



RUTGERS

Edward J. Bloustein School
of Planning and Public Policy

Spring 2022 Abstract Book



Internship Abstract

Traditional Internships

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Internship Abstract

Title: Data Analyzation For Project Firstline Infection Control (PFL)
Name: Batool Abdi
Preceptors: Michael J. Hodges, MHS, HO, REHS, CHES
Agency: New Jersey Association of County and City Health Officials (NJACCHO)

Purpose: To analyze pre and post-test data from Project Firstline Infection Control Trainings to evaluate the effectiveness of the program.

Significance: When COVID-19 struck, the world was not fully prepared on how to face the pandemic. This included local health departments, healthcare settings, and daycares. There are protocols and procedures that should be followed when trying to mitigate the spread of infectious diseases in all types of settings. The New Jersey Association of County and City Health Officials (NJACCHO) and the Centers for Disease Control are collaborators on the Project Firstline Infection Control program. This program helps educate people in the community on how to prevent the spread of infectious diseases so that everyone can stay safe. By decreasing the spread of diseases and teaching the public health workforce and frontline workers on how to face infectious diseases, this will help healthcare and other community settings to use their resources more appropriately to keep people safe and healthy. The program also has a Train the Trainer component that equips individuals with the knowledge and skills to provide foundational infection control training to others.

Method/Approach: Pre and post tests for the various courses were given to attendees of the NJACCHO Project Firstline Infection Control Training classes to evaluate change in knowledge and skills. Additionally, there were program evaluations distributed to assess the program and facilitator effectiveness. Methods used for the evaluations included Google forms and SurveyMonkey data.

Outcomes/Results: Pre and post test data indicated program effectiveness as there was an improvement during each session in knowledge and skills from the PFL programs. An example is the comfort rating with the “Basic Science of Viruses” session (the comfort level which was rated on a scale of 1 through 5), and the improvement in that training session was from 18.9% to 45% for the 5 rating which was a 138.095% increase. Each session had both pre and post test questions like this and the attendees were experiencing the same phenomena in each session. For the “Basic Science of Viruses” session, program evaluation and facilitation demonstrated 96.7% of the attendees will use the knowledge they learned in the session into daily practice. There is now an aggregate summary for each session topic and where to improve for each session. There was still confusion on a few questions for some of the topics/sessions and that is now seen through the aggregate data analysis on the pre and posttests. The surveymonkey data showed what parts of the sessions helped the learning process and what participants took away from it.

Evaluation/Conclusion: Overall, the findings from the pre and post test data showed where the Project Firstline Infection Control sessions were the strongest and where there was more clarification needed. Specifically feedback for the evaluator included how to improve each session and what worked including if breakout rooms were necessary when learning about these topics since not everybody participated and adding moderators in each group could help the flow of discussion, specific terminology that needed more clarification, analogies that were used to ground the science and make it more visual, and also how the CDC videos that were shown helped the attendees absorb the information. With the changes that will be required, the efficiency of the program will rise and therefore more gaps of knowledge will close for the attendees of the sessions.

Internship Abstract

Title: The Impact of Social Media marketing in health care

Name: Hiba Adina

Preceptors: Dr. Radia Elidrissi Zoak

Agency: Dental Health Associates - Englewood NJ

Purpose: To create and analyze marketing strategies for Dental Health Associates using Instagram as my main marketing strategy.

Significance: When the COVID-19 pandemic forced the entire world to shut down, companies had to look to more digital solutions. Businesses increasingly turned to digital marketing for sales leads. Seventy-two percent of online marketers describe content creation as their most effective Search Engine Optimization (SEO) tactic. Annual advertising spends on social media will top \$134 billion in 2022, an increase of over 17% YOY (that's an additional \$23 billion!). Creating a space for dental health marketing in the digital world will also increase our overall contribution to population health and allow us to target specific demographics that need to be educated on the importance of dental health. On Instagram, posts with at least one hashtag get 29% more interactions (for profiles with 1,000 or fewer followers). This project will use a variety of different hashtag groupings to organically grow the account and reach a broader audience.

