

Fall 2022 Abstract Book



Title: Fabry/Pompe Disease Research and the Use of Early Clinical Data Management

Name: Oluwagbenga Adegbite

Preceptors: Pilar Moore, Director Data Management

Agency: Amicus Theraputics

Purpose: To study and evaluate the impact of Migalastat in children and adolescents with Fabry disease and data record integration to maintain clinical trial timelines.

Significance: Fabry Disease a rare condition that affects 1 in 117,000 men and women. It's a hereditary condition caused by globotriaosylceramide fat accumulating in cells. Pompe disease is an uncommon, inherited heart and muscle disorder.). Migalastat stabilizes and "traffics" amenable mutant α -galactosidase. Clinical Data Management (CDM) helps clinical trials produce high-quality, reliable, and statistically sound data. This shortens drug development and marketing. CDM procedures such Case Report Form (CRF) design, CRF annotation, database design, data entry, data validation, discrepancy management, medical coding, data extraction, and database locking are regularly assessed during a study. EDC data input systems and Microsoft Excel were used to quantify data from clinical and pharmacological trials for this project. Amicus Theraputics is biotechnology company at the forefront of advanced therapies to treat a range of devastating rare diseases.

Methodology: User acceptance testing was completed in September 2022 to ensure that all patient questions followed SOP guidelines. First, the query was checked to see if it already existed on the database platform. If not, it was added to the Excel spreadsheet. If the questions were in the EDC platform, queries would be completed. If there is an error, the question was still valid in the database. The appropriate case report forms were completed and forwarded to trial sponsors. Trial data charts were further reviewed and outliers were flagged for verification. From November to December 2022, the experiment's database lock phase commenced.

Outcomes/Results: Between September and December 2022, entries were checked for 500+ medical research sites. An average of 100 questions were answered per medical research site. Nearly 30% of the questions were recognized as errors within the database. These were checked as queries. The trials' data lock portion continues until 100% correctness is achieved. The final step is delivering all files to the department for FDA approval.

Evaluation/Conclusion: The conduct of clinical trials often takes place over the course of several years and requires an ongoing flow of data and analysis. Each and every variable change needs to be checked thoroughly, in a timely manner, and in accordance with the protocols that have been established. Each process needs to be examined and double-checked multiple times. During the course of the trial, each and every piece of data must be accounted for, which demands the clinical research data managers to put in hundreds of hours of labor. Accessing many databases, each of which involves training and practice, involves adaptability, particularly when considering the short deadlines. A sense of both quantitative and qualitative interpretation is required for this work, so before considering, one should think about your data-analysis skills (trends, comparison, relationship, producing the data visualization, representing data). The experiment is not yet complete; nonetheless, the prescribed timeframe for the protocol was adhered to throughout the trial. Making use of the quantitative data, the phase III implementations of the trial execution will begin in 2023.

Title: Cutting Cost & Increasing Efficiency: Reducing Company Overspending

Name: Asfand Ali

Preceptors: Tiffany Santiago, Assistant Senior Director of Recruiting and Credentialing

Agency: All American Healthcare Services

Purpose: To identify excess spending, specifically with background checks

Significance: Due to the company's expansion into other states, a shift in management, and a higher volume of potential staffers applying, it is imperative that All American re-evaluate their fiscal health as the quarter comes to an end. The high volume of applicants raised a concern for running duplicate background checks that cannot be processed immediately, and have a turn-around time of up to 30 days. This project analyzed duplicate requests which led to overspending and suggested ways to reduce future duplicate requests.

Method/Approach: The first initiative was to compile a list of all the names of the staffers for whom we ran background checks during the quarter. Using our background website, these requests were individually investigated for duplicate requests. Each duplicate was highlighted and transferred to another Excel spreadsheet along with the staffer's work-state as each state has a different price-point to run a background check. Multiple background check requests for staffers were submitted for whom had a longer "in progress" period in completing the screening. It was discovered that Account Managers were requesting background checks multiple times for the staffers that were still in the processing stage. The level of overspending on duplicate requests was calculated by using the specific price-point of each state. Background checks cost \$9.95 for most states, however, larger states such as New York, California, and Florida require additional verifications which increases the price to \$15.95, known as a state-specific background check.

Outcomes/Results: There were 96 duplicate checks run in the past quarter, 33 at the normal \$9.95 price point and 63 state-specific checks each at \$15.95. The total in excess spending for the quarter amounted to \$1,333.20, with \$1004.85 being solely state-specific requests, accounting for over 75% of company overspending. Consequently, regions have been shifted to have all larger states requiring additional verifications join together in the same region, being overlooked by the same Account Managers.

Evaluation/Conclusion: Due to the majority of duplicates being state-specific, it is imperative to be mindful of double checking each request within the background check website via the "Manage Documents" tool to view the catalog of all screenings run. Although tedious, until further actions are implemented, this will surely reduce excess spending. Early efforts attempting to reduce duplicate requests are IT changes to the Google spreadsheets being utilized as a background check tracker. Any duplicate requests will be highlighted on the excel spreadsheet, relaying to the credentialing team to not run the screening.

Title: Results of a Thematic Analysis of Patient Perceptions of Vyvanse as a treatment for

Binge Eating Disorder (BED).

Name: Audrey Asare

Preceptors: Dr. Morgan H. James - Principal Investigator

Agency: Robert Wood Johnson Medical School - Brain Health Institute

Purpose: The objective of this study is to utilize thematic analysis to investigate the experiences of patients with Binge Eating Disorder (BED) during treatment with Lisdexamfetamine, also commonly referred to by the brand name Vyvanse[®].

Significance: Binge eating disorder is the most common eating disorder in the United States, although it has only been formally recognized in the DSM-5 since 2013. Binge eating disorder (BED), is a severe eating disorder that is characterized by repeated episodes of eating excessively large amounts of food in a short period of time, often to the point of discomfort. People with BED typically experience a feeling of a loss of control during the binge and commonly experience guilt, distress, or shame after the episode. In fact, the disorder has been linked to several chronic diseases such as obesity, heart disease, type 2 diabetes, cancer, sleep apnea, high blood pressure, arthritis, and psychiatric disorders etc. "Vyvanse" is the brand name for (Lisdexamfetamine), which is a medication used to treat ADHD and binge-eating disorder. It works by altering the chemical balance of the brain and increasing dopamine and norepinephrine levels.

Methods/Approach: A thematic analysis of patient experiences with Lisdexamfetamine (Vyvanse®) was conducted using the reviews from a platform called drugs.com. The research software Nvivo® was used for our predominantly inductive and qualitative data driven approach to thematic analysis. The familiarization process was conducted separately to prevent bias between the researchers. Each researcher created their own codes and studied the reviews repeatedly to extract relevant recurring themes from the data. The themes were then checked against each other and against the original data set to ensure that they were coherent, consistent, and distinctive. The process involved using patterns in the data that are important to create underlying codes, generating themes, reviewing, naming and defining them until thematic saturation.

Outcomes/Results: A convenience sample of 90 participants of various ages, reported their treatment experiences with the ADHD and BED medication Lisdexamfetamine (Vyvanse®). Nine themes were identified: (1) psychiatric side effects; (2) physiological side effects; (3) sleep disturbances; (4) reduced food cravings, intake, obsession, and preoccupation; (5) generation positive perception of vyvanse; (6) general negative perception of vyvanse; (7) BED continues, increased appetite, & treatment ineffectiveness; (8) treatment cost of vyvanse; (9) initial reaction to vyvanse.

Evaluation/Conclusion: These patients with Binge Eating Disorder reported a range of experiences during their treatment with Lisdexamfetamine. The data from the thematic analysis gives insight into their collective experiences which may allow physicians and scientists to identify aspects of the pharmaceutical therapeutic Vyvanse [®] that may subsequently affect their satisfaction and adherence to treatment.

Title: Substance misuse and risk communication in Montgomery Township

Name: Josephine Awadalla

Preceptors: Devangi Patel, MPH, MCHES, HO

Agency: Montgomery Township Health Department

Purpose: To identify the role and responsibilities of public health and prevention professionals regarding cannabis education.

Significance: The legalization of Cannabis has created a cultural shift in the community and a gap in guidance for Public Health and Prevention Professionals, where organizations are reforming marijuana prevention messaging. There are concerns about this shift among Public health and Prevention Professionals as Cannabis usage has been increasing among adults and dispensaries are more accessible. There have been reports of overdoses among laced marijuana products, THC poisonings among children, and motor vehicle-related accidents or deaths. There is limited recent data on the public health and public safety impacts of cannabis legalization, which prevents public health officials from taking needed action. Over 12% of NJ's residents above 21 are marijuana users; substance misuse occurs among 3 out of every 10 users. In 2021,137 individuals received marijuana abuse treatment in Somerset County; 3 were Montgomery Township residents. Meta-analysis studies reveal that Cannabis use has irreversible effects. Including cognitive and functional impairment, permanent IQ loss, risk of mental illness, and decreased coordination, impacting driving and daily performance. Marijuana use among pregnant and breastfeeding women can cause fetal growth restriction and brain development.

Method/Approach: The project initially reviewed cannabis prevention messaging from other areas with legal recreational consumption. The literature review focused on risk messaging and cannabis awareness communication to the public. Results revealed the need for key informant interviews among community stakeholders. The interviews included Montgomery's educational, religious, physical, mental, and social sectors. The team analyzed data from the interviews to create a logic model and a root cause analysis to assist in program planning, implementation, management, evaluation, and reporting of cannabis education activities. The study aimed to expand the knowledge of risk communication on cannabis and collect data to understand the root cause of marijuana consumption and the role of Public Health past legalization.

Outcomes/Results: Upon completing our research, our findings summarized that the public health sector is crucial in addressing marijuana prevention and education among residents. The logic model table showed demand for partnering with other organizations such as Empower Somerset, Youth Marijuana Prevention, and Substance Abuse and Mental Health Service Administration. The key informant interviews were conducted with the Empower Somerset, Religious centers, High schools, Municipal alliance, Board of Health, EMT, and Pharmacists to initiate the partnership and introduce the concern. Data on marijuana use is underreported since most people in Somerset County opt to pay out-of-pocket for treatment services to disguise having addiction-related information tied to their medical records. Findings show an urgent need for educational campaigns, risk communication, access to therapy, stress management, and increasing youth outreach to address root motivators for marijuana use.

Evaluation/Conclusion: The logic model showed the need to partner with community stakeholders to address the underlying risk of marijuana. The Health Department collaborates with local non-profit organizations and key stakeholders to determine necessary actions. Future steps include educational campaigns, mental health support, initiatives support among youth, and risk communication, to educate the public about the impacts of cannabis usage while preventing long-term health effects and addiction.

Title: New Parent Information Packet

Name: Catherine Bell

Preceptors: Brittany Patterson, Corporate Director

Agency: Atlanticare

Purpose: To create a handout for expectant parents regarding medical leave and bonding time.

Significance: AtlantiCare's Leave Management Office is responsible for opening short term disability requests, ensuring accurate completion of paperwork, processing disability claims, and answering employee questions or concerns. The office receives many leave of absence requests from expectant parents which pertain to maternity leave and bonding time. There are different layers to the process including the maternity short term disability claim and federal and state laws concerning bonding time which can be confusing to the employee. The project is to create a document that would include the answers to frequently asked questions including initiating the leave request, eligibility for bonding time, information on New Jersey Family Leave Act (NJFLA) and Federal Family Medical Leave Act (FMLA), and applying for New Jersey Family Leave Insurance (NJFLI). The goal of the project is to reduce the number of phone calls and emails the Leave Management Office is receiving.

Method/Approach: Research was completed to determine the pertinent federal, state, and company policies regarding maternity leave and bonding time. Staff input was considered to limit the information that would be offered in the new parent information packet. Microsoft Word was used to create the packet. Three drafts were created and presented to the team prior to choosing the format that would be presented to the employee.

Outcomes/Results: The completed document includes information on the process of short term disability for maternity leave and bonding time. It includes a checklist with a timeline of important reminders for employees who are requesting maternity leave and bonding time. The document contains direct links to the Atlanticare webpage to request a leave of absence and to New Jersey's state website to apply for state benefits if opting to use bonding time. The document also contains the answers to frequently asked questions and provides detailed information regarding company policies and State and Federal laws including New Jersey Family Leave Act (NJFLA), Federal Family Medical Leave (FMLA), and New Jersey Family Leave Insurance (NJFLI) pertaining to family leave and bonding time.

Evaluation/Conclusion: The document is being forwarded to employees who have questions regarding their entitlements for maternity short term disability and bonding time. The success of the document will be measured over time to determine if the leave management office is receiving a reduced number of phone calls and emails with questions pertaining to maternity leave and bonding time.

Title: Analyzing Impact of Ambulation After Spinal Surgery

Name: Fanny Brito - Cruz

Preceptors: Kyala Hayes, MSN, RN, ONC, CJCP - Joint Care Coordinator

Agency: Robert Wood Johnson University Hospital

Purpose: Investigating outcomes such as length of stay, opioid usage, and discharge disposition, based on whether or not the patient was ambulated or not within the first 8 hours after spinal surgery.

Significance: The typical practice of bed resting after surgery has been linked to unfavorable outcomes, including a higher risk of deep vein thrombosis, pneumonia, muscle wasting, and physical functional decline. Enhanced Recovery After Surgery (ERAS)₂, a multifaceted approach to bettering surgical patient care that is subspecialty- and procedure-specific evidence-based, suggests that early mobilization is associated with decreased morbidity, sepsis, or infection, and a shorter average length of stay. Instances of low compliance with early mobilization show that those who remain sedentary following their spinal surgery are at a higher risk of complications down the line.

Method/Approach: Patients undergoing spinal surgery at Robert Wood Johnson University Hospital-New Brunswick between February 2022 and May 2022 were retrospectively reviewed. The time frame was chosen due to the fact that there was a temporary halt in elective procedures as a result of the surge of COVID cases in January 2022. The end date was determined by the initiation of a new EMR system, which started in June 2022. Data was pulled using the Sunrise Clinical Manager EMR system. Ambulation attempts were made by nurses, physical therapists, and mobility technicians within 8 hours after surgery. The length of stay, opioid usage, and discharge disposition were recorded. In order to measure opioid usage across the population, it was standardized and converted, morphine milligram equivalents (MME), assuming a 25% cross tolerance reduction for appropriate medications.

Outcomes/Results: Of the population reviewed (n=72), 56 patients (77.8%) were ambulated, and 16 patients (22.2%) were not. The overall average length of stay was 3.10 days. The average length of stay for those who were ambulated within 8 hours after surgery was 2.86 days. Patients who did not ambulate within the first 8 hours after surgery had an average length of stay of 3.88 days. The overall average PO MME was 86.7 mg. Ambulated patients had an average PO MME of 71.7mg. Patients who were not ambulated had an average MME of 139.5mg. Of the total population, 62 (86.1%) patients were discharged home. Of the ambulated patients, 8.92% were discharged to a skilled nursing facility or an acute rehabilitation center. Among the population of patients that were not ambulated, 31.25% were discharged to a skilled nursing facility or acute rehab facility.

Evaluation/Conclusion: Patients who were ambulated within 8 hours of surgery had lower average length of stay. These patients also required nearly half of the opioids as patients who were not ambulated. Additionally, there is a significant number of ambulated patients who are discharged home after surgery. The data collected supports that of the ERAS pathway, showing that early ambulation after surgery leads to more favorable outcomes post-operatively. It is shown to decrease the length of stay, decrease opioid usage, and increase the chances of going home after surgery.

Title: Senior Center Programs: Improving Quality of Life

Name: Feona Burton

Preceptors: Kate Brace, Program Development Specialist

Agency: Senior Citizen Center - New Brunswick, NJ

Purpose: To offer social, recreational, and educational programs that promote health literacy in order to encourage healthy living, foster a sense of purpose, and improve seniors quality of life.

Significance: Low health literacy has an association with poor health outcomes such as low levels of self-efficacy, increased mortality, poor health status and reduced quality of life. Specifically, in the state of New Jersey 70% of the physical decline associated with aging is due to poor lifestyle behaviors . The obstacles that elderly people encounter in today's society can be overcome in part through education, as acquiring new skills and opportunities enables them to attain both physical and emotional well-being. The New Brunswick Senior Citizen Center assists in improving the quality of life of seniors through connecting them to essential community services that can help them stay healthy and informed. This project will aid in increasing senior health literacy through conducting virtual zoom presentations to the senior community on topics that will offer information and awareness on age-related topics.

Method/Approach: Between the months of October 2022 through December 2022, twelve presentations were conducted via zoom twice a week. Following each presentation, a four-question verbal evaluation was conducted to gain feedback on the material presented and measure the impact presentations had on the senior community. Questions included, what percentage of information discussed has been new to you?" with answer choices of "100%", "75%", "50%", and "0%"; are you able or willing to utilize the information presented in your daily life" and "has any of the content presented given you a motive to improve your current lifestyle habits?" with answer choices of "Yes" or "No", and how would you rate the information provided" with answer choices "excellent", "good", fair", and "Poor". Responses were logged in a Microsoft Excel spreadsheet to measure health literacy by identifying the level of knowledge seniors had before each presentation and obtained after.

Outcomes/Results: Total number of participants for the twelve presentations was 8. 100% of senior participants answered "yes" to being able or willing to utilize the information presented in the workshop in their daily life and that the information presented provided a motive for them to improve their current lifestyle habits. There were improvements in health literacy achieved through the presentation regarding the topic of *Fall Prevention*, in which 60% of senior participants were 100% aware of the topic and 40% were 75% aware. Additionally, there were major improvements in health literacy in regard to the Healthy *Eating Part I* presentation where 40% of seniors were 75% aware of the topic, and 20% were 50% aware of the topic beforehand.

Evaluation/Conclusion: Health literacy can always be improved upon within the senior community in order to spread awareness on age related topics that will enable seniors to foster a sense of purpose, stay informed, and utilize tactics to improve quality of life. This particular project had a positive impact on the senior community at the New Brunswick Senior Citizen Center with 100% of senior participants rating presentations each week amongst the ranks of "Good" and "Excellent". This project can expand in person rather than virtually; this will allow for more interaction.

Title: Submitting Insurance Claims Template

Name: Fatma Celik

Preceptors: Office Manager, Heather Stefaniuk, Licensed Optician

Agency: The Eye Exam Group

Purpose: To create a guideline for insurance submissions to avoid denials, enhance routine, and avoid mistakes.

Significance: From the opening of the practice in the 1990s to the year 2017, the office was documenting patient charts by hand and submitting insurance claims via mail. In June 2017, a new physician took over and turned into an all-digital system. The training period was not sufficient enough for them to process the new system. Due to this reason, between the years 2017 and 2022, there have been over 400 insurance denials within this practice. On average, each claim has a return value of \$80 to 600 dollars. The contact lens orders caused up to 18,000 dollars of revenue lost on an average month. This project aimed to realign the disarray of procedures and stop the revenue loss.

Method/Approach: First, two checklists were created in September 2022. The first one was created based on past denials and the second checklist consisted of how to submit current files. The supervisor provided feedback to simplify the checklists. On September 30, 2022, training was held with the staff on an individual basis.

