Summer 2023
Abstract Book

Title: Kidney Health Awareness and Disease Prevention

Name: Sabainah Ademoji

Preceptors: Direct Supervisor: Andrew Baddoo - Nephrologist and Primary Doctor
                     Project Supervisor: Damara Banton - Office Manager

Agency: Renal Medical Associates

Purpose: To educate patients and the community of East Orange about kidney health, risk factors for kidney disease, and proactive measures to maintain optimal kidney function.

Significance: Kidney problems are a significant health concern in the United States. According to the American Kidney Fund, 37 million Americans have kidney disease, 807,00 live with kidney failure, and 562,000 are on dialysis. (American Kidney Fund, 2023). A gap in understanding and awareness of kidney health remains, leading to delayed diagnoses and suboptimal care. The National Institute of Health (NIH) reports that men are 1.6 times more likely than women to develop end-stage kidney disease. Compared to white people, black people have nearly four times the risk of developing end-stage kidney disease, while Hispanics and Native Americans have two times the risk. (NIH,2023). These numbers are significant to the community of East Orange because, according to the 2022 Census, roughly 82.6% of the community is Black/African-American, 11.7% identify as Hispanic, and 46% of the community is male. This demographic represents the individuals most at risk for kidney-related problems.

Method/Approach: The town was provided with Interactive Kidney Health workshops to improve the community of East Orange's engagement in their education about kidney health and proactive measures. These initiatives were implemented directly in the doctor's office, Renal Medical Associates LLC, in East Orange, NJ, and through community outreach. For direct office engagement, create an infographic and brochures and stock the waiting room. For community outreach tabling outside the office building and leafleting at community events. During tabling, visitors were encouraged to take an electronic pre-assessment and engage with the resources, and upon leaving the building, they were encouraged to return for a post-assessment. The building is an essential part of reaching the community because it attracts many parts of the community, increasing exposure and foot traffic.

Outcomes/Results: The infographic and brochures displayed in the waiting room were well-received and frequently accessed by patients. The infographic hung next to the television for visibility, and flyers sat on tables in waiting rooms. Community outreach was also flourishing; on June 17th, East Orange General Hospital hosted a Men's Health Fair at Scovil's Barber Shop, where 42 brochures were disturbed. The two days spent tabling outside the building resulted in high exposure, where many individuals now have access to the brochure. However, participation in the pre and post-assessments were low. In the two days of tabling, 15 people took the pretest; of those individuals, only seven returned for the post-test. The accuracy of the assessment increased overall by 20%.

Evaluation/Conclusion: The Kidney Health Initiative disseminated vital information to the community. With approximately 30 patients now better educated about the impact of their choices on kidney health, the initiative's reach was significant. Effective community outreach, highlighted by the Men's Health Fair and tabling efforts, further extended the initiative's impact. While pre and post-assessment participation faced challenges, the project still managed to enhance accuracy by 20%, showcasing its capacity to improve knowledge retention.

Internship Abstract

Title:	Your Health Kiosk Navigator
Name:	Elif Akat
Preceptors:	Sabiha Hussain, MD, MPH & Carol Shu, MSW, LSW
Agency:	Robert Wood Johnson Medical School - New Brunswick, NJ

Purpose: To use the technology of YourHealthKiosk (YHK) to reduce the health inequity in the town of New Brunswick (NJ) by promoting healthcare access via digital platforms to make it easier to find the health and wellness resources needed.

Significance: In 2020, the Data USA: New Brunswick, NJ reported 45.7% percent of that population are White (Hispanic), which was 1.23 times more than any other race or ethnicity. The most frequent health problems were with access to care or barriers to utilization, language or cultural barriers, undocumented barriers, and distrust of the healthcare system. This evidence indicates a gap between the healthcare system and the community. YHK addresses this gap by offering funding from the New Jersey State Department of Health, no-insurance healthcare access in real-time by providing multi-language guidance to all necessary healthcare resources for those experiencing health inequity. The platform aims to provide patient care without physical encounters, easy-to-understand personalized health and wellness information, and offers free real-time guidance for those with limited knowledge.

Method/Approach: To expand the program's reach among the low socioeconomic status (SES) population in New Brunswick, the team has tried several strategies. First, the team has set up tables at community events to attract attendees' attention. The team included posters and flyers to introduce the objective and purpose of the program. Additionally, the team had goody bags filled with candy, promotional merch, and a prize wheel where the winner holding the correct lottery ticket gets a gift card to either Target or Walmart. During the events, the team gathers information (DOB, Ethnicity, Age, Language, and Smoking history) and inputs it into the enrollment form. Through the platform, the team follows up with these individuals and gathers any necessities they need to provide support and better service.

Outcomes/Results: The three local community health programs that the team has contacted, all have responded to help promote the platform. The first event was held in partnership with RWJ Employee Health Fair; the second event was with the Community Health Promotion Program, Men's Health Fair, and the third was Military Family Day. During the Men's Health Fair, it was observed that low SES and the undocumented were interested in the program, readily expressing their willingness to sign up immediately. The team had faced language barriers with the Hispanic/Latinx community; however, after recruiting Spanish-speaking students, the issue was resolved. Additionally, it was easy to grab people's attention due to the lottery wheel, gift cards, goody bags, and candy. The goody bags and lottery gift cards were a great success. There is currently a count of 340 individuals signed up for the platform and ready to be navigated, with 143 added to the program before the start of the internship, in addition to 98 from the RWJ Employee Health Fair and 99 from the Men's Health Fair.

Evaluation/Conclusion: The team will assess the platform's efficacy by collecting essential personal information and gathering data on program participation and satisfaction levels from enrolled individuals. As the project is still in progress, it is recommended to extend its reach beyond New Brunswick and engage providers from various towns to cater to patients residing in distant locations.

Title: Pick and Stage Congestion Post-Kaizen Project

Name: Fariah Ashraf

Preceptors: Jenn Kuntz, Regional Workplace Health and Safety Manager
                          James Campbell, Regional Workplace Health and Safety Manager

Agency: Amazon

Purpose: To analyze injury data and congestion volumes across Amazon Logistics (AMZL) units and recommend solution(s) to reduce congestion risk, improve Pick and Stage metrics, and reduce injury rates.

Significance: Since 2021, there have been [redacted] total recordable incidents (RI) that occurred in the Pick area of AMZL sites. In 2022, there were [redacted] RIs in the pick aisles due to congestion (AMZL Injury Slice n Dice, 2023). Amazon has established safety policies and the Workplace Health and Safety (WHS) team works to improve safety compliance. The WHS department utilizes a thorough injury reporting process that allows them to understand the root cause of injuries to prevent further complications (NA Safety Standards of Conduct, 2023). Reducing congestion in the Pick area will allow for improved efficiency and lowered injury risk. This project will present recommendations supported by data analysis to improve select metrics, with the aim of widespread implementation.

Method/Approach: A summit was held at an AMZL site which was selected due to its escalated congestion, heightened volume metrics, and narrow aisle widths. Activities that took place included collaboration between various departments, process mapping, data collection and analysis, idea generation, and administration of a 24-hour pilot. The pilot implemented numerous changes in the pick aisle area which were tracked through observations. In addition, injury and metric data were exported into Excel for data analysis. The primary process path analyzed was Pick and Stage. Efficiency metric trends including packages per hour (PPH), on-time staging, and picklist cycle time (PCT) were also tracked on an internal platform.

Outcomes/Results: Prior to the pilot there were approximately [redacted] congestion incidents that occurred in the experimental aisle. After the pilot's multi-step solution was administered, there was a 100% reduction in these congestion incidents. Positive feedback in support of the pilot changes was received from associates and site leads. This pilot was further administered for Prime Week when volume metrics are significantly higher than the network average. The result was a 40% average reduction in congestion incidents compared to pre-pilot which supports the scalability of this solution.

Evaluation/Conclusion: Intending to reduce congestion risk and subsequent injuries, this pilot was successful and reduced the number of congestion incidents that occurred in the Pick area. Additionally, this pilot resulted in a reduction of congestion incidents during the stress test (Prime week). The next steps are for this pilot to be administered at buildings of different sizes and types with the goal of collecting additional data. The aim is to implement this project at 100% of AMZL sites. A limitation experienced during this project was the inability to make technological changes in a short period of time. Further collaboration with the technology team is necessary to improve the logic of select variables. Updates to the standard of procedure (SOP) for training associates, the Pick and Stage process, and the audit process are required.

Title: Improving Student Health through Health Promotion and Education Programming

Name: Naika Baptiste

Preceptors: Project & Direct Supervisor: Tracy Trukowski

Agency: Rutgers University - Recreation

Purpose: To design and implement health promotion and education programs through the use of physical and digital projects to increase student engagement and campus community outreach.

Significance: Physical activity has been widely recognized for its physical and mental health Benefits, while stress is a common link to many chronic diseases. Most notably, "individuals who exercised more, especially those who spend 30–60 mins, scored higher on physical health, mental health, and academic performance" indicating a positive relationship between regular exercise and one's overall health (Zhang et. Al, 2022). This project aims to construct educational programming that will educate the greater campus community to encourage healthy fitness habits and provide affordable on-campus options. The targets of this project are current and incoming Rutgers students as a result 87% of college-aged students across the United States report their academic life as their main source of stress (Barbayannis et. Al, 2022). These programs will allow information and resources to students which will increase student engagement in recreational activities.

Method/Approach: The first piece of this project was the Step Challenge, a two-week program that promotes inclusive fitness and wellness programs by introducing a beginner activity such as walking. The measure of success was the number of applicants that completed 140,000 steps after the 2 weeks. The second part of this project focused on constructing health programs for the incoming freshmen by leading a team of 7 students to provide both informative and physical fitness resources. During these programs, students received information on the diverse programs offered at the facilities as well as their benefits. After each program, we recorded the number of participants, as well as monitored the number of students who downloaded the Rutgers Recreation application. In line with the Walkathon findings, a key incentive for students to return to the facilities in the fall semester was free guest passes that allow them to bring in a friend or family member free of charge to work out with them.

Outcomes/Results: Utilizing various marketing techniques to recruit and inform students, caused a 2.05% increase in student engagement as well as a 32.44% increase in applicants who completed the challenge. According to the post-program survey data, more than 60% of participants logged more steps during the challenge which can be attributed to the top three reported motivators to complete this challenge: " free prize," "accountability," and "health benefits." 90% of participants identified the challenge as having a positive impact on their mental, emotional, and academic life, citing their interest in continuing to work out or explore new methods of fitness.

Evaluation/Conclusion: More than 50% of participants during both parts of the project took part in the health promotion activities and responded positively to the project's measures of success. To continue increasing the number of students who participate in physical/wellness activities, Rutgers Recreation should utilize a myriad of marketing techniques as well as provide accessible group programs that set health goals for students. These programs should also foster a sense of community amongst students while providing fun incentives such as the water bottles from the step challenge, free guest passes after the physical activities, and free headbands that serve as post-informational session rewards.

Title: Curriculum Design and Development for Community Engagement Programs

Name: Rashel Bernal Reyes

Preceptors: Liz Brandt - Community Engagement Director

Agency: The Bonner Foundation

Purpose: To revise training guides to strengthen the Bonner Program's developmental model.

Significance: The Bonner Program is a four-year service-based college scholarship program that provides students with "access to education and the opportunity to serve." The program recruits and supports a diverse pool of low-income, first-generation students who are committed to changing the world through service. In 2019, a Bonner Student Impact Survey found that 51% of Bonner seniors strongly agreed and 37% agreed that Bonner provided integration of service experience with academic experience (The Bonner Program, 2019). Over 3,000 Bonner students participate in education and training each year to develop their knowledge, skills, and values to engage in community well-being and social change efforts. With feedback from participating schools, the Bonner Foundation continually revises the scope, sequence, and content of training modules for stronger alignment between the Bonner Student Development model and best practices in community engagement, diversity and inclusion, and student success.

Method/Approach: Summer of 2023, the projects entail reviewing, updating, and developing new training models to support the Bonner curriculum. Its' goals are to enhance students' learning and project work off campus, encourage a sense of belonging, promote accountability, foster campus-wide and community connections, and lead to high levels of retention and graduation. The first project was revising two "***Know Your Issue" (KYI)*** training guides from the 8-theme Bonner training curriculum. The second-year modules help students narrow down an issue, research existing programs and policies around the issue, and prepare a Policy Brief. To successfully revise both training modules, the curriculum team needed to examine different iterations of KYI in various Bonner schools. Four Bonner Associates from Berry College, Sewanee College, The College of New Jersey, and Allegheny College were interviewed.

Outcomes/Results: For the first project, schools will ideally implement the curriculum for sophomore students in their second semester. The objective of the "Know Your Issue" modules is for students to create a presentation that they will deliver to their Bonner program or at a partnership event with other departments and faculty. Students will have an opportunity to have their work displayed on the Bonner Training Website, known as the *Bonner Wiki*. These presentations will address an issue that meets the community partners' needs at their site placements. The Bonner network and staff will have the option to implement the redeveloped "Know Your Issue" curriculum. The team has finalized two out of four training modules for "Know Your Issue".

