whiffin

Preceptors: Dr. Gloria Bachmann

Agency: RWJMS Women's Health Institute

Purpose: To review the available literature on mothers post-delivery regarding maternity leave accessibility in the United States (U.S.) and to compare and contrast the accessibility rates and mental health in post-delivery mothers.

Significance: Despite being a developed country, the U.S. lacks maternity leave coverage and utilization with the only program providing 12 weeks of unpaid leave (International Labour Organization, 2010). Studies also show that about 1 in 10 women in the U.S. reported mental health symptoms during postpartum, with 1 in 8 experiencing postpartum depression, and these statistics vary depending on age, state, and notably, race and ethnicity (Centers for Disease Control and Prevention, n.d.). The RWJMS Women's Health Institute is motivated to investigate and bring awareness to the current issues and disparities regarding women's health. This project aims to investigate maternal mental health and maternal leave utilization and disparities through available peer-reviewed literature, bring awareness to the current issues regarding this topic, and will determine whether the available literature is sufficient or not.

Method/Approach: A literature review was conducted using peer-reviewed journal articles from reliable databases including Google Scholar, PubMed, and Rutgers Library. The search terms included were "maternity leave", "accessibility", "disparities", "mental health", "mental stress", "post-partum depression", "length of leave", "coverage", and other related terms. After analyzing and finding seven relevant articles, a literature review was conducted and the main findings from these articles are summarized in this abstract.

Outcomes/Results: Seven journal articles were found that discussed the targeted topics. It was found that shorter maternity leave along with other risk factors put women at a greater risk for postpartum depression and poorer overall health (Chatterji & Markowitz, 2012; Hyde et al., 1995). Maternity leave utilization demonstrates a disparity by race where single and black mothers are less likely to utilize maternity leave (Andres et al., 2016). Lastly, the current U.S. maternal leave policy is not sufficient for mothers and puts them at a greater risk for postpartum depression and poorer overall health (Dagher et al, 2014). Further research is needed regarding postpartum maternal health as well as policy reforms aimed at providing longer and paid maternity leave in the U.S.

Evaluation/Conclusion: Developing postpartum depression after giving birth is not uncommon for women. However, with the addition of racial disparities, societal stressors and pressures, poor health coverage systems, and poor maternity-leave policies, women are put at an alarmingly higher risk for poor physical and maternal mental health therefore, it is especially crucial that we continue to discuss, research, and influence policy reform to change this. (references link)

Title: Lab Procedure Analysis Assessment

Name: Brianna Wilkinson

Preceptors: Goutam Nath, Associate Director of Facilities

Agency: Organon- Church Road, PA

Purpose: To evaluate current Standard Operating Procedure (SOPs) at Organon and create new SOPs for lab cleaning and chemical management.

Significance: GMP (Good Manufacturing Product) or CGMP (Current Good Manufacturing Practice) is used to ensure quality and purity of products being created, researched, produced, or examined for cause of adverse effects (Pharmacovigilance). Other forms of labs are considered GLP's (Good Laboratory Practice) which has requirements for safety and quality of produced data but is not overseen by the FDA (FDA, 2018). In this case, the GMP requirements and procedures are regulated and enforced by the FDA (Food and Drug Administration) to ensure compliance (FDA, 2021). If failure to comply with regulations or misinformation was submitted to the FDA and distributed to the public, a recall will occur. This project had the purpose of proposing recommendations to adhere to law and company regulations and standards. This was completed through the process and need for SOPs to be implemented.

Method/Approach: All the current SOPs at Organon were reviewed and the departments without an SOP were identified. A best practice research was conducted for missing SOPs by reviewing SOPs of similar universities and labs. The scope of this project was to create new SOPs for lab cleaning and chemical management. The first step was to research current SOPs at other universities and pharmaceutical companies' laboratories. Secondly, the mapped out current process using Lean Six Sigma was used to determine any gaps in the process. While the current state is being processed, a draft SOP was created, mainly focusing on the procedure. Once the current state was mapped, recommendations were added into the final state map to provide insight into the new process. After the final state has been established, meetings with the scientists are conducted to receive feedback on the new process. The SOP will then be modified based on the discussion and the responsibilities of the SOP will be finalized.

Outcomes/Results: Two SOPs were created for laboratory cleaning and chemical management. The SOP's include the scope of the procedure, responsibilities, and the steps of the entire process. A total of ten (n=10) best practices and SOPs were evaluated and reviewed to identify the best practice for SHIP Lab. The SOP's created were based on the information gathered from the organization and the current SOP's at other laboratories. Gaps within the current processes have been found via Lean Six Sigma and recommendations have been made in hopes of easing the process for the scientists. A total of six (n=6) recommendations have been proposed based on the research for the best practice and the understanding of the current state and situation at Organon. The final SOP has been shared with the OR&D (Organon Research & Development) Quality Assurance department for approval.