Method/Approach: A new Instagram account was set up for the dental office. An updated logo was created in Canva. From March 1st to April 30th one Instagram post was posted each day. Instagram reels were recorded using an iPhone and edited using the Instagram app. The stock photos were a mixture of free photos found on Pinterest and photos of the office. The hashtag strategy included adding 8-15 hashtags per post to give a more focused identity to the Instagram algorithm. Some posts used fewer hashtags (3-5) to compare results. An artificial intelligence program called Flick.tech was used to identify the most pertinent hashtags. Moz.com was used to collect data on the company's online presence score. Instagram analytics tools were used to monitor the progress of each campaign.

Outcomes/Results: The first hashtag group contained 3 high competition tags, 5 medium competition tags, and 7 low competition tags and was used for 6 days straight. During the first day no hashtags were used and this resulted in no reach of the audience. Day 2 reached a total of 5 new accounts, followed by a big jump the next day leaving day 3 with 17 new audience reaches. Day 4 reached 44 new people but surprisingly there was a decline on day 5, only 22 accounts interacted with the post. The downhill trend continued as day 6 dropped to a total of 7 people only, and then back up to 22 accounts reached on day 7. An averaging of 17.7 accounts were reached per day for the first week of April. Moz.com online presence score improved by a total of 42% from March 1, 2022 to April 7, 2022.

Evaluation/Conclusion: Hashtag strategizing is extremely useful when building a brand's online digital presence. Using the insight tool Instagram offers serves as a beneficial tool for social media marketers to take advantage of since it collects data for you in regards to audience reach, content interactions, and profile activities. The insight tool goes even further to break down the demographic further to let you know who is interacting with your page. On-going hashtag testing will be used to optimize the brand's growth.

Internship Abstract

Title: Red Bank Veterinary Hospital Health and Safety Performance Assessment

Name: Madeline Agresti

Preceptors: Project/Direct Supervisor: Jessica Contenoff, Clinical Manager

Agency: Red Bank Veterinary Hospital

Purpose: To analyze Veterinary medicine safety techniques, in a high-energy environment and propose educational interventions to improve adherence to guidelines.

Significance: Veterinary practice is associated with a large number of potential chemical, biological, physical, and psychological hazards that vary within the workplace setting and the type of tasks performed (Gibbins and MacMahon, et al, 2015). Accidents can be minimized or prevented when proper safety measures are made in response to identified safety hazards. At Red Bank Veterinary Hospital the aim is to provide the highest quality of care to the animals while following all safety measures. To be able to provide care, the staff needs to be able to perform at their highest potential. "Compassion fatigue can damage a person mentally and be problematic to the physical work that they do, contributing to an unhappy work environment and clinical errors being made." (Thompson-Huges, 2019). Veterinary medicine typically attracts individuals who are caring and compassionate so they take on a lot of physical and emotional pain at a cost. This is why RBVH offers mental health services so that the staff can safely work each and every day without feeling mentally exhausted or the effects of burnout.

Method/Approach:

Research and observations were conducted as well as a handful of interviews with the staff at Red Bank Veterinary Hospital. An anonymous survey was also sent to the staff asking about the mental health services offered at RBVH. The staff consists of Veterinarians, Veterinarian Technicians, Vet Assistants, Learning and Development Administrators, and the Head of HR. Interview questions consisted of personal experiences with health and safety throughout the hospital and how each individual feels about the changes that have happened. Specifically, safer techniques to keep the employees physically safe as well as openly offering mental health services.

Outcomes/Results: After four months of researching online, observing, and working with all rankings of staff within veterinary medicine a great deal of information was collected and processed. The primary theme to keeping the workplace running smoothly was to make sure that the staff in charge of the health and wellbeing of the patients felt safe and well. The survey that was sent out showed that the main reason for wanting to work in veterinary medicine was because of the individual's love for animals and need for a purpose. Out of 28 respondents, 40.7% had not dealt with mental health before working in this field. 35.7% said their mental health would improve if they stopped working in this field and 97% think mental health should be discussed more openly.