Evaluation/Conclusion: Over 70 schools will participate in redeveloping the "Know Your Issue" curriculum. When schools implement this curriculum for sophomore Bonners, it allows them to begin thinking about their senior capstone project. The curriculum is designed to promote civic agency, critical thinking, social justice, and teamwork. These training guides will also help students develop their research, organization, and active listening skill sets. Institutions, community partners, students, and anyone interested in learning more or utilizing the training guides will have access through the Bonner Wiki publication. An evaluation will be conducted to assess the curriculum's success and impact. The evaluation results will guide the curriculum's review, revision, and redevelopment by 2028.

Title: The Mental Health of TB Patients in Hospital Isolation

Name: Gia Bernhardt

Preceptors: Anita Khilall, MPH

Agency: Rutgers Global Tuberculosis Institute (GTBI)

Purpose: To develop an understanding of the mental health impact that hospital isolation has on TB patients.

Significance: Tuberculosis (TB) is an infectious disease transmitted via airborne routes when a person with TB disease coughs, sneezes, sings, or speaks. In 2021, there were approximately 1.6 million deaths from TB globally. Individuals who are identified as having TB infection are asymptomatic but should be offered treatment to prevent the development of TB disease in the future. When left untreated or improperly treated, it can progress into infectious tuberculosis, lead to the development of drug resistant TB or even result in death. While patients are infectious, they may be placed in hospital isolation for prolonged time periods, which can result in negative mental health consequences. GTBI is engaged in research that may impact the care of TB patients and create educational materials for patients and healthcare providers. This literature review served as the background research for a study conducted by GTBI and New York City (NYC) Department of Health and Mental Hygiene titled *Patient Experiences During Hospital-Based Isolation for Tuberculosis*.

Method/Approach: To develop a better understanding of the psychosocial impact that prolonged hospital based isolation can have on TB patients, a literature review was conducted to investigate the consequences of prolonged hospital isolation on patients and their families. Research has been conducted using previous literature published by the CDC, the New Jersey Administrative Code Department of Health and Senior Services, and other peer reviewed articles via the PubMed database. Articles have been selected based on relevance to the topic of tuberculosis-related hospital isolation and date of the study. Next, this information was added to the Non-Interventional/ Methodological Research Protocol Template, (HRP-503b), and Institutional Review Board Application.

Outcomes/Results: A total of seven articles were selected for inclusion in the literature review. Hospital isolation policies and procedures for TB patients are detailed in two of these selected references. Two studies evaluated the psychological consequences of isolation for TB patients. De-isolation and hospital discharge policies are covered in two other articles. The final study selected discusses the psychological impact of in-home isolation for the caregivers of TB patients. One of the research studies that assesses the psychosocial impact of hospital isolation notes that following a positive tuberculosis diagnosis, 24.4% of patients reported having anxiety with 9.3% reporting severe anxiety, 20.9% of patients reported baseline depression with 7% reporting severe depression, and 11.6% of patients reported having both anxiety and depression (Febi et al., 2021). Evidence of psychosocial adversities following this literature review support the relevance of the new study being performed by GTBI and NYC Department of Health.

Evaluation/Conclusion: Upon the approval of the Research Protocol Template, (HRP-503b), and Institutional Review Board Application, a survey will be administered to TB patients that have recently been de-isolated. This study seeks to identify the existence and severity of psychological consequences experienced during hospital isolation. This research will then be considered when modifying current hospital isolation policies and procedures for TB patients and the results will inform development of educational materials for patients and providers.

Title: Summer Public Health Intern

Name: Hayley Carroll

Preceptors: Jennifer Kershima-Biam, Siclali Flores, Rachel Werner

Agency: Crossroads 4 Hope

Purpose: To offer psychosocial support to anyone who has been touched or impacted by a cancer diagnosis through one on one support, support groups, nutrition education, educational workshops, financial support, and outreach.

Significance: In New Jersey, we, unfortunately, see high rates of cancer. It is estimated there will be 56,150 new cases of cancer this year in the state of New Jersey. (American Cancer Society) With these high rates, it is important that we understand how many people are affected by this. When someone is diagnosed with cancer diagnosis, everyone around them is affected. A cancer diagnosis can not only alter one's physical health but also their mental and emotional health as well. Families may struggle in many ways when coping with this diagnosis including financially. Supporting those who are sick and their loved ones can help improve their quality of life and survival. Educating people on the importance of getting tested and getting proper treatments can also help improve one's health. Educating loved ones and supporting them helps bring more comfort to those who are affected.

Method/Approach: Having events and workshops help educate the community on cancer. Educational events that help stress the importance of cancer screenings motivate people to get cancer screenings. We work with different organizations to participate in events that have free cancer screenings and important information on cancer. Many people don't have access to cancer screenings or information on cancer such as proper prevention or what to do when diagnosed. We are able to provide useful information and resources to those who need them. Connecting people with registered dietitians and licensed social workers helps give them the support that they need. We offer one on one support as well as support groups to those who are affected. Using these different approaches to offer support to the community not only benefits those who are affected but also gives us a better understanding of how different each community is.

Outcomes/Results: There has been a considerable amount of evidence that suggests that cancer support groups reduce feelings of isolation, depression, and anxiety, enhance coping and self-management, and lead to better-informed patients. (Bender, 2021) We provide support to those who are in need while dealing with a cancer diagnosis. Providing different communities with crucial information surrounding cancer. Free Cancer screenings have helped many people get screened for different cancers at no cost. Having information sessions on what to eat and how to take care of our bodies also helps people stay healthy. The information that we provide regarding the importance of getting screened can help people catch cancer at an early stage and potentially save their lives.

Evaluation/Conclusion: Witnessing members of the community come out to information sessions and seeing how beneficial they are to help us see how we are making a difference. As we provide information and education and see how they are learning things that they didn't already know provides us with evidence that we are helping. Providing people with different resources as we help them navigate through a diagnosis helps them get all of the help that they may need.

Title: The Importance of Advanced Directives

Name: Karla Carvo Adrianzen Student

Preceptors: Direct & Project Supervisor: Ms. Caroline Silva, Director of Volunteer Outreach

Agency: Christian Health Care

Purpose: To inform patients of the significance of understanding Advanced Directives.

Significance: An advanced directive is a legally binding document that you can prepare on your own to ensure that, in the event you are unable to make healthcare decisions for yourself, your preferences for specific medical treatments are carried out. Without planning an advanced directive approach to care it can become difficult for one to carry out their wishes. Many people are unaware of the importance of advanced directives. This causes a lack of completing an advanced directive beforehand causing wishes to not be entirely carried out when a person is unable to make healthcare decisions. Approximately 36% of people complete an advanced directive form (Health Affairs, 2017). This evidence demonstrates that there is a lack of education and knowledge when carrying out information about advanced directives in the healthcare field. Evidence-based teaching interventions will aid the gaps of this to improve and increase the understanding of completing advanced directives.

Method/Approach: Residents of Christian Health Care ages 60-90 years old received an advanced directive brochure. Each unit had approximately 60 patients who needed to be educated. Through this assignment, many of the residents were either aware or unaware of advanced directives. Some residents had received a verbal education on advanced directives but had not had a physical copy to look back on. Through handing out brochures many of the residents were also able to communicate their wishes with their family members when they visited. This also led not only teaching the patients at Christian Health but the family members, and staff that were taking care of the patient during the time of teaching.

Outcomes/Results: Of the sample size cohort of 60 patients, women and men combined 10% did not know everything about advanced directives. The outcome of distributing brochures and teaching led to 100% teaching. There were also one-on-one conversations on the brochures with the patients to see what they understood and didn't understand. Through this teaching method many residents were able to look at their advanced directive wishes either to adjust or make a new one. Patients also had a better understanding and knowledge of what to do when it comes to completing an advanced directive.

Evaluation/Conclusion: More than half (n = 85%) of nursing home patients from the whole cohort (n =60), had some knowledge and understanding of an advanced directive form. Teaching one on one, and providing easy read brochures serve as an effective strategy to enhance patients to complete and understand advance directives. Ongoing teaching and one-on-one conversations with patients can also improve the future of their completing advance directives. Through going into each resident's room, the effect of teaching was custom to their learning skills. Not only were the residents taught but others who were present in the room learned as well.

Title: Decoding Insurance Denials: An Analysis of Denial Patterns and Reasonings

Name: Beyla Cayenne

Preceptors: Office Manager: Jacqueline Gibbons

Agency: Gibbons Foot and Ankle Group, LLC

Purpose: To analyze and research the differences between insurance companies regarding allowances, claim denials, and denial codes, exclusively focusing on complex differences between traditional Medicare and Medicare Advantage plans for seniors.

Significance: Evidence suggests that roughly 87 % of people have encountered foot pain in their lives, with one-third of older adults experiencing pain and stiffness (Health in Aging, 2023). Despite this commonality, due to complex issues that underlie insurance companies, patients and podiatrists are often faced with billing dilemmas rooted in copayments and allowances. For specialized medical professionals, such as podiatrists, further complexities stem from gaps in insurance coverage, which correlates to higher out-of-pocket costs for a patient and a lack of fair pay for doctors (Kim et al., 2019). As a result, this substantial increase in out-of-pocket costs creates significant barriers to achieving healthcare equity, particularly for vulnerable groups, leading to a diminished quality of life (Jalali, 2021). Medicare Advantage plans, offered by private insurance to patients aged 65 years and older are an alternative to traditional Medicare and often results in increased insurance issues, including higher chances of claim denials and subsequently higher out-of-pocket expenses. Thus, this project will utilize a researched based analysis to uncover and compare differences in insurance companies and aid in the billing processes for the podiatrist office and patients.

Method/Approach: An examination of the documented Explanation of Benefits was conducted, encompassing the period from June 1, 2023, to June 15, 2023. The insurance companies utilized in this research were Horizon Blue Cross Blue Shield, United Healthcare, AARP, Aetna, and Medicare. In the Explanation of Benefits, to differentiate between each claim, only billed amounts that were not covered through insurance companies were analyzed, which were depicted as zero payments. In addition to zero payments, an E.O.B. lists explicit diagnostic codes and denial codes that are attached to each claim and therefore were noted in this research as well. The observations and statistics were transcribed onto an Excel spreadsheet. This tool allowed for a concise comparison of trends in denied claims for patient visits, facilitating the analysis of variations in coverage between different insurance companies.

Outcomes/Results: Of the recorded Explanation of Benefits for June 1 through June 15, 2023, 90 out of 795 claims were discovered to be denials. For Aetna, 22.35% of claims were concluded to be denials while for United Healthcare 15.38% were concluded to be denials. AARP was reported to have denied 1.41% of claims and Medicare was reported to have denied 9.98% of claims. Horizon Blue Cross Blue Shield denied 22% of claims. Thus, the insurance company with the highest percentage of denials was Aetna. The most common code of denial was 11056 & 11721. Finally, the most common reason for denial varies by insurance company as each one utilizes a special coding system.

Evaluation/Conclusion: This analysis provides insights into the commonalities and distinctions in denial patterns among insurance companies, facilitating a deeper understanding of their practices in handling claims. Regarding this study's representative nature of all claims, variability is expected as each month may differ. Future studies and improvements may include utilizing other private insurance companies, as well as adding CPT codes and modifiers to the gathered data.

Title: Youth Workforce Development

Name: Leilani Chavez

Preceptors: Serena Collado, Director of Community Health

Agency: RWJ Somerset Hospital

Purpose: To increase job opportunities for youths that are not financially stable to get certifications they might need for a job.

Significance: Most young adults between 14 and 25 years of age are trying to look for work. There are 43 million youths living in the United States, but only 17.5 million are working in the United States (U.S. Bureau of Labor Statistics, 2022). Youth unemployment is increasing because they do not have certifications that some jobs require. Babysitting and lifeguarding are the two most common jobs that youths search for. Youths do not often get certifications due to the costs of taking the required courses. To improve workforce development, RWJ Somerset Hospital Community Health provided CPR, EMR, and babysitting courses for free. Providing these courses can help decrease the barriers of employment.

Method/Approach: The Community Health Department was searching for 50 participants to take at least one of these courses free of charge. The first step was to find 12 more participants to finish the 4-hour babysitting course. Dates were chosen based on the availability of the EMS coordinator who would be teaching the course. Since the grant required completion by the end of summer 2023, youth summer camps were targeted to find participants. Five camps were identified to reach out for babysitting training via phone calls and emails to schedule an informational Zoom meeting. After finishing the course the students were provided with a certificate and encouraged to find job opportunities by themselves with their new accomplishments.