Outcomes/Results: Of the 6 people who completed training, 5 of them successfully comprehended the assignment and were able to use the checklist immediately after the training. The other person retired. The volume of patients after the digital system increased. Per day, on average there were about 15 claims submitted and only 3 denials. The denials were immediately taken care of by the office manager, who reviewed the checklist that was associated with that claim. Additionally, the claims that have been denied, were decreased by \$9,000. The checklists helped us be more productive on the phone with support as well. On average there were 38 minutes spent taking care of one denied claim. Thanks to the checklist that guides customer service, we brought that time down to 16 minutes, on average.

Evaluation/Conclusion: Before using checklists, there were about \$18,000 in claims that have been denied. Also, before using checklists, there were \$32,700 in claims that were successfully submitted and reimbursed. Lastly, checklists improved productivity. There were clear and concise directions. This resulted in the effect of more claims being before the checklists were in place, fewer claims being submitted due to the lack of proactiveness. The biggest challenge is that the older staff might have had a hard time adapting to the checklists due to the digital system already being in place. We were nervous that the staff might be overwhelmed. However, through the individual meetings, the staff was comforted, and once the results were positive, they too felt content and productive because of the claims that were being approved.

Title: The Role of Religion in Medicine

Name: Kaylee Chan

Preceptors: Gloria A Bachmann, MD, MMS, Co-Director

Agency: Robert Wood Johnson Medical School Women's Health Institute (WHI)

Purpose: To collect and study data pertaining to the relationship between religion and medicine, focusing on research conducted in the last two decades.

Significance: The presence of prayer is common in hospitals, physician's offices, and other healthcare facilities. In spite of the disconnect individuals seem to automatically draw between religion and medicine, more than 50 percent of US medical schools have courses on religion. Within these schools, ample examinations are conducted of evidence-based medical literature detailing a multitude of religious approaches to spirituality and health. But while 50 percent of Americans believe that prayer can heal, they are unlikely to neglect conventional medicine. This evidence indicates a significant relationship between religion and healthcare, that transcends just consumer belief, being fairly palpable in medical education as well. Further analysis of this relationship will shed light on how regularly these two bodies of information coincide.

Method/Approach: A literature review was conducted utilizing peer-reviewed journal articles from databases including Google Scholar and PubMed regarding the overlap of religion and medicine in the last two decades. The searches also included related topics, such as spirituality/culture and health. After selecting and analyzing ten articles relevant to the topic, trends were identified on the relationship between religion and medicine, as well as how religion affects the rendering of healthcare services as a whole.

Outcomes/Results: All ten journal articles discussed the use of religion or spirituality in conjunction with conventional biomedicine. With healthcare being a field centered around patient comfort and healing, much like religion, one study found that nurses ought to engage more in spiritual care and respect prayer as an entry into deeper feelings of relief (Reimer-Kirkham *et al.*, 2020). Another study indicated associations between religion and health outcomes, including improvements in hypertension, recovery from surgery, coping with illness, and will to live (Puchalski, 2004). Alongside these potential benefits however, studies found the religiously or spiritually active to be more susceptible to developing greater stress, depression, and suicidality as a direct result of 'negative religious coping,' or expecting God to solve one's problems (Thoresen & Harris, 2002). Seven articles pointed towards a need for modern health institutions to be more sensitive towards the issue of spiritual belief and its effect on patient behaviors. One study found that cultural context, especially as it relates to different religious beliefs, ought to be a critical factor in framing the way forward in terms of public health interventions (Iwelunmor *et al.*, 2014).

Evaluation/Conclusion: In spite of the power conventional biomedicine holds in modern societies, its connection with religious belief cannot be denied on the scope of patient experience. Religious belief and its power to facilitate healthy or harmful health behaviors ought not to be underestimated within our healthcare institutions. Bearing this in mind, it is crucial for health professionals to recognize this relationship and demonstrate sensitivity in delivering healthcare services if they hope to facilitate better health outcomes among patients.

Title: Quality Patient Coordination

Name: Donald Chen

Preceptors: Shreya Modi, Training Supervisor

Agency: Memorial Sloan Kettering – New York, NY

Purpose: To provide a welcoming experience for patients looking for chemotherapy treatment and appointments with doctors in a fast-paced clinic.

Significance: MSK primarily consists of treatment rooms and outpatient clinics that put an emphasis on the treatment of patients and quality of patient care. MSK tries to make the patient experience as easy and least intensive as possible. I try to carry these morals with me whenever I go into work and talk to patients while checking them in. I try to make sure they have the best possible experience and can leave the hospital feeling treated well. I have found that my role in this position is important because in the hospital, we are constantly in contact with other care coordinators or office coordinators to manage patient clinic flow. It is important to understand the role of others as in the hospital we are a collective team.

Method/Approach: To ensure that I have been able to answer patient questions in a timely fashion, I first message another warm welcome Care Coordinator who has more experience. If that does not work then I will most likely call the doctor's office to relay the message. Furthermore, when I do not know the answer to something, I will not always ask people right away because everyone is very busy in the clinic. Therefore, I first will try and look at my own resources and information available to me so I can contact or call others who may have the knowledge on the subject matter. A warm welcome care coordinator is responsible for printing out the next day's patient schedule while managing clinic flow at the same time. In addition, warm welcome care coordinators are in charge of confirming lab orders which require calls to the doctor's office or figuring out what to do independently.

Outcomes/Results: From working alone and managing my time efficiently to following my plan to use my own resources at my disposal, I have made strides in becoming a care coordinator. By forcing myself to use my own resources without contacting others, I have become more independent in my role so I do not have to rely on others as much. However, being able to ask others for help has allowed me to become a better CC and feel more confident in my abilities. There are days where I am by myself working the front desk care coordination which can be stressful due to the hundreds of patients coming inside the clinic. As a result, I have been able to strengthen my skills and get better within my role. I feel confident enough to be able to work by myself and answer the many questions that patients may have.

Evaluation/Conclusion: My method of learning through personal failures and experiences along with the advice of other care coordinators has helped me improve my ability at performing my job. The hospital setting and clinic setting, especially for a large hospital such as MSK, requires constant communication between care coordinators, doctors, and nurses to make sure patients get their treatments in a timely manner and receive the best possible care they can. I have realized through my time working here and using my approach to becoming a better care coordinator how important this skill is. I am glad that I have had the opportunity to work here and have developed my skills that could be beneficial in my life.

Title: Health Conditions in relation to Difficulty of Weight Loss in Adults

Name: Karis Choi

Preceptors: Direct Supervisor: Manuel Castañeda, Director of Community Health

Agency: New Brunswick Tomorrow - Live Well New Brunswick Campaign

Purpose: To introduce health conditions that may be affecting weight loss and promote lifestyle habits to minimize symptoms to adults through social media.

Significance: According to data from Middlesex County's 2022 Healthy Community Planning Report for New Brunswick, in 2018 31.6% of adults in New Brunswick are obese. This is both above the 26.0% of obesity in adults in Middlesex County and 28.2% across New Jersey. Live Well - Vivir Bien New Brunswick is a city-wide campaign by New Brunswick Tomorrow aiming to create and promote a healthy and active community. This project will be promoting the categories Be Well, Move Well, and Feel Well as it covers lifestyle changes in relation to weight loss and how these improve physical and mental well-being. Through the social media platforms of Live Well - Vivir Bien New Brunswick, the project aims to provide potential solutions to adults struggling to lose weight with traditional methods through social media.

Method/Approach: Over the course of 3 weeks from November 9 - 23, 2022, a total of 6 social media posts were published on Instagram and Facebook. The posts were created on Canva and scheduled to post on Later. The first week focused on why weight loss can be difficult. The second week focused on insulin resistance. The third week addressed chronic stress and the condition Polycystic Ovary Syndrome (PCOS). These posts included a relevant resource within the New Brunswick Community. Data on each posts' impressions, reach, and engagement was collected a week later. Data was compared to Covid-19 social media content from September 25 to October 25, 2022. Although the topics of Covid-19 and obesity are different, they will be compared as they are both promoted under the topic of health wellness.

Outcomes/Results: From September 25-October 25, 2022, there were a total of 274 in impressions, 206 in reach, and 10 in engagement on Instagram. In comparison, Instagram posts from November 9-23, 2022, had a total of 297 in impressions, 246 in reach, and 20 in engagement. The post on chronic stress had the most impressions (71) and reach (60) while the post on insulin resistance had the highest engagement (6) on Instagram. Overall, the posts in November had a higher impressions, reach, and engagement in comparison to the posts in September and October. However, this could be due to the fact that the comparison is being made with 5 posts prior to the project and 6 posts after. For Facebook, posts prior to the project had a total of 268 in impressions, 237 in reach, and 6 in engagement. After the project, Facebook had a total of 179 in impressions, 168 in reach, and 4 in engagement.

Evaluation/Conclusion: Based on the data, the project was successful in promoting health conditions and lifestyle changes in adults on Instagram. In comparison, the project posts on Facebook did not increase from the Covid posts before the project. However, it is important to note that these are two very different topics and as a platform, Covid-19 content tends to perform better on Facebook in comparison to Instagram.

Title: Colorectal Cancer Awareness Program

Name: Isaiah Cimafranca

Preceptors: Serena Collado, Director of Community Health

Agency: Robert Wood Johnson University Hospital - Somerset

Purpose: To educate the elderly population in Somerset County about Colorectal Cancer Awareness and the importance of getting a colonoscopy.

Significance: Colorectal cancer is a highly preventable form of cancer, yet it is one of the most common forms of cancer nationwide. Colorectal cancer is the third most common type of cancer diagnosed in the United States, as well as the second most common cause of cancer deaths for men and women combined (American Cancer Society, 2022). It is estimated that in 2022, 106,180 new cases of colon cancer and 44,850 cases of rectal cancer will be diagnosed (American Cancer Society, 2022). Colorectal cancer awareness must be deemed priority due to how prevalent the cancer is in the United States, especially in the elderly population. It is important to educate individuals on the benefits of getting screened due to the potential that various screening methods, specifically colonoscopies have in saving lives.

Method/Approach: Coordinating the events with various senior centers in Somerset County was the first step in implementing the colorectal cancer awareness program. Outreach dates were organized with Basking Ridge, Bridgewater, Montgomery, Hillsborough, and Somerset senior centers. The total number of individuals for all outreach dates was 40. To determine the effectiveness of the program, a pre/post test was given regarding the presentation to see what the individuals were able to learn. A program evaluation form was also given at the conclusion of the event to determine what individuals thought about the program's organization and effectiveness. Information such as whether or not individuals will schedule a colonoscopy, consult with their physician, eat a balanced diet, exercise frequently, and drink more water were included on the evaluation forms.

Outcomes/Results: Upon completion of the program, an evaluation form was completed by 40 individuals (n=40). Overall, 43% of individuals stated that they will get their colonoscopies, 50% of individuals will consult with their physician, 60% will eat a balanced diet, 65% will attempt to exercise frequently, and 70% will drink more water. When analyzing the effectiveness of the program, 83% of the attendants strongly agreed and agreed that they developed a greater knowledge of colorectal cancer and 93% strongly agreed and agreed that they would recommend the program for the future.

Evaluation/Conclusion: The Colorectal Cancer Awareness Program was able to provide information regarding the importance of getting a colonoscopy, emphasize the preventability of colorectal cancer, and steps that can be taken to decrease one's chances of developing the disease. Individuals were able to determine which lifestyle changes will be prioritized as a result of the information learned during the presentation. Efforts to increase the number of participants in future outreach programs is ideal and can provide greater insight to the effectiveness of the program. Overall, this program was able to adequately bring awareness about Colorectal Cancer among the elderly population in Somerset County.

Title: Healthy Families: Campaign to Raise Awareness of the Priority of Mental Health and to

Promote Positive Self-Thinking

Name: Alaina Feaster

Preceptors: Supervisor: Zaria Rawls, Volunteer & Community Partnership Coordinator

Agency: Greenway Family Success Center

Purpose: To educate and bring families together in Middlesex County on the importance of Mental Health through education and activities.

Significance: Nearly one in five United States adults are currently living with a mental illness (National Institute of Mental Health, 2022). While one in six American children are suffering with mental health (Center of Disease Control, 2022). In New Jersey, over 42% of the population reported that they experience anxiety and depression on a day-to-day basis (NAMI, 2022). 61.4% of New Jerseyans ages 12–17 who have depression did not receive any care in the last year (NAMI, 2022). Greenway Family Success Center serves the residents of Middlesex County with support, information, and services that help to alleviate some stressors and challenges they face in their day-to-day life. The healthy families campaign is intended to help families by providing them with the science-based tools needed to reduce symptoms of depression and anxiety, in both adults and children. These resources include education and training on mental health and emotional intelligence, techniques like intention-setting and meditation, and an added component that connects families to accessible mental health services in Middlesex County, including counselors and social workers.

Method/Approach: Program development, implementation, and evaluation were done at Greenway Family Success Center. The development stage included researching scientific based tools and programs that benefit mental health, regardless of race, age, gender, and income. The most effective manner to distribute these tools to the community was then determined through research. Various programs included improving one's mental wellness on an everyday basis, as a first step to achieving overall mental health. This was achieved through the explanation of intention-setting, that focused on a goal at hand, while practicing having an open-mind so that any issue faced can be handled in the best way to reduce anxiety and stress. Science based mental health tools such as, journaling, meditation, processing emotions and more were used at this program. At the end of the program, a list of affordable and accessible resources in Middlesex County was provided to community members who attended. To evaluate the effectiveness of these programs a survey was completed at the beginning of the campaign and again at the end, while also gaining information on how the community felt about the new effort, and about mental health in general.

Outcomes/Results: Due to the time constraints and difficulties in obtaining information from consistent families, data on the satisfaction ratings of families with the activities at Greenway and their awareness of mental health procedures can not be properly analyzed. However, some families did verbally report having a better understanding of mental health and coping mechanisms, along with how to seek help if needed.

Evaluation/Conclusion: Data is not available for review. Inconsistencies in families attended programs, limited data. Nevertheless, this program seems to be beneficial as most individuals in low income neighborhoods do not have access to, or knowledge of mental health resources.

Title: "A More Inclusive World" -

Examining the Health Disparities of Individuals who are Living with Disabilities

Name: Keyshawn Frizzelle-Williams

Preceptors: Javier Robles

Agency: Rutgers University Department of Kinesiology and Health

Purpose: Analyzing health disparities that individuals living with disabilities experience.

Significance: Fifteen percent of the world's population, and 25% of the US population, report having a physical, developmental, or emotional disability. This roughly 1 billion people makes the disabled population a significant minority. People with disabilities have less access to health care, more depression and anxiety, engage more often in risky health behaviors, and are less physically active. The Center for Disability Sports, Health, and Wellness, a part of the Department of Kinesiology and Health at Rutgers promotes health and wellness in easily accessible spaces to individuals who identify as having a disability. This project worked to research and analyze the health and accessibility of the disabled population in hopes of potentially finding better evidence-based solutions.

Method/Approach: Using resources such as PubMed, the Centers for Disease Control and Prevention, and the National Institutes of Health, I researched and analyzed statistics regarding the health of the disabled population in comparison to non-disabled people. These statistics were gathered and analyzed and compared to one another and will be presented below in outcomes/results.

Outcomes/Results: Research found that 40.3 percent of individuals living with disabilities are more likely to report their health as "poor" or in "fair condition", compared to 9.9 percent of individuals who do not identify as having a disability. Individuals living with disabilities also have higher rates of new cases of diabetes, and have higher rates of chronic diseases compared to the general public. Adults living with a disability are also less likely to receive preventative care. Individuals living with disabilities also have higher rates of obesity (44.6 percent compared to 34.2 percent) and lack physical activity (54.2 percent of individuals living with a disability lack physical activity compared to individuals who are not living with a disability at 12.1 percent). Individuals living with disabilities ages 18-44 years old have a significantly higher of cardiovascular disease compared to individuals of the same age bracket who are living without disabilities (12.4 percent compared to 3.4 percent), and a similar trend can be seen in individuals living with disabilities ages 45-64 years-old and their abled-bodied cohorts (27.7 percent compared to 9.7 percent). Individuals living with disabilities are also victims of violent crimes at higher rates compared to the general public (32.4 per 1000 persons compared to 21.3 per 1000 persons) and report receiving sufficient social and emotional support at lower rates compared to the general public (70.0 percent compared to 83.1 percent). Individuals living with a disability are 2.5 times more likely to report failing to meet with a healthcare provider due to costs, and women living with disabilities are less likely to be up-to-date in routine screenings such as mammograms and pap smears compared to women who are not living with disabilities.

Evaluation/Conclusion: Health disparities exist between individuals living with a disability and the general public. To reduce this disparity, it is suggested that measures such as improving accessing human services and healthcare, increasing data for decision-making, strengthening health and human services work capacity, including individuals living with disabilities in public health programs, and increasing preparation for emergencies must be made.

Title: Sexual Health Knowledge/Education Amongst the South Asian Community

Name: Jaanhavi Ganesh

Preceptors: Mark Cruz, Health Education Specialist

Agency: Rutgers HOPE (Health Outreach, Promotion, and Education)

Purpose: To understand the sexual health knowledge that members within the South Asian community (such as Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka) have and how to overcome challenges and stigmas to access better resources.

Significance: Due to cultural norms and stigmas, there is a significant amount of misinformation or even a lack of information that South Asians have regarding sexual health (Griffiths et al., 2008). There are gaps of understanding seen between first-generation South Asians compared to second-generation South Asians, as immigration and assimilation plays a major role in the way knowledge is understood and shared (Fisher et al., 2003). Kiridaran and other researchers have studied that South Asians, especially women, are uncomfortable accessing sexual health services and communicating their sexual health concerns with healthcare professionals (Kiridaran et al., 2022). Through sharing stories about their understanding of sexual health education, there will be awareness created amongst the community about how one can access better educational resources

Method/Approach: An Instagram account has been created where students of South Asian descent will be sharing their experiences regarding their sexual health education and misconceptions or stigmas they have faced that have been shaped by their cultural identity. The aim is to create conversations around these topics that are usually taboo in the South Asian community to create awareness and comfort around shared experiences. Instagram is the most popular social media platform amongst the youth, this will be easier to share stories and increase awareness. There have been social media initiatives to share stories of individuals, such as Humans of New York, which have helped raise awareness on different topics. However, there has never been a social media platform for South Asian youth to share their experiences around sexual health knowledge and education. This is a unique initiative that is meant to connect with people through the art of personal stories.

Outcomes/Results: The Instagram account, Humans for HOPE at Rutgers, gained over 100 followers. Stories of five South Asian students with different journeys and experiences were shared. Over 350 different accounts were reached, over 90 accounts were engaged, and each post had an average reach of 200 accounts. Those that shared their stories were given an option of remaining anonymous and being photographed without their faces. The anonymous posts had less engagement, whereas posts, where the face was included in the photograph, received more engagement. Posts with emotional/ touching stories received more comments, whereas stories that were more less emotional received less comments.

Evaluation/Conclusion: The post-survey data revealed that South Asian students were generally more likely to address or acknowledge topics about sexual health within their household after sharing or reading stories of other South Asians. After sharing their story through the Instagram account or reading the stories shared, they felt more comfortable opening up about their experiences with at least two close friends or family members. HOPE interns will be assigned to continue this initiative and enhance it further by developing more thorough pre-survey and post-survey questions. By developing these methods in the future, comfort of South Asian youth around the topics of sexual health can be measured more accurately.