Evaluation/Conclusion: The primary goal of the project was to show the importance of continuous safety checks and mental health services at veterinary hospitals. Limitations included a lack of responses. Future plans include further research; evaluating more veterinary hospitals and staff; encouraging the discussion of mental health; and proposing mental health services as a core component of employee benefits.

Internship Abstract

Title: Sex-Positivity for Female Bodies Workshop

Name: Tatyana Aguilar

Preceptors: Francesca Maresca, PhD, Director

Agency: Health Outreach, Promotion and Education

Purpose: To empower female-bodied individuals to take control of their sexual experience through learning communication skills, reproductive anatomy, and how to explore their sexuality.

Significance: About two-thirds of sex-positive women feel shame or selfish when they masturbate, and only a third of them feel sexual empowerment. Specifically, studies reported that women who said they felt shame or felt gross also stated having feelings of guilt, disgust and selfish for not being with their partner; or for taking time to themselves when they masturbated. The women who felt sexual empowerment stated they experienced feelings such as powerful, strong, sexy, independent, and satisfied.

Women are generally expected to have offspring and engage in sex with men and masturbation disrupts these expectations which can lead to feelings of empowerment over their own sexuality. A sex-positive workshop for female bodies can lead women towards sexual empowerment and promote feeling positively about their sexuality.

Method/Approach: To improve sex-positive feelings, a workshop was developed on the topics of communication, anatomy, and masturbation. The workshop contained an activity that taught communication skills of needs and wants, another on naming the parts of the vulva, and lastly, a lesson on safe practices for masturbation/self-sex. There were two sets of evaluations. The first workshop and evaluation was for an audience comprised of the facilitator's fellow sexual health peer educators. The participants evaluated various components of program facilitation including delivery, timing of activities, and the quality of the workshop on a scale of one to five (one being not true, three being neutral and five being very true). The second audience comprised students assigned female at birth, or AFAB, from the general student body. Members ranked their answers on the same scale of one to five for each question on how they felt before and after the workshop. The questions were about their confidence levels on talking about sex, their own sexuality, and their retention of what they learned about in the workshop.

Outcomes/Results: Two-thirds of the participants (n=9) were able to identify at least seven of the ten parts of the vulva that they were taught during the workshop. Prior to this workshop only a third that answered ranked at least a four out of five in their knowledge of the vulva. Prior to this workshop less than half of the participants felt comfortable communicating their sexual needs and wants to their sexual partner. After the workshop, seven of the nine participants ranked at least a four out of five. When asked about their ability to identify ways and places to explore their sexuality, only a third of the participants ranked at least a four out of five in ability to do so. When asked about how they felt after the workshop, all the participants ranked a four and above.

Evaluation/Conclusion:

The evaluation proved to have helped the participants improve their confidence and skills in communication, reproductive anatomy, and how to explore their sexuality. This pilot project indicates that larger scale workshops and continuous education can continue to improve sexual empowerment for people with vaginas. Further research on this topic can include a larger audience.

Internship Abstract

Title: Refugees in the American School System
Name: Sabrina Ahmed
Preceptors: Kylie Davis, Youth Program Coordinator
Agency: International Rescue Committee - Elizabeth, NJ

Purpose: To collect and analyze data on refugee families' understanding of how the United States school system works.

Significance: The overthrow of the Afghan government by the Taliban and the subsequent withdrawal of United State military forces resulted in an influx of refugees from Afghanistan to the United States. Since August of 2021, the U.S. has pulled out more than 76,000 Afghan citizens to the United States, according to a representative for the U.S. Department of Homeland Security. Since January 31st, 68,000 Afghans have been relocated to communities across the nation, in cooperation with more than 200 resettlement organizations. Almost half of the refugees are documented as being younger than 18 years old. Being displaced outside their own borders – suggests there are huge gaps between refugees, and their non-refugee peers when it comes to educational expectations.