Outcomes/Results: After discussing the grant with the camps, there were only 2 camps interested in the babysitting training. Both of the camps were interested in doing a babysitting class by mid-August to the beginning of September before school starts. Many youths declined the opportunity to take the babysitting course due to other personal reasons. Uninterested students stated that they were too busy to take time to sit through a four hour class or they were more interested in other activities during their time at camp. Partnering with two camps provides a higher chance to attract 12 more participants within both camps instead of one. Unfortunately, the guaranteed number of participants for both camps are not available due to the challenges and date of the camps.

Evaluation/Conclusion: Challenges due to busy schedules and disinterest in the courses made it difficult to get the participants we needed in a timely manner. It seemed to be easier to attract participants by going to their high school and promoting the project. Another challenge in the project was finding an organization this summer to get participants. Overall, with the specific population the project is targeting, it is best to target this population in an environment that they are constantly in, such as their high school and to secure a date with a trustworthy company in advance.

Title: Examining the Screening and Treatment of Depression Disorder Among U.S. Adults

Name: Daniel Chiofalo

Preceptors: Dr. Rebecca Klege, Dir. of Research, and Jennifer Berko, Principal Research Analyst

Agency: Henry J. Austin Health Center

Purpose: To gather data to inform an ongoing research project that entails an evaluation and analysis of depression screening tools (PHQ-2 and PHQ-9) and follow-up treatment within a Federally Qualified Health Center that uses an integrated model of primary-behavioral health care.

Significance: Depression affects around 8% of adults in the United States, resulting in healthcare costs exceeding $210 billion annually (Olfson 2016, Maurer 2018). Studies have shown that depression screenings are recommended for all adults in the U.S., but the screening rates are inadequate, particularly among adults without a known history of depression (Bhattacharjee 2018, Kato 2018, Smithson 2017). Additionally, most adults with positive depression screening do not receive treatment due to many primary-care practices lacking the proper tools and protocols for follow-up. This project aims to provide an overview of depression screenings in a variety of primary care settings, including integrated care settings. This review will help HJAHC provide support for universal depression screening and follow-up procedures.

Method/Approach: An analysis of peer-reviewed literature available through PubMed was conducted, using search terms such as depression screening, depression prevalence, United States depression screening, rate, adult, and low-income. Study inclusion criteria were: included only adults (18 and up), a study conducted within the United States, and publication within the past 10 years. Relevant articles were evaluated to extract information regarding the study purpose, independent variables, dependent variables, study design, years data was collected, results/findings, and personal notes regarding the evaluation of a source. A narrative literature review was created to provide important context for the depression screening case study being conducted by Henry J. Austin.

Outcomes/Results: Following an extensive literature search, a critical evaluation of the findings point towards a lack of both screening and diagnosis for depression within primary care settings. A narrative review summarizing and evaluating literature findings was written and finalized in the final weeks of the internship.

Evaluation/Conclusion: Depression screening rates are sub-optimal within multiple primary care settings across the country, with many depression patients going undiagnosed. To improve care, primary care providers and organizations must look for ways to improve screening rates. The literature shows that potential ways to improve include installing routine protocols for the administration of the PHQ-2 and PHQ-9, as well as new technology/software such as VitalSign6, that creates a protocol system physicians can follow to increase detection of depression. Finally, the four-cycle PDSA approach has shown positive results in creating efficient outcomes for depression screenings and is key for the implementation of improvements.

Title: Public Health Emergency Preparedness Assessment

Name: Hamza Choudhry

Preceptors: Amanda Amodio, Preparedness Coordinator

Agency: Somerset County Department of Health (SCDOH)

Purpose: To improve the Somerset County Department of Health's risk communication plan by utilizing the Homeland Security Exercise and Evaluation Program.

Significance: The Somerset County Department of Health is the lead agency responsible for all countywide public health emergency planning and response activities. Public health emergency preparedness involves prevention, mitigation, and recovery activities, not just response efforts (Nelson et al., 2007). Throughout all of these phases, prompt and effective communication is necessary. The COVID-19 public health emergency challenged the preparedness level of the SCDOH, and shortcomings were identified. Amongst them, communication and inventory management were highlighted as areas for improvement. Updating current contact lists to be more accessible and maintaining an accurate inventory of supplies will help the SCDOH be better prepared to act during an emergency.

Method/Approach: The "Whole Community Integration" and "Capability-Based, Objective-Driven" principles of HSEEP were applied to the preparedness process. To make improvements on the first identified issue, establishing seamless communication between the SCDOH and county constituents, previous contact lists beginning from 2019 were reviewed. Contact information was extracted from the previous system and entered into five separate Microsoft Excel documents. Data was sorted categorically according to the roles or professions of individuals. To make improvements on the second identified issue, keeping track of SCDOH resources, usage of the iCAM inventory management system was adopted. Under the New Jersey Department of Health's (NJDOH) license, SCDOH is able to utilize this software. SCDOH's inventory was entered into the system and can now be viewed remotely by anyone with access.

Outcomes/Results: From the previous contact list system, 133 categories of contacts were identified, which included mayors, fire departments, schools, physicians, etc. From these categories, 2,376 individual contacts were extracted and moved into the five Microsoft Excel documents. The Excel documents were shared with the SCDOH's public health emergency preparedness team. The team will reference these documents when creating alerts through the county-wide public health emergency notification system. Inventory management has been made much simpler by adopting the iCAM system. All resources can be tracked electronically, whether in storage or deployed. This allows for the SCDOH and NJDOH to have instant access to the most accurate inventory records.

Evaluation/Conclusion: Contact lists will need to be routinely updated to maintain accuracy due to turnover rates in roles. Overall these lists allow for direct and rapid communication between the SCDOH and individuals, which was otherwise not efficiently possible prior. These lists can also easily be shared with any other agencies looking to utilize them for similar purposes. Adopting the iCAM system is a big step in improving inventory management for the SCDOH. In the past, no electronic platform was utilized for keeping track of department resources. The implementation of this software will allow for a seamless transaction of resources during the next public health emergency.

Title: Preparing for the Annual ACPE Accreditation Review

Name: Kylie Chua

Preceptors: Rev. Caroline Unzaga, Manager of Spiritual Care

Agency: Atlantic Health System - Morristown Medical Center

Purpose: To assist in preparation for the annual ACPE Accreditation Review and improve adherence to ACPE standards for Spiritual Care and Education, professional guidelines, and certification requirements.

Significance: The Accreditation Commission annually reviews ACPE programs and centers to ensure alignment with all ACPE Accredited Program Standards and required procedures established by the Board (ACPE, 2023). A 2 ½ day site visit is conducted every six years and will be held at Morristown Medical Center in October 2023. The Spiritual Care Advisory Committee meets regularly to discuss, identify, and work towards methods of strengthening performance and establishing compliance with the Standards. Morristown Medical Center should meet all requirements and receive a satisfactory evaluation to maintain its accredited status. This project will implement data collection and review to increase the Center's overall professional and ethical quality and subsequent approval by The Accreditation Commission.

Method/Approach: A comprehensive review was completed between June 12 and June 16 to evaluate the current Accreditation Review Portfolio, which requires the inclusion of recent and relevant alumni surveys. Questions were emailed to all alumni. Primary categories were academics, professional development, and the overall learning experience. Responses from 13 of 34 CPE alumni were imported to Microsoft Forms, then aggregated to an Excel spreadsheet. The ACPE Certified Educator and Manager of Spiritual Care explored 3 types of student feedback: 1) written, 2) self-assessed, and 3) evaluative, followed by creating analyses of findings for future improvements.

Outcomes/Results: Of the 13 participants, 4 were healthcare chaplains, 3 were clergy members, 3 were unspecified, 1 was a spiritual care counselor, 1 was a seminarian or religious student, and 1 was a lay visitor. After completion of the program, 5 alumni (38%) returned to spiritual/religious care, 2 alumni returned to an educational setting (18%), and the remaining 6 did not specify. Since participating in the program, 1 of 13 alumni obtained an additional certification, Certified Wellness Coach, 0 obtained an ordination or licensure, and 1 completed a Master of Art in Chaplaincy degree. All students received CPE units for completion of the program, with 5 students (38%) earning 1 unit and 11 students (62%) earning 2-4 units. 2 students (18%) participated in CPE for academic credit. Eleven of 13 alumni (85%) agreed that, if offered the opportunity, they would do CPE again. Finally, all 13 respondents would recommend the CPE program at Morristown Medical Center to a colleague.

Evaluation/Conclusion: More than half (n = 26, 66%) of CPE alumni students who received the survey through email did not respond, resulting in a low sample size of 13 participants. This increased the potential for inaccurate or unreliable data. Telephone calls or postal mail were considered as alternative methods of outreach, but were not executed due to the length of the survey and the poor outlook of receiving timely responses. Still, the results and feedback that were received provided valuable insight to the current program's quality, strengths, and areas of improvement. The CPE internship and residency programs will continue to be offered for the upcoming academic years, allowing students to gain experience and pursue meaningful careers in spiritual care.

Title: Improving Patient Medication Compliance and Care through Outreach

Name: Evely Condis

Preceptors: Direct and Project Supervisor: Maria Salkind, Pharmacy Manager

Agency: Walgreens Pharmacy, Union City New Jersey

Purpose: To improve medication compliance in patients by reaching out directly and often to check if they have any questions or concerns on their therapy.

Significance: When patients are consistent with their medical therapy, there are much better health outcomes as a result. PubMed discusses medication adherence in their article, stating that "Medication adherence is defined by the World Health Organization as "the degree to which the person's behavior corresponds with the agreed recommendations from a health care provider. is necessary to find the right treatment for the patient". Medication compliance and adherence are very important in patients to ensure that they are receiving the right treatment they need for their doctor's recommendations and instructions. US Pharmacist discussed in one of their articles that "Medication adherence can affect quality and length of life, health outcomes, and overall healthcare costs. Nonadherence can account for up to 50% of treatment failures, around 125,000 deaths, and up to 25% of hospitalizations each year in the United States."

Method/Approach: Asking every patient at prescription checkout if they have any questions or concerns regarding their new or current medication. For those who do, they are referred to the consultation window to have a private consultation with the pharmacist. Every patient receiving a call through the patient portal is asked if they would like to sign up for 90 day supply and Save a Trip Refills. When a patient is called for pickup and the patient is not available, they are asked if they would rather have the medication delivered. This way, the patient still received their medication. All patients are signed up for text notifications to alert them when medication is ready for pickup. Patients are asked if they are interested in receiving any vaccines they may need or be behind on.

Outcomes/Results: The outcome of this project will be to improve patient care by a multitude of factors and actions. These include improvement of numbers in medications being filled and verified on time, patient vaccination compliance, prescriptions sold, patients being enrolled in 90 day supply and Save A Trip Refills, etc. Verified prescriptions hit their promised time goal at 90% compared to the 80% goal previously set. 90 Day "yes" indicator hit 73% (goal of 70%), Patient Care Portal improved from 58% to 78%, phone call hold time dropped from 60 seconds to 54 seconds. Vaccines hit 140% of the store's summer goal.

Evaluation/Conclusion: Patient satisfaction was much higher and numbers significantly improved as a result of the new methods put into place. Outreach showed to aid in improving all parts of the pharmacy, from patients receiving vaccines, signing up for Save A Trip and 90 day supply, and most importantly, picking up their medication on time.

Title: Sleep Apnea Assessment for Women Pulmonary Patients

Name: Nakisha Crippen

Preceptors: Jennifer Skiendzielewski, Practice Manager

Agency: Pulmonary Division, PennMedicine (Somers Point, NJ)

Purpose: To analyze the different forms of Obstructive Sleep Apnea (OSA) in a women's patient population and the different forms of CPAP treatment utilized.

Significance: OSA affects about 1 out of 5 women in the United States. Due to OSA being more common in men than women, it can often be misdiagnosed or not diagnosed at all in women patients (Society for Women's Health Research, 2017). PennMedicine provides different screening treatments depending on the type of sleep apnea. OSA includes a variety of distressing symptoms for patients such as daytime sleepiness, paused breathing episodes during sleep, and dry or sore mouth. It can also be an increased risk factor for diabetes, stroke, high blood pressure, and cardiovascular disease. A primary form of treatment for OSA is a continuous positive air pressure machine, or a CPAP, which is considered a gold standard form of OSA care (Katella, YaleMedicine, 2022). This project will analyze the women patients seen for OSA and will identify any common patterns to provide improvement in diagnosis and CPAP treatment.

Method/Approach: After collecting data, a total of 50 women patients have been seen for sleep apnea and are evaluated with the Pulmonary Function Test (PFT). The average age of patients was between the age of 55-75 years old, and have been receiving repository therapy for the last 90 days. PFTs evaluated the strength of the lungs and how well they exchanged air, via forced vital capacity (FVC) and forced expiratory volume-one second (FEV1) ratio. Normal lung functioning was evaluated at an FVC/FEV1 ratio of 70% or above. Mild functioning was between 60-69%, Moderate: 50-59%, Severe: 50% and below. All ratios less than 70% were considered abnormal functioning.