Evaluation/Conclusion: Large meetings, including all relevant stakeholders such as the scientists, facilities, and Quality, are needed to update any changes within the facility to ensure the SOP will keep the facility in compliance with regulations. Going forwards, SOPs should be reviewed on a periodic basis to ensure compliance. The recommended time frame is every one to two years to ensure the policies and procedures are current and match the needs of the laboratory. If changes are necessary to further comply with regulations and company standards, those requirements will be added. The current SOPs are currently pending the approval from OR&D. SOP's are crucial to facilities and laboratories to maintain compliance with the regulations from local, state, and federal health authorities and departments.

Title: Assessment of lead-paint levels in Roxbury homes

Name: Tyler Williams, student

Preceptors: Jim Craig, public health nurse

Abigail Montgomery, registered environmental health specialist

Agency: Roxbury Health Department, Roxbury NJ

Purpose: To understand and help with lead-paint investigations in homes made before 1978 to protect children and families from the health risks associated with lead exposure.

Significance: According to the World Health Organization, roughly 1 million people die each year due to lead poisoning, many of them being children. Millions of people who do not die from lead poisoning are exposed to low lead levels which can pose serious health risks (World Health Organization, 2022). Lead exposure can lead to many lifelong health problems, including high blood pressure, anemia, damage to the organs, as well as behavioral and neurological deficits. Those who survive cases of severe lead poisoning, most commonly children, often suffer from intellectual disabilities, a lower IQ, slowed growth and development, and several hearing, speech, learning, and behavioral problems (Centers for Disease Control and Prevention, 2022). In children, symptoms of lead poisoning are usually invisible, which only stresses the importance of effective lead prevention. This project aims to initiate lead investigations and testing in rental homes built before 1978.

Method/Approach: To compile a list of rental properties in Roxbury, the simplest way was to start by taking a drive through the township and writing down any addresses that looked like rental properties. This is done by identifying properties that had multiple doors, multiple mailboxes, or properties labeled in ways similar to "A-B". The original list, which was based on property exteriors and the environmental health specialists' common knowledge, was very broad and not specific to the main goals of this project. An additional list of rental properties was provided by the Clerk's office, but many of the rental dates were outdated. NJ property tax records helped to eliminate any unfit properties, ensuring that they were still listed as rentals and built before 1978.

Outcomes/Results: The finalized list consists of nearly 400 properties built before 1978 that require lead inspection. A total of 800 rented properties were reviewed in Roxbury Township, roughly 200 of these properties being identified from the outside. Since beginning this project, the Roxbury Health Department has only received two lead-safe certificates from properties off of this list.

Evaluation/Conclusion: Developing a list for this project is ongoing. For this project to move forward, a contract between the township and the test company must be in ordinance with the state and approved by the town council in a public meeting. Once approved, the health department creates a mailing list to advise the community on potential upcoming lead inspections. Any rental properties with lead-safe certificates will send a copy of the certificate to the health department to create a list of properties in need of inspection. This finalized list will then be shared with LEW Environmental, a lead, asbestos, and mold inspection company in the area to begin inspections. Lead inspections must be completed every three years or upon tenant turnover where no valid lead-safe certification is present. If the owner has a lead-safe certificate, which is valid for two years, they do not need to undergo inspection (NJ Department of Community Affairs, n.d.).

Title: Patient and Healthcare Organization Outreach Expansion

Name: Jacob Wolak

Preceptors: Laura Diaz, Manager of Patient & Community Outreach

Agency: Leukemia and Lymphoma Society - LLS (Southern California/Hawaii Region)

Purpose: To connect new healthcare organizations with the Leukemia and Lymphoma Society (LLS) via increased patient outreach to the Blood Cancer Conference within the Southern California/Hawaii region.