Method/Approach: School-directed assessments were developed. The Afghan refugees were contacted individually by phone to schedule and present a school orientation. Before presenting the school orientation, the pre-assessment questions were administered. If the parent had an obvious understanding of the topic, a checkmark was placed. If they made a guess or their answer was incomplete, no checkmark was placed. Then, the post-assessment questions were asked after the presentation. During the post-assessment, if a client seemed to have a clear general understanding, a checkmark was placed. If clients received a score of 87% or higher on the post-assessment, then they were noted as having a satisfactory understanding of how the United States school system works.

Outcomes/Results: This project was used to measure the knowledge of how the United States school system works and address any of the refugee family's concerns. The sample size cohort was (n = 14). Pre-test results were as follows, people who knew how the United States school system works prior to the presentation were 0 (0%), and people who did not know how the United States school system works were 14 (100%). Post-test results were as followed, people who understood how the United States school system works following the presentation were 12 (86%), and people who did not understand how the United States school system works post orientation were 2 (14%). Outreach to refugee families is ongoing.

Evaluation/Conclusion: The outcome of the pre-assessment showed that all of the clients were not knowledgeable about how the United States school system works. Most of the remaining clients that did not pass the pre-assessment showed that there was knowledge gained because of the orientation given, post-assessment results raised to 12 (86%) for people who understand how the United States school system works. As a result of this project, the clients have a better understanding of the nature of the school system, the educational opportunities available to them, the values and functions of the school system community, and the central objective of the school system as an academic enterprise.

Internship Abstract

Title: Maternal and Child Health
Name: Sania Ahmed
Preceptors: Maritza Raimundi-Petroski, Vice President
Agency: The Children's Home Society of New Jersey

Purpose: To effectively conduct research, literature review and coordinate presentations as part of the professional development/training track for staff working with women, infants and children.

Significance: There is a total population of 283,000 people in Trenton, NJ and over 81% of the population identify themselves as African American or Latinx (THT, 2020). The city of Trenton has been affected socially, economically, and physically by decades of inequitable investment compared to larger communities in New Jersey. Due to these factors, residents are often skeptical about the healthcare that they receive. Maternal health is crucial for mothers and their babies. The Children's Home Society of New Jersey (CHSofNJ) works with women, infants and children to educate and aid in healthier living with several programs and health services. Through effective training and presentations for staff at CHSofNJ, residents of Trenton may grow a higher trust for the maternal healthcare system and thus overall improve maternal health.

Method/Approach: In order to effectively develop training programs/presentations for the staff of the Maternal and Child Health Program at CHSofNJ, extensive background research must be conducted. This research can be done through studying and reviewing previous and current maternal health programs such as AMAR Community-Based Doula Program, CUNA Prenatal Health Education and Support Group Program, Birth Parenting Counseling, and the Women, Infant and Children Program. Reviewing the material that has worked for programs can allow the staff at CHSofNJ to be educated on maternal health needs by using best practice techniques. Potential speakers will also be sought out in hopes that they will give Diversity, Equity and Inclusion (DEI) presentations to the CHSofNJ staff.

Outcomes/Results: A presentation about the impacts of the COVID-19 pandemic was created by looking at previous programs along with scholarly articles about maternal health programs. Staff will be informed of what CHSofNJ has done in terms of the pandemic and how it has affected the maternal health field and its programs. The presentation includes information about the effects of the pandemic on mental health and physical health for pregnant individuals. The presentation will be 7-8 minutes long and recorded by April 20th. It will be shared with CHSofNJ's staff in the first week of May with a survey at the end evaluating the presentation and if it was effective in sharing COVID-19 information.

Evaluation/Conclusion: CHSofNJ offers many programs, at no cost, for women, infants, and children in terms of maternal health. However, there are community members who refuse to reach out for help in fear of being discriminated against or receiving improper care. There are potential challenges the staff may face while being educated or distributing information to community members. There might be a language barrier present. Currently, CHSofNJ offers information in both English and Spanish. Visuals (graphs, pictures, etc.) while relaying information may make it easier for a non-English speaker to understand. If the staff is educated about a recent pandemic, then they will be able to confidently answer questions that patients, or the community asks them. This will increase the level of trust that the community has for the staff of CHSofNJ.