Title: Addressing Human Trafficking in Healthcare Settings

Name: Raleigh K. Gardner

Preceptors: Diana Starace, Injury Prevention Coordinator

Agency: Robert Wood Johnson University Hospital

Purpose: To raise awareness and help healthcare employees improve recognition and response to victims of human trafficking.

Significance: Various studies report that up to 88% of human trafficking victims report having seen a healthcare provider while being trafficked. In a survey of 100 survivors of domestic sex trafficking, 63% reported going to the emergency room while being trafficked (Lederer and Wetzel 2014). These patients are often discharged from the emergency department without staff recognition. There is overwhelming research demonstrating a lack of knowledge surrounding human trafficking among healthcare professionals, which can lead to poorer outcomes for patients experiencing trauma.

Method/Approach: A survey, created for healthcare providers by the New Jersey Coalition Against Human Trafficking, was conducted at Jersey Shore University Medical Center in Neptune, New Jersey. In order to evaluate employee awareness and knowledge on human trafficking, the survey was distributed to specific department heads for their direct care staff to complete. The survey was used to determine whether staff knew how to recognize the signs of a trafficked person and how to respond appropriately.

Outcomes/Results: The findings of the survey were alarming. While 77% of the survey participants (n=62) answered that they had the opportunity to learn about human trafficking in the past, 58% were unaware that New Jersey is a hub for human trafficking while 66% believed that the majority of trafficked persons *do not* receive medical care while being trafficked. These two results demonstrate how unaware healthcare professionals are of the scope of the issue. Only 23% of participants knew that the majority of trafficked persons in the United States are not immigrants and 74% of the survey participants believe it is mandatory to report suspected human trafficking in New Jersey for a patient 18 years or older. This is a huge concern as reporting to an entity (e.g. hotline, law enforcement, etc.) without patient consent can be dangerous for both the patient and staff.

Evaluation/Conclusion: A meeting was held to discuss the results of the survey with Brian Walch, Hackensack Meridian Health's Vice President of Clinical Services and Operations. During the meeting several options were discussed to raise employee awareness and knowledge. This project will move forward in 2023 with the support of *Project HEAL*, Jersey Shore University Medical Center's Hospital Violence Intervention Program, beginning with recognition of National Human Trafficking Prevention Month in January.

Title: Alternative to Suspension Program

Name: Sarah Gordon

Preceptors: Mara Carlin, Director of Prevention, Project supervisor: Colleen Sharlow

Agency: Wellspring Center for Prevention

Purpose: To present and evaluate a 5 week alternative to suspension program for vaping violations for 7th through 12th graders in South Plainfield high school.

Significance: The FDA reports that 1 in 4 youth use e-cigarettes daily. According to a 2020 report, 2,807 people have been hospitalized and 64 people have died due to e-cigarette related incidents. The highest rate of youth vaping in NJ is in Middlesex county. Wellspring Center for Prevention works diligently, throughout Middlesex, to prevent children and young adults from using e-cigarrettes. The "We're not Buying It" program directly addresses how social media is used to market to youth. Wellspring's Alternative to Suspension program is a newly funded program to help students who have been suspended for vaping stop using and make healthy choices.

Method/Approach: Method/Approach: A pre test survey was administered to South Plainfield high school students during their first week in the Alternative to Suspension program. The survey covers questions on the health effects of vaping. New students are added to the program each week depending on when they are caught smoking or having smoking related paraphernalia in their possession. Students took part in the 5 week alternative to suspension program which includes 8 different education modules. The modules are given through a computer program called ASPIRE. Students participated in different group activities to add to their overall understanding of vaping and smoking risks. Students discussed goals and coping mechanisms as the weeks progress. A post test survey was administered to students after the five weeks. A pre and post quiz, as well as quizzes throughout each module, are taken online within the computer program ASPIRE.

Outcomes/Results: Six students were enrolled in the alternative to suspension program from the South Plainfield high school in fall 2022. Of these six students five completed the five week program alternative to suspension program by the end of November. Students enter the program at different times and therefore finish at different times. On the 11 question true/false and multiple choice pre and post test, two students increased their scores by one point. Two student's pre and post test survey scores remained the same. One students score went down by one point. Using the metric of the computer program quizzes, all students scores increased from their pretest. The minimum increase of score was seven points out of 100 and the maximum score increase was 31 point increase. The mean increase was a 15 point increase from the computerized pre and post test.

Evaluation/Conclusion: Half of the students increased their knowledge on the negative effects of vaping when comparing the written pre and post test. Using the Alternative to suspension computer program all students increased their knowledge around vaping and smoking effects, peer pressure, and healthy coping mechanisms. A follow up with each student is needed to see if this increase in knowledge translates to abstinence from vaping. Data collection is limited by student number because this is a newly designed program. More research must be collected as more students join the alternative to suspension program. Lastly, all participants report a need in addressing marijuana use in the program lesson plans.

Title: Removing The Barriers to Mental Health Resources with a Coffee Break Program

Name: Zeriyah Griffin

Preceptors: Quadai Palmer, President

Agency: From Jersey With Love

Purpose: To analyze the need of mental health resources for individuals in leadership roles

Significance: Suicide rates rose from 13.5 per 100,000 people in 2020 to 17 per 100,000 people in 2021. Individuals in leadership roles such as law enforcement and the C-suite are the main victims of these suicides, due to the taboo of discussing mental health in the workplace. Unfortunately, initiatives such as department therapists and psychologists proved to be unhelpful because of the threat of losing one's job. Due to the fact that 90% of all suicide victims have mental health conditions, such as depression or substance abuse, mental health is not something that the world can turn a blind eye to. Advocacy programs are needed to prevent mental health from becoming an epidemic. The program "Coffee Break" provides mental health resources by addressing work/life balance, providing an opportunity to network, and establishing unity and community among leaders. The Coffee Break's goals are to equip, empower, and encourage community leaders.

Method/Approach: Reasearch was gathered from the CDC, The Georgia Post, the FBI data collections, and the American Psychological association to identify the correlation between suicides among leaders and their mental health status. Next, a needs assessment was conducted to identify any stigma-free programs that already exist for leaders. After confirming that stigma-free programs are lacking for leaders, ideas for how to create a program were brainstormed. The "Coffee Break" was the final idea, and it was decided that it would run virtually to avoid transportation conflicts. An outline for the program was put together along with a list of panelists. Next, information about Coffee Break was distributed via LinkedIn, Gmail, and the November newsletter. Six conversation starter questions were compiled by the supervisors based on work/life balance guidelines. These guidelines were gathered from the National Institute of Mental Health, as well as, the National Library Of Medicine.

Outcomes/Results: Two sessions were held on November 7, 2022 and November 11, 2022 via Google Meet with 5 attendees in each session; a total of 10. Other attendees included a volunteer therapist, nonprofit leaders from "Everybody Eats", and "Empower Me", and a MPH coordinator from the Open Door Recovery Center. The benchmark for self-care is spending at least 30 minutes per day on relaxation exercises (napping, exercise, meditation, journaling, etc.) Most of the participants were not living balanced lives based on their inability to establish self-care. The participants that admitted to not performing self-care at home were more stressed and overwhelmed in the workplace, as well as feeling like they are not caught up. Panelists offered advice to leaders about how to handle stress as well as how to incorporate self-care daily.

Evaluation/Conclusion: Coffee Break was able to teach leaders about the importance of self-care and how it contributes to a person's overall wellness and mental health. Even though there were fewer attendees than expected, they were able to engage in conversation with the given opening questions and learn how to manage the stress that leaders face. Afterwards, program evaluations were sent to this initial group. Going forward, advertising for these monthly events will be in our newsletter. In addition, we are establishing an Instagram account to both encourage new participants and offer self-care tips.

Title: Analysis of Individuals with Developmental Disabilities and Health Disparities

Name: Millicent Hyman

Preceptors: Direct Supervisor: Aloha Smith-Oatman

Agency: Benchmark Human Services

Purpose: To analyze how health disparities affect individuals with developmental disabilities.

Significance: In the United States, developmental disabilities affect 1 in 4 people across every racial, ethnic, gender and socioeconomic group. Developmental disabilities impact an individual's physical, learning, cognitive, language, and/or behavioral development. Depending on the disability, various tasks that are a part of normal development can be difficult or delayed. These include tasks such as daily living activities like bathing, dressing, eating, walking or communicating with others. Some individuals with developmental disabilities may have more than one disability which can greatly affect their quality of life. People with disabilities are less likely to communicate/ may be unable to communicate their current state of health causing certain health issues to go unnoticed and untreated.

Method/Approach: Data was collected by various sources including the Behavioral Risk Factor Surveillance System (BRFSS), National Health Interview Survey (NHIS), National Health and Nutrition Examination Survey (NHANES), National Crime Victimization Survey (NCVS), and Child Protective Services. These agencies tested the frequency of chronic diseases like diabetes and hypertension; cases of violent crimes, depression and anxiety, obesity and smoking amongst the disabled population. These results were compared to people without disabilities. Health behaviors and social determinants like individuals' access to quality care, internet access and access to transportation were also used in the surveys.

Outcomes/Results: Findings showed that in multiple areas of health, individuals with disabilities reported higher rates of the health condition being surveyed. For example cardiovascular disease, diabetes, and obesity were amongst the top areas in which these disparities are seen most. Lack of quality health insurance, internet access, education, and transportation contribute to higher rates of poor health/health behaviors in adults with mobility limitations. In spite of the fact that they have higher instances of persistent illnesses than everyone, adults with disabilities are essentially more averse to receiving preventive care. The rate of disabled individuals with cardiovascular diseases was 3 to 4 times higher than adults without disabilities.

Evaluation/Conclusion: The goal of this project is to find ways to communicate with nonverbal clients to help them receive the healthcare they need and help to decrease the health disparities that they experience. At Benchmark, a majority of clients are nonverbal making it more difficult for them to communicate their health status. We use a communication board that helps our clients tell us how they are feeling which is a great help in this field. Programs that improve access to quality care, help clients to communicate and give them access to transportation could positively impact the health of those with disabilities.

Title: Improving Patient Flow to Impact Physicians' Efficiency

Name: Esther Kabutey

Preceptors: Reva Kaufman, Office Manager

Agency: Be Well Family Practice

Purpose: To participate in learning how to improve patient flow that will impact physicians' efficiency.

Significance: Each year, primary care providers serve as a foundation for building an effective healthcare system that guarantees productive health outcomes and health integrity. Boosting patient flow can surge a patient's satisfaction, develop the competence of a medical practice, and drive proceeds. Patient flow is strategized in managing variations in demand, bringing down costs and boosting interests. Efficient patient flow enhances doctor-patient time. This helps patients to easily negotiate without waiting in line at a longer period of time. This improves their satisfaction by boosting retention rates and impacting their lives through positive experiences.

Method/Approach: A review was conducted by a physician assistant to assess components including detailed medical history, evaluation notes, complete prescription notes and follow ups in delivering quality care to avoid wait times and overlapping at the practice. The first step was to reduce an average 30 minutes wait time to 15 minutes. Next, was to reduce the setbacks of emergencies. For example, a patient who is low on a prescribed medication and needs a refill urgently or a patient reacting to a new medication that was prescribed by their primary provider. Office staff concluded that paperwork filled out during their doctor's visit took an average of 30 minutes to process.

Outcomes/Results: TalkEHR improved efficiency and productivity by sharing capabilities to communicate with our patients. Scheduling more early morning appointments increased office flow by 60%. Mondays and Tuesdays tend to be busier days at the practice. Patients with non-comprehensive appointments were encouraged to scheduleWednesdays through Fridays. This improved office flow by 14%. Sending registration forms in advance saved 28% in staff administrative time and lessened wait times

Evaluation/Conclusion: The use of the talkEHR software is simple, requires less writing, and allows quicker navigation for healthcare staff. Patient frustration related to wait times were minimized by increasing efficiency. Encouraging patients to communicate with their providers at the practice via text messaging was a big timesaver as well. This makes it easier to use our physician's feedback in communicating with patient's concerns based on real life situations such as health matters, routine checkups, emergencies on a day-to-day basis rapidly enhancing wait times.

Title: MyGOAL program study

Name: Kakumanu, Neil

Preceptors: Janet Kaghado

Agency: MyGOAL

Purpose: To study and assess the programs of MyGoal and their impact compared to similar programs in other competing organizations.

Significance: Autism is a developmental condition of varying degrees indicated by difficulty in social interaction and communication and by limited or repetitious thinking patterns and manners. MyGOAL exists to help families and individuals impacted by Autism and other intellectual disabilities throughout their lifespan. We do this through connections and resources provided. This project analyzed the company's programs using feedback from the families we serve.

Method/Approach: The first step was concentrated on understanding and researching the MyGOAL organization's daily operations and Autism. This included attending all MyGOAL online and in-person events, understanding the history and purpose of the company and doing 30 learning modules on Autism to understand the family's necessities. Next a questionnaire was created to collect more specific understanding of what MyGOAL families would like to see in the company moving forward. This questionnaire had questions regarding the website, ratings of each online and in-person program, and sections where they can add events they would like to see in the future. The next step was to analyze the questionnaire results. Finally, similar nearby organizations were studied to find events we could replicate.

Outcomes/Results: About 19 questionnaires were completed between November 10, 2022 and December 1, 2022. The children served are of all ages over 6. Forty-five percent have disabilities rated as mild, and 55 % percent were rated moderate to severe. Race/ethnicities of the families were spread pretty evenly between Black, Latino, and Asian, with white being the minority. When asked, "On a scale of 1-5, how useful have the services of MyGOAL been to you" A majority answered a 5. When asked, how they rated online and in-person services; the online services had a 75 % overall approval, and in-person events rated near 80% percent. Events from other organizations include in-person opportunities for adult or teen volunteers to chat with an individual with special needs (especially using AAC), camp, swimming hour at Rutgers, meditation, and gaining work experience.

Evaluation/Conclusion:

MyGoal does a great job of supporting the special needs community. Most families in MyGOAL are in an inclusive, supportive system where they feel like they have support from like-minded people besides them. However, it is also apparent that as informative as the online events are, the parents are looking for more in-person events. All these parents want is what any parent wants their kids to be happy and safe.

Title: Assessing Patients' Experience From Health Programs

Name: Zoe Kang

Preceptors: Bethanie Mills - Senior Manager, Patient and Community Outreach

Agency: The Leukemia and Lymphoma Society - Central Valley Region (remote)

Purpose: To determine the influence of the program and communicate to patients and health care providers in regards to resources that LLS provides.

Significance: According to the Cancer Statistics Center, there are about 60,650 new cases of Leukemia in the United States with about 24,000 deaths in 2022. In California, 5,630 new cases of Leukemia were reported with 2,340 being deaths. The Leukemia and Lymphoma Society website states that about 90,390 people in the United States are expected to be diagnosed with lymphoma in 2021. The Leukemia and Lymphoma Society provides a variety of resources that can be used to help patients and families battling with these specific cancers. There are peer connection programs that connect patients with other patients going through similar journeys, financial aid programs that help financial support patients, educational resources for those affected to read about certain illnesses and programs by health professionals for family members and patients to be informed.

Method/Approach: A pre-post phone call interview was used to measure the satisfaction of the health program amongst the cancer patients and loved ones that attend and other LLS resources that were given out. An example of this was a health program called *Living Life Through Treatment and Beyond* by Dr. Amy Shaw completed on September 21st, 2022. Ten patients were called before the program began for a reminder call where questions about how they were mentally, their level of knowledge prior to attending the program and thoughts about going to the program were discussed. After the program ended, patients that were specifically new to the organization and to their cancer journey were called to discuss their thoughts about the program. There were multiple different events following this that required pre-post calls.

Outcomes/Results: From the calls that were made to patients before and after, it was evident that many of the patients enjoyed the program and it was informational. Six out of ten responded to the phone call and shared their personal positive reviews regarding the program. Four out of ten did not answer but still attended the program. This corresponds to over half of the participants attending and benefitting from the program available free of cost.

Evaluation/Conclusion: In conclusion, the usefulness of virtual health programs was depicted because of comfort and easy accessibility for patients. Health programs such as these for newly diagnosed patients were beneficial so they could ease their way into resources. The patients enjoyed hearing a professional talk about different coping mechanisms and ways to combat negative mindsets. This information was received through the calls given. To make the evaluation more concrete, there could have been an official form pre and post program to officially review the program and measure the satisfaction.

Title: Recruiting Integrative Healing Practitioners for Hospice Patients

Name: Melissa Kelly

Preceptors: Vellus Campbell, Volunteer Coordinator

Agency: Holisticare Hospice

Purpose: To create a diverse volunteer program for end of life care patients, including massage, reiki, music, and pet therapy.

Significance: Over 1.5 million patients in the U.S. receive hospice care every year through various agencies. While a patient receives hospice care, they often feel anxious and scared of what's to come in the last couple weeks of their life. Holisticare Hospice is dedicated to making sure their patients and also their families receive the absolute best quality of care during this difficult time of losing a loved one. By creating a volunteer program at Holisticare Hospice, we can have a diverse range of therapists provide comfort to our patients during their transition to the end of their life.

Method/Approach: Community outreach is the key to recruiting volunteers at facilities who will benefit hospice patients. Research was conducted on various facilities within the areas of Holisticare's patients to see if their services were a right fit for patients and families. To stay organized on what facilities were contacted, a detailed spreadsheet was created listing the facility's name, contact information, and what kind of service they perform that is being recruited by Holisticare. The first step was to call the facility and speak to a member of their organization to introduce Holisticare's volunteer program. Next, if the agency agreed, a volunteer flyer detailing what kind of services are needed for patients, as well as Holisticare's contact information, were sent to the facility via email. A voicemail was left for any facility who did not pick up the phone explaining the reason for Holisticare's call as well as a callback number.

Outcomes/Results: The completed spreadsheet was 14 pages long and consisted of 128 diverse facilities whose services would benefit Holisticare's patients. The 128 facilities included 39 reiki practitioners, 74 massage therapists, 3 end-of-life doulas, 7 yoga studios, and 5 wellness centers. Having a diverse range of practitioners volunteer their services for hospice care benefits the patients' mind, body, and spirit in many ways.

Evaluation/Conclusion: The volunteer flyers will help spread interest in the opportunity to volunteer for hospice patients and make a positive impact in someone's life. If the facility is interested in volunteering, they will be educated on the free volunteer training that is provided by Holisticare Hospice as well as the flexible volunteer schedule that can be created. The integrative healing volunteer program at Holisticare Hospice is still in the process of recruiting, reaching out into the community and educating people on hospice care. Volunteers for hospice should be compassionate about helping patients feel safe, relief from emotional or physical pain, and providing comfort during the sensitive time of someone's last moments of their life. Bringing awareness to this kind of care allows the volunteer to feel prideful in the work they are doing knowing they are making a positive impact in someone's life during a very emotional and difficult time, while patients enjoy the company of a compassionate volunteer who is there to help.

Title: Fundraiser to Elect Democratic, Pro-Choice Women Candidates

Name: Nadya Khan

Preceptor: Casey Haddox, Director of Advocacy

Agency: Hoboken Strategy Group

Purpose: To coordinate and execute a political fundraiser to financially support Democratic, pro-choice women candidates for local, state, and federal elected office.