Significance: In 2021, there were an estimated 57,750 deaths in the United States from Leukemia, Lymphoma and Myeloma. These blood cancers account for approximately 9.5% of cancer deaths in the US (Facts and Statistics Overview 2021). The average annual mortality rate for blood cancers in California is 5,911 (Surveillance, Epidemiology, and End Results Program 2020). The Leukemia and Lymphoma Society works with organizations and governmental agencies to provide free resources to patients and their families as well as healthcare providers to reach all communities. These resources include financial assistance grants and programs, regional support groups, nutrition consultations, and connections to nonprofit organizations. These programs help reduce the burdens of living with cancer financially, and emotionally. The Blood Cancer Conference is a key event to introduce patients to the resources provided and further educate them through professional speakers of blood cancers. Outreach with healthcare organizations to connect new LLS patients will demonstrate an increase in access to services by garnering a larger patient population. By increasing outreach to communities and healthcare organizations, the burdens of living with blood cancers can be greatly reduced.

Method/Approach: A comprehensive review of current patient lists and healthcare organizations was completed to determine the best outreach approach. The financial aid list for this region was the largest, necessitating an email template that was created and tailored to each individual that was called and subsequently emailed. In the email template, important resources were provided as well as an invitation to the Blood Cancer Conference (BCC). A list of resources was created for ease of flow in conducting patient and healthcare organization calls. During the calls, resources were explained and invitations to the BCC were extended. The Save the Date for the BCC was attached to every patient email conducted. The effectiveness of this outreach style will be measured by attendance at the BCC.

Outcomes/Results: Of the sample size of the 176 patient calls and 644 registrants from the BCC, there were 315 registrants from the SoCal region. The SoCal region rivaled the Greater LA region of California by just a 1% difference in total registrants, which illustrates the success of the flyer outreach via email, in addition to calls to patients and healthcare organizations and providers. Out of the 315 SoCal registrants, 165 patients attended the BCC. These patients were all provided with resources and are being logged into the SalesForce database to be further assisted in their cancer journey. The BCC provides LLS with new patients while spreading the word, contributing to the overall outreach that is done to help patients.

Evaluation/Conclusion: The BCC outreach via healthcare organizations and LSS patients showed that many patients require LLS's services. Patient calls were received well and the BCC invitation was embraced. Social workers in healthcare organizations spreading the flyer contributed to the BCC attendee list. There is ongoing outreach to new and existing patients that attended the BCC to ensure that they are given the appropriate support. By increasing outreach for patients to utilize these resources and attend the BCC, the LLS mission is being advanced by improving the lives of patients and their families. When evaluating the feedback from patients, major takeaways included having longer sessions to mingle with patients and volunteers, and to provide more information for the BCC on the LLS website.

Title: Myopia Management

Name: Meagan Wolff

Preceptors: Dr. Tobin Ansel, OD, FAAO

Steven Clair, Human Resource and Operations Manager

Agency: Somerset Eye Care - North Brunswick, NJ

Purpose: To research and develop an easy-to-follow process for tracking and notifying patients when their yearly Myopia Management maintenance renewal is due.

Significance: Myopia, also known as "nearsightedness," is becoming an increasingly greater issue worldwide, with studies predicting that by 2050, 50% of the world's population will be myopic (*Myopia*, n.d.). Further, myopia is the most common ocular disorder and the leading cause of visual impairment in children worldwide (Mehta & Wen, 2019). As myopia progresses, stronger optical prescriptions are needed and the risk of glaucoma, retinal detachment, and cataracts increase. However, there are three commonly used treatments that slow the progression of myopia: Orthokeratology lenses, multifocal lenses, and atropine eye drops. Somerset Eye Care has developed a Myopia Management program to provide these treatments. Creating a streamlined, easy-to-follow process for tracking and notifying patients when their yearly maintenance fee is due will ensure that patients receive the full benefit of their program.

Method/Approach: The first step to develop a streamlined process for the Myopia Management program yearly maintenance fees was running bill code reports to generate a list of current patients in the program. Patient information gathered from these reports was input to a Google Sheet designated as the Myopia Management Yearly Contact List. Next, a Google Document with written procedures detailing this process was created for current and future employees. The instructions detail how to: run bill code reports, create a spreadsheet of patients in the Myopia Management program, and notify patients of their renewal via email and mail. Further, follow up procedures were also included in this document. This included instructions on how to send Amazon gift cards to those who renewed their programs by the set date, and how to send a 60 day follow-up notice to those who have not renewed their programs by the set date.

Outcomes/Results: A total of 114 patients were enrolled in the Myopia Management program. For January, February, March, and April, 38 patients were due for payment. Emails and letters were sent out to the 38 people notifying them of their upcoming renewal. Of those notifications, 17 patients responded to their letters with payments (45%).