Outcomes/Results: 70% of patients' FVC/FEV1 ratio is above 80% indicating normal lung behavior. 30% of patients have an FVC/FEV1 ratio of between 50-55%, indicating moderate lung behavior. It is observed that the female patients with abnormal lung functioning were associated with a variety of symptoms such as coughing, wheezing, and insomnia. 30 % of patients with abnormal lung function were found to fit the requirements to receive CPAP treatment.

Evaluation/Conclusion: A third of the patients (15) of the total sample size (15), were found to have abnormal lung function, after their PFT testing. This indicates that they have been diagnosed with OSA and qualify for CPAP treatment. Patients would receive a prescription for an at-home use CPAP machine. Based on past patients' success with the CPAP treatment, the key indicators to show signs of successful treatment will be (a) improved sleeping patterns, (b) improvement in PFT test results, and (c) improved daytime mood. Ongoing monitoring and repository therapy will be undertaken to ensure future improvement.

Internship Abstract

Title: Strengthening Efforts to Address Food Insecurity in New Jersey

Name: Maryellen L. de Leon

Preceptors: Direct Supervisor: Michele Huresky, Director of Partner Support and Insight
                     Project Supervisor: Ali Stefanik, Mobile Pantry Manager

Agency: Community FoodBank of New Jersey (CFBNJ)

Purpose: This project aims to enhance knowledge, project management skills, and communication and collaboration abilities within the Community FoodBank of New Jersey's efforts to address food insecurity in the state.

Significance: The project's significance lies in strengthening the Community FoodBank's efforts through increased knowledge, improved project management skills, and effective communication. These efforts will facilitate the development and implementation of impactful programs, initiatives, and partnerships to combat food insecurity in New Jersey, making a positive difference in the lives of individuals and communities served, to bring food to people in need while striving to end hunger in New Jersey and working with an extensive network of community partners, including food pantries, soup kitchens, and shelters, to bring food to our food-insecure neighbors (cfbnj.org, 2023). Inadequate and inconsistent access to nutritious food can harm the health of individuals across all age groups. (NJSHAD 2023).

Method/Approach: Conduct a thorough assessment of the local community to identify areas with the highest levels of food insecurity and vulnerable populations. It gathers data on factors contributing to food insecurity, such as poverty rates, unemployment, and access to affordable groceries. Community Engagement and Collaboration programs with local government agencies and non-profit organizations create a united front against food insecurity. Strengthening Food Assistance Programs will assist in implementing innovative distribution methods, such as mobile food trucks or pop-up distribution centers, to reach the underserved. Develop and promote nutrition education initiatives that empower individuals to choose healthier food. Establish community gardens and urban farming projects to increase access to fresh produce and foster a sense of ownership and self-sufficiency among community members. Moreover, collaborate with local businesses and organizations to create job training and employment opportunities that enable individuals to earn a stable income.

Outcomes/Results: These interventions and poverty alleviation efforts significantly reduced food insecurity in New Jersey. By providing education, empowerment, and support services, CFBNJ built more resilient communities. Individuals gained essential skills and resources to overcome challenges. Fostering collaboration among organizations and agencies facilitated efficient resource utilization and impactful programs. CFBNJ's advocacy efforts led to policy changes supporting poverty reduction and access to nutritious food in New Jersey. Policy reforms created a more supportive environment. CFBNJ's holistic approach addressed root causes for lasting change, ensuring a sustainable impact.

Evaluation/Conclusion: The project's significance lies in strengthening CFBNJ's efforts to combat food insecurity. Increased knowledge, improved project management skills, and effective communication will enable impactful programs, initiatives, and partnerships. By addressing the root causes of hunger and poverty, CFBNJ's work positively impacts the lives of individuals and communities served.

Title: The Importance of Mental Health and Engagement Amongst Leaders

Name: James Farrell

Preceptors: Quadai Palmer, Founder & President

Agency: From Jersey With Love

Purpose: To evaluate the effect of mental health on community leaders and increase their engagement in mental health support.

Significance: In the U.S., it is reported that nearly 50% of all leaders and CEOs struggle with a mental health condition. Most leaders also report saying they feel overworked, overstressed, and all around fatigued from the work they have to complete (Horton International). Specifically, community and business leaders struggle with mental health issues, with them more likely to report mental health issues than others (Harvard Business Review, 2021). This organization offers help for these leaders by being an outlet to seek help, communicate their issues, continue to work on these problems, and initiate solutions to help them better balance their mental health and their work. This project will expand the growth of this organization through social media, garnering more attention for leaders to use From Jersey With Love for their own benefit while also growing the company's presence and experience.

Method/Approach: This company is expanding their outreach to multiple community leaders and making a positive impact in a higher capacity. In order to do so, the method we will be taking is to grow our social media presence, along with our marketing through other resources. This will allow the company to interact with a much greater and more diverse population. Specifically, the use of Instagram and Facebook has been lacking in presence. The company will aim to post multiple times a day, encouraging the resources, useful tips and ideas to use it, along with offering events in which people can personally interact with community leaders through meetings. The goal is to increase the following by at least 25%, along with increasing the weekly postings significantly.

Outcomes/Results: The outcome of this approach has been that the company has found that growing the social media account has allowed for an increase in the overall activity with the targeted demographic. Weekly posts have increased from zero to at least twice or three times a week. These posts have been targeted to reach community leaders, in which certain statistics and resources have been shared in order to help this demographic. Specifically, Instagram and Facebook have reached a total of 42 new accounts, totaling a 300% increase in the activity seen since compared to before. Much of this success has come mainly from Instagram, in which 38 of the 42 new accounts have been purely off of this app. The increase in content has seen an increase across both platforms, showing new followers, more activity, and more interaction with the posts that have been pushed out.

Evaluation/Conclusion:
Reaching the company's audience has been successful through the use of the platforms Instagram and Facebook. From the data collected it was determined that an increase in weekly posts and an increase in supplying crucial statistics and resources for the demographic has shown a large increase in the audience's interaction with the social media accounts. Showing certain facts about leaders' mental health, coupled with supplying multiple organizations and groups that aid in this area has allowed the company to be successful in reaching its goal. Specifically, it is determined that posting through Instagram has accounted for most of the success, and would be the main platform to push the social media posts for the future.

Title: Analysis of Lyme Disease Disparities

Name: Adam Fathalla

Preceptors: Preceptor: Hannah Gould, Ph.D., Director, Global Medical Affairs
Direct Supervisor: James Stark, Ph.D., Global Medical and Scientific Affairs Lead

Agency: Pfizer Inc.

Purpose: To conduct comprehensive literature reviews on Lyme disease equity, with a specific focus on identifying racial disparities in the knowledge, attitude, and practices (KAP) along with prevalence, diagnosis, treatment, and outcomes of Lyme disease.

Significance: Lyme disease is the most common vector-borne disease in the United States, with 476,000 new cases occurring annually, primarily in northeastern states (Kugeler et al., 2021). Currently, there is no FDA-approved vaccine for Lyme disease, in which most cases are treated through recommended antibiotics. Though antibiotic treatment is effective for most patients, some patients report persisting or relapsing nonspecific symptoms after treatment, often referred to as post treatment Lyme disease symptoms (PTLDs) or syndrome (PTLDS). Although surveillance data report that most cases of Lyme disease are in persons who identify as white, a few studies have noted differences in disease manifestation in persons of color, suggesting disparities in time to diagnosis and treatment. Describing these disparities is crucial in order to address health inequities and ensure equitable access to care for all populations.

Method/Approach: Systematic literature reviews were conducted by searching databases such as Pubmed, ScienceDirect, Google Scholar, and Oxford University Press for relevant articles using search terms related to Lyme disease disparities by race along with KAP for Lyme by race. Data extraction and analysis were performed to identify patterns, trends, and discrepancies in the literature. Excel was used to extract relevant data and placed into content categories such as an overview of the study, findings, incidence by race, region, and clinical manifestation by race. The conclusions of these articles are highlighted in a paper.

Outcomes/Results: The literature review documented racial disparities in several aspects of Lyme disease. Overall, 15 studies discussed racial disparities in KAP regarding Lyme, while 31 studies discussed the epidemiology and clinical characteristics of Lyme disease by race. Noteworthy studies found that Hispanics had less familiarity with Lyme disease symptoms (21% vs. 53%, p<0.002) and were less likely to correctly identify ticks as vectors of Lyme disease (40% vs. 85%, p<0.001) compared to Non-Hispanics (Yang hu et al., 2019). In addition, there was a significant difference found between the White to African American Incidence-Rate-Ratio (IRR) for Erythema migraines (IRR: 17.7, 95% CI: 11.2-27.8) and for Lyme disease-associated arthritis (IRR: 2.3; 95% CI: 1.7-3.2) (Fix et al., 2010).

Evaluation/Conclusion: Taken together, these outcomes highlight notable disparities in knowledge, protective behaviors, disease manifestation, and post-treatment symptoms related to Lyme disease among different racial/ethnic groups. It emphasizes the importance of addressing health inequities and ensuring equitable access to care for all populations affected by Lyme disease. These findings point to the need for further research to better characterize disparities related to Lyme disease and to understand the populations and communities most impacted.

Title: MRI Insights: An Accessible and Efficient Platform for Streamlining Follow-ups in
                    Medical Cases

Name: Jarett Goldberg

Preceptors: Spencer Scott, CEO

Agency: Nassau Open MRI

Purpose: To develop a platform that enhances transparency and efficiency in patient coordination and radiology verification between physicians, patients, and lawyers.

Significance: In radiology and healthcare, effective communication and coordination are crucial for providing timely and accurate diagnoses and treatment plans. By addressing the existing challenges in patient coordination and radiology verification, this project sought to significantly improve the efficiency of the follow-up process, leading to reduced delays, enhanced patient care, and improved collaboration among healthcare professionals, patients, and lawyersOther benefits included the potential to facilitate a smoother and more transparent legal process, ensuring that all parties involved have access to the necessary information and documentation.

Method/Approach: A spreadsheet was created using Excel, and further implemented onto the facility's Lytec medical software. The platform is = accessible to physicians, patients, and referring doctors, enabling seamless communication and data sharing among all parties. The approach to aiding in the development of this software began by gathering requirements from all stakeholders, including physicians, patients, and referring doctors. After all required input was gathered, the team designed a user-friendly interface with secure logins, ensuring privacy and ease of use for all parties. Data security and compliance with regulations such as HIPAA were paramount, and encryption protocols and role-based access controls were implemented. In collaboration with the team, the system was seamlessly integrated within Lytec software. Rigorous testing and user acceptance were conducted before deployment. Once deployed, training and documentation were provided to users, establishing an ongoing support system for maintenance and continuous improvement.

Outcomes/Results: The platform significantly reduced the time and effort required for patient coordination and radiology verification. For reference, prior to the implementation of the platform, roughly 3-4 individuals between the 3 separate office locations had access to both medical and radiology information (X-ray, MRI, CAT scan). With the introduction of the new system, all 25 employees now have access to one unified medical systems platform that has resulted in ease of use and an increase in efficiency between all parties. Through secure MRI scan results and medical report uploads, physicians, patients, and lawyers can promptly access crucial information, eliminating the need for physical document transfers and reducing the risk of misplaced or delayed data. This streamlined communication has substantially improved efficiency in the follow-up process, resulting in faster diagnosis, treatment, and legal proceedings. The evidence gathered through user surveys, time analysis, document transfer metrics, real-time engagement monitoring, and healthcare outcome analysis underscores the platform's success and positive impact.

Evaluation/Conclusion: The platform's implementation effectively tackles patient coordination and radiology verification challenges, offering substantial benefits. With increased transparency, better communication, and enhanced efficiency, it accelerates diagnosis, treatment, and legal processes.

Title: Assessing the Impact of Pain on Daily Mobility Functions and the Efficacy of Flex
                    N'Relax Workout for Pain Alleviation: An Outcomes-Driven Data Collection Study

Name: Jenna Han

Preceptors: Direct Supervisor: Sean An, Certified Coach/Owner
                   Project Supervisor: Sean An, Certified Coach/Owner

Agency: Flex N' Relax

Purpose: To empower clients by showcasing that regardless of their age, it is never too late to enhance their lives through exercise, specifically by addressing the issue of mobility decline commonly experienced as people grow older.

Significance: A study published in the Journal of the American Geriatrics Society by Simonsick et al. (2005) found that regular exercise, including mobility function exercises, significantly improved physical performance and decreased the risk of mobility disability in older adults. The study followed a large cohort of participants aged 70-79 over a 2.5-year period and concluded that exercise interventions were effective in preserving mobility. Furthermore, a meta-analysis conducted by Liu et al. (2019) examined multiple studies on exercise interventions and mobility outcomes in older adults. The analysis revealed consistent evidence supporting the positive effects of regular exercise on physical performance and mobility in older adults. The authors concluded that exercise programs, including mobility function exercises, should be recommended as a key component of preventive care for older individuals to reduce the risk of mobility disability.