Significance: Women legislators are more likely than their male counterparts to focus on legislative efforts relating to issues affecting women and children, yet women are vastly underrepresented in elected office (Volden et al., 2013). One of the most significant problems affecting women and childbearing people is reproductive freedom, and Democratic women legislators are often the most prominent champions of reproductive rights legislation. With the recent overturn of Roe v. Wade, reproductive rights are on the ballot in the 2022 midterm elections. Swing states must elect Democratic leaders to increase the introduction and movement of favorable reproductive rights legislation protecting women and childbearing people (Kamarck, 2022). The greater the funds policymakers have to campaign, the greater support they garner for their bid. (Schuster, 2020).

Method/Approach: The first step in this project involved securing a venue and facilitating venue payment. After a venue with catering was solidified, publicizing the event was the next step in the process. Hoboken Strategy Group has an extensive network of professional connections, so outreach on behalf of this event was conducted toward this network. Four email blasts were sent to the network over two weeks with event information and RSVP details. The correspondence communicated that attendees must present proof of donation to a Democratic, pro-choice women candidate in any 2022 midterm race. with an emphasis on supporting candidates in contentious races, for admission. After circulating event details, the focus shifted to developing strong programming to ensure the central message of the event was amplified. Three women political and policy leaders in New Jersey were invited to speak at the event on the topic and the remaining time was for networking. Fifty-two guests attended the fundraiser and over four thousand dollars was raised for Democratic, pro-choice women candidates in various elections across the country. After the event, a post-event survey was circulated asking attendees to answer four questions relating to their methods of supporting Democratic, pro-choice women candidates moving forward. The questions, all to be responded to on a scale of 1 to 5, were as follows: (1) how likely are you to pay increased attention to Democratic, pro-choice women candidates in all types of elections, (2) how well did this event inform you of the lack of representation of women legislators, (3) how well did the programming and guest speakers broaden your understanding of the scope of the issue and (4) how likely are you to encourage the people around you to support Democratic, pro-choice women for elected office.

Outcomes/Results: The survey was sent to all fifty-two attendees via email, and a total of twenty-six individuals responded. The average response for question (1) was 4.81, the average response for question (2) was 4.38, the average response for question (3) was 3.92 and the average response for question (4) was 4.93.

Evaluation/Conclusion: The data collected from the post-event survey reveals supportive attitudes among attendees relating to their interest in seeing more Democratic, pro-choice women in positions of legislative power, and commitment to supporting these candidates in different ways.

Title: Nutley Family Services Bureau Blueprint Project Liaison Role

Name: Timothy Li

Preceptors: Direct Supervisor: Molly Clark, Case Management Coordinator

Project Supervisor: Katherine Carmichael, Executive Director

Agency: Nutley Family Services Bureau (NFSB)

Purpose: To create a needs assessment for the disabled population to find and address the largest problems afflicting people with disabilities in Nutley.

Significance: The NFSB has just received a grant from the Rutgers Bloustein school to conduct an assessment for the disabled population of Nutley, to be able to find the problems that are still afflicting the people of Nutley Township which have not yet been addressed. Nutley has a higher overall population of elderly individuals with a higher overall disability rate, by around 5% according to the Essex County Needs Assessment in 2020 compared to the New Jersey average. The goal is to find out the major problems and then apply for a grant which will be used to alleviate those problems. https://tinyurl.com/5n8esxdy

Method/Approach: Currently, the NFSB has created the Community Action Coalition (CAC) group, to help generate the questions to be used within the listening sessions. Listening sessions were conducted both in person and online through video conferencing, where participants were able to listen to the questions that were posed, and discuss freely with each other. This did not result with complete unity amongst the answers, rather a greater understanding about the troubles and implications of each of the stakeholders. After asking the initial questions and the discussion period, we had then recorded the responses and compiled the results in an Excel spreadsheet. The results are currently in the process of being prepared to submit to the Rutgers Bloustein School Grant Program, where the NFSB will be requesting funding to help solve the greatest problems afflicting the population living with disabilities.

Outcomes/Results: After compiling the results for the cohort (n=42), we had learned that 38% of individuals had believed that mental health and peer support services were a problem, 28.57% of individuals had believed that housing was a major problem, 19% had believed that access to transportation services were limited, that 9.5% of individuals had believed that access to employment while disabled was a problem, and where 4.7% had believed that access to education and communication services for people with disabilities was a problem.

Evaluation/Conclusion: After compiling the data and going through each individual response, we have found that (n=42, 85%) of individuals with disabilities surveyed had found these to be the largest issues in the town of Nutley. For further research, the NFSB will be conducting environmental scans to survey housing availability and accessibility, and also mental health and peer support services to pinpoint the exact areas of concern. The assessment for access to transportation will be conducted through a survey. This research will be conducted after my internship in January, and the information gathered will be used to apply for a grant from the state of New Jersey and the Rutgers University Bloustein Grant program and the funds will be used to fix some of these problems.

Title: HR Onboarding Process

Name: Andy Lin

Preceptors: Brian Kwan- Chief Financial Officer

Agency: Hercules Enterprise LLC

Purpose: To analyze and onboard current and future employees onto the legacy payroll system.

Significance: In every company, employers are obligated to onboard their employees onto their system. The purpose of onboarding is to acclimate employees to their role, the company's philosophies, and what the company has to offer. It also engages employees, creating workers that are committed to the company's success and helps retain new hires by making them feel like a member of the team. In general 1 in 10 employees have left a company because of a poor onboarding experience, and 37% of employees said their manager did not play a critical role in their onboarding experience support. Due to the high demand of hiring at Hercules, it is essential to onboard these employees so they feel welcomed and stay retained leading to better performance metrics.

Method/Approach: Between September 6, 2022 and October 6, 2022 each day from 12pm to 3pm, employees of Hercules LLC signed up for an appointment for their onboarding process. The onboarding process was run through a Human Resource platform called Insperity. Each individual completed forms and information in regards to their employment status. Employees were then verified by both Insperity and Hercules. Next, data entries were collected for each individual employee into a spreadsheet for evaluation. This project focused on employee retention.

Outcomes/Results: Between September 6, 2022 and October 6, 2022 around 10 employees were onboarded every week. Of the Sample size of employees (n=100), all of them were successfully onboarded, and 5 (5%) of the employees left the company. This statistic is lower than the resigning rate (10%) of those who had a bad onboarding process between July 1, 2022 and September 1, 2022. This result suggests how employees are adapting to the company and are accepting the company culture. These employees are satisfied with their positions and their benefits they are receiving from HErcules LLC. Their retention rate is a clear outcome of how well this method is being delegated.

Evaluation/Conclusion: The resigning rate (5%) is lower than the average resigning rate of a company who provided an unprofessional onboarding experience (10%). From these metrics, it appears that this approach is successful. Those 5 employees who left did have other offers from other companies that eventually led to their departure. The 145 remaining employees who stayed remained positive as they have been very professional, coming to work on time, and doing their tasks efficiently. From this outcome, we can say that the employees who were onboarded and stayed enjoyed their process of being initiated into the company and are satisfied with what they were offered.

Title: Food Safety and Composition Research

Name: Yuqi Liu

Preceptors: Ning Luo, Project, Coordinator

Agency: Yantai Chengtong Xinqing New Material Co. LTD (YCX)

Purpose: By testing and researching the ingredients of the product and analyzing its efficacy and effects, ensure that the data is rigorous and scientific to increase crop yields while ensuring food safety.

Significance: It is estimated that every 9 pounds of grain produced will consume 1 pound of fertilizer, and if each person's grain intake is calculated according to 30 pounds/month, then each person will consume almost 40 pounds of fertilizer per year. Regular fertilizers can harm human health; they easily make the nitrate content in vegetables exceed the standard, and nitrite combined with amines will form N-nitroso compounds for strong carcinogenic substances. The pursuit of green fertilizers, and varieties that minimize the harm of fertilizers to human health, reduce environmental pollution, and maintain high-quality agricultural products is the need of the situation and the inevitable development. YXC is committed to fertilizer innovation at the source. Based on the three-dimensional theory of "minerals (trace elements) + organic matter + microorganisms," they use high technology and research new fertilizers to increase crop yields and improve the soil.

Method/Approach: To investigate whether the organic and non-polluting fertilizers in the company are helpful for crop growth, an experiment was arranged. The experiment was arranged in Anqiu, the main production area of ginger in China, and its surrounding areas. Ginger was the main local cultivar. The Attapulgite microbial fertilizer used for the trial was provided by YCX. The fertilizer was a nitrogen, iodine and potassium compound fertilizer (15-15-15), and the fertilizer with which it was compared was the one customarily used by local farmers. No special requirements were made for fertilizer planting habits and field management, etc. The test plot was selected from sandy brown loam with flat topography, deep soil layer, convenient drainage and irrigation, and loose soil or tidal soil with fertile soil suitable for ginger cultivation. Soil pH 5.5-6.5, organic matter 9.5-14.5 g/kg, alkaline nitrogen 75-120 mg/kg, effective phosphorus 15-35 g/kg, fast-acting potassium 80-140 mg/kg. The size of the two, the degree of leaf hypertrophy, color and so on were recorded.

Outcomes/Results: The results showed that the effect of Attapulgite microbial fertilizer compounded with plant traits and biomass of ginger was extremely significant. The field survey revealed that the treatment with Attapulgite microbial fertilizer had thick leaves, sturdy stems and good growth. At the time of ginger harvest, the ginger had good color, uniform size, high dry matter accumulation and high specific gravity. To be specific, the plant height was 78.3-90.1 cm for traditional fertilizer and 80.2-95.5 cm for Attapulgite microbial fertilizer. The number of branches was 12.1-13.1 for traditional fertilizer and 12.9-14.8 for Attapulgite microbial fertilizer. The weight of a single piece of ginger produced by traditional fertilizer is 178-257 grams, while the weight of a single piece of ginger grown with Attapulgite microbial fertilizer can reach 188-403 grams.

Evaluation/Conclusion: The effect of Attapulgite microbial fertilizer on plant traits and biomass of ginger was highly significant. It can effectively promote the formation of early meristematic tissues and produce more branches, which can increase the number of effective photosynthetic organs - leaves, and can increase the storage pool of photosynthetic products, laying the foundation for high yield in the later stage.

Title: Per Diem Access Assistant, Office Coordinator

Name: Moremi Majekodunmi

Preceptors: Jessika Edouard, Training Manager, Talent Operations, Main Campus

Andrea Bravo, Project Coordinator, Main Campus

Agency: Memorial Sloan Kettering Cancer Center

Work Duties: As a Per Diem Access Assistant, I provide assistance to the Radiation Oncology department in NYC. My role as an Office Coordinator within that department requires me to communicate effectively with the doctor I work under, the registered nurse, attending, and other Office Coordinators within the department. I also communicate with patients via the phone and MSK patient portal to offer assistance in scheduling and rescheduling appointments. I monitor patient inquiries via the Portal Secure Messaging system and direct their concerns to the appropriate team member if it is something out of my jurisdiction.

Techniques: In order to keep myself organized while working, I ensure that I always have the Microsoft Teams software and my email open since that is the main method of communication between me and the other members of my team. I also have my EPIC Healthcare Information System software open so that I can easily access patient information and appointment desks when necessary. I ensure to uphold a professional tone while conversing with both patients and coworkers.

People Skills: Since I work under a doctor, it is common that I will be the first point of contact for a patient who calls the doctor's office with any questions or concerns. Using MSK's All Care Together model I exude the following principles with every patient interaction: coordinating the journey, fostering warmth, keeping it simple, meeting individual needs, minimizing uncertainty and restoring control. I also learned the importance of empathy and being compassionate with patients since cancer treatment can be a very difficult journey in a person's life.

Results: My time at MSK has greatly improved my communication skills. When a patient reaches out with a question, I am able to relay their message to the clinical team and either reach back out to them with an answer or provide their contact information to the clinical team so they can speak with the patient. I am able to realize the need of the patient by listening carefully to verbal and nonverbal cues and then best triaging that need. I have driven results by comprehending the patients needs and circling back to them with results. I have also learned to communicate effectively with my peers. Working with many different departments and speaking to a variety of patients has prepared me to handle a variety of situations. It has taught me to channel interpersonal savviness with clinical teams, peers and patients.

Lessons Learned: The two most important lessons I have learned during my time at MSK is that being a listening ear to patients can go a long way and that working with a good team proves to be extremely efficient. I used to be set on completing tasks completely on my own but during my time at MSK, I have really come to understand and benefit from working with a team. Additionally, I have been able to develop relationships with patients solely off of being compassionate and listening to them. This has made patients have a more positive outlook on a rather dark time in their lives.

Title: Impact of Patient Care Coordination on Cancer Patients and Cardiopulmonary Testing

Name: AnnMarie Matel

Preceptors: Direct Supervisor: Desiree De Fritas, Assistant Manager – Outpatient Operations

Project Supervisor: Elliot Celan, Team Lead – Outpatient Operations

Agency: Memorial Sloan Kettering Cancer Center – Main Campus, New York, NY

Work Duties: Serving as a liaison between the patient, family, and clinical team during the office visit by initially greeting, checking in, and orienting patients to the outpatient visit and to environment, as well as complete the patient visit by scheduling and coordinating all appropriate tests, procedures, visits, treatments, and consultations in accordance with the physicians' orders, while ensuring that each physician's practice session is well-prepared, organized, and fully utilized to reach a goal of a satisfied patient visit. Care Coordinators also act as a surface-level educator about the test, procedures, and/or treatment patients are about to undergo by briefly explaining the purpose of the visit and answering any appropriate questions and concerns.

Techniques: Utilizing EPIC systems to check-in patients and update personal information when needed, Salesforce to contact and connect with other members of a patient's clinical team for collaboration on a patient's care, and Memorial Sloan Kettering's customized clinical care system (CIS) to schedule appointments, place and release orders, and print any necessary medical records and labels for the specified visit.

People Skills: Memorial Sloan Kettering's All Care Together principles of coordinating the journey, keeping it simple, minimizing uncertainty, fostering warmth, meeting individual needs, and restoring control help form trusting relationships with each patient and emphasize the importance of empathy within the healthcare field. When combined in action, these principles build patient confidence, maintain patients' sense of dignity and individuality, reduce stress, create a sense of familiarity, as well as provide comfort, emotional support, and understanding. It is important to showcase these positive behaviors through verbal and nonverbal communication such as a warm greeting regarding the time of day and eye contact during a conversation.

Results: The creation of trusting relationships amongst patients due to consistent demonstration of empathy and patience. Simple acts such as remembering frequent patients' names when they visit and asking how they are feeling when they first come in showcase a personal sense of care and contribute to the welcoming aura patients enter as they walk in. Patients and their families have handed out many compliments on the Care Coordinator team's warm, kind service and hospitality reflected by Memorial Sloan Kettering's All Care Together principles.

Lessons Learned: Cardiopulmonary testing, pulmonary function testing, echocardiograms, and electrocardiograms (PFT, ECHO, EKG) are essential to cancer therapy because certain therapies put the heart at risk for cardiovascular diseases. For instance, since most women with breast cancer are susceptible to pulmonary issues due to their treatments, PFT's, ECHO's, and EKG's are able to detect left ventricular function and any perfusion defects such as injured heart tissue.

Title: Health Disparities In Marginalized Communities

Name: Christian McGrew

Purpose: To look at health inequities in marginalized groups of people in NYC and specifically how the covid pandemic affected these groups.

Significance: Throughout history, health care outcomes have differed for different populations. There are many factors that contribute to these disparities, including income disparities and healthcare costs. Health and wellness are also influenced by the environment. Social determinants of health include ZIP codes, race and ethnicity, air quality, education, transportation, and access to food and jobs. Racial and social inequalities have also contributed to generations of poor health in some communities. In conjunction with disparities, a pandemic will wreak havoc on underserved communities. New York City is a good example. Those neighborhoods that were most severely affected during the first wave of the coronavirus were also affected during the second wave. When compared to wave 1, neighborhoods that had a higher percentage of Black and Hispanic populations and had lower insurance coverage had a higher death rate and case fatality ratio, while neighborhoods where there was a higher percentage of Blacks and Asians had a higher case fatality rate. Both waves found a negative correlation between median household income and incidence rate, and a positive correlation between median household income and death rate per capita. A higher death rate and a higher case fatality ratio were observed in neighborhoods with a greater number of seniors.

Method/Approach: Combined the data from the Census Bureau with the data from the COVID testing. With this approach, infection risk index based on weighted social factors associated with ZIP codes was calculated and evaluated for trends..

Outcomes/Results: There are many areas with a high density of low-income minorities and inadequate medical care. It is more likely to affect people living in such areas than the general population. Among low-income minorities, medical professionals are more likely to be infected than other populations. Minority communities were less likely to seek medical attention for COVID-19 than wealthy areas. As a result, COVID-19 was more prevalent and spread faster. Due to this, White communities have better access to treatment and diagnostic testing to determine COVID-19 infection rates. People living in places with a higher concentration of healthcare facilities and individuals with experience in COVID-19 are more likely to receive assistance. As a consequence, this epidemic spreads at rates much higher than those encountered by other populations.

Evaluation/Conclusion. According to the findings, minority communities have a lower chance of acquiring COVID-19 than non-minority communities because of population density, income, demographics, education levels, and isolation. By exposing themselves to infected individuals, these factors can raise the risk of contracting COVID-19 and making minority neighborhoods more at risk for fatalities. In addition, individuals living in these communities are more likely to be exposed to COVID-19 because of the density of nearby people. This increases the risk of symptoms and fatality rates among poor neighborhoods where many individuals are infected with the virus and unable to afford proper medical care. Therefore, minority communities are more likely to contract COVID-19 and die from it because they have lower levels of education. Low-income communities are more likely to be affected by COVID-19 infection because of these factors.

Title: Revitalize Road to Recovery and Hope Lodge programs

Name: Manya Mehta

Preceptors: Michele Capossela, Senior Manager: Cancer Support Strategic Partnerships

Agency: American Cancer Society

Purpose: Revitalize the Road to Recovery and Hope Lodge programs in efforts to increase access to care and improve patient experience

Significance: Studies suggest that lack of access to transportation has a significant impact on cancer patients' decisions to stop or continue treatments. In Vermont state, approximately 35 patients were served using the Road to Recovery program, with the service providing 420 rides to patients visiting hospitals and treatment centers in 2019. More than half of these rides were provided in Washington County, the most populated county within Vermont. The American Cancer Society has seen a decline in its ability to provide rides in rural areas, especially Vermont, for a variety of reasons over the years in part due to the pandemic. Volunteer attrition, cost of gas, and the rural nature of the state are also important factors which play a role in the decline of volunteers and rides. At the start of the project there were only two volunteers. The goal was to increase this to 10 volunteer drivers.

Method/Approach: Prior to researching organizations, the base number of volunteers who have completed the Road to Recovery training were identified. Then, the number of new recruits needed to fulfill the volunteer quota was set based on the information we had gathered. Partner organizations were selected by researching individual cities and towns within Vermont and determining which populations would be most likely to volunteer. It was decided that philanthropic organizations, senior centers, places of worship, and libraries were to be contacted. Additionally, two small organizations which specialize in driving elderly people to doctor's appointments, similar to our mission with Road to Recovery, were identified as potential recruits. Next, a script was created to contact the organizations through email, and followed up by a phone call.

Outcomes/Results: Twelve organizations located in Barre, Vermont were contacted; five organizations located in Berlin, Vermont were contacted; six organizations located in Roxbury, Vermont were contacted; three organizations located in Woodbury, Vermont were contacted, and six organizations in Montpelier, Vermont. As of December 1, 2022 there was no increase in volunteers.