Internship Abstract

Title: Furthering Futures for Young Adults and Biweekly Outreach Programs

Name: Samirah Alauddin

Preceptors: Kathy Wright, Executive Director of NJPC

Agency: New Jersey Parents' Caucus - Elizabeth, NJ

Purpose: To provide resources, referrals, and support to young adults dealing with mental and behavioral health challenges to improve that quality of life

Significance: Currently, the United States is in a mental health crisis and nothing is being done to help with these matters. Mental illness is a deadly disease that contributes to many deaths that occur worldwide. Statewide, young adults are dealing with mental illnesses and don't receive the help needed. It's even harder for individuals living in disadvantaged communities where there is no support system, making it more difficult to access necessary resources. The New Jersey Parents' Caucus is eager to help families by providing resources and training for both the parents and children with mental health disabilities. This program provides referrals and information from multiple organizations to reduce the trauma that many individuals have encountered. The new project will provide resources for those with mental health disabilities as well as assist those from disadvantaged communities learn about college and credit to better prepare them for adulthood.

Method/Approach: In order to help those with mental health disabilities and those from disadvantaged communities, a program was implemented entitled Furthering Futures. Furthering Futures focuses on changing individuals' lives and supporting them by providing peer counseling and educational workshops on financial aid, credit counseling, and employment assistance. A brochure and flier was created to explain the program and the resources being offered. A client intake form was created as well for individuals interested in participating in the program to fill out. To bring awareness to the programs provided, four Outreach events were hosted and there was weekly marketing on all social media platforms to provide information about my program. The first event was virtual where a Facebook Live was created to inform individuals of the new programs created and the services provided. The events were advertised on NJPC's website, as well as Facebook and Instagram page. The second Outreach event was in-person, located at Trinitas Regional Medical Center. There was a lot of information and resources provided to the people who came in and many families learned about the mission of Furthering Futures and how it can benefit the community as a whole. Those who filled out the intake form were contacted and scheduled into a peer support or educational workshop meeting via Zoom.

Outcomes/Results: The Facebook live received a total of 214 views. 80 individuals were reached at the four outreach events between March 7th and April 25th and were given Furthering Futures' brochures and intake forms. As a result of the Outreach events, 6 new clients were registered. Surveys were given out to the 6 clients to rate the performance and effectiveness of Furthering Futures.

Evaluation/Conclusion: Through the surveys given out, clients were able to analyze the progress made mentally. The increase of clients from 0 to 6 demonstrates the success of this program. Those in need now have an organization to get help from when needed. The intake forms help keep track of all the individuals assisted and the surveys help analyze the effectiveness of the program. This program will be continued in the summer to help any families in need of help.

Internship Abstract

Title: An Analysis of the 2022 CABOMETYX Pan Tumor Campaign

Name: Alyanna Aldea

Preceptors: Direct Supervisor: Kinsey Hackworth, Account Supervisor
Project Supervisor: Teresa Day, COO & Managing Director

Agency: BGB Group

Purpose: To analyze the agency's process for developing and promoting the CABOMETYX #1 TKI claim and compare cabozantinib with other TKI competitors.

Significance: Cancer is the second largest leading cause of death in the United States (CDC, 2020). However, with different therapies, the survivability of many cancers has been greatly increased. Targeted therapy is a type of cancer treatment that aims to block specific pathways in order to inhibit tumor growth and survival (BGB, 2022). Currently, there are many drugs marketed as targeted therapy that oncologists can prescribe to their patients. In order to educate healthcare physicians and provide consumers with the treatment they need, pharmaceutical companies rely on marketing agencies to inform their audience about their product (Matheson, 2016). With the major goal of promoting the efficacy and effectiveness of CABOMETYX' (cabozantinib) therapy, the BGB Group incorporates creative marketing strategies with an analysis of competitors to ultimately provide target consumers with the treatment they need.