Evaluation/Conclusion: Before the start of this project, these patients were not being consistently tracked, and therefore follow-up was sporadic. Having a clear process and tracking system should improve program renewals. Because this process is ongoing and renewal notifications are issued on a monthly basis, the efficacy of these procedures cannot yet be concluded. Success will be measured when this responsibility is transferred to another person seamlessly, and when patients receive their notifications, and renew their programs in a timely manner. We anticipate the procedural document will help track the patients with upcoming renewals so that none are missed or notified late. We also anticipate this document will help this responsibility to be transferred seamlessly between different people in the office, as necessary.

Title: Volunteer Recruiting Toolkit

Name: Colleen Wong

Preceptors: Professor Ann Marie Hill

Agency: North American Association of Central Cancer Registries (NAACCR)

Purpose: To create a DEI-focused volunteer recruitment toolkit, develop marketing materials for the NAACCR's annual conference and identify best practices for recruiting the younger generations for volunteer work.

Significance: Every year, almost 2 million people are diagnosed with cancer in the United States. In New Jersey, the incident rates have been 488.9 per 100,000 people from 2015 to 2019. The North American Association of Central Cancer Registries (NAACCR) is a collaborative umbrella organization for cancer registries, governmental agencies, professional organizations, and private groups in North America with the purpose of strengthening the quality and use of cancer registry data. NAACCR develops uniform data standards for cancer data registration, provides education and training curriculum, certified cancer registries, collects and publishes cancer data, and enhances surveillance systems for cancer control and epidemiologic research to fight against cancer in North America. However, NAACCR is fueled through volunteer work and requires the commitment of motivated individuals of all age and background. Recently, volunteer burnout has been reported as a serious concern for senior leadership. This project will use a variety of marketing resources to support and streamline volunteer recruiting for initiatives within the organization with an emphasis on a DEI approach.

Method/Approach: In order to create a volunteer recruitment toolkit, it is crucial to understand what NAACCR is, its mission, and how garnering more volunteers can increase its efforts in enhancing the quality and use of cancer data. The toolkit will be an add-on section to the Recruitment & Retention Toolkit existing on the website. The volunteer recruitment toolkit will focus on methods/best practices to attract new and existing members to participate in new initiatives or projects. Materials will focus on enhancing diversity of younger volunteers and introduce members to the rich opportunities that are available to them and need their help. The toolkit includes a short presentation deck introducing NAACCR and prospects of membership, a brochure on membership profiles highlighting programs such as MAP and Mentorship, a job description template, and an email template that can be used to invite members to join.

Outcomes/Results: The volunteer recruiting toolkit was completed and provided online as a condensed source of information to help NAACCR gain volunteers in needed areas. Best practices in reaching younger and diverse members of the NAACCR community were developed and emphasized. Marketing materials including posters, infographics, and a campaign on Why I Volunteer for NAACCR were prepared for review. These resources will help members in different groups within NAACCR know what direction to take when looking for volunteer projects. It will also offer suggestions on how to communicate opportunities to them.

Evaluation/Conclusion: In order to evaluate the success of the volunteer recruiting toolkit, it will be reviewed by the preceptor and members of various chair committees on its relevance and overall usefulness to the organization. The toolkit ultimately aims to increase volunteer involvement from new and existing NAACCR members. Evaluation will be determined by how many members download the toolkit and the number of people that volunteer annually. Suggestions for improvements will be taken into consideration that will best benefit the organization.

Title: The Assessment of Airborne Particulate Levels and Understanding Preventive Measures

Name: Joyce Wu

Preceptor: Kasey McAndrew, CSP - EHS Project Manager

Agency: The Children's Hospital of Philadelphia

Purpose: To monitor airborne particulate levels throughout the hospital, identify active construction sites impacting patients, caregivers, and employees, and understand the implementation of preventative measures to reduce the risk of healthcare-associated infections (HAIs).

Significance: In the United States, an estimated two million (1 in 3) patients per year experience HAIs (Baltimore, 2012). The Children's Hospital of Philadelphia (CHOP) has invested in multiple capital projects to expand and enhance its ability to provide world-class care. This has resulted in many ongoing construction projects throughout its campus. Prior to any construction, demolition, renovation, or repair within the facility, an infection control risk assessment (ICRA) and Pre-Construction Risk Assessment (PCRA) is completed to determine the precautionary measures necessary to protect patients, caregivers, and employees from the risk of HAIs. Dust accumulated from construction can serve as environmental reservoirs for airborne HAIs. This project will continue monitoring dust/particulate levels to recognize any potential need for increased infection control measures.