Evaluation/Conclusion: More than half of the volunteers which started driving for Road to Recovery in 2013 were unable to do so in 2019, and the program saw a 62% decrease in volunteers in the span of 6 years. Without these drivers, rides to hospitals and treatment centers plummeted by 73%, forcing many patients to find transportation to appointments. In order to reverse this, recruitment of volunteers will occur in college campuses, places of worship, and community centers, where we will target young adults and those who identify as retired. Awarding volunteer hours for young adults will allow for more youth to participate in the program and user friendly guides will allow elderly folk to prepare for this volunteer opportunity with ease.

Title: HR and Development Communications Event Coordinator

Name: Alexis Nguyen

Preceptors: Lauren Hill - Recruitment, Development, and HR Coordinators

Agency: Children and Screens: Institute of Digital Media and Child Development

Purpose: To plan and communicate with company members across all boards of specialties to streamline planning efforts for expert research, fundraising, social events, and organizing data from advisory meetings to ensure team's mission and goals are achieved at the highest level.

Significance: According to Neuroscience and Biobehaviorial Reviews, between 1996 and 2018, 113 epidemiological studies with meta-analysis and systematic review were published. With 693,306 participants, it was concluded that the average prevalence rate of internet addiction is 7% and is continuing to rise. From a global stance, rates can get as high as 21% and 22% in Asia and the Middle East, respectively. All percentages are estimated to increase exponentially over the next decade. Children and Screens aims to research, advance, and spread interdisciplinary scientific research on the cognitive, psychological, and physical impacts of digital media on the health and well-being of children and adolescents. Expanding research and scientific knowledge to parents and the general public helps prevent permanent damage and bad habits. It is essential to have a driven team with all positions vital to success. This position ensures smooth sailing through crucial processes.

Method/Approach: Popularity reviews and frequency use of the website through webinars, virtual events, fundraising events, and research efforts have been examined throughout the year at various times to examine successes and areas of deficiencies. In addition to organizational success statistics, endless studies have been investigated surrounding all aspects of child development. For example, internet addiction is associated with neurochemical and neuroanatomical alterations. With medical imaging processes like magnetic resonance imaging (MRI) and computerized tomography (CT), scans were conducted on adolescents who use technology and digital media. Other research that was less concrete and physical evidence-based studied the statistics of the age in which technology use begins in a lifespan.

Outcomes/Results: After the method of medical neuroimaging, results found the thinning of the cortex and negative modification of dopamine levels. These results indicate technology addiction is associated with structural and functional changes in regions of the brain responsible for decision-making, emotional processing, cognitive control, and behavioral disorders. In the statistical observational study, it was found that the time spent on digital technology has increased significantly in children as young as 10 years old. A surprising find in this study was how predominant internet addiction is in certain countries over others, proving that addiction is associated with more global and regional factors.

Evaluation/Conclusion: With evidence and sophisticated research on various areas of child development, Children and Screens facilitates research efforts and places a foundation for awareness and spreading knowledge to the population. Children and Screens works heavily in public health specialities to promote health in children and adolescents. Internet addiction is associated with the deviation away from other important aspects of life such as the need to eat, hydrate, personal hygiene, sleep, and relationships. Internet addiction is detrimental to physical, emotional, and psychosocial health leading to things like poor academic performance, family conflict, skeletal muscle issues, low confidence, mood disorders, and even suicide.

Title: The Solar Investment Tax Credit (ITC) is not the only savings available to homeowners

Name: Agujudah Okey-Uche

Preceptors: Andrew Howrigan, Co-Founder

Agency: Solar Tax Consultants

Purpose: To provide full-service consultations on solar energy savings.

Significance: There are two general ways of going solar in the United States. Through a lease or a loan. While you do not receive any credits with the lease, if you install solar energy equipment in your residence through the loan option, with the current incentives since the Inflation Reduction Act was passed by the 117th United States Congress and signed into law by President Joe Biden on August 16, 2022, you are entitled to a nonrefundable credit off your federal income taxes, equal to 30 percent of the total system cost. This is known as the Solar Investment Tax Credit (ITC). Since it was first enacted in 2006, the U.S. solar industry has grown by more than 10,000%. My preceptor also estimates for homeowners that 10% or lower do not get their full ITC credit. Neither is there concrete data right now on the application of solar depreciation in the sales process of the system. With solar still being a relatively new market, we are very early. The vast majority of solar sales representatives, however, are not well versed with taxes. Solar in general is very confusing but this is where we come in for the ITC and the depreciation of their solar credits.

Method/Approach: Solar companies on the corporate level have a lot of gatekeepers before anything like this can be approved for their sales representatives so we targeted sales teams within solar organizations for quick implementation. Our work primarily had to do with working with their onboarded clients one-on-one for their specific situation where we would gather information to input into our Solar Renewable Energy Credit Calculator that shows both the 30% ITC credit and the additional net savings through depreciation, what we specialize in. We then set proper expectations for 2023 when tax season will begin from where they can file themselves or share the document with their tax professional to file for them. Solar Tax Consultants also partners with a CPA for expert service should it be necessary.

Outcomes/Results: Not only do we make sure our clients claim the total of their ITC credit, with the proper documentation, we also depreciate the credits that the system produces that can add an additional 10-25% on average more in net savings over a 5 year depreciation schedule. This results in thousands of dollars more in savings making solar an even better option for their family than it already was.

Evaluation/Conclusion: At the end of every completed consultation, every single client is very pleased to learn of the additional savings. Ultimately, this gives onboarded solar sales teams the competitive advantage within their territory as teams we partner with can show more net savings to prospective solar clients. It is clear that both the sales teams and solar clients are more than satisfied with our services here at Solar Tax Consultants.

Internship Abstract

Title: Correlating Leave Policies/Acts with Employee Satisfaction

Name: Katherine Orefice

Preceptors: Susan Burman, Manager of Human Resources

Agency: Livingston Board of Education (LBOE)

Purpose: To understand the stressors that accompany returning from a leave of absence and identify policy remedies that are designed to improve employee satisfaction and retention.

Significance: When individuals are scheduled to return from a leave of absence, many experience reservations about reentering the workforce. Firsthand accounts from employees, especially women, reflected a need to establish a work/life balance and focus on their mental health, all while continuing to perform their job in an effective manner. In many instances, employees returning from leave will need to make outside arrangements for childcare, elder care, financial advising, professional counseling, and other wellness programs. The LBOE has recognized many of these needs by engaging the services of Magellan to provide a free Employee Assistance Program (EAP) for all staff. Though employees of the District have expressed the need for extra assistance and support upon their return, only a limited number of employees engage with this program and benefit from its services annually. Reports from Magellan have shown that the implementation and consistent promotion of an EAP within the workplace can positively impact employee stress management, absenteeism, worker's compensation claims, healthcare costs, and employee retention (*Toolkits Managing Employee Assistance Programs* 2022).

Method/Approach: To identify improvements that the LBOE can make in regard to leave policies and procedures, employees who have taken a leave in the past five years will be surveyed on their satisfaction with leave duration and return transitions. An email will be sent out explaining the survey to the 160 employees being asked to participate. The email will also clarify that the participants and survey data will remain anonymous and confidential. The survey questions shall be set up to branch in order to remain applicable to all individuals and their specific type of leave. The employees will have the opportunity to expand, in their own words, to capture personal experiences and suggestions. The survey responses will be reviewed to identify weaknesses within LBOE's leave policies and procedures.

Outcomes/Results: The survey revealed two areas needing focus: 1) a need for establishing dedicated spaces for pumping for individuals who have returned from maternity leaves and are breastfeeding, and 2) greater communication regarding the District's EAP. While the District complies with the New Jersey law (P.L.2017, Chapter 263) and the Federal Fair Labor Standards Act (29 U.S.C.207 [R] 1-4) requiring spaces for pumping, schools are often overcrowded and the dedicated spaces available can vary depending on availability and simply meet the minimum requirements. Responses also showed limited knowledge about the EAP among district employees.

Evaluation/Conclusion: District administrators will find and secure better options for dedicated spaces intended for pumping in district buildings. New building maps will identify the dedicated pumping spaces. An email will be issued to those returning from a maternity leave providing them detailed information regarding the newly dedicated space. The District will also issue an email to all returning employees to welcome them back and reintroduce the EAP program. The District will follow-up with survey respondents for further feedback once changes are implemented.

Title: Resource Distribution Through Community & Patient Outreach

Name: Abigail Panarello

Preceptors: Tracy Moore: Patient and Community Outreach Manager

Agency: Leukemia & Lymphoma Society (LLS)

Purpose: To organize and promote educational events on blood cancer by contacting patients, healthcare workers, and organizations within the regions of Tennessee and Alabama.

Significance: Over 1 million people in America are suffering from a blood cancer or are in remission (LLS, n.d.). Leukemia, Lymphoma, and myeloma are the three main types of blood cancer that affect individuals across the country (LLS, n.d.). It is vastly important to educate those inflicted, so they are better able to understand what is happening in their bodies as well as take care of their health in the right way. Padronos and his team of researchers explain that patients need a large amount of "information to facilitate health care decision making, understand management options, and health care system navigation" (Padrnos et al., 2021). The educational events organized by the Leukemia & Lymphoma Society will help educate and raise awareness for blood cancers; therefore potentially improving the participants' "quality of life" (Padrnos et al., 2021).

Method/Approach: To organize educational events for The Leukemia & Lymphoma Society, a significant amount of research into non-profit cancer organizations must be done. The largest event to be organized is for awareness regarding myeloma in March of next year. The proper contacts will be found within certain organizations, such as the American Cancer Society, to inquire about them having a table at the event. It is also part of my project to find additional local non-profit organizations that will benefit this target population, which is quite marginalized. This particular event is taking place in Tennessee, and many organizations were found that could be an asset to the cause. These include Gilda's Club, Tennessee Breast Cancer Coalition, United Cancer Support Foundation of Knoxville, Tennessee, and Cancer Support Community East Tennessee.

Outcomes/Results: In preparation for the March Myeloma Event, the majority of data collection consisted of several free online resources focusing on overall wellness that would be easily accessible to underserved and marginalized individuals in Birmingham, Alabama. This will be compiled into a handout for patients and caregivers to take home and utilize depending on their needs. The categories of online assistance are mental wellness, symptom management, education, caregiving, sleep wellness, and support. The featured applications include Calm, Shine, Breathe, Minds of the Culture, Bearable, LivingWith, Health in Her HUE, and more. Additionally, the American Cancer Society (ACS) was called and offered the opportunity to have a table at the event displaying their resources. The Central Alabama Sickle Cell Foundation (CASCF) was also contacted and asked to have a table with the resources and information they offer. Other non-profit organizations were researched, such as Gilda's Club, Cancer Support Community East Tennessee, and the Tennessee Breast Cancer Coalition.

Evaluation/Conclusion: The success of this project will not fully be shown until the main event data is gathered on March 11, 2023. It is the hope that patients and caregivers will be able to find the myeloma wellness handout helpful and provide some knowledge and/or relief in their day-to-day lives. Both the ACS and CASCF proved to be quite enthusiastic regarding participation in the event and plan to speak to LLS' Patient & Community Outreach Manager. Additional non-profits were discussed and considered.

Title: Creating a Story with Data

Name: Jasmine Park

Preceptors: Mark Cruz, Health Education Specialist

Agency: Health Outreach, Promotion & Education

Purpose: To develop, track, and create an evaluation system that monitors the effectiveness of HOPE educational workshops and disseminate to all student peer educators.

Significance: Educational workshops have helped establish many problems that may arise in universities. At Rutgers University, HOPE provides many workshops about sexual health, alcohol, drugs, mental health, nutrition, bystander intervention, etc. HOPE provides these workshops to create an environment that is comfortable and safe for students to express themselves and help to educate students about these topics. Through these workshops, they are able to raise awareness for the types of diseases that may arise from drugs, sex, alcohol, etc. By raising awareness about these topics, HOPE is able to not only build relationships with the students but also be available to those students who are in need of a helping hand. Based on the data that HOPE has collected from the peer mental health workshop, it showed that 44.34% of the students chose to listen to the *Got Stress* session and 41.16% learned more techniques on ways to reduce stress.

Method/Approach: The first step was to reach out to the individual students and coordinators who are running the workshops to obtain detailed information. Doing this will ensure whether or not the evaluation systems are beneficial to HOPE. Providing positive and negative feedback about the current evaluation system that HOPE is currently using can be used as an example of why evaluation systems are necessary to programs. This method will need to be thoroughly utilized and by collecting the evaluations from the students who attend the workshops, HOPE can input the data that was collected. This method will take some time because the latest data that HOPE collected was from 2019 and then COVID hit.

Outcomes/Results: After researching different evaluation systems there was not much progress. HOPE has highlighted many of these problems with its own evaluation systems and is working towards being more detail-oriented on how they can improve the different workshops provided. Upon looking over the different evaluations it was best to create a new evaluation for the peer mental health workshop because many students tend to attend those workshops. Implementing specific questions about the various topics that are discussed within the peer mental health workshop was something the peer educator highlighted. By doing this it will help to collect accurate information and data on the specific topics. Although this new evaluation system was not handed out to the students so that the data can be collected, HOPE is looking to utilize this in the future to see potential progress. Because there are different topics being taught within the workshops it was difficult to pinpoint exactly how to improve this further. In the near future, HOPE is expecting to see positive results come out of the newly formed evaluation for peer mental health.

Evaluation/Conclusion: Proving a new approach to the evaluation process will need to be done over time. This research has shown that there is not enough information on evaluation systems which raises a problem because with the lack of information, universities and even companies are not able to gather effective information about the material they are providing. As a result, there is no data to back up the outcome that is being researched, but as it is being changed now, HOPE will be able to use this.

Title: Care Coordinator I - Intern

Name: Karishma Patel

Preceptors: Robert O'Connor, Assistant Manager

Agency: Memorial Sloan Kettering Cancer Center (MSKCC) - Basking Ridge, NJ

Purpose: To serve as a liaison between patients, their families, and clinical teams by answering questions during their visits, calling doctor's offices about treatment orders, solving discrepancies, and checking them in to their respective appointments using Epic's Healthcare Information System (HIS) and Electronic Health Records (EHR).

Significance: Cancer is one of the leading causes of death globally, with approximately 1.9 million new cancer cases expected to be reported in the United States alone in 2022 (Cancer.Org). Memorial Sloan Kettering Cancer Center has been nationally ranked as the number two hospital for cancer prevention screening, treatment, and research for cancer cures and specializes in over 400 types of cancer. They have made groundbreaking contributions in redefining treatment plans for breast cancer patients, and receiving a 100% response rate on a immunotherapy clinical trial for rectal cancer (MSKCC). MSKCC was recently given FDA approval for the drug T-DXd to treat non-small cell lung cancer which will allow them to continue testing and finding a better treatment plan for their patients (MSKCC, 2022).

Method/Approach: In order to check in their hundreds of patients, MSKCC employees need to utilize Epics's Healthcare Information System (HIS) and Clinical Information System (CIS) software. Although both are a form of electronic medical records (EMR) HIS stores a patient's demographics and all future/past appointments, while CIS has all of their tests or treatments ordered by their provider and their results. The Department Appointments Report (DAR) on HIS generates a list of patients to be seen on the specific day and requires that all patients being checked-in answer the COVID-19 questions as a part of protocol. This consists of asking the patient about their signs, symptoms, possible exposure, and questions their traveling agenda. MSKCC also implemented Salesforce that helps Care Coordinators to find a patient's in-network provider and schedule appointments for them with their respective provider's approval. Salesforce is a crucial aspect to a patient's appointments as it allows Care Coordinators to reach the provider's Office Coordinators and their nurse practitioners to put in lab orders if they were not entered. Each of these software solutions are used in conjunction with each other to ensure a smooth patient experience at MSKCC and allow for quicker workflow in these facilities.

Outcomes/Results: Due to the high influx of patient scheduling and a shortage of employees, the Basking Ridge location is often delayed which makes patients late for their next appointments. The DAR and CIS both make it possible for Care Coordinator Is to create a more efficient flow where patients are not as upset about the long wait times.

Evaluation/Conclusion: Patient care and satisfaction are very important to a patient's quality of care. MSKCC works to find effective solutions to support cancer patients in all of their needs so that they only have to worry about getting better. To accomplish this, EMRs keep patient health information organized and confidential.

Title: Identifying Appropriate Staffing Ratio

Name: Sheena Patel

Preceptors: CFO & Associate Practice Manager: Sejal Patel

Agency: Pelorus Elder & Behavioral Health

Purpose: Identify the appropriate staffing ratio of administrative staff to clinicians (M.D., PA-C's & NP's) and process improvement methods to help the organization run efficiently.

Significance: Staffing issues in healthcare arose significantly from the start of the COVID-19 pandemic. Many organizations struggled to staff clinicians and administrators. Organizations needed to be efficient in order to provide the same experience and care to their patients. In order to properly measure the efficiency of the current administration team, an analysis on the time per task was completed to ensure the administrative team is able to support the clinicians in the practice.

Method/Approach: All the administrative coordinators provided a list of tasks that they are responsible for. A stop watch was used on the major administrative tasks to set baselines on time per task. Each task in the main office was measured 2 times for the 10 staff members to calculate Full Time Equivalent (FTE). All tasks were logged into an Excel spreadsheet to calculate the weekly and annual volume. The time it takes the administration team to complete certain tasks was converted to (FTE).

Outcomes/Results: The clinician to admin staff ratio was 48:8.5. Overall, the total administrative tasks that administrators are responsible to complete on a daily basis was 8.73. This clinician to admin ratio analysis showed that the 10 administrative staff are sufficient enough to support the 57 clinicians that work in nursing facilities, in the office, or both. In order to maintain efficiency, the office needs to continue to use the weekly task list. The task list allows all administrators to be aware of their daily tasks and responsibilities. This allows the organization to keep track of which administrator is responsible for which task on a given day along with knowing if the certain tasks were completed.

Evaluation/Conclusion: Overall, the organization wanted to do an analysis to see if they were efficient and able to support all of their clinicians. This analysis allowed the organization to see the various tasks that the admin team is responsible for as well as observe the time required per task they do. Consistency in completing admin tasks is something that the office should continue doing. In order to stay efficient, the organization should implement more frequent training on the different systems that admin staff are required to use on a daily basis. Implementing more frequent training allows for the staff to be more knowledgeable and also work more efficiently to complete their tasks as they are familiar and taught how to do them. All systems that are used, including the EHR system continually have new features and updates. Having these frequent trainings or sit-downs with the office staff allow for the office to run efficiently as well as ensure the organization is providing the best patient care.

Title: Assisting the A.L.I.C.E. (Asset Limited, Income Constrained, Employed) Population of

Sussex County

Name: Amanda Peckham

Preceptors: Benjamin Davey LCSW - Executive Director, Craig Kalucki MSW, Director

Agency: Benny's Bodega (Non-Profit)

Purpose: To assist the A.L.I.C.E. (Asset Limited, Income Constrained, Employed) population through promotion to the public and to create relationships with the local community and businesses.