Method/Approach: In order to explore the CABOMETYX campaign and BGB's approach, a comparative review of both competitors' and BGB's internal campaigns was established. First, a selection of different competitor drugs branded as TKIs were studied with the purpose of identifying core claims and strategies. Next, an analysis of the BGB agency's internal campaign processes was conducted. The agency regrouped internally on a daily basis in order to align with the client's needs, FDA guidelines, and creative direction. This involved multi-departmental meetings involving departments such as Account, Creative, Project Management, and Medical in order to facilitate the creation of deliverables that satisfied client, agency, and governmental standards. By comparing the core claims and marketing of both CABOMETYX and their competitors, the agency's strategies to promote cabozantinib could be analyzed in order to make further recommendations to the client.

Outcomes/Results: An analysis of competitors such as Lenvima and Inlyta showed similar trends in the language used in their marketing. Popular pharmaceutical marketing strategies relied on positive terms such as "efficacy" and "first" as a means of distinguishing themselves from other drugs. In addition, calls to action were common among the studied competitors. BGB incorporated similar strategies throughout the current CABOMETYX campaign. Throughout the internship, the process for approving the #1 TKI claim required numerous FDA reviews and appropriate changes based on client and reviewer feedback. With consideration to the client's needs, the #1 TKI claim was approved with an appropriate disclaimer, allowing the agency to incorporate this claim in current and future projects.

Evaluation/Conclusion: The success of the CABOMETYX campaign and the #1 TKI campaign will be measured over the course of the campaign as deliverables continue to be finalized. Ensuring a balance between FDA approval and meeting clients' needs is an essential aspect of pharmaceutical marketing.

Internship Abstract

Title: February's Updates on Children's Online Safety Legislation

Name: Maleiha Ali

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

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

Purpose: The Legislative Monthly Update is a newsletter that provides a governmental and non-governmental scan tracking all current news regarding online safety and media policy.

Significance: In 2021, a series of articles by the Wall Street Journal called *The Facebook Files*, revealed that the platform was aware of its harmful effects, and that they knowingly contributed to misinformation, polarization, and the invasion of consumer privacy and safety. Several pieces of proposed legislation are currently in place with bipartisan support, yet many of them have not been passed yet or are in place but ineffective. Children and Screens supports research efforts to study the harmful effects of media on youth, and serves as expert witnesses in legislation congressional hearings. The updates keep the public up to date and Children and Screens informed on current congressional hearings, relevant reports, leading advocacy groups, and more.

Method/Approach: In order for Children and Screens to serve as an expert witness, they must have an in-depth understanding of current legislation on children's online safety. The [Library of Congress](#) has an online tracking measure of the current legislative activities of the 117th Congress (2021-2022) which serves as an important tool for gathering information. Other trustworthy sources such as Forbes and The National Law Review provided differing opinions from people with different political affiliation, other research institutes, and various social groups. Being aware of the current state of legislation and observing the public's reaction allows Children and Screens an opportunity to support more research efforts and decide how they'd like to serve in the legislative process.

Outcomes/Results: The February Legislative Update was divided into several categories that provided a brief overview of the current policy landscape, as well as key players to watch like congresspeople, committees, and advocacy groups. Several new bills were introduced into the House or Senate, as well as committee hearings on already passed bills looking to amend or get rid of current bills. There were updates in bills like the Social Media NUDGE Act. Significant jumps occurred in the realm of child safety law, particularly in the PROTECT Kids Act, EARN IT Act, and the Children's Online Privacy Protection Rule. International developments in online safety bills in Thailand and the European Union are underway. Domestically, there were major COPPA settlements and introductions of White House bills.

Evaluation/Conclusion: The public's call to the government demanding for regulations on social media to increase children's online safety has increased. With the introduction of fairly new bills that are all in their beginning stages, Children and Screens has ample opportunities to research the suggested bills and aid them in being effective and efficient during their congressional hearings at the House and Senate.

Internship Abstract

Title: Pediatric Patient Outreach with LLS

Name: Zehra Ali

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

Agency: The Leukemia and Lymphoma Society

Purpose: To connect pediatric patients with Leukemia and Lymphoma Society (LLS) programming and support that will aid them and their families through their fight with blood cancer.