Method/Approach: The Children's Hospital of Philadelphia (CHOP) uses four TSI DustTrak II 8350 Monitors to measure airborne particulates generated from construction job sites. The monitors need to be calibrated with the Zero Filter prior to running a test and sent out annually for preventative maintenance. Locations are determined by assessing the class of construction, the job site's proximity to patient care, and the movement of occupants within the hospital. From February 1st, 2023, to March 31st, 2023, a total of 11 locations were monitored. Four of these locations were directly adjacent to patient care units. The monitors are set to run a total of 14 tests, at 12 hours per test to collect values every minute. Data is collected and analyzed using Excel and the TSI TrakPro program to identify increases in particulate values that may elevate the risk of HAIs.

Outcomes/Results: Of the four locations adjacent to patient care units, eight tests were run. Four tests by Fluoroscopy [M3W16], two tests by Sedation [M3W47], one test by Rehabilitation [CSH 262], and one test by Surgery Check-in [M450]. Eight incidents of high particulate level readings were identified. An incident of high particulate readings consists of two or more consecutive hourly averages exceeding the trigger values, which is determined by 2-3 times the baseline value or the average of 3-5 days of values. Five incidents occurred at M3W16, zero incidents occurred at M3W47, three incidents occurred at CSH 262, and zero incidents occurred at M450. Negative values were read or 'zero drift' occurred during three of the eight tests. These values were excluded from the data.

Evaluation/Conclusion: The data collected from the TSI DustTrak II 8350 Monitors reflect the changes in airborne particulate levels from on-going construction projects at CHOP. Results indicate that of the eight incidents of high readings from February 1st, 2023, to March 31st, 2023, none required reporting to Infection Prevention and Control (IPC) and the Facilities Project Manager due to values falling below the trigger value prior to the end of a test. A trend in value deviations from baseline were found to occur during construction at the start of a shift, lunch, and at the end of a shift. Depending on the class of construction - barriers, TSI pressure monitors, HEPA filters, anterooms, and sticky mats at entrances/exits of construction sites are used to prevent the movement of dust outside of the construction site. Airborne particulate monitoring is one way to measure the effectiveness of dust control strategies, and CHOP implements many approaches to prevent the occurrence of HAIs.

Title: Demographic Research for home appraisal in New Jersey

Name: Calista Xirouhakis

Preceptors: Gus Konstanti

Agency: E. P Appraisal Company New Jersey

Purpose: To analyze how racial bias in the housing market impacts the value of neighborhoods and how this can negatively affect access to transportation, better education systems, and adequate healthcare.

Significance: In 2023 the New Jersey housing trends are expected to increase between 2.3-8.8% in townhouse, condo, and home sale prices. Homes in Black neighborhoods are valued roughly 21% to 23% below what their valuations would be in non-Black neighborhoods. Research shows that a minimum of 10% of homes are at risk for under-appraisal in majority-black neighborhoods. Black neighborhoods with undervalued homes have less adequate health care, worse school systems, and less opportunity for transportation. The key contributor to this is that investors are less likely to put money into areas largely inhabited by minorities. As a result, black communities experience higher crime rates, higher employment rates, higher rates of residents relying on government-assisted programs, and higher drug rates. To combat this, our agency encourages investments and properly appraises homes in black neighborhoods.

Method/Approach: The review began by narrowing down our neighborhoods and comparing black and white-dominated neighborhoods. The data for 3 homes in each neighborhood were compared after the home was given a proper appraisal. There was a small cluster of Hispanic neighborhoods also studied to gain a broader outcome. All the data was inputted into an Excel spreadsheet to manage the home's progress over time. We then used data from the undervalued areas to compare the proficiency rate for children in public schools, the mean percent of people who commute to work on public transportation, and the percentage of people without a good regular doctor.

Outcomes/Results: After comparing the first two similar homes, we found that not only was the home in the black-majority neighborhood under-valued, but so were the other properties in the area, exactly 7.8%. The other homes were under-valued at 6.4% and 5.8%. The 3 Black neighborhoods studied were roughly 6.6% undervalued in comparison to non-black neighborhoods including Hispanic ones. Black-owned homes also had a lower median listing price per square foot. Black communities had a 30% less proficiency rate than white children in public schools. Black neighborhoods were 10.6% more likely to rely on public transportation to go to work and residents were 9% less likely to have an adequate regular doctor.

Evaluation/Conclusion: While the sample size was small, our results followed the growing trend that majority Black neighborhoods are undervalued, under-appraised, and less in demand than majority White neighborhoods. This data overall presents a public health issue that prevents Black neighborhoods from accumulating success in the same manner that White neighborhoods do. At the end of this study, certain things were not conclusive such as the data on Hispanic neighborhoods which could have provided us with more accurate information regarding racial bias.