Significance: The number of A.L.I.C.E.(Asset Limited, Income Constrained, Employed) households has increased in New Jersey over the last decade as a result of rising costs and low wages. Over the years it has been recorded that there are more A.L.I.C.E.households than households in poverty, and the number of ALICE households has increased at a faster rate compared to those in poverty (NJHI, 2019). Data from 2018 showed that 10% of households were living below the Federal Poverty Level (FPL), meanwhile 27% were A.L.I.C.E. households. These households earned above the FPL, but not enough to afford basic household necessities such as food, clothes and hygiene products. Non-profit Benny's Bodega was established in 2019 to help families by providing resources to assist the ALICE population of Sussex County, New Jersey. They provide in more ways than a food pantry and is an experience similar to shopping at a store. Except it's at no cost for individuals of the ALICE population and individuals on SSI (Supplemental Security Income), SSD (Social Security Disability Insurance) or are 62 and older. Creating a brochure for Benny's Bodega and networking with the local community and businesses will allow for more donations to the Bodega and will spread awareness about the ALICE population in Sussex County.

Method/Approach: To help those in the A.L.I.C.E. population, the organization Benny's Bodega was established in 2019. Benny's Bodega focuses on changing individuals' lives and supporting them by offering food, clothes, toiletries and more. A brochure was created to explain the mission of Benny's Bodega and the resources being offered to reach more individuals that fall under the A.L.I.C.E. population in Sussex County. This brochure includes information about the requirements an individual needs to be approved to shop at the Bodega and how an individual can give back to the community. The brochures will be given out to local businesses and agencies to spread awareness of the A.L.I.C.E. population along with the services that Benny's Bodega can provide.

Outcomes/Results: One hundred and fifty brochures were printed and then distributed among local businesses in Sussex County, New Jersey on October 1st 2022. In October, the Bodega had 76 new clients signed up into the pantry database compared to only 57 in September before the brochure was distributed. This shows an increase in clientele after the brochure was shared among the targeted population. The only error with this was not all volunteers remembered to ask how they heard about the Bodega but the 40 out of the 76 new clients who were asked, did say they found out about the Bodega from the brochure.

Evaluation/Conclusion: The distribution of the brochure about Benny's Bodega had increased the clientele we had received for the month of October. This gave the Bodega another opportunity to reach more of the A.L.I.C.E. population besides word of mouth and their social media such as Facebook and Instagram. The Bodega will continue to distribute this brochure in the community and at events held to spread awareness about who the A.L.I.C.E. population is and how to help them.

Title: Blood Cancer Outreach and Education in the Hispanic and Latino Community

Name: Lucija Rasin

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

Agency: The Leukemia & Lymphoma Society (LLS) - New Jersey Region

Purpose: To identify and conduct outreach to Hispanic Organizations to address blood cancer disparities within the Hispanic community, increase education about blood cancer and the support available through LLS, and identify opportunities to diversify partnerships with community organizations.

Significance: Cancer is the leading cause of death in Hispanic and Latino Americans. Leukemia has the highest incidence rate within the Hispanic population in patients under the age of 20 (Bencomo-Alvarez et al., 2021). Even in blood cancers that are not most common in the Hispanics, this population still exhibits higher mortality rates and worse outcomes than Non-Hispanic Whites 5- and 10- years post-treatment. (Bencomo-Alvarez et al., 2021). Many outcome disparities are a result of lack of resources, translators, health education and language/literacy barriers within Hispanic communities (Bencomo-Alvarez et al., 2021). Further evidence is seen in lowered rates of enrollment in clinical trials due to lack of clear explanation to Hispanic patients on the benefits of participation, further contributing to less successful outcomes (AACR, 2022). Due to the overwhelming disparities in these communities, there is a need for outreach to increase education, availability of Spanish resources, and access to quality caresomething LLS is dedicated to as a mission priority.

Method/Approach: Extensive research was done to compile a spreadsheet of Hispanic organizations and entities in New Jersey. The spreadsheet is composed of 22 Hispanic health-focused organizations, 2 non-health Hispanic organizations, 5 Hispanic news and radio organizations, and 12 Hispanic churches. All of these 41 organizations and entities were then contacted through email to discuss partnering with LLS to increase Hispanic Community Outreach. Local news, radio and Hispanic churches were sent emails in both Spanish and English. Organizations that were responsive to email outreach were asked to set a meeting date to discuss increasing education and support resources within the Hispanic community.

Outcomes/Results: 6 Hispanic organizations were responsive to email outreach. LLS is in communication with these organizations to set meeting dates and has created official partnerships with 3 of them. The Hispanic Resource Center of Northwest NJ entered LLS into their database for referrals for the Hispanic community. The other two organizations, the NJ Hispanic Chamber of Commerce and Community Affairs Resource Center, met with LLS, and are distributing LLS materials to their Hispanic members and are in the process of planning joint educational events with LLS to increase awareness and better reach the Hispanic Community. Further Hispanic Organization partnerships and progress are expected from communication that is still in progress.

Evaluation/Conclusion: LLS partnerships with Hispanic organizations increased by 100% due to outreach efforts. Further success will be evaluated by looking at data to see if partnerships have increased the number of Hispanic patients who are new to LLS in the New Jersey region. This is an ongoing process which requires evaluation once time has allowed for partnerships to build and make an impact. These partnerships will include joint education programs, health fairs, and partners sharing LLS information to Hispanic populations over time to increase blood cancer awareness, outreach, and address disparities.

Title: EMS systems and Innovations to come within

Name: Ishan Raval

Preceptors: Project manager / Manager - Vithurshan

Supervisor - Dhruv Patel

Agency: Accurate Diagnostic Laboratories

Purpose: To improve accuracy and time management per sample In the current EMS systems

Significance: The Covid-19 pandemic led to an increase of samples coming in and not enough workers to help handle the workload. The processing department has been tasked with improving efficiency. Outdated systems will be improved and workers will have a streamlined process. This also helps reduce the amount of errors made which leads to an increase in patient satisfaction and decrease in human error.

Method/Approach: Collaboration between the processing department and the IT department was made in order to discuss innovation based on base business work. First step taken was to discuss daily processing and the visibility of which patient data is essential in order to move testing along, looking through EMS systems and hard drive data taken by scanned paperwork. Once identification of innovation was made, the changes on the EMS system took place. This starts with identifying *required* fields that are set up as obstacles throughout the system and removing those barriers in order for processors to save data without being stopped by old EMS guidleines. Once obstacles were removed from the system, improvements on processing were made by setting up pre-made barcodes of common information used throughout all samples at the labaratory and placing it next to each processor workstation, thus saving more time when processing repeated data. Finally, Training was held October 24th for the barcodes and scanners and to show the changes made onto the EMS system.

Outcomes/Results: Half of the previous system barriers were deemed inefficient and removed. Barcodes and scanners were added to workcenters to speed up data entry. Previously each sample processed would take anywhere between 4-5 minutes. With the changes made to the EMS system and the reductions of obstacles due to old guidelines, we save around 2 minutes per sample being processed. This resulted in approximately 30-40 more samples completed by each worker per day. Training revealed that working in groups would also cut down on mistakes. Throughout the data collected so far, we have an estimated improvement of 500 samples processed in each shift throughout the day.

Evaluation/Conclusion: Systems changes have made a significant impact on the current streamline process while also reducing human error. With more results and better understanding by all employees we can start seeing even greater impacts in the coming months. Recording more data we will get a precise answer on how many samples are processed per day exactly and in turn showing our results to our stakeholders and increasing our company standards. While these are still preliminary results, we wait to collect more data in order to get an exact amount of how many more samples are being produced. We can have a good estimation that each shift will likely be processing more than 500 samples than they were before but this can increase as we spend more time with the system changes.

Title: Food Drive Distributor

Name: Christopher Rizzo

Preceptors: Patricia Donio, Director of Social Services

Agency: AtlantiCare - Hammonton Family Success Center

Purpose: To administer a health-friendly food drive for families affected by food insecurity.

Significance: Food insecurity is a growing problem in the United States. According to the USDA, more than 33 million people (5 million of those being children under the age of 18) are food insecure. Whether their food insecurity may be for health or financial-related reasons, it is very important for those who are less fortunate do not spend most of their time being hungry. Food security is crucial to the proper functioning of society due to the fact that in the long-term, food security can promote economic growth, job creation, poverty reduction, increased global security and/or stability, and an overall healthier population. The Hammonton Family Success Center fights in the battle against food insecurity. The food security project is aimed to assist and make sure that no one in the local community is suffering from any health-related complications due to hunger and a lack of access to food.

Method/Approach: Each Tuesday and Wednesday during 10AM to 12 PM and 4PM to 5PM, bags of healthy food containing all of the recommended food groups were assembled. Protein goals were met with the inclusion of canned tuna and beans as well as various fruits, grains, and vegetables. To catch the attention of the public and add new members, each recipient was cataloged into the AtlantiCare database after the time windows close. Survey from Feeding America was for users to rate the service. When completed, the user received a \$10 virtual gift card. The survey that asks about their experience with the Hammonton Family Success Center food bank. The survey results and data would exclusively be sent to the Feeding America organization and will be used for future funding purposes. This inclusion had the numbers grow as people in the community talked more and more about the food bank portion of the facility, ultimately increasing the number of people who come in on a weekly basis.

Outcomes/Results: Between September 6, 2022 and October 6, 2022, an average of 26 members received food bags on a daily basis. As it got closer to October, the average number of people increased to 31 due to consistency with the packaged goods and the incentivised survey. Data collected from the survey has shown that Due to these increased numbers in the first month, the grant money was used to buy frozen meats and fresh produce, which led to an even more significant increase from October 6, 2022 to November 10, 2022, from an average of 31 members per week to 44.

Evaluation/Conclusion: This project has helped families obtain and receive healthy and nutritious meals based on the recommended guidelines for nutrition. From September to December, the number of people who came in doubled. Because of the short 3 month timeframe, we can observe that our numbers grew on a monthly basis. Consequently, we can claim that food security in Hammonton and the surrounding communities has at a minimum lessened food insecurity. As a result of this food pantry opening, we have granted access to healthy food for those in need, which was once not an option for members. We are confident that the food pantry will continue and that the numbers will continue to increase at a steady rate, fighting food insecurity on a week to week basis.

Title: HIV Resilience and Survivorship through Oral History and Dance Performance

Workshop

Name: Ajanee Russell-Hopkins

Preceptors: Kristen Krause, PhD, MPH, Deputy Director

Agency: Center for Health Identity and Behavior Prevention Studies (CHIBPS)

Purpose: To compose and ready supporting documents for an Institutional Review Board (IRB) submission to enable the continuation of study including people living with HIV/AIDS (PLWHA) participants undergoing drama therapy as a method of mental health intervention.

Significance: In the United States, nearly 50% of the PLWHA population is over the age of 50 (Harris et al., 2018) and yet many of them lack the proper tools to deal with long term survivorship, grief, and many of the coexisting stressors that come alongside it. Historically, research has shown that dance therapy across a variety of struggling subpopulations has modeled growth in individuals and an overall positive impact on these communities (Reed et al., 2021). A lack of comprehensive knowledge on how to best support PLWHA through their unexpected survivorship, lack of aging community, guilt and grief has become an apparent gap in public health care. Following COVID-19, CHIBPS recognizes new and growing challenges within this community, which has placed an even more significant burden on the need of therapy intervention data. Through a joint disciplinary approach of public health and the dramatic arts that emphasizes a strength based approach, PLWHA have a new opportunity to improve their quality of life and health and wellness outcomes by participating in this study whilst also growing in a community and building bonds with field professionals.

Method/Approach: A proposal was drafted by the Principal Investigators which first outlined the ramifications for the study after years of work in this field and an intense literature search was conducted. The investigators found that there was an overarching need for more comprehensive and evaluative research to be done. Considering all of the changes in the world, the investigators understood the clear need for human subjects and thus a submission to the IRB was needed. In crafting the documents, past proposals and IRB supplied templates, archived studies and other IRB approved consent forms were utilized and examined in order to curate concise and accurate documents that specify intent while informing the IRB and protecting potential subjects.

Outcomes/Results: Over the duration of this internship, over 50 different kinds of resources have been gathered to be used as resources for the drafting of the IRB protocol and the supporting consent documents. On November 17, 2022, the protocol and supporting consent documents were submitted to the Principal Investigators for further review and final edit suggestions. These documents were found to be acceptable for submission to the IRB upon further editing and finalization.

Evaluation/Conclusion: Contingent upon IRB approval, these documents will serve as the completion of Phase 1 of such research, and all subsequent research will follow under the guidelines sent henceforth. These documents will stand as protections against human subjects and provide context for how researchers and investigators operate. When the IRB submission is approved, we will begin to recruit participants for the research, making way for the advancement of understanding in the area of therapeutic intervention in the case of long term survivorship of HIV/AIDS in person over 50 years. The landscape for HIV/AIDS research and the arts will benefit greatly from this work.

Title: Leukemia & Lymphoma Society Patient & Community Outreach

Name: I'Asia Shabazz

Preceptors: Carrisa Almquist, Patient & Community Outreach Manager

Agency: The Leukemia & Lymphoma Society (LLS)

Purpose: To enhance the quality of life for individuals impacted by blood cancer by creating accessible virtual programming that will engage communities throughout the Pacific Northwest Region, specifically Alaska, both during and after the COVID-19 pandemic in order to maintain LLS's cancer education and health promotion efforts.

Significance: According to blood cancer patients, two of the most frequent obstacles they encounter, as newly diagnosed cancer patients, are a lack of social support and problems with healthcare communication (Hendren et al., 2011). The Leukemia & Lymphoma Society (LLS) was established to help close these gaps. This project aims to improve the accessibility of social support services for people with blood cancer. However, due to the recent COVID-19 pandemic, numerous organizations are still required to hold events and programs remotely via Zoom. In order to respond to this transition and continue to be available to their patients, the LLS Patient & Community Outreach department decided to move its cancer education initiatives to online webinars and social media.

Method/Approach: The Patient & Outreach team used social media to create a weekly podcast called *The Bloodline with LLS*, a monthly webinar called *LLS Fireside Chat*, and an annual "*Black Tie Gala*" festival with a focus on cancer education. These programs/events are based on informal discussions and interviews with cancer researchers, community health partners, cancer patients/caregivers, and medical professionals. Zoom is used to stream every presentation so that it can be accessed at a later time. Finally, demonstration webinars (for example, meal preparation) for healthy behavior practices were implemented. The goal of this project is to continue offering virtual support and education to various blood cancer patients in Alaska.

Outcomes/Results: More than 30,000 viewers have been tracked since March 2020 across 132 virtual presentations on cancer. According to data gathered from surveys, the audience is 84% female, 45 years old on average, and made up of 43% community members. Fifteen percent of the viewers are Hispanic, 53% are non-Hispanic white, and 32% are American Indian/Alaska Native. According to evaluations, 86% of the audience was attentive, 96% said their knowledge has grown, and 72% said the information presented was useful. Eighty-seven percent of the viewers believed the research topics benefited their community, and 72% said they preferred receiving cancer education materials via email.

Evaluation/Conclusion: According to statistics obtained, providing multicultural outreach activities virtually has enabled the LLS Patient & Community Outreach team to continue operating as an educational resource to their various communities. Interacting with and welcoming representatives from the diverse Alaska communities, as well as health experts, has made the LLS Society more relevant to the population it serves, while also allowing Alaska residents to hear from their own community.

Title: Create a Standardized Process for Wall Postings at Cooper University Health Care

Name: Kushal Shah

Preceptors: Nancy Narvell (AVP Population Intelligence & Operational Excellence)

Stephanie McBeth (Manager- Population Intelligence)

Agency: Cooper University Health Care- Population Health & Operational Excellence

Purpose: Develop clear policies and procedures for approval, managing, placing, and removal of wall-mounted items across all Cooper University Health Care (CUHC) facilities and locations.

Significance: Standardized process to ensure that plaques, awards, recognitions, notices, signage, and other items mounted on Cooper facility walls have appropriate content, are in the appropriate location, are not out of date, and support the overall Cooper messaging, brand, and strategic initiatives. Currently no policies or process exists with criteria on what can be hung (including awards, posters, department/unit based information, projects, artwork anything taped or mounted to the walls). There is no approval process, or any guidelines for maintaining or removing items mounted on walls. Creating or revising policies and processes for approval or management of any wall-mounted items would provide standards based upon location (staff vs. public spaces), types of items that are appropriate, parties responsible for mounting and removing such items and an overall consistent with Cooper messaging, branding and alignment with strategic initiatives.

Method/Approach: Using the Lean Six Sigma (LSS) approach to organize a "Workout" with key stakeholders which is a process of concentrated team-based decision-making and empowerment used to resolve issues and improve processes. The process improvement team consisted of a LSS Master Black Belt, a Black Belt, two Change Agents, and two Interns, including myself. The pre-work consisted of sensing the project where the purpose, scope, voice of the customer, and leadership roles were established. The team then visited a number of on campus and off site locations to observe current signage and postings on the walls and include pictures in the workout presentation for the stakeholders. Research on current best practices of postings in other healthcare institutions was gathered to include in the workout presentation. Presentation was revised and finalized, invitations to the participants were sent out, and team member roles for the workout were assigned. Participants of the workout included members from facilities, marketing, patient experience, human resources, ambulatory, regulatory, risk management and the process improvement team. Participants worked through the exercises led by the change agents towards possible solutions during the workout.

Outcomes/Results: The workout led to detailed discussions and an action item list where participants were assigned relevant roles and responsibilities towards making the changes. Action items consisted of developing a process for inventory of space, having sunrise/sunset dates for special event signage, displays assessed as part of EOC rounding for current relevance and duration of postings.

Evaluation/Conclusion: Implementation of the new standardized process of wall postings will create a consistent image and brand of CUHC across all facilities that aligns with the organization's strategic initiatives. The final report-out of results and findings of the workout will be on January 12th, 2023. It will consist of the status of each action item assigned to their respective process owners during the workout on November 21st, 2022.

Title: Assessment of Food Insecurity Among Underprivileged High School Students

Name: Yasmeen Shareef

Preceptors: Aaron Reevey, Senior Program Coordinator

Agency: Rutgers Future Scholars

Purpose: To assess food insecurity and usage of resources among high school youth in the 9th and 10th grade in New Brunswick, NJ and Piscataway, NJ.

Significance: It has been well known that New Brunswick and Piscataway are both areas that have a significant population of minorities. Food insecurity has been associated with poorer health outcomes such as undernutrition, adverse pregnancy symptoms, obesity, poor mental health, and developmental issues (Kursmark and Weitzman, 2009). Food insecurity tends to be most prevalent in food deserts, which are areas that severely lack food resources of nutritional and beneficial value and these deserts are most prominent among densely populated areas of minorities (Donley et., al, 2016). Rutgers Future Scholars is a program that aims to guide high schoolers from these communities towards a better educational future while shaping them into well rounded young adults. Students from this program can be informed about food insecurity and what resources are readily available to them and their family in their area. This project will assess levels of food insecurity among ninth and tenth graders in these school districts and connect them to the appropriate resources as needed to help reduce food insecurity in these communities.

Method/Approach: A survey was used to assess levels of food insecurity and knowledge of resources among high school youth in New Brunswick and Piscataway. After spending four weeks building rapport with the students, the survey was sent to them via email. The purpose for building rapport was to create a safe environment where students that may be struggling with food insecurity would feel comfortable seeking assistance if necessary. 50 students received a link to a Google Form consisting of questions about their environment, diet, living location, and knowledge of what food insecurity is. A Google Form was selected as the primary recorder of data due to its easy accessibility among the students. Once all responses were recorded, data was entered into Excel for graphing.