Method/Approach: To research the scale of pain to comfort, multiple methodologies were employed, including extensive data collection through surveys and interviews with real clients who had experienced pain and discomfort. By directly engaging with these individuals, valuable insights into the progression of pain and its impact on daily mobility functions were obtained. A clear timeline was established, tracking the duration of pain relief after workouts at Flex N'Relax, and standardized pain scales and questionnaires were utilized to ensure accurate and reliable data. Effective communication and collaboration with clients, building trust and rapport, were vital for encouraging participation and obtaining accurate information.

Outcomes/Results: More than half (n= 42, 84%) of the current clients from the population seeking mobility function help at Flex N'Relax (n= 51) have stated that they have seen progress within the first 3 months of working out. An additional 7 people state that they see progress within their bodies 6 months into working out. All clients have stated they have seen mobility improvement within the first year of training at Flex N'Relax. Satisfactory surveys and process evaluations will serve as effective strategies to (a) assess the impact on client satisfaction (b) identify any challenges and make improvements as needed to enhance overall effectiveness. Ongoing monitoring of client satisfaction rates will be undertaken to ensure continued improvement in the future and Flex N'Relax can make advancements in the field of mobility function exercises.

Evaluation/Conclusion: At the project's conclusion, a comprehensive report will document the pain progression experienced by individuals, including the waiting time before daily pain affects mobility, and the duration it takes to achieve pain relief after exercising at Flex N'Relax. This data collection, gathered through client interviews and observations, provides valuable insights into the impact of exercise on pain management and mobility, aiming to improve understanding and enhance overall well-being.

Title: Creating Social Programs to Engage and Strengthen Families

Name: Katie Han

Preceptors: Direct Supervisor: Jensy Campos, Volunteer and Community Partnership Coordinator
Project Supervisor: Christian Mejia, Site Director

Agency: Palisades Family Success Center

Purpose: To strengthen the family base and prevent child neglect by creating programs that increase protective factors and by offering primary and secondary prevention strategies for New Jersey families.

Significance: According to the CDC, 1 in every 7 American children are affected annually from abuse and neglect, and more cases may be unreported or undocumented. Child abuse causes an increased risk for a poorer quality of life from lasting emotional and psychological problems, further affection health, opportunity, and wellbeing. Risk factors for child abuse are associated on the individual, family, and community level with commonalities in low socioeconomic status, low social capital, and underdeveloped communication styles. Family success centers recognize specific risk factors in the population and implement protective factors that may combat some of the risks in the community to lessen the likelihood of negative child rearing outcomes by providing resources that support families. The goal of this project was to offer a mental health program that can help facilitate positive coping strategies for parents and children.

Method/Approach: Research on stress management strategies was conducted using sources such as PubMed and Google Scholar to determine which workshop style would be the best fit for the target demographic. Research suggested that expressive writing, meditation, and music therapy are solutions to facilitate relaxation and emotional regulation for all age groups. Program outlines, including the details of each stress management strategy, were created for discussion and presentation to the PFSC team. The outline of each tentative workshop was designed to target relational communication, creative output, and emotional intelligence, in alignment with the core values of family success centers. To evaluate the success of the program, anonymous surveys were created to be administered at the beginning and end of the program. Through feedback and revisions, suggested improvements were incorporated into a finalized workshop outline with approval for implementation.

Outcomes/Results: The expressive writing program was chosen for implementation because of the relevant logistics of the program, such as accessible resources and applicable research. Because research has shown that writing about topics regarding self-compassion and personal development will increase emotional resilience, writing prompts utilizing the mentioned themes will be implemented in the workshop. The program will take place in two sessions on September 7th and September 11th, 2023. Both sessions will be 1.5 hours, beginning at 3:30pm to ensure ample time for participation from all family members.

Evaluation/Conclusion: Some strategies were rejected as a result of the lack of research or resources for the specific demographic. The development of this project required significant attention to detail and communication with the team to allow for a smooth transition to program implementation. Current detailing to this project includes the promotion of the workshop to Union City residents through the creation of flyers using Canva editing platform and the distribution of information to local resource centers. To increase community involvement for future programming, feedback from the participants and survey evaluations will be analyzed with the conclusion of the workshop.

Title: Reviewing Monthly Audits and Writing Grant Proposals for Drug Recovery Data

Name: Hannah Heideveld

Preceptors: Lynn Nguyen, Data Analyst; Emily Newton, Chief Development Officer

Agency: Prevention Links- Roselle, New Jersey

Purpose: To review monthly reports/audits for the Recovery Database Platform (RDP) for Prevention Links' (PL) data, and write grant proposals for those who suffer from substance misuse.

Significance: In the United States, opioid-involved overdose deaths rose from 21,089 in 2010 to 47,600 in 2017, and significantly increased in 2020 and 2021, with 80,411 reported overdose deaths (*Drug Overdose Death Rates*, 2023). In New Jersey, drug overdose death rates have increased from 14 (2014) to 32.4 (2021) per 100,000 (*CDC/National Center for Health Statistics*, 2022). Underserved communities have more unmet needs for substance misuse treatment services and PL has been providing evidence-based programs for individuals and families within underserved communities through peer coaching without cost.

Method/Approach: Assisting with the auditing process, the CPRC Demographics report contains patient information and the STAR report consists of successful and unsuccessful contact made with patients. For the CPRC report, once the monthly audit was received, the data was copied to Excel and checked for completeness (eg: correct journal entry dates) and the data was highlighted to use the pivot table Excel function. Then a new measure was created, using the "concatenatex" formula, to yield the desired information. A new sheet included columns for referral source, age, gender, race, and treatment status, and was called the "demographics" report. The STAR report consists of the TRS and RC, and a pivot table was made for both and stored in the working sheet. As the list was short, the doubles between TRS and RC were combined manually and the filter function for 'was contact made' was clicked to 'only YES'. The second major task was writing grant proposals and the approach was first reading a federal grant application and extracting the important information, then practicing the writing style by writing a narrative, and finally writing a mock grant proposal for a topic of choice.

Outcomes/Result: The RDP showed that the number of recovery coaching sessions increased by 72% from 2021 to 2022, and the duration of the calls increased by 29%. The activity logs increased from 3,463 to 5,291, equating to a 53% increase, from 2021 to 2022. The number of recovery centers has doubled since 2020 and the level of successful contact is 80% which indicates the value participants receive from the services.

Evaluation/Conclusion: The reports show that patient participation in the PL recovery programs has increased and participants value the support they receive, whether telephone support, in-person, or educational resources. Public health continues to need more data in this area, such as surveying stigma within substance use for these communities and how it impacts their willingness to seek help, whether professionally or by family, or stop seeking help.

Title: Innovation of KRAS precision medicine in lung cancer treatment

Name: Marcela Ishihara

Preceptors: Dr. Pergolizzi, Director of Surgical Sciences Research Laboratory

Agency: Englewood Health Medical Center - Englewood, NJ

Purpose: To study and analyze Kirsten rat sarcoma viral oncogene homolog (KRAS) genetic mutations in patients diagnosed with lung cancer aimed to improve and revolutionize the future of precision medicine.

Significance: Cancer is the second leading cause of death in the US, with 21.7 percent of total deaths in the US (Holland, 2023), with lung cancer being the leading cancer killer in both men and women (American Lung Association[2], 2022). Genes are the instructions that tell each cell how to function, so even a slight change can be detrimental (Cancer.net, 2022). Each cancer patient obtains either somatic, in other words, acquired throughout their lifetime, or germline mutations, which are inherited from their parents. KRAS in healthy cells serves as an on-off switch that regulates cell growth (Chien, 2021). However, when mutated KRAS can become stuck in the "on" position, allowing cells to grow uncontrollably, being the driver of 32% of lung cancer cases (Chien, 2021). Chemotherapy works on killing multiplying cells, cancerous or not, but precision medicine brings a whole new perspective to treatment. It's designed to target and interfere with the cancer-causing genes on a molecular level (MDAnderson Cancer Center). Improvements and more understanding of precision medicine can be used to treat and fight this ever-growing disease.

Method/Approach: An analysis and observation were done on the Tempus database, which contained multiple different cancer diagnoses, mutations, and alterations for each of the patients, along with an analysis on EPIC Hyperspace for additional information. Within the Tempus database, a dissection and separation of only lung cancer cases to a specific Excel Sheet, with name, DOB, ethnicity, comorbidity, risk factors, gene mutation and alteration, and possible FDA-approved therapies and clinical trials were performed. There were a total of 52 lung cancer patients, each with multiple different gene mutations and alterations, with many different patterns, however, a tremendously alarming number of KRAS mutations.

Outcomes/Results: Out of the sample size (n=52), 20 patients (38.5%) had one or multiple KRAS mutations. The alterations found were G12V (31.8%), G12D (13.6%), G12C (13.6%), G12A (9.0%), G13C (9.0%), G13D (4.5%), P34R (4.5%), K5N (4.5%), G12S (4.5%), Q61L (4.5%). G12C tends to be most commonly seen in half of lung cancer cases than other alterations (American Lung Association[1], 2022), however, in this cohort population, G12V is the most prevalent alteration compared to G12C (31.8% vs. 13.6%).

Evaluation/Conclusion: With an 18 percent difference, G12V seems to be the most common alteration in the KRAS gene in this lung cancer patient cohort population than G12C (31.8% vs. 13.6%). Treatments have been more targeted and found for G12C gene alteration, however, this new data set may be a new path for researchers to follow. More monitoring and data analysis is needed to reach an overall conclusion, but these findings are just another step to improving the future of KRAS precision medicine in lung cancers.

Title: Social Media Development for the CITY Lab

Name: Derna Jean-Jacques

Preceptors: Linda Oshin, Ph.D., Lab Director

Agency: The Context and Identity in the Treatment of Youth (CITY) Lab

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Purpose: To establish a social media presence and be a source of knowledge, opportunities, collaboration, and growth for everyone, particularly young people of color.

Significance: In 2021, young adults aged 18-25 years had the highest prevalence of any mental illness (33.7%) compared to adults aged 26-49 years (28.1%) and aged 50 and older (15.0%) (NAMI). Eaton et al., 2007 found that Hispanic/Latinos and non-Hispanic Black youth have significantly higher prevalence rates of sad mood, suicidal ideation, and suicidal attempts compared to non-Hispanic Whites. Furthermore, Alegria et al., 2010 found that minority children have the highest rates of unmet need for mental health services, and even when they are able to access care, minorities are significantly undertreated compared to their White counterparts. By harnessing social media platforms like Instagram, the CITY Lab aims to transcend traditional academic boundaries by posting relevant and current information/updates, fostering engagement through posts and research opportunities, and finally, reaching a wider audience. This initiative is a pivotal step towards communicating science and research, attracting potential research participants and collaborators, and building a supportive online community that empowers youth and advocates for their well-being.

Method/Approach: An Instagram account was created for the research lab and other Rutgers research labs, and relevant parties were followed and added, including the National Mental Health Institute and the Graduate School of Applied and Professional Psychology. Canva was used to create appealing posts including a welcome post, introduction posts for the research team, and educational facts. Social media engagement strategies were developed and utilized including using relevant hashtags and Instagram analytics.

Outcomes/Results: The Instagram account has accumulated 2 followers. It has reached 14 accounts, highlighting the account's capability to build connections. 7 of those accounts were reached from the hashtags used. While this represents a modest start, it lays the foundation for exponential growth and impact. These early followers show the potential for greater outreach and connection, paving the way for meaningful interactions and the dissemination of valuable mental health information.

Evaluation/Conclusion: Posting regularly will lead to more traction. For higher engagement, more posts must be posted to analyze optimal posting times for user engagement. By analyzing trends, the probability of the account's visibility will increase, solidifying its presence and building an engaged audience. The following steps should include creating and publishing stories and Reels to further grow the account. With consistent and engaging content, the Instagram account can foster a supportive community and attract more followers.

Title: Montgomery Township Strategic Plan Evaluation and Revitalization

Name: Michelle Lupu

Preceptors: Devangi Patel, MPH, MCHES, HO

Agency: Montgomery Township Health Department

Purpose: Revitalize the Strategic Plan and its subcomponents in efforts to improve Montgomery Township's Health Department goals and mission.

Significance: Every five years, local health departments are required to update their Strategic Plan. The Public Health Accreditation Board (PHAB) defines strategic planning as "a disciplined process aimed at producing fundamental decisions and actions that will shape and guide what an organization is, what it does, and why it does what it does" (NACCHO). While taking into consideration that Montgomery Township Health Department experienced a location change, the organization has to also assess its strengths and weaknesses in order to plan for a variety of organizational level goals for the near future. In this project, the Asset directory will undergo modifications to support the overall updated Strategic Plan.

Method/Approach: The National Association of County and City Health Officials website was used to find the best practices for the new Strategic Plan. The featured resource on the NACCHO website, Henry County's Health Department Strategic Plan template (2012-2015) was chosen due to its title of "Examples of High Quality* Strategic Plans." The Asset Directory was updated first and information was requested from the staff which included the Health Educator, Animal Control Officer, Public Health Nurses, Local Health Outreach Coordinator, Administrative Assistant, and Environmental Health Specialist.