Title: Maintaining OSHA Regulations to Ensure Safe Work Conditions for Employees

Name: Simge Yavuz

Preceptors: Lisa Levy, Area Director

Agency: US Department of Labor - Occupational Safety and Health Administration

Purpose: To ensure safe and healthy work conditions for employees in Passaic County, New Jersey, by going on inspections to enforce OSHA standards and promote outreach.

Significance: Fall protection is a critical aspect of workplace safety in New Jersey, where falls from heights are a leading cause of workplace injuries and fatalities. According to the Occupational Safety and Health Administration (OSHA), falls are the most common cause of fatal injuries in the construction industry and the second leading cause of non-fatal injuries across all industries in the United States (OSHA, 2021). In New Jersey specifically, OSHA reports that falls accounted for 24% of all workplace fatalities in 2020 (OSHA, 2021). Studies have shown that implementing and enforcing fall protection measures can significantly reduce the incidence of fall-related injuries and fatalities in the workplace (Tong et al., 2020; Fan et al., 2019). To prevent falls and promote workplace safety, OSHA can enforce compliance with safety regulations, conduct inspections, and provide training and outreach programs to employers and workers (OSHA, 2021). By taking these steps, OSHA can help ensure that workers in New Jersey are protected from the dangers of falls, and employers can avoid costly fines and legal action.

Method/Approach: A review was conducted by Safety and Health Compliance officers at OSHA to determine and establish standards that would ensure the safety of employees. Inspections are conducted weekly in both Passaic and Bergen Counties when fall hazards are observed and when complaints and reports of injuries or fatalities are received. OSHA compliance standards are developed after vigorous studies are conducted to ensure that appropriate standards are promulgated. Interns are accompanied by Compliance Officers to learn how to conduct interviews with employees and to develop legally sufficient evidence to support a citation. The purpose of the employee interviews is also to ensure their employers are not willingly putting them at risk. In addition, the level of workplace hazards that is associated with various employees' occupations and the general environment was observed. Furthermore, employees were provided with knowledge about equipment and standards or rules they must abide by to protect their health and safety.

Outcomes/Results: The initiative of this project is to provide safe and healthy working conditions for employees in Passaic County, New Jersey. This will be accomplished by conducting inspections to enforce OSHA regulations and conducting outreach. The inspections will seek to detect hazards in the workplace, and employers will be advised of any infractions that must be corrected. Employers will face monetary penalties depending on the level of infringement, which includes "Other-Than-Serious paperwork violations, Serious, Failure to Abate, Repeat or Willful violations. These fines can vary from \$13,653 to \$136,532 per violation (OSHA, 2021).

Evaluation/Conclusion: Pre and post-inspection data will be compared to see whether there was a decrease in the number of violations and dangers discovered in order to assess the project's performance. To determine the success of outreach initiatives and the overall influence on workplace safety, the number of corrective measures taken by employers and the number of employees removed from hazards will also be assessed. Overall, this project is anticipated to make a substantial contribution to the development of workplace security in Passaic County, New Jersey, as well as lower the incidence of workplace deaths and injuries related to falls.

Title: Social Media Marketing Plan

Name: Nasil Yearm

Preceptors: Shawn Ekwall, COO of IGEA Brain & Spine

Agency: IGEA Brain & Spine

Purpose: To audit company's current social media presence and create a YouTube channel

Significance: In this day and age of social media marketing, it was important for IGEA Brain & Spine to be able to create a platform where all consumers and patients can learn about the organization's activities and services. According to the Australian Government, it stated that "Social media is online communication that allows you to interact with your customers and share information in real time". (Gov.AU 2023) With that being said, IGEA Brain & Spine is not getting enough attention from the outside consumer/ patient base because their social media accounts have not been active. Therefore, they are trying to utilize different social media pages to attract more patients. IGEA Brain & Spine's main objective was to do a social media audit for their organization's current social media platforms with the ultimate goal of creating a new YouTube channel for the organization.

Method/Approach: The first step was to review IGEA's current standing social media accounts like Instagram, Facebook, YouTube, and LinkedIn to define their user base. The audit was completed by going onto each of the organization's social media pages. It was interesting to see how outdated the posts were and that the accounts were rarely being used. In addition, best practice/ market research was completed to make sure what other healthcare organizations were doing to promote their practices. As a result, a new YouTube channel was created, and relevant videos were uploaded.