Outcomes/Results: 60% of students (n=30) recorded that they had never received information or education regarding food insecurity in schools before. 46.7% stated that they do not know where to find food pantries if needed. In regards to neighborhood conditions in assessing food insecurity, 36.7% live close to a liquor store and 40% live close to fast food restaurants. On a scale from 1-5 where 1 is least likely and 5 is most likely, 53.3% of scholars reported 3 as their answer when asked how likely it was for their families to purchase organic foods. Finally, 80% of students believe that food insecurity and related resources should be advertised and discussed in our communities while 33.3% requested more information on the survey.

Evaluation/Conclusion: Providing information on food pantries and soup kitchens in nearby areas can help scholars and their families gain access to more nutritious food as this information is not widely available or communicated. Increasing education and awareness of food insecurity in schools will help curb the societal taboo placed on those that are struggling with food insecurity. Decreasing stigmas against food insecurity will help encourage more students and their families to research and utilize these resources.

Title: Outreach with Myeloma Link to Increase Support within LLS and PCPs

Name: Erica Shemper

Preceptor: Stacy Kreizman

Agency: The Leukemia and Lymphoma Society

Purpose: To build awareness of myeloma signs and symptoms, and the support and resources LLS can offer patients and caregivers facing a diagnosis, by developing relationships.

Significance: African Americans are twice as likely to be diagnosed with Myeloma than their white counterparts. African Americans are also more likely to experience significant barriers to treatment and quality care. Approximately 124,483 people in the United States are living with or are in remission from Myeloma. Myeloma Link at LLS helps raise awareness in underserved communities and communities with higher rates of minorities. LLS offers free educational information, as well as support services, and help with finances with treatment. Myeloma Link offers extensive outreach in Black communities with trusted information on treatment and access to quality care. This project will significantly help PCPs (primary care physicians) with diagnostic information and help them educate their patients about services offered through LLS to help Myeloma patients. It will also increase education in communities that have a disproportionate prevalence of Black Americans being diagnosed with Myeloma. Lastly, this will allow and ease the stress on PCPs because it will enable LLS to help step and fill in the gaps where information and services may be lacking.

Method/Approach: ZocDoc, nj.gov, and Google were used to identify PCPs and Federally Qualified Healthcare Centers (FQHCs) in Newark. Forty-two private practice offices and seven FQHCs were contacted to schedule education and outreach sessions with office staff throughout October and November. Scheduled and attended meetings with AACCNJ (African American Chamber of Conference of NJ), and the National Coalition of 100 Black Women Southern NJ Chapter to showcase the importance of Myeloma Link and its benefits. These meetings were also used to obtain partnerships with each organization to further LLS outreach and education in the community. Tabling events were held at the Branch Brook Fest in Newark on October 29th, for the education and recruitment of Myeloma Link volunteers. Campus community service organizations at the New Jersey Institute of Technology and Rutgers-Newark were contacted via email to recruit Myeloma Link volunteers through November 2-9th.

Outcomes/Results: Two PCP/FQHC locations returned calls or emails to inquire about Myeloma Link. Partnerships were established with AACCNJ, and the National Coalition of 100 Black Women Southern NJ chapter to spread awareness through their newsletters and e-blasts. Campus recruitment efforts yielded no responses to date.

Evaluation/Conclusion: Reaching out to local/ statewide Black organizations was most successful. Contacting PCPs did not immediately produce results, and may take more attempts. In the future, it's recommended to target small businesses, shops, and libraries, to educate the community.

Title: Pediatric Care Coordinator Intern

Name: Fareed Siddiqui

Preceptors: Direct Supervisor: Joaquina Santana, Assistant Manager - Outpatient Operations

Project Supervisor: Jessica O'Neill - Lyublinsky, Team Lead - Outpatient Operations

Agency: Memorial Sloan Kettering Cancer Center - MSK Kids, Main Campus

Work Duties: Acting as the first stop that patients and their families interact with as they enter the floor by greeting, checking and signing them in, then guiding them through the day's appointments to minimize confusion before then wristbanding them. This role also requires acting as an intermediary between patients and their care team by notifying of patient arrival and confirming future appointments for the Sarcoma team. Reception Care Coordinators also screen every patient for COVID-19 symptoms and exposure, and if likely positive, or coming in with orders based on other infections or immunodeficiency, are promptly isolated in the proper location. At the end of the day, performing closing duties by creating the next day's caregiver excel sheet and printing out wristbands.

Techniques: Greeting and identifying patients by asking for last name and DOB and then using the Cadence platform by Epic to check and sign in each patient to their appointments while asking and filling in the required screening questions. If needed, then switching over to the MSK Clinical Information System (CIS) to print required forms or missing wristbands. Also, interacting with members of the clinical teams or entire floor through Microsoft Teams, Outlook, or calling corresponding extensions to ensure constant communication.

People Skills: Maintaining strong people skills is essential in the role to keep patients and their families comfortable in their difficult times and ensuring as much as possible is done to make their visit run smoothly. The All Care Together principles that Memorial Sloan Kettering pushes as their philosophy for patient interaction include the tenets of coordinating the journey, fostering warmth, keeping it simple, meeting individual needs, minimize uncertainty, and restoring control, which shows this commitment to patient experience and provide a guideline of how all patient facing roles must act. These principles can be shown in a variety of ways depending on the situation whether it be face to face or on the phone, something as simple as providing a warm greeting and initiating small talk can make a difference.

Results: Through the course of the internship, more comfortable relationships were built with many patients and families. By following the All Care Together Principles and generally displaying a sense of care, patients felt more like they have someone in their corner that is willing to help. Patients felt as though they could approach the desk and ask for things or guidance both on visit and not visit related topics. As the internship winded down, certain patients heard of this and thanked me for all the help I provided and that they will miss my presence on the floor.

Lessons Learned: Patient experience is a major part of one's care journey and is not something to take lightly. A significant aspect of dealing with a serious illness is the mental fatigue and impact it has on patients and their families. Learned the importance of adapting style of communication based on who is being addressed, whether it be different patients or coworkers. Also, how working in a pediatric setting is different from being in an adult department due to the different needs and nuances of younger patients and their families.

Title: Analysis of Patient A1C from Admission to Discharge from Inpatient Chronic Illness

Management Program

Name: Hijab Siddiqui

Preceptors: Ayana Hamilton, MA, MSW, CCLS and Lauren Galifi, RD, CDCES

Agency: Children's Specialized Hospital- New Brunswick, NJ

Purpose: Determine the efficacy of the inpatient Chronic Illness Management Program for patients with diabetes by analyzing the change in patient A1C from admission to discharge.

Significance: In the United States, 37.3 million people have diabetes, and 96 million people have prediabetes (CDC, 2022). About 283,000 American children and adolescents under the age of 20 are estimated to have a diagnosis of diabetes (ADA, 2022). People with diabetes are at higher risk of having serious health complications and higher medical costs (CDC, 2022). The A1C is a simple blood test that indicates a patient's average blood glucose over the last 3 months. Higher A1C levels correlate with an increase in diabetes complications (CDC, 2022). The Chronic Illness Management Program at Children's Specialized Hospital is a four-week inpatient program that uses a multidisciplinary and behavioral approach to care that attends to the physical, emotional, and psychosocial needs of each patient. Admission to the Chronic Illness Management Program is aimed at enhancing disease self-management (RWJBH, 2022). This analysis looks at the change in A1C in patients with diabetes admitted to the Chronic Illness Management Program, from admission to discharge.

Method/Approach: Patients' A1C was assessed by Children's Specialized Hospital staff on admission and again at discharge from the Chronic Illness Management Program. Deidentified patient health data was retrieved electronically from a research database and exported into a report. The report was modified to include A1C data from patients admitted to the Chronic Illness Management Program from January 2022 through September 2022. A1C data were analyzed and changes in A1C from admission to discharge were calculated.

Outcomes/Results: In 2022, eighteen patients with diabetes were admitted to the Chronic Illness Management Program. The average A1C on admission was 11.31%, and the average A1C on discharge was 9.27%. The average change in A1C from admission to discharge was calculated to be 2.04%. The goal for most people with diabetes is to achieve an A1C less than 7% (ADA, 2022). A1Cs in this analysis were elevated at admission, indicating a higher risk of developing medical complications, like heart disease, kidney disease, and stroke, due to poor diabetes management. At discharge, A1Cs remained elevated above the recommended goal, but were reduced from admission. There is strong protection against developing these medical complications for every 1% reduction in A1C (Gandi, 2022).

Evaluation/Conclusion: The results of this data analysis reflect the efficacy of the Chronic Illness Management Program and its impact on patients with diabetes. Strengths of this analysis included the availability of all relevant patient data, positive patient outcomes, and effectiveness of medical interventions by the Chronic Illness Management Program. This analysis is intended to benefit current and prospective referral sources, current and prospective patients and families, health care payers, and Children's Specialized Hospital staff. Favorable patient outcomes may lead to an increase in program admissions, motivation for patients and families to seek necessary care, improved rates of approval for care from payers, and motivation for hospital staff to continually improve care.

Title: Importance of checklists in a healthcare setting

Name: Mehar Kanwar Sidhu

Purpose: To assess the importance of checklists and their impact on the effectiveness and quality of patient care in a hospital setting.

Significance: A major issue in the healthcare industry is the current lack of communication and missing information that causes necessary surgeries to be postponed/canceled and other complications to occur. However, multiple studies indicate that implementing and using checklists can help reduce the occurrence of these errors. Checklists, especially digitized ones, have been proven to help nurses and physicians remember all the important, pertinent questions to ask when conducting patient histories and discussing issues that may otherwise interfere with care being provided. This digitized information allows it to be easily accessible for all, reducing miscommunication errors and lack of information. This project aims to highlight specific advantages of implemented checklists in complex processes in the healthcare industry.

Method/Approach: A thorough research investigation was conducted using thirteen literature studies obtained from the Rutgers Library databases to determine the role that checklists play in complex procedures in healthcare settings. A qualitative study in Norway, from the BMC Health Services Research database focused on 11 different groups consisting of 27 post-operative patients and 27 healthcare workers at a teaching hospital and at a community hospital. This study analyzed interview data using content analysis to ascertain risk elements that ought to be included in a patient-driven surgical patient safety checklist. Another study, from the BMJ Global Health database, conducted various interviews with informants and stakeholders in Bangladesh. This study's aim was to develop a health system resilience checklist that measures the specific capabilities and process health systems need in areas being severely impacted by infectious disease outbreaks. A cross-sectional study in the Journal of Patient Safety, focused on 316 physicians and nurses' survey results across Germany. This study aimed to assess the application attitudes and compliance with safety measures centered around the WHO safety checklist for safer surgical procedures.

Outcomes/Results: After extensive research and debate, the final WHO safe surgery checklist consisted of 19 checks overall, with seven before anesthesia, seven more before the incision, and five at the end of the operation. When these 19 checks were implemented in 8 different hospitals all over the world, the rate of major complications in surgical patients "in all 8 hospitals fell by 36%" after the introduction of the checklist. The death rate had decreased by "47%", and the infection rate had decreased by almost 50% (Gawande, 2010). Upon conducting surveys, team members also stated they felt the level of communication had increased and was far more effective, something crucial in the surgical field. After comparing team performance from 47 different resuscitations, Kulp and other colleagues found that digital checklists led to more frequent completions of the initial airway assessment (Kulp et al., 2019).

Evaluation/Conclusion: When reviewing and analyzing the various studies, some limitations were found. One notable limitation was that some of the studies were conducted in certain surgical specialties and came from a small number of departments and institutions. All the research and publications used in this project, with the exception of one source, are all within 5 years and are very relevant and up-to-date. The next step, after analyzing the results of the various studies, is to improve complex processes in the healthcare system by implementing the various checklists that the studies have created, researched, and studied.

Title: Covid-19 Molecular Testing by Race/ethnicity

Name: Layne Spyrka

Preceptors: Digna Diaz, Community Outreach Director

Andrew Walters Covid-19 Outreach Director

Agency: Visiting Nurses Association of Central Jersey Community Health Center

Purpose: To track Covid-19 cases and the vaccination rates among race and ethnicity within Monmouth County.

Significance: The point of this data collection is to establish reliable data for the area of Monmouth County, New Jersey. This helps the CDC track if cases are going up or down and if distribution of more vaccinations are needed within whatever subsections of race and ethnicity. We are able to compare data and statistics to other federal agencies, vaccine providers, and local and state public health departments across the country and see where we stand in this pandemic. Through comparing data we are able to see trends across certain races and ethnicities. We are also able to monitor the public health safety outcomes for hospitalizations rates and diagnosis rates of patients

Method/Approach: Fifty five vaccination sites and clinics were set up throughout the following months between August through October of 2022 which is our year two quarter one of this project. Weekly we were able to test for COVID-19 rates within Monmouth County between August 1st, 2022 and the end of October 2022. Positive tests were logged and race and ethnicities were noted using Microsoft Excel spreadsheets. In order to establish patterns, totals, monthly results, and trends were added to reports. Patterns among races, ethnicities, and the correlation between vaccination rates were recorded.

Outcomes/Results: From August of 2022 through October 2022, the groups getting tested the most were White 50%, Hispanic/Latino 16%, and Black/African American 11%. The total number of people getting tested was 104 people and 19 of them tested positive which is 18%. The groups with the highest positive COVID-19 rates during the 2022 duration were Hispanic/Latino 35%, White 17%, and African American/Black at 16%. The same months last year August 2021- October 2021, the groups getting tested the most were White 38%, Hispanic/Latino 18%, and Black/African American 17%. The total number of people getting tested was 683 people and 43 tested positive which is 6%. The groups with the highest positive COVID-19 rates at this time were White 7%, Hispanic/Latino 5%, and Black/African American at 3%. Vaccination amounts went down by 84.5%. The rate of positive cases also went up by 200% (6% to 18%).

Evaluation/Conclusion: The data suggests a surge during the last three months of positive Covid-19 rates. This could be correlated to the fact that fewer people have now received vaccinations. We can also note that a lot fewer people got tested during these months in 2022 compared to 2021 which can **cause an increase in variance of positive cases because of the lack of data.** In an ideal world we would have been able to get more people to get tested during these months in 2022. We can't make conclusions about an ethnicity if there were little to no patients with that ethnicity at the clinic testing site. It is also important to note that we used the same months, but in two different years to limit bias in our data as well.

Title: The Impact of Nutrition Lessons on Adolescents Participating in the FranklinFit Program

Name: Alisa Stellini

Preceptors: Erin Comollo

Agency: New Jersey Healthy Kid Initiative (NJHKI)

Purpose: To assess the impact of culinary nutrition lessons on the nutrition knowledge of a group of adolescents participating in FranklinFit, a police-run physical activity program in Franklin Township, New Jersey.

Significance: Fruit and vegetable intake in children and adolescents in the United States is inadequate, with intakes decreasing as they age (Lorson et al., 2009; Nepper & Chai, 2015; Slavin, 2012). Novel interventions to increase healthy food consumption among youth include repeated taste exposure combined with experiential learning and nutrition education (Nekitsing et al., 2018). The New Jersey Healthy Kids Initiative (NJHKI) aims to contribute to improving this scenario by implementing culinary literacy lessons as part of a police-run physical activity program called FranklinFit.

Method/Approach: This is a pre-post study with a group of FranklinFit program adolescent participants in Franklin Township, New Jersey. Following the participants' existing FranklinFit group fitness class, NJHKI implemented culinary nutrition lessons and recipes over three consecutive weeks for one hour a week. The lessons were split into nutrition and culinary skills, with demonstrations including knife skills, blender use, and microwave use. The adolescents' knowledge before and after the lessons was measured by pre- and post-questionnaires with 23 questions. For this study, we used the 13 questions that were directly related to nutrition knowledge. The impact of the lessons was verified through paired t-tests. Statistical significance was set as p<0.05.

Outcomes/Results: Pre and post-test evaluations were available for 16 adolescents. Students scored better on the post-test in six of the 13 questions regarding nutrition, with statistically significant results regarding fiber benefits and balanced meals, with p-values of p=0.038, p=0.009, respectively.

Evaluation/Conclusion: Adolescents' knowledge about fiber benefits and balanced meals increased significantly after the culinary nutrition lessons presented by NJHKI at the FranklinFit program. These results suggest that this program can be implemented in other after-school or school-based programs to enhance adolescent nutrition knowledge. Unfortunately, some participants did not fill out the pre or posttest, and others did not sign assent or parental consent forms, excluding their responses from the final data analysis.

Title: Employee File Compliance Assessment

Name: Ahuva Strauss

Preceptors: Samantha Priolo - Human Resources Generalist

Agency: Children's Specialized Hospital (CSH)

Purpose: To assess and ensure that all files are compliant for the upcoming Joint Commission visit (TJC).

Significance: The Joint Commission is an organization that consistently tries to improve healthcare by evaluating healthcare organizations and making sure that their patient care is of the highest quality. The main purpose of accreditation by The Joint Commission is to allow hospitals to receive federal/government funds, but many additional benefits cause hospitals like CSH to put so much pressure on accreditation. Accreditation helps the organization focus on maintaining the safety of their patients and gaining access to resources related to better patient care. According to the TJC website, TJC has been involved in the accreditation of hospitals for approximately 70 years, and 85% of Hospitals in the United States are accredited by TJC. Therefore, accreditation by TJC doesn't only provide the benefits previously listed but the additional benefit of respect for the organization that comes with TJC's stamp of approval. For the hospital to get accredited, TJC surveyors make sure the patient files are up to their standards and that the patients are all being taken care of. The surveyors also check the employee personnel files to verify that the employees' competency is up to par and ensure the best care for the patients.

Method/Approaches: While waiting for the TJC surveyors, the CSH HR team found that many of the files for the contracted employees and New Hires have missing forms. The HR group is striving to get these files up to standards by determining what is missing from the files and accessing the missing documents. One of the HR team members went through the New Hire and Contracted employee files, sorting through them and recording what was missing. From there, the audited files were passed to a coworker, and she added the information to a spreadsheet and then then the two team members emailed the related individuals and team leaders to access the missing documents and place them in the appropriate files. Once the files are complete, they are stored in a filing cabinet with the other files.

Outcomes/Results: HR is continuing to work on the project in anticipation of the surveyors' visit and hope to have completely audited all the files by the time the surveyors arrive. Throughout this project, all the Contracted Employee and New Hire files have been assessed for compliance, and the HR team is continuously waiting for the missing documents from the team leaders. Assuming the audit of the patient and employee files goes well, Children's Specialized Hospital will be accredited, resulting in better access to government funding and better care for the patients.

Evaluation/Conclusion: It would be beneficial for the CSH HR department to transfer their files from paper to electronic files and store employee information on an electronic database. The auditing process only takes place once every 3 years, so it might not seem worth the conversion to electronic files right now, but the time that is spent on transitioning the files will be worth it and will save time and paper while improving the auditing process.

Title: Removing Medical and Social Barriers for Previously Incarcerated Women Reentering

Society

Name: Emily Stroud

Preceptors: Constance Kusi, Nurse Navigator, Gloria Bachmann, MD

Agency: New Jersey Reentry Corporation (NJRC)

Purpose: To connect returning female citizens to resources and remove barriers to health care and employment.