Outcomes/Results: The finalized Asset Directory totals 9 pages. The document was organized with 18 categories, include subheadings (government, first responders, hospitals, health departments/organizations, healthcare/mental health services, community, schools, child care centers, higher education, non-profits, local businesses, places of worship, parks and recreation, food establishments, grocery stores, rental housing developments, human service social supports, and large employers). Under hospitals, RWJ Barnabas Health NB, RWJ Somerset, St. Peters Healthcare System, and Penn Medicine Princeton Medical Center were included. Within each category, there are tables that display the service name, website and/or phone number. Given that the Asset Directory could be held electronically, the websites are able to provide more detailed information for the community.

Evaluation/Conclusion:
When gathering community partners, it became evident that the Asset Directory needed distinct categories specifically for mental health, human service social supports, health departments/organizations and government. Each of these services provide unique services that needed to be organized in an easy to follow guide for the user. After successful completion of the Asset Directory, The Montgomery Health Officer decided that the next step will be to initiate the Strategic Plan process for 2020-2025.

Title: Newark NJ Sex Ed Curriculum Development on Body Wellness

Name: Jazziel Munoz

Preceptors: Founder/ Executive Director: Stephanie Franklin

Agency: Masakhane Center

Purpose: To create activities (for Newark NJ Sex Ed Curriculum) that aid in the delivery and understanding of information on Sexual Transmitted Infections (STI) screening and prevention, proper hygiene, and methods to care for young adults' bodies while being sexually active.

Significance: Sexual education plays a crucial role in promoting healthy sexual behaviors and reducing the prevalence of STIs among young adults. Research has shown that comprehensive sexual education programs are associated with delayed sexual initiation, increased use of contraception, and decreased rates of STIs (Kohler et al., 2008; Santelli et al., 2017). However, traditional teaching methods often fail to effectively convey essential information on STI screening and prevention, hygiene practices, and self-care, resulting in knowledge gaps and risky behaviors among young adults (DeMaria et al., 2017; DiClemente et al., 2017). By developing evidence-based activities tailored to the needs of young adults, the activities aim to address these limitations and promote better understanding and retention of crucial information for promoting sexual health and well-being.

Method/Approach: To develop the activities, evidence-based practices, best practices, and current guidelines related to STI screening and prevention, hygiene practices, and self-care for sexually active young adults were identified. The literature found consistently highlights the importance of interactive, skills-based approaches in sexual education, which are associated with improved knowledge, attitudes, and behaviors (Kirby et al., 2007; UNESCO, 2018). With this evidence, the members of the Masakhane Center (team of sexual health educators and curriculum specialists) collaborated to design the activities. The activities were designed to be age-appropriate, culturally sensitive, and inclusive, incorporating diverse perspectives and addressing the specific needs of different populations.

Outcomes/Results: The study resulted in the development of three evidence-based activities to enhance the delivery and comprehension of information on Sexual Transmitted Infections (STIs) screening and prevention, proper hygiene practices, and methods to care for young adults' bodies during sexual activity. The *Sexual Hygiene Trivia* engaged participants in interactive learning on sexual health topics. The *Body Wellness Bingo* promoted overall health awareness and self-care habits. The *Guess Who Wellness Exam Game* taught about different wellness exams and encouraged proactive healthcare decisions. These activities offer a promising approach to empowering young adults with essential knowledge and skills for maintaining sexual health and overall well-being within the Sex Education Curriculum in Newark, NJ.

Evaluation/Conclusion: In conclusion, the development of evidence-based activities tailored to the Newark, NJ Sex Education Curriculum offers a promising approach to enhance the delivery and understanding of information on STI screening and prevention, proper hygiene practices, and self-care strategies for sexually active young adults. By implementing these activities, educators and practitioners can empower young adults with the knowledge and skills necessary to make informed decisions and maintain optimal sexual health in line with established evidence-based practices. The activities created will be evaluated to see if they are effective by looking at the results of questionnaires provided to students after their outreach.

Title: Clifton Environmental Assessment

Name: Matt Murphy

Preceptors: Direct Supervisor: Michael J. Hodges
                  Project Supervisor: Micahel J. Hodges Trevor J. Weigle, Lisa Harrison-Gulla

Agency: Strategic Health Advisers, LLC

Purpose: To perform an environmental assessment for the municipality of Clifton.

Significance: Strategic Health Advisors assists townships in New Jersey with improving their health departments through plans and strategies with workforce development,quality improvement and other directives. Clifton, New Jersey was seeking a Community Health accreditation issued by the Public Health Accreditation Board. Plans and guidance were provided for an environmental assessment, a community health assessment, and a community health improvement plan. This project contributed towards the environmental assessment by pinpointing areas in need of updates and improvements.

Method/Approach: The Community Health Assessment was reviewed and performed in Clifton to evaluate the community between July 26th and August 2nd. Steps taken included observing and evaluating the community, which included looking at sidewalks, parks, neighborhoods, safety, and nutrition options. A Checklist and our assessment document determined the quality of these parts of the community.

Outcomes/Results: First we were able to observe that many smaller corner stores did not have the variety that larger chain supermarkets had. Noted omissions for smaller stores included skim milk, refrigeration for the fruits and vegetables, frozen vegetables, ground meat, and Women Infant and Children (WIC) signs. Larger food store omissions included healthier options or an adequate variety for healthy options such as salads, sandwiches, wraps, baked chips, and decaf coffee. With the parks and neighborhoods we investigated, some roads had missing or faded crosswalks, some roads were also missing sidewalks which is unsafe for any pedestrian, especially children. Third, the parks that we evaluated were missing areas for shade and a few could use updates to the areas where people play sports like basketball and tennis. We submitted the assessment to Clifton as a report. The report included hazards we found in neighborhoods for street safety, park information, and food pricing.

Evaluation/Conclusion: The environmental assessment will identify areas for improvement in Clifton's built environment. Ideally, Clifton will utilize this data to inform its Community Health Improvement Plan (CHIP) strategies. This will hopefully bring change and improvements to the community overall to make it healthier and safer. Clifton's commitment to making these changes will also show the Public Health Accreditation Board that they are serious about their efforts to provide world class public health. The process of getting the data was very easy and accessible. One challenge was assessing the wide variety at the corner stores. This required more time and focus to not miss anything but we feel that we were successful.

Title:	Treatment Outcomes in Response to Colon Cancer Patients
Name:	Daniella Notghi
Preceptors:	Dr. Robert Pergolizzi -Director of Surgical Sciences Research
Agency:	Englewood Health Medical Center

Purpose: To investigate Next Generation Sequence (NGS) Molecular Pathology data in colon Cancer Patients by analyzing large databases (Tempus and EPIC) for correlations in treatment response, overall outcome, correlations with histopathology, and utility of the NGS sequencing as part of the clinical picture.

Significance: Colon cancer is the third most common cancer diagnosed among U.S. citizens (Cleveland Clinic, 2022). The genetic mutation, KRAS, is present in about 25% of tumors, making them one of the most common genetic mutations linked to cancer (Chien, 2021). Chemotherapy with immunotherapy is often utilized as a primary treatment plan with KRAS mutation patients, however, there must be a decrease in mortality rates, particularly in colon cancer, since it is known to be aggressive. This evidence indicates that there are gaps in personalized medicine and treatment plans for patients due to the complexity of the KRAS gene across all cancer patients; however, with further analysis of patient data collection, researchers and physicians will be able to determine a more accurate approach on how to treat their patients.

Method/Approach: The methods utilized for this research project consisted of analyzing data from the patient databases, Tempus and Epic. Tempus consists of over 2,000 Englewood Hospital patients' genetic information based on the type of cancer they were diagnosed with, the date of their diagnosis, the gene and its alteration, their gender, and age. Epic provides researchers with in-depth medical reports of the patient, including their hereditary history, treatment plans utilized, and possible FDA-approved therapies. After analyzing patients' information, they were divided into categories in Excel to visualize the data gathered, such as the type of cancer, genetic mutation, gene alteration, comorbidities, ethnicity, DOB, and risk factors. This revealed 37 patients obtaining the KRAS mutation while also displaying correlations between various oncogenes. This serves the purpose of comparing the variety of characteristics within oncogenes and their correlation to the different types of colon cancer seen within the Tempus patients.

Outcomes/Results: Out of the cohort sample size (n=37), 17 colon cancer patients (43.24%) showed one or more KRAS genetic mutations and alterations. A total of 8 different genetic alterations were discovered amongst the 17 various KRAS patients. Seven patients (41.17%) genetically displayed the G13D alteration. Meanwhile, A146T, G12D, and G12C had two patients for each alteration (11.76% per gene). Finally, G12A (5.88%), G12V (5.88%), V141 (5.88%), and Q61H (5.88%) had 1 patient for each alteration.

Evaluation/Conclusion: The codon 12 mutation is known as the most dominant among KRAS alleles, however with a 29.38% difference G13D (43.24%) showed to be the most dominant in the colon cancer population compared to G12C (11.76%). Overall, these findings contribute to improving the precision of personalized medicine and treatment plans for KRAS colon cancer patients. Detecting KRAS mutations in gene alterations has allowed researchers and physicians to target new treatment plans for patients in order to decrease mortality rates; however ongoing monitoring of data collection from patients and dissecting their commonalities will allow a final conclusion to be reached in the future about treatment.

Title: Enhancing Customer Service Experience through Secret Shopper Program at CVS

Name: Sumaiya Nusrath

Preceptors: Paul Kenefick (Store Manager), Lisa Speicher (Preceptor, University Relations Manager)

Agency: CVS Health

Purpose: To create and implement a secret shopper program at CVS to optimize customer service metrics.

Significance: CVS is known for their people-oriented style of customer service. The five core values of the company include: collaboration, innovation, caring, integrity, and accountability. Each of these are able to be scored based on a metric system under CVS's customer reviews, and each store has monthly criteria in order to be in the green zone. By employing secret shoppers, CVS Health will be able to better understand how and where their customer services practices are useful, and where they need to improve. This program's goals are to nurture and expand CVS Health's culture of outstanding customer service, which will lead to increased customer satisfaction and brand loyalty.

Method/Approach: First, the Secret shopper program beta was conducted with a cohort demographic of college aged students that visit CVS Health stores for either general, health-related, or beauty. Data collection involved age demographics, income levels, & education experience. The data was collected across various CVS locations in NJ, specifically targeting those in the North Jersey area, such as East Brunswick and New Brunswick. The survey included data regarding service (friendliness, helpfulness), store layout (cleanliness, ease of access to products), and areas for improvement (product availability/non availability).

Outcomes/Results: The data showed that 62.5% were female shoppers. a majority of the surveyors 87.5%, were in the college age group, 18-24 years old. Income level was reported as student, or in the less than $25,000 range. The majority of the employment status was also reported under student, 62.5%. Only 25% of participants were full-time employed. Twenty-five percent of the participants reported shopping at CVS rarely, and 75% reported shopping at the store once a month. Surveyors were then asked to choose an item at their discretion, to ask staff questions about it. Surveyors chose items such as napkins, sunscreen, gum, medications (over the counter), and batteries. Store stock levels were also observed. 87.5% of the survey participants reported having no difficulty finding the product, and reported that staff was "friendly," "accommodating," "knowledgeable," amongst other fill in questions. Nothing substantial was reported under suggestions for improvement.

Evaluation/Conclusion: A larger sample study is necessary in order to find more conclusive data, based on key discrepancies. A larger study would provide the opportunity to observe information and data from various demographics as identified in the questionnaire section of the study. Also, the study can be more tailored per CVS Health location, based on this sample. The college aged participants, however, did provide impactful information, and some general areas to focus on. Due to the infrequent nature of the demographic shopping at CVS Health, CVS Health could focus on improving its services by organizing promotional events tailored to cater to them.

Title: Improving Interoperability for Referring Providers and Patients

Name: Dennisha Page

Preceptor: Jason Cavallaro, Shelly Georgescu

Agency: Cooper University Hospital - Information Technology

Purpose: To create and update record identification for referring providers within the Cooper production system to ensure patients receive timely results and allow providers to obtain access to medical record information.

Significance: Having a referring provider's fax number and up to date location is crucial in healthcare for efficient communication and patient coordination (HealthIT.gov). Accurate information ensures patient safety by preventing errors in referrals and supporting timely follow ups (U.S Department of Health and Human Services). Moreover, it aids in compliance and documentation, as well as maintaining accurate patient records. The correct fax number and location streamline communication,enhance patient care and improve the overall efficiency of the healthcare system.

Method/Approach: An excel spreadsheet was created to assess which referring providers did not have updated information within the production system. 522 providers were listed. The spreadsheet included components such as the provider's name, NPI number, license number, current primary and secondary address and phone number that was previously on file. The data management system SYMPLR was used to gather updated information along with npiprofile.com to verify provider's NPI and license verifications. After the input of data into the spreadsheet, An SER/record was created within the Cooper master file containing each providers' up-to-date information.