Outcomes/Results: From the market research, it was evident that most leading healthcare providers in the NJ/NY area were uploading media regularly on their websites and social media pages. For instance, a leading orthopedic hospital in New York City called HSS was uploading its practice in orthopedics on its Facebook and LinkedIn pages. In regards to IGEA's YouTube page, a YouTube channel was created for IGEA because IGEA Brain & Spine used a third-party organization to run their social media pages and therefore did not have access to social media pages like the YouTube channel Currently, IGEA Brain & Spine are in the process of uploading existing videos and have discussed posting short educational videos about the practice that IGEA Brain & Spine does.

Evaluation/Conclusion: Overall, social media management is an ongoing process and new educational videos are being discussed and will be uploaded in the foreseeable future. To evaluate the success of the YouTube channel, it would depend on the view counts and the subscribers of the channel. Ultimately, the goal of the YouTube channel is to educate the viewers on the practice and what IGEA Brain & Spine can offer to patients. The ultimate goal is to create something called "shorts" on the YouTube platform which is a short 30-second video to highlight and promote what IGEA Brain & Spine is doing. By doing so, the practice can connect with its target demographic of younger, more affluent residents of New York and New Jersey in innovative ways, and effectively open new patient referral opportunities/channels and continue to grow their market share and presence.

Title: Rutgers Softball Fan Engagement Through Twitter Analytics

Name: Katherine Yoon

Preceptors: Shayna Sadow

Agency: Rutgers Athletics Marketing

Purpose: To conduct market research to boost attendance and fan engagement at the Rutgers Athletics sporting events.

Significance: Each year, Rutgers University Athletics Marketing is responsible for the successful execution of hundreds of different sporting games and athletics events. Rutgers University is a Big 10 school, meaning that there are up to tens of thousands of fans at these events and the Rutgers Athletics Marketing department's job is to boost fan engagement and generally make the fan experience the best that it can be. To achieve this, it is necessary to utilize social media and other marketing tools to best reach target audiences.

Method/Approach: Initially, myself and the other interns had a brainstorming session to determine how we could best market the Rutgers softball games to potential fans. After some research, we decided to create a Twitter account as it was the best way to engage easily with fans and create more of an interactive experience through social media. Over the next couple weeks after creating the account, we continued to brainstorm ideas about what to post. Over the course of consistently posting at all of the softball games, we used the available Twitter analytics to determine which posts reached the most people, and we then further analyzed through group discussions to see if there was a trend among these top tweets.

Outcomes/Results: Through our analysis of the top tweets, myself and my fellow interns were able to identify some trends. For one, we noted that among the top tweets, many were tweets that spread awareness about different giveaways and fan experiences that game goers could have. Among the top 5 tweets, three of them pertained to fan experiences or fan giveaways. Even at the games, there were a few game-goers who attended our table and mentioned the Twitter posts as being the reason that they were made aware of the giveaway. Therefore, we decided to continue especially focusing on highlighting the fan experiences available at the games in our tweets.

Evaluation/Conclusion: The results demonstrate that the utilization of social media has strong potential in marketing to more potential fans, and even being able to target a more specific audience through the use of hashtags. Beyond that, it was clear through our tweet analysis that the most popular tweets were those that highlighted in-game fan experiences, which shows that there is significant potential for more fan engagement and even attendance through a combination of having fan experiences at games and marketing them through strategic social media posts. In general, this project could have flourished more with more consistency across posts as well as more utilization of the various interactive features on the Twitter platform such as polls and even live video feeds. On top of that, in the future, it would be helpful to market the Twitter page itself more, such as at games and within other Rutgers athletics environments.

Title: Know Before You Go - Making Family Emergency Preparedness Plans

Name: Mira Zakhary

Preceptors: Direct Supervisor: Christina Armstrong, Site Director

Task Supervisor: Zaria Rawls, Volunteer and Community Partnership Coordinator

Agency: Prevention Links: Greenway Family Success Center

Purpose: To promote family-centered preparedness activities that prioritize fostering a prevention prepared community.

Significance: Emergencies and disasters, whether natural or man-made, can cause serious disruption to a community, including many casualties, as well as financial, environmental, social, and economic losses. Dealing with these issues properly is often beyond the power of the community. Although the vulnerability of some communities to these emergency situations is unfortunately inevitable, the community can still play a significant role in reducing the impact of these situations by learning about system resilience and disaster recovery. According to the CDC, only 39% of Americans have developed and communicated an emergency plan with their family. In addition, 48% of Americans do not have emergency supplies ready for any disaster (CDC, 2020). The best way for families to protect themselves is to develop an emergency communication plan together, as well as prepare a thorough emergency kit.