Significance: According to the Prison Policy Initiative, the United States is the world's leader in incarcerations; it also is one of the lead countries in incarcerating women. The data from 2019 noted that there were approximately 231,000 women/year incarcerated. Further, these data reported that 80% of these women are mothers (Sawyer & Bertram, 2022). Women in prison have long been at a significant disadvantage in having their needs met, as prisons and jails were designed for men. Women's healthcare, such as medical, behavioral, and OB/GYN, has often been neglected and or ignored. The New Jersey Reentry Corporation's Women's Navigation Project aids in ensuring that incarcerated women receive the optimal medical, behavioral, and social support they need as they reenter their community upon prison release. This Project to date has involved the direct outreach to over 500 women (clients) who were recently released from prison, from jail, on probation, or involved with the courts.

Method/Approach: NJRC provided a list of 559 clients with their contact and other relevant information. The contact method was conducted using Google Voice to directly call clients. The Nurse Navigator provided talking points that included questions to engage in the client's general well-being, health, and the status of medical appointments. Information on additional resources. These resources, such as the Circle of Care, a virtual support group, and programs such as the Women's Roundtable event, a discussion about women's correctional and reentry healthcare needs, were provided to the women and they were encouraged to be active in them. Phone calls to the clients occurred on Mondays from 9:30 am to 5:00 pm, Tuesdays from 9:30 am to 1:00 pm, and Wednesdays from 9:30 am to 4:00 pm. Client participation in the weekly Circle of Care meetings occurred on Wednesdays from 4:00 pm to 5:00 pm. The results of all outreach attempts and engagements were recorded in a spreadsheet designed for this project's purpose.

Outcomes/Results: 446 out of 559 clients (79.8%) were contacted over the course of this internship. Of those contacted: 160 (35.9%) were successfully engaged, 156 (35.0%) voice messages were left, 92 (20.6%) contact client phone numbers were invalid, 32 (7.2%) were not answered and no voice message option was available, and 6 (1.3%) either hung up immediately or assumed it was a scam. Of note, 7 clients who were contacted also attended the Women's Roundtable held in November, 2022.

Evaluation/Conclusion: Out of 559 clients, 160 engaged with the program. While these numbers may seem small, they are incredibly impactful, as exhibited in the following client testimonial: "Before the call, I felt isolated and lost. Since then, I found the support I needed and was even able to get my drivers license back. That feeling of independence and empowerment was life changing and I was only able to do it with yours and the program's support."

Title: Ad Board Planning Strategies for Virtual Companies

Name: Adriana Todorov

Preceptors: Nickia Williams, Operations Manager

Agency: BGB Group

Purpose: Review and update the Ad Board Planning guidelines and checklist to include best practices for the new virtual/hybrid/live world that many companies are now operating within.

Significance: The problem that will be explored is how Ad Board planning varies when Ad Boards are carried out in virtual versus live settings, and how it is harder to engage attendees in virtual Ad Board settings. The Account Team at BGB Group is responsible for planning Ad Boards for clients, and the process for doing so varies based on whether or not the Ad Board will be held in a virtual, live, or hybrid setting. BGB Group's Ad Board requirements will be evaluated, along with clients' needs and specifications, to create the ideal Ad Board planning guidelines and checklist to help BGB support all client needs and optimize engagement in virtual, live, and hybrid settings.

Method/Approach: The materials that BGB Group has on Ad Boards will be reviewed, including what is considered "best practices" for Ad Boards in general, versus "best practices" for Ad Boards that are held specifically in virtual and live settings. When reviewing these materials, a focus will be placed on ideas and implementations targeted at improving engagement at Ad Boards, after which suggestions for updates to the Ad Board guidelines and checklist will be developed. BGB Group's Ad Board guidelines will be revised to include updated and improved "best practices" since the current "best practices" BGB Group has were last updated in October 2020, and the updated guidelines will include "best practices" for engagement depending on the setting that the Ad Board is being held in. In addition, a review of the newly released brand style guide will be conducted to provide reminders and key guidelines for inclusion within the look and feel of the Ad Board.

Outcomes/Results: This will result in both updated BGB Ad Board guidelines and checklists for virtual and live Ad Board settings, which include a large focus on improving and retaining engagement. Additionally, the Ad Board checklist will be developed to cater to brand specifications at hand. The overall goal is to produce updated Ad Board guidelines and checklists for the company to help assist with navigating the post-pandemic work of meeting planning as Ad Boards are now regularly held in both virtual and live settings.

Evaluation/Conclusion: Success will be evaluated through identifying whether engagement has increased in Ad Boards following the implementation of updated strategies. It is suggested that the project be looked at every 6-months to see if "best practices" updates can be made to either virtual Ad Board guidelines or live Ad Board guidelines, and to also ensure that engagement ideas and strategies are being updated as new technologies are introduced or ideas are simply developed. The Ad Board checklist will be evaluated every time a new branded Ad Board is developed to ensure that all branded specifications are included.

Title: Active Living of Women

Name: Sandra Ulokameje

Preceptors: Manuel J. Castaneda, Director of Community Health

Agency: New Brunswick Tomorrow - Live Well Vivir Bien

Purpose: To promote a culture of active living amongst women in New Brunswick by increasing the available resources and educating them on the importance of staying healthy.

Significance: Physical inactivity, or a sedentary lifestyle, can increase the risk of a number of health consequences. In New Jersey from 2020–2021, the percentage of women ages 18–44 who reported physical inactivity or exercise other than their regular job was highest among Black (25.3%) and Hispanic women (28.4%) (America's Health Rankings, n.d.). Live Well - Vivir Bien New Brunswick is a city-wide campaign to create a healthy and active community by connecting people to programs and activities that help achieve better health and overall wellness. Active Living identifies places to encourage physical exercise, such as community parks and activities, that provide more opportunities for exercise. The target of this project is women in New Brunswick. This project is intended to provide resources and tips for women to stay healthy and active in New Brunswick.

Method/Approach: Social media offers an excellent opportunity to connect with women. Two educational videos per week were posted on Live Well's New Brunswick's social media outlets (Facebook and Instagram) for the duration of four weeks using a variety of Tiktok videos. This approach educated women on the importance of maintaining a healthy lifestyle. The objective was to provide resources from others who have had success being active and convey the idea that women in New Brunswick can do it.

Outcomes/Results: Analytics for regular content under Active Living were collected from September 25 to October 27, 2022 (4 weeks). Instagram: Total Impressions (196), Reach (173), and Engagement (9), Facebook Total: Impressions (242), Reach (223), and Engagement (9). This data was compared to project content from November 10 to 28, 2022 (4 weeks). Instagram: Total Impressions (163), Reach (120), and Engagement (7), Facebook: Total Impressions (118), Reach (111), and Engagement (2). The Mental Health and Active Living post had the highest impression, reach, and engagement on both Facebook and Instagram. This was an outlier, but the data for the regular and project posts were generally consistent. Between the regular and project content (Instagram), there was a decrease of 16.8% (Impressions), 30.6% (Reach), and 22.2% (Engagement). For Facebook, there was a decrease of 51.2% (Impressions), 50.62% (Reach), and 77.77% (Engagement).

Evaluation/Conclusion: The project promoted active living for women. The analytics are important for evaluation. The analytics provide the posts' impression, reach, and engagement. A comparison of the analytics during the project and prior to the project was conducted. This determined whether or not the target audience was reached and how successful it was. Based on the data the posts before the project content did better. However, it is important to note that the posts have been out for a longer period of time and the topics are different. Aside from the outlier, the data was generally consistent across both platforms.

Title: 2022 Impact Numbers

Name: Jacqueline Vallejo

Preceptors: Sashay Turner, Communications and Development Manager

Agency: Day One

Purpose: To raise awareness of dating violence and abuse among youth by using Day One's Impact Numbers to generate more funds through fundraiser campaigns such as Giving Tuesday.

Significance: One in three teens report experiencing some kind of abuse in their romantic relationships Day One partners with youth to end dating abuse and domestic violence through community education, supportive services, legal advocacy, and leadership development. Data for the impact numbers for 2022 was able to be synthesized into an infographic for easier view and presentation to funders. The infographic was able to demonstrate Day One's impact on youth through their workshops, counseling and legal services, and learning materials. This data has helped to secure more funding from donors which will allow Day One to continue to increase its services to New York City youth.

Method/Approach: The method to collect data on the impact numbers was to reach out to all programming staff, training team, legal, and social departments who provided services such as workshops and legal counseling, distributed guides, served clients, and took helpline calls. The training data was collected from community educators. Data was also gathered from social workers who provided social services. Data was collected regarding the number of clients served, the number of resources or materials distributed, and the number of workshops conducted. Information was captured using quantitative Salesforce programming data that was required from each department as well as conduction of qualitative research. An excel database was created and maintained for the past several years to keep all numbers organized and tallied. From there, the Canva platform was used to create an infographic that would provide this crucial information to donors and those wanting to know more about Day One in a short, visually pleasing display. The success of obtaining and measuring the data was reflected in the increased number of services and support provided to youth.

Outcomes/Results: Utilizing the data allowed the attention of donors and youth to be seized who could potentially need Day One's services. Donors and youth learned more about how Day One made an impact with real time numbers. Preparing the infographic for outreach to donors and sponsors was essential in bringing awareness to youth who dealt with domestic violence. Gathering the data also enabled Day One to know where they trended and what they needed to rally to increase their impact on- such as the number of guides provided to youth. The increase of impact in specific areas like HelpLine calls also enabled them to see a need for more of those services. With more funds raised from the utilization of the infographics on Giving Tuesday, Day One was able to continue to provide legal representation, counseling services, and emergency relief funding to youth struggling with dating violence.

Evaluation/Conclusion: The goal of gathering impact numbers to use as a marketing tool for donors to be inclined to donate and increase funding for programs was successful. This will enable Day one to reach more youth struggling with domestic violence, and enable them to provide more services such as legal advocacy, mental health services, and preventive workshops. Eventually, success could be measured by expanding Day One's outreach and services to other states nearby such as New Jersey and Pennsylvania. This will grant Day One the ability to keep growing and expanding until they are a nationwide organization, supported both locally in its communities and globally.

Title: Care Coordinator 1

Name: Brianna White

Preceptors: Manager: Rob O'Connor

Agency: Memorial Sloan Kettering (Location: Basking Ridge)

Purpose: Greet/check-in and orient patients to the outpatient visit and to the environment, as well as complete the patient visit by scheduling and coordinating all appropriate tests, procedures, visits, treatments, and consultations in accordance with physician's orders.

Significance: In many healthcare settings, it is hard to find good customer service and many patients are left unsatisfied and underserved. "It can be challenging to provide good customer service when you see many patients daily. As a healthcare employee, you're busy admitting patients and trying to discharge them as soon as possible while documenting their care for their records (Puri, textline.com)."As a care coordinator at MSK, I am working to change the face of healthcare services. These cancer patients often have multiple appointments in a day which keeps them in the hospital for hours. They look forward to seeing care coordinators who can coordinate their journey and ease their uncertainty when it comes to their care.

Method/Approach: Care coordinators are trained with understanding of a warm welcome and how it will be beneficial to the patient's journey. Care coordinators coordinate the journey in order to give patients and their families confidence in their care. It also offers them a sense of familiarity across every department at MSK. Each patient's experience should align as one.

Outcomes/Results: Understanding the effect a care coordinator has in these patients' lives is a major outcome of this position. Patients remember you from short conversations and they are able to build a comfortable relationship with you after seeing them just a few times. Providing comfort and emotional support helps the patients understand that they have something to fight for when battling with their various cancer diagnoses. Contexts and systems are created that allow warm, human-centered interactions. Cold or sterile atmospheres and interactions are avoided completely when coordinating the patient's journeys. Patients journeys will be deemed manageable and easy despite what the clinical side of cancer may offer.

Evaluation/Conclusion: The internship introduces students to the partial work duties of a care coordinator at MSK. Checking patients in and understanding EMR of the patients gives students the opportunity to gain experience and understand how a real outpatient facility would operate in the real world. Working in real-time with patients, demonstrating a warm welcome and being able to coordinate their journey is another step further to improving patient access.

Title: Supporting Struggling Families with the Help of the Community

Name: Daria Wysocka

Preceptors: Executive Director- Heather Nover

Agency: Anshe Emeth Community Development Corporation (AECDC)- Central Jersey Diaper

Bank (CJDB)

Purpose: To engage local schools and organizations to host diaper drives and engage in volunteer opportunities in order to reach more members of the Middlesex County Community.

Significance: According to the National Diaper Bank Network, low-income households are short of 19 diapers a month on average. Without clean diapers, children are extremely susceptible to contracting infections and other illnesses. Further, the price of diapers has increased roughly by 23% in some cases as a result of the pandemic. For low-income families, diapers bring a huge financial burden, though remain a necessity. Thus, partnering with Rutgers University and other community organizations will increase the funding, donations, and volunteers. Many women rely on diaper banks, and being that the AECDC CJDB is the only dedicated diaper bank in Middlesex County, it is imperative that we increase community awareness and engagement.

Method/Approach: Given the increase of prices for diapers and other items that are distributed, the CJDB relies heavily on donations and drives from organizations. In order to increase community awareness about the non-profit, it was imperative to focus the project on outreach to Rutgers University and local high school students. An e-mail was crafted and sent to all about hosting a drive or fundraising. By increasing community awareness, the diaper bank has more resources for clientele, open distribution events and less burden on the set budget.

Outcomes/Results: Overall, the primary goal of this project was ensuring the response of each organization. Many were followed up through the use of social media platforms. Many high school clubs such as Key Club, National Honors Society, and the Human Rights Coalition were interested in supporting the organization. There are multiple diaper drives planned and scheduled for the beginning of January. Another club has planned to sponsor the CJDB for their movie night and donate all the proceeds towards the organization. From this, we received a \$300 donation that will be used immediately to purchase diapers, wipes, and formula. We are also partnering with the Rutgers University Honors College to work on a community service project to be implemented in the Spring 2023 semester.

Evaluation/Conclusion: Increasing community engagement is an extremely necessary aspect of running a non-profit. While many have the privilege to provide their children with diapers, formula, and clothing, others rely on organizations like the CJDB for assistance. As a result, the CJDB is in constant need of supplies, many of which come from donations. Thus, increasing awareness about the diaper bank and how low-income Middlesex County families rely on the CJDB for their necessities is critical. We are able to distribute more supplies more efficiently with the assistance of local high schools and Rutgers University. The diaper bank works to help battle the underlying health disparities that face children today. With an increase in awareness and donations given to the organization, families will receive their diapers quickly and more residents will be served.

Title: Comorbid Psychosocial Issues in Chronic Low Back Pain Literature Review

Name: Ritika Yadav

Preceptors: Samantha Sternkopf, Senior Regional Operations Manager

Agency: Princeton Brain, Spine, and Sports Medicine

Purpose: To conduct a literature review of the comorbid psychosocial issues in chronic low back pain (CLBP) patients.

Significance: Over 70% of the general population experiences low back pain (LBP) once in their lifetime. However, duration of pain as well and number of pain sites has been correlated positively with severity and prevalence of depression. Chronic pain patients develop psychiatric illnesses more readily due to the psychosocial comorbidities they face. In a group of 200 patients with CLBP pain who were entering a functional-restoration program, 77% of patients met lifetime diagnostic criteria and 59% showed current symptoms for at least one psychiatric diagnosis. Certain psychosocial factors have been linked to poor prognosis of CLBP, and thus cognitive behavioral therapies are increasingly promising interventions.

Method/Approach: A literature review was conducted using PubMed and Google Scholar to gather cross sectional information on CLBP and correlated psychosocial factors. Using the search terms CLBP, depression, and chronic low back pain empathy therapies. Essential information was recorded. Consequent steps organized and analyzed the information on a word document. Organizational categories included background points on CLBP, study population descriptions, relationship between psychiatric illness and chronic pain, treatment techniques, and limitations.

Outcomes/Results: Five articles proposed that chronic disability in back pain is primarily related to psychosocial dysfunction. A meta-analysis found that 21 of 23 articles related the severity of pain to the degree of depression. One study linked patients with CLBP to impaired emotional empathy, and showed that cognitive therapy was negatively correlated to pain intensity. Seven studies supported the adoption of a more comprehensive and patient-centric approach to CLBP. Interventions targeting determinants from several different fields such as disability, job dissatisfaction, negative body image, and weakness in ego functioning seem the most promising. An educational flier was created from this project detailing simultaneous psychiatric issues present in CLBP patients, why they are present, and how increased empathy and patience during patient encounters might help strengthen resilience and aid pain management.

Evaluation/Conclusion: With the multi-dimensional origin of chronic low back pain, providers must institute holistic examinations, considering potential barriers to care such as; occupational environments, patient resources, and psychiatric limitations. Patients with comorbid LBP and psychosocial issues have poorer response to treatment, and thus, practicing positive emotional affirmation among clinical staff is an equally imperative part in comprehensive chronic pain management. Patient satisfaction surveys are given on a routine basis to evaluate progress.

Title: EPIC Training

Name: Quadjo Yeboah

Preceptors: Shawket Mourtada, Principal Trainer.

Agency: Robert Wood Johnson Barnabas Health (RWJBH)

Purpose: To design workflow based on training content and make our software more intuitive

Significance: Over 300 million patients have a medical health record with EPIC. RWJBH, over the years, has used EPIC to keep patients' medical data safe and easily accessible. Epic Together is not just about teamwork at RWJBH, it is about harmonizing communication between providers and patients, sharing information between providers and patients, and making patients central to the process. The upcoming upgrade, "Wave 3B," will result in over 9000 providers and employees registering for training. Over 49% have completed registration between Monmouth Medical, Community Medical, and Jersey City Medical Center. The goal is to have 100 percent of medical professionals within the organization ready for the go-Live of EPIC WAVE 4.

Method/Approach: The project manager and shareholders constructed a significant budget to implement go-Live. Classes were scheduled with department supervisors from the various sites going live. Adequate materials were printed and distributed to sites to make the learning experience smooth and efficient. Principal Trainers, alongside experienced Credential Trainers, ensured excess trainers were on hand to teach classes. Provider test out sessions were set up in various go-Live sites to allow providers with recent EPIC experience to test out of the upcoming courses. Command Centers were set up at the main business office and participating facilities to help communicate live issues with managers, analysts, and trainers.

Outcomes/Results: RWJBarnabas Health received a perfect score from health electronic vendor for its HER implementation project, achieving a Gold Star 10 ranking, the highest level of recognition. The project reported a 43% increase in productivity. The current statistics show 167 learners completing classes. Ninety-four percent of end-users (181 students) have completed both class and web-based training. Over 75% of learners completed both class and web-based training for Go Live. On Saturday, October 27, 17 RWJBH medical practices went live on Epic. One hundred four new providers were added to the growing Epic family. Go-Live Support has been set up at the various facilities, allowing providers and other employees to seek assistance. The support staff, made up of both clinical and front desk go-live support personnel, was successfully implemented.

Evaluation/Conclusion: There is a lot of intensity in implementing EHR systems for health organizations. The process is technical and requires a hands-on approach to ensure a smooth transition with different operating systems. The purpose of Epic is to make health records secure, efficient, and user-friendly, a feat that was achieved. The systems will continue to update, seeing the upgrading of previous workflows. With few challenges, the sites that went live have seen less traffic in troubleshooting. The future of tech in healthcare is here, and RWJBH is leading the way to ensure patient information and data are secured and protected.