Outcomes/Results: Out of 522 referring providers, 70% of records were updated into Cooper's system, while 30% of providers had an expired license, information that could not be verified, or no new location was found.

Evaluation/Conclusion: Interoperability in healthcare is vital for seamless data exchange among different systems. With the new updated information input into the system, patient safety is enhanced by preventing patient's records being sent to an incorrect location or fax number. A patient can be assured that the referring provider will receive their medical records in a timely and secure manner.

Title: Enhancing Analytical Reporting for Social Media Health Promotion: A Case Study

Name: Salma Pathan

Preceptors: Manuel Castaneda, Director of Community Health

Agency: New Brunswick Tomorrow - Live Well-Vivir Bien Health Campaign

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Purpose: To enhance data-driven decision-making and outreach for New Brunswick Tomorrow's Live Well-Vivir Bien Health Campaign by implementing a more efficient approach to gathering analytical reports from various social media accounts.

Significance: According to the U.S. Consensus Bureau, 35.3% of New Brunswick residents live in poverty. Additionally, 20.0% of New Brunswick residents under 65 lack health insurance, compounding the barriers to proper healthcare. In response to these challenges, Live Well-Vivr Bien leverages the power of data analytics to enhance their efforts in providing health resources to the community. Social media is crucial in disseminating health information effectively in the digital age. Analytical reports from various social media platforms offer valuable insights into audience engagement, content performance, and overall campaign effectiveness. By adopting a more efficient method of gathering accurate and insightful data, the agency can identify target audiences and ensure that their resources reach and impact the New Brunswick community more effectively. The power of data-driven decision-making empowers us to optimize our efforts and positively impact the bigger picture of public health equity and well-being. Through these endeavors, the residents of New Brunswick gain better access to essential health resources, bridging gaps and working towards a healthier and more prosperous community.

Method/Approach: As part of the efforts to understand the limitations of the agency's current approach to gathering analytical reports, an in-depth analysis of the agency's recent social media analytics process was a crucial first step. This involved understanding the existing tools and methods used to gather data from Meta and Later platforms and the challenges faced in consolidating and interpreting the results. Once the limitations of the agency's current analytical process were identified, it was vital to research which analytical platform could best assist the agency in curating its yearly analytical review reports and provide insights to assess which health information content resonates with the users the most. Then utilizing the data gathered, and the organization's goals, a presentation was made and presented to the team detailing a comparative analysis of various analytical tools and which was best fit for Live Well-Vivir Bien.

Outcomes/Results: Following a meticulous analysis of various analytical platform options, it was determined that Sprout Social emerged as the most optimal choice. Sprout Social demonstrated its superiority by providing meticulously curated weekly, monthly, and yearly analytical reports for the health campaign's multiple social media accounts. Additionally, Sprout Social offered various other valuable features, such as data on reach, engagement, followers, click-through rates, and other essential performance indicators, further enhancing its appeal as the preferred solution for comprehensive social media analytics within this study.

Evaluation/Conclusion: Overall, the project successfully presented the team with a new analytical platform that significantly decreased the time required for gathering analytical reports. Feedback from my preceptor and Communications Manager was provided when we worked together to understand better Sprout Social's features and how they can boost the agency's social media networks.

Title: Distribution Trends from Oasis Insight in Nutley Food Pantry

Name: Nicholas Pedro

Preceptors: Katherine Carmichael

Agency: Nutley Family Service Bureau- Nutley, NJ

Purpose: To utilize Oasis Insight in the Nutley Food Pantry to improve tracking methods of client demographics and inventory management by exporting Oasis reports into Microsoft Excel.

Significance: In the United States almost 10% of households are food insecure due to financial situations, debilitating health conditions, limited healthy food options as well as many other factors (CFBNJ 2023). Specifically in New Jersey, 7% of adults and 9% of children are food insecure (CFBNJ 2023). Nutley Family Service Bureau is a non-profit organization that aims to help individuals in need by providing diverse services such as their counseling center, case management, as well as their food pantry. The food pantry in the past has served residents in Nutley with a plentiful supply of healthy grocery items to help supplement clients who are struggling or need assistance acquiring groceries. Now that the food pantry is partnered with the Community Food Bank of New Jersey this service has spread to not only residents of Nutley but also to people all over New Jersey. Through this internship, Oasis Insight will be utilized to identify trends within the clientele demographics to further improve food distribution.

Method/Approach: Using the existing Oasis client information in addition to new entries, reports were created and imported into Excel. Once data was imported into Excel, specific variables such as age, ethnicity, and household size were referenced against the amount of food distributed to different clients. Using Oasis reports and Excel, charts were created to analyze the data collected.

Outcomes/Results: As of August 1, 2023, the Nutley Family Service Bureau Pantry handles 351 cases within 351 households. Using Oasis Insight, a report was created displaying each individual client, their age, ethnicity, household size, and assistance count measured using the state standardized unit of boxes/bags. From this data, not taking into account those who had missing information, about 95% of the Pantry's clients were adults over 18 years old and 56% of those adults were over the age of 60. About 40% of the Pantry's clients identified as Caucasian and about 33% identified as Hispanic while only 4% of clients identified as African American. On average about 49% of households had a single occupant while 51% of households occupied 2 or more people. Although the Pantry accepts cases from outside Nutley, the data is comparable to the racial demographic of the surrounding area with 73.8% of Nutley's population being Caucasian and 3.4% being African American.

Evaluation/Conclusion: With around 56% of the Pantry's clients being elderly, accommodations to the elderly is a vital aspect of NFSB's operations. As NFSB's clientele reflect Nutley's population demographics, more halal food options would help accommodate the Pantry's growing Arabic populace. Ongoing implementation of Oasis Insight's digital features such as the barcode system and appointment scheduling will be done to continue the efficacy of Oasis Insight within the Pantry.

Title: Efficient Onboarding for Healthcare Providers: A Comprehensive Virtual Orientation Project

Name: Stephanie Pokuah

Preceptors: Micheal Neilson, MBA, RN-BC

Agency: Pelorus Elder & Behavior Health

Purpose: To develop a comprehensive virtual orientation tool for a smoother onboarding process and ongoing reference support.

Significance: Many healthcare organizations struggle with providing effective onboarding processes and ongoing reference support for local providers, leading to potential gaps in knowledge. At Pelorus Elder and Behavioral Health, the current onboarding process for local providers lacked a comprehensive module and virtual orientation tool, resulting in challenges for new hires in accessing information and seeking support when questions arise. The principal aim of this project was to optimize the onboarding procedures for newly established sites situated beyond the current state's borders through an online, self-paced environment.

Method/Approach: A comprehensive review of the existing policies and documentations was conducted, with the objective of consolidating the information into easily comprehensible segments. Subsequently, an evaluation of various platforms took place to identify the most suitable option for hosting the training content. The director provided insights and feedback. To ensure effective knowledge retention and understanding, a learning assessment was developed utilizing the Google Forms Quiz tool. This assessment serves to test users' proficiency in the subject matter covered in the module, with a minimum passing threshold of 75%. In the event that users do not attain the required passing score, personalized support is extended through individualized consultations with the trainer. To enhance accessibility, the PowerPoint module was exported as an MP4 file, complete with captions, to be integrated into the welcome email communication.

Outcomes/Results: The original training, spanning 69 pages, was condensed into a more concise online training consisting of 35 slides and 1 policy. Each new employee will receive the training directly via email or link. The accompanying quiz, comprising 10 questions, will gauge the trainees' comprehension and knowledge retention effectively.

Evaluation/Conclusion: The use of PowerPoint (PPT) and video formats streamlined the training process, making it accessible and time-efficient for both trainers and trainees. This optimized training timeline enhances the efficiency of onboarding new employees, ensuring they grasp essential information promptly and effectively. The evaluation process of the final product will be undertaken jointly by the director and the Pelorus team. An examination of the module's navigational aspects will be performed to ascertain its user-friendliness and intuitive design, recognizing the significance of a well-organized and easily navigable interface in elevating the overall learning experience.

Title: Targeting Summer Learning Loss and Healthy Futures

Name: Velinda Sagastume

Preceptors: Rudy Turner, Sawmill Camp Director

Agency: New Jersey YMCA State Alliance - Hamilton YMCA

Purpose: To promote STEAM and health education to summer campers ages 4-13 to aid in summer learning loss prevention and help maintain a safe environment for campers.

Significance: The YMCA aims to provide high-quality programs and services to the community of Hamilton, New Jersey. Children from low socioeconomic backgrounds are at greater risk of learning loss; however, summer programs benefit all (State of New Jersey Department of Education, n.d.). Summer learning loss affects children's achievement rates, as a national study has found that students who experienced continuous learning loss for five summers lose about thirty-nine percent of academic term gains (Atteberry & McEachin, 2021). Additionally, health education is vital in children as they gain knowledge and behaviors. According to the Centers for Disease Control and Prevention, health education at early ages can aid youth in gaining academic advances and following healthy behaviors/choices as they grow (Centers for Disease Control and Prevention, 2023). This project will aim to create lessons involving Science, Technology, Engineering, Art, and Math (STEAM) and health education for campers to promote healthy living. The project also aims to help the camp Director and nurse promote a safe and healthy camp.

Method/Approach: STEAM and health lessons were planned, approved, and taught to the campers. Lessons were planned according to the campers' age groups to ensure that all ages were taught. The Playerspace Program Manager was used to obtain campers' medical history forms, gather their information, and create primary care cards for all campers. The primary care cards were vital to the camp as they contained the camper's name, date of birth, parent name and number, and any allergies or medications the camper may have. If the nurse was needed, counselors would need to bring the injured camper along with their primary care card. Additionally, all of the campers' medical history forms were printed and organized in a binder for the camp nurse to identify any camper who came into her office quickly. Reminders were sent to the camper's parents who were missing medical history forms, immunization records, and any documents required to attend camp.

Outcomes/Results: A total of 395 campers ages 4-13 were able to learn about STEAM and health for a total of 11 weeks, with a weekly camper average of 163. Campers were sent home with a comprehensive pamphlet with information learned in health class for the parents to be informed. A total of 395 primary care cards were created for camp weeks 1-11. The primary care cards were beneficial when campers were brought into the nurse's office and needed a parent to be called.

Evaluation/Conclusion: STEAM and health lessons were held for all eleven weeks of camp. The camp director and leadership staff will meet at the end of the summer and evaluate whether this education promotion will continue for the following year. Limitations included not being able to measure changes in campers' knowledge. The primary care card system was a newly implemented system that will continue to be used for the following years due to its efficacy. The sorting of medical history forms was also vital for the summer camp and will be filed away at the end of the summer to be kept for camp records. This same process will be used for next year.

Title: Health and Hygiene for Individuals

Name: Leslie Sarabia

Preceptors: Kelsey Lynch and John El-Maraghy

Agency: Archangel Raphael's Mission (ARM)

Purpose: To provide health and hygiene services to individuals in New Brunswick, Orange City, Newark, Hoboken, and Montclair, New Jersey.

Significance: Not everyone has access to clean water, a shower, or food to eat every day. More than 49 million people in the U.S. are at risk of hunger (Feeding America, 2013). One in three low-income families cannot afford basic household necessities (Feeding America, 2013). 3.6 billion people do not have access to sanitation in their homes, and 2.3 billion people lack basic hygiene services (CDC, 2022). Even though, over the years, some have gained access to clean water; unfortunately, many people have not. It is important that everyone has access to clean water in order to live a healthy life. ARM offers free showers, free haircuts, and free food for the people who live in the cities, New Brunswick, Orange City, Newark, Hoboken, and Montclair, New Jersey. Their mission is to be able to give individuals something that is vital in a person's life.

Method/Approach: ARM offers showers, meals, and free haircuts to people who need them. These events happen in New Brunswick, Hoboken, Montclair, Newark, and Orange City. People come and receive meals and get a free haircut if they desire one. ARM works alongside churches in order to offer their services. For example, in Orange City they work with Saint Matthew African Methodist Episcopal Church and in New Brunswick they work with the United Methodist Church. During events, it is important to set up the trailer where the haircuts will happen or the showers. One of the main tasks is to take down the individual's names and make a list of the people who come first. After the event is over, it is crucial that everything is left clean and ready for the next event. During meal distributions, one of the tasks is to help pack the food in containers and then set up the table outside the facility in order for it to be easier to hand out the meals to people. When distributing meals, each person that gets a meal also gets a flyer to let them know the date, time, and location of the next event.

Outcomes/Results: Individuals who are in financial need or suffer from homelessness take this opportunity to get a free meal and free showers or haircuts. Each time there is an event, about 6 people get haircuts, about 5 individuals get showers, and the number of people getting a meal is much larger. In New Brunswick, the haircut events are more common. Many people talk about their problems and why they are in the situation they are in. A woman, in particular, said that times right now are hard because jobs are scarce. The individuals that come to ARM events are always grateful that services like this exist.