Method/Approach: Based on a previous community health needs assessment, research was conducted to create a way for families in the community to become better prepared for emergencies and disasters while still being cost-effective. Initially, a flyer regarding the "Know Before You Go" program was marketed to families through the Greenway Family Success Center newsletter and their social media. From there, using the registration link provided, families were navigated to a Google Form to register for the program. Upon arriving at the in-person program, families completed a pre-test measuring their level of knowledge regarding emergency preparedness and also received a step-by-step emergency preparedness guide created by the program host. This program utilized an interactive approach by asking families to participate in the program by completing the step-by-step emergency family communication plan and creating their emergency kits using supplies provided by GFSC. After the program, families received a post-test to inform the program host about what the attendees learned.

Outcomes/Results: On April 6th, 2023, 7 families attended the preparedness event, totaling about 20 people. Initially, with the answers recorded from the pre-test, 100% of the families noted that they had never made emergency kits with their families prior to attending this event, and 71.4% noted they had never gone over emergency information or formed an emergency communication plan with their families. Following the "Know Before You Go" program, post-test scores indicated that 100% of the families not only had a better understanding of emergency preparedness, but also felt more prepared if an emergency were to occur. 100% were satisfied with the program and gained valuable knowledge regarding family emergency preparedness.

Evaluation/Conclusion: A pre-test was completed by participants to understand their knowledge about emergency preparedness. A post-test was then provided to participants regarding the information they learned and whether they felt the program taught them to prioritize preparedness and prevention strategies. 100% were satisfied with the program and gained valuable knowledge regarding family emergency preparedness. Overall, the program was successful and will continue to be implemented at Greenway Family Success Center.

Title: Streamlining the Intern and Volunteer Recruitment Process

Name: Huma Zeb

Preceptors: Sara Culang, Volunteer Manager, Community Liaison

Agency: Stein Hospice

Purpose: To create a program that streamlines the intern and volunteer recruitment process in order to retain the most motivated, passionate, and consistent interns and volunteers.

Significance: The goal of hospice is to provide patients with services that restore their dignity as well as nourish their mental, spiritual, and physical wellbeing during their most vulnerable stage of life. An essential part of this process are hospice volunteers. In the United States, it has been found that in the last ten years, there are almost twice as many hospice agencies than there were previously (Adrien, 2017). In addition, the population within these hospice agencies is growing due to the need to accommodate the aging population (Adrien, 2017). Unfortunately, the need for hospice volunteers is not being met as it is difficult to attract and retain volunteers (Adrien, 2017). At Stein Hospice, volunteers play a vital role in supporting the organization's mission of enhancing the quality of life a patient has remaining. Volunteers read to patients, engage in conversations with patients, go for walks, assist in life recaps, and physically comfort patients through hand holding or head stroking.

Method/Approach: A meeting with the Volunteer Manager/Community Liaison was held to discuss the issues the organization encountered with the volunteers previously selected. It was uncovered that the organization experienced delays in onboarding and trouble with the retention of volunteers. In order to further investigate the cause of these two issues, the date the volunteers accepted the offer and the date the volunteers were fully onboarded were collected. The purpose of this data was to determine how long the delays were, how many volunteers failed to complete onboarding, and ultimately how motivated the volunteers were to officially start. Then, volunteers and groups from Rutgers were sourced in hopes to create a program that would bring in new volunteers every semester for Stein Hospice and Stein Assisted Living. Although the assisted living facility was not the primary focus, discussions on the value volunteers would bring, lead to including this entity as well.

Outcomes/Results: Through the collection of data, a gap between 1-4 months between accepted offer date and onboarding completion date is found amongst the volunteers. Through the analysis of data, it is found that those that have the incentive to volunteer complete their onboarding process quicker and stay with the organization for longer. This incentive ranges from the desire for patient interaction to simply being passionate about giving back. A relationship between Omega Phi Alpha National Service Sorority and the Director of Resident Engagement at Stein Assisted Living has been established which will result in volunteers visiting residents 3-4 times a semester for planned events. In addition, members within the sorority have also been presented with the Hospice Volunteer opportunity to fulfill their service hours.

Evaluation/Conclusion:

Omega Phi Alpha is a National Service Sorority that has relationships with many organizations that allow its members to volunteer regularly. It is likely that through this newly established relationship, Stein will be able to retain reliable volunteers. In order to continue to build the relationship between the two organizations, Stein will be given a satisfaction survey after each event and an onboarded hospice volunteer. This will create a channel of communication between the organizations that will help improve the relationship through the first year to ensure future success.