Evaluation/Conclusion: Many people who are struggling financially or who are experiencing homelessness come to these events, and they leave with satisfaction on their faces. After people get haircuts and showers, their whole attitude changes. ARM provides soup kitchens, free showers, and haircuts helping these individuals with their self-esteem and relieves them of some of their stress or worries.

Title: Using Data to Enhance the Customer Experience

Name: Neera Shah

Preceptor: Henry Gannon, Operations Manager

Agency: Independence Blue Cross (IBC)

Purpose: To analyze member feedback, escalation data, and internal support data to identify opportunities for improvement within the customer service department.

Significance: The customer service department at IBC serves many members on a daily basis and is continuously looking for opportunities to better serve their members. There are many internal sources of data that can be analyzed to identify call trends and areas of opportunity. These data sources include member feedback surveys, escalation data, and internal support data. Analyzing these data sources provides insight into the performance of individual representatives and trends that apply to different lines of business.

Method/Approach: An analysis of customer service calls from the three different data sources was conducted to provide insight into calls that took place between January and May 2023. From the member feedback survey data, calls were examined that contained positive customer feedback as well as calls where customers indicated there were opportunities to further enhance the experience. This provided a baseline to define a successful call, as opposed to a call with opportunities to enhance the experience. For the escalation data, calls were selected from ten representatives to identify the most common reasons for escalations. Calls where the representative requested help from the internal support line were also analyzed from twenty selected representatives to look for opportunities to enhance resources in these areas. From all calls, data was collected in Excel to analyze if there was any correlation including the length of the call, time of the call, number of years of experience of the representative, and the location of the representative, in-house or contract.

Outcomes/Results: Based on the analysis of nearly 200 calls, three areas of opportunity were identified, and enhancements were proposed. The opportunities identified were to develop tools to expand upon explanations of complex topics, enhance the process to make follow-up calls, and continue to enhance resources to ensure completeness and accuracy of every call. The first proposed solution is to update the level of detail on selected job aids that are frequently inquired on; this will aid in reducing the need for support and enhance the speed that information can be provided to the customer by the representative. To enhance the process to make follow-up calls, it was proposed to add additional time to the schedule for each representative to complete their promised call backs and follow ups. Finally, a deeper dive can be conducted into the types of inquiries that most often require additional explanation from the representatives and are more likely to become escalated. By focusing on these topics, additional resources can be developed to better share information on these cases and reduce the need for escalation. The proposed solutions were presented to senior leadership and will be evaluated by management to find possible areas of integration within the department.

Evaluation/Conclusion: In the future, the department will know the success of these measures by analyzing the same data points and seeing continued improvement. This includes seeing continued strength in results of member feedback surveys, a reduction in the number of escalations, and a decline in specific internal support requests for the topics reviewed.

Title: Food Security with Resources for Cancer Patients

Name: Ryan Singh

Preceptors: Avni Patel, Manager: Oncology Access & Nurse Navigation

Agency: Robert Wood Johnson Barnabas Health - Somerset, NJ

Purpose: To provide cancer patients who are struggling financially with access to nutritional food during recovery from treatment.

Significance: In 2022, 1,918,030 new occurrences of cancer cases were recorded and 609,360 patients died from cancer in the United States. Not only is cancer treated aggressively with chemotherapy, but also may last weeks. Many people undergoing chemotherapy will lose their jobs because of the intense side effects.Without steady income, patients sometimes find themselves facing food insecurity. However, proper nutrition is imperative for recovery. The goal of this project is to alleviate any food burden on patients as much as possible.

Method/Approach: For short-term patients who needed assistance immediately, a Shoprite gift card was provided. These gift cards were obtained through Wakefern, Shoprite's parent company, organizational department with increments of $25, $50, and $100. The amount of gift cards sent to each site was determined by the number of patients that the site attended to on average. The gift cards were handed out to nurses at most Robert Wood Johnson Barnabas Health sites to nurse navigators between June 19, 2023 and June 23, 2023. The nurse navigators screened patients to determine if the patient would be eligible for one or more gift cards. The nurse would notify when a gift card was used. An Excel sheet with information regarding community resources was created for patients with long-term needs. The Excel sheet was organized by county and type of SDOH, social determinant of health. For patients needing long-term solutions for food instability, a community resource list was compiled. The resource list included food, housing, transportation, and financial community resources.

Outcomes/Results:. A total of $3,975.00 worth of $25 gift cards were purchased. A total of $6,150.00 worth of $50 gift cards were purchased. A total of $9,600.00 worth of $100 gift cards were purchased. Ultimately, $19,725 worth of gift cards were purchased; however, after a 5% discount provided through WakeFern, only $18,738.75 was spent. Forty-nine patients utilized 52 gift cards (3 patients used more than one gift card). This translates to a total monetary value of $2,850 used out of our $19,725 purchase. The list for long-term solutions included 1,294 resources for multiple counties in the state of New Jersey. Out of this total, 302 of those resources pertained to food. A follow up wellness call was made with these patients who were provided with these gift cards. Thirty-six out of the 49 patients needed further assistance with their food insecurity. By utilizing the resource list, these patients were provided with long term solutions for their barrier.

Evaluation/Conclusion: This number of patients does not accurately represent all of those who are facing food insecurity due to many factors. Areas such as New Brunswick, have more resources readily available for these patients. Many patients are actually in need of both short-term and long-term solutions for their food needs. Although there has been success, there has also been failure. Another factor would be eligibility for said resources. State resources tend to have a more strict eligibility criteria. County resources are simply underrun and under funded, thus patients are waiting weeks for a call back from these resources, or simply there are no resources available. Ultimately, there is a positive impact on these patients' food insecurity by them eventually being connected to resources that will help.

Title: Early Intervention Department's New Electronic Billing Reconciliation Process

Name: Tobey Tyler

Preceptors: Ruth Bash, FACHE, System Vice President, Strategic Partnerships

Agency: Inspira Health

Purpose: The Operations Consulting Group received a project request from the Early Intervention Department. The request was to implement an automatic electronic process for appointment reconciliation. This specific project pertains to Inspira's Waste Walk Initiative, which assesses different processes throughout the system to detect inefficiencies and determine better use of staff time, utilization, and money. Overall, some tasks are very time consuming and Inspira's goal is to eliminate unnecessary staff work and instead implement automated processes.

Significance: According to New Jersey state regulations, the time frame to reconcile paperwork is expected to decrease from 90 days to 60 days. Now the Early Intervention Department has a larger workload with a shorter period to complete it. Related to Inspira's Waste Walk Initiative, there is an opportunity for an efficient way to complete this process that better utilizes staff time.

The leadership team currently manually cross-checks and reconciles all paperwork and verification logs given to them by practitioners. This is a time-consuming and tedious process because the manager must reference multiple different systems which include EIMS, which stores children's demographics, excel sheets, and paper verification forms. While performing these tasks, there are often errors when reconciling the paperwork such as practitioners inputting incorrect information, forms being illegible, or information missing from the form.

Method/Approach: Throughout this project, the DMAIC methodology is utilized. The DMAIC methodology consists of 5 phases; Define, Measure, Analyze, Improve, and Control. Before beginning the DMAIC methodology, there is prework that needs to be completed, consisting of completing a Kick-Off Template, Executive Summary, Project Charter, and Current State Process Maps, as well as undergoing Discovery Days.

Due to a six weeklong internship timeframe, only the pre-work and 'Define' phase of this project have been completed. While preparing to begin the 'Define' phase, the team needs to confirm all the current information and data from the prework phase is correct before any implementations to the project can be made.

Outcomes/Results: The EI project is currently in the process of meeting with the project executives to begin the 'Measure' phase of the DMAIC methodology, which is where the project KPI/Metrics are finalized, the baseline data is presented, and the Data Collection Plan is implemented. The Data Collection Plan outlines exact steps to collect all necessary data for a project. After completion of the 'Measure' phase, the team will complete the rest of the DMAIC methodology and begin the 'Analyze' phase.

Evaluation/Conclusion: The OCG consultants detected many different inefficiencies when completing the prework and 'Define' phase for the Electronic Billing Reconciliation project. Due to state regulations shortening the time frame to reconcile data, this project is time sensitive and there is a need in the community for Early Intervention.

Title: Assisting Customers Through a Change Within the Company

Name: Emily Vogler

Preceptors: Cosmo Zacarro, Director of Service Delivery Management

Agency: Atlas Data Systems at Merck

Purpose: To create tools such as knowledge articles, blog posts, and timelines and communicate them to the company to ensure a smooth transition and provide all the information the end users need.

Significance: Merck pharmaceuticals total number of employees is about 74,000 globally. Creating step-by-step instructions, knowledge articles, slide decks, etc., ensures a smoother transition into a new software with minimal disruptions to employees and their work. Each of these materials are translated and available in several languages to help everyone and be inclusive and diverse. These materials created to transition to new software are essential to the company to ensure no production delays to help our patients worldwide. The main IT hubs are located all over the world. Some are located in Singapore, Texas, and North Carolina.

Method/Approach: Before writing knowledge articles, research had to be completed, especially since the software isn't available to everyone yet. The research was done simply by looking at the Windows 11 features on the Microsoft website. While looking at the website and comparing it to the previous upgrade, a lot of notes were being taken in order to craft it into an article. Shortly after the drafts of the articles were completed, the opportunity arose to apply to be an early adopter, which means to download the software earlier than everyone else. Once the software was available for early adopters, it was easier to go through the notes and review the articles to make sure they are accurate. Taking all of the technical information and breaking it down into layman's terms was essential to make sure it was easier for the end users to consume. Each step needed to be reviewed so it is completely correct for the company to use when the software is available to the rest of the company starting this Fall 2023. The deployment was split up into three pilot groups, all to be completed by February 2024.

Outcomes/Results: By having early adopters, the issues that may come along with the upgrade, such as compatibility issues, different accessibility features, as well as a different setup and even how long the upgrade takes will help document it for the whole company to plan. Each issue that has come up with early adopters has been documented and either resolved or in the process of getting resolved. Having all of these issues, possible questions and concerns, and instructions all written down and answered for people will make them feel comfortable. By providing this information to end users in the company, the ability to adapt to this change should become easier and smoother for the company. Disruptions will be very unlikely to occur, and if someone has a question or problem, they will have access to everything they need, whether it is online or a person that can assist them one-on-one.

Evaluation/Conclusion: The communications created, such as articles, instructions, videos, and blog posts have been posted globally, which helps and guides thousands of people through the change. These forms of information will continue to be updated and stay available as each pilot occurs and the overall production and deployment. Each piece of information has been reviewed by multiple people and checked to ensure that everything is accurate and inclusive. For example, one article covers certain topics for those who utilize the accessibility tools, captions and those who are in different countries that speak or read languages other than English.

Internship Abstract

Title: Converting To An Automated Appointment Service To Maximize
Direct Patient Care Time

Name: Wiktoria Zieba

Preceptors: Dr. Navtika Desai

Agency: Full Circle Endocrinology

Purpose: Converting a medical office to an automated service for appointment and blood work reminders.

Significance: Medical offices allocate a significant amount of time daily performing administrative tasks which reduces the amount of time spent on direct patient care. For every hour spent on direct patient care, approximately two additional hours are dedicated to administrative tasks (Sinsky et al., 2016). The medical practice the internship is being held at spends about two to four hours daily completing appointments and blood work reminders manually. Excessive amounts of administrative tasks can prevent patients from "receiving timely and appropriate care or treatment" (Erickson et al., 2017). Converting a portion of administrative tasks to an automated system increases the time spent on direct patient care.

Method/Approach: A review was done by the staff at the internship to assess the time spent daily on appointment reminders compared to direct patient care for 1 month before the start of the internship. The staff enrolled for a new application, CGM Connection, that integrates with the office's software, Aprima. Every patient established within the practice opted into text and voice reminders. A document was created containing the different appointment types used to schedule appointments. In CGM Connection, "rules" were created for the system to recognize when to send the appointment reminders and what the reminder message should state based on the appointment type. A meeting was held with the provider to finalize what reminder message needed to be assigned to each appointment type. After the reminder messages were finalized and rules were created, testing of CGM Connection was conducted using test patients. Once testing was finalized, CGM Connection's support was contacted to launch the new automated service.

Outcomes/Results: With the launch of CGM Connection, appointment reminders became automated. The two to four hours spent daily on appointment reminders were allocated to direct patient care. Before the integration of CGM Connection, patient appointments were roughly 15 to 30 minutes long. Due to the integration of the new automated system, appointments were increased to an hour long allowing for patients to receive more thorough meetings with the medical providers.

Evaluation/Conclusion: The new automated service, CGM Connection, allowed for more time dedicated to direct patient care. The integration of CGM Connection increased patient appointment time by half. In the post-appointment surveys, patients reported the increase in time spent with the medical provider allowed for a more meaningful, in-depth appointment. Additionally, more patients were able to be seen per day due to the newly allocated time. If any discrepancies were to come up within the new automated service in the future, the support technician will be contacted to resolve any potential issues to ensure the system is functioning properly.