Significance: In New Jersey, the incidence rate for pediatric leukemia is higher than in the United States for each gender and age group (New Jersey Department of Health). Though the incidence rate is high, many patients and caregivers lack the resources necessary to grapple with this difficult diagnosis. The Leukemia and Lymphoma Society has created programs and services including emotional support, financial services, and educational programming free of charge. These services are advertised through the outreach initiatives of LLS Patient and Community Outreach staff, along with phone calls, mailings, and marketing via social media, and the LLS website. The goal of this project is to connect more patients with services and programs that can benefit them throughout their cancer journey. By doing so, patients will have more access to fight their cancer and thrive during this difficult time.

Method/Approach: To review what steps were needed to increase partnerships with patients and LLS programming, a ledger was created noting all interactions for each hospital or cancer center treating pediatric patients, and the associated social workers were identified. These social workers were presented with LLS programming and educational materials. Social workers were encouraged to refer their patients to LLS so they can be contacted and matched with appropriate support. Next, each patient referred was contacted via phone and connected with programming that could aid them. Programs include free nutritional counseling, financial assistance, support groups and more.

Outcomes/Results: There are 10 cancer centers/hospitals treating pediatric patients in New Jersey. Of the ten social workers contacted, all received LLS material to distribute to their patients. Data collected found that in the northeast region 31,893 pediatric patients have been diagnosed with blood cancer. With new LLS material distributed, there was a 30% increase in pediatric patients added to the LLS database. Each patient was connected with a program or form of support to match their needs. This contributes to the bigger picture because now each of these patients can benefit from new programming created by LLS.

Evaluation/Conclusion: With each patient that is connected to LLS, they are added to the pediatric patient count and the gap is lessened with those who are in need. With the 30% increase, can provide support to more pediatric patients than ever before, while continuing to connect more new patients along the way. Each new member has been connected with a new program whether it be financial copay assistance, nutrition advisors, support groups, or caregiver workbooks, and more. After the pediatric educational program that will take place at the end of May, the count of new patients can be reassessed and Patient and Community Outreach staff can determine what new programming they need to be connected with. This program entitled “Emerging from a Pandemic: Psychosocial Impact on Child and Adolescent Cancer Patients” will be taking place to introduce new patients and caregivers to LLS and will offer further information for pediatric cancer patients and caregivers.

Internship Abstract

Title: Effectiveness of Mobile Health Interventions on Postpartum Women with Previous GDM

Name: Aila Altunbilek

Preceptors: Project Supervisor: Shristi Rawal, Ph.D., Assistant Professor

Agency: Rutgers School of Health Professions

Purpose: To conduct a literature review on the effectiveness of mobile technology to promote lifestyle changes and improve cardiometabolic outcomes among postpartum women with previous gestational diabetes.

Significance: Gestational diabetes mellitus (GDM) is the most common pregnancy complication and is associated with an increased long-term risk of diabetes and cardiometabolic diseases (Potzel et al., 2021). Globally, GDM is estimated to affect about 14% of pregnancies. Half of these women will develop Type 2 diabetes in the future, a rate that is three and a half to seven times that of women who did not experience GDM in pregnancy (Cheung et al., 2019). Face-to-face behavioral interventions use structured lifestyle modifications, such as ensuring optimal weight loss, good dietary routine, and physical activity habits, for women with GDM or following GDM to prevent or delay the onset of cardiometabolic diseases. However, these interventions have shown a lack of effectiveness for these women. This literature review explores how the features of a mobile health technology can be tailored to effectively promote lifestyle changes to reduce GDM women's risk of Type 2 diabetes and other cardiometabolic diseases.

Method/Approach: A literature review was conducted using PubMed and Google Scholar with terms related to mHealth interventions, GDM, and Type 2 diabetes/cardiometabolic risk factors. Relevant articles were selected in the following research areas: 1) risk factors for progression from GDM to T2D and other cardiometabolic diseases, 2) beliefs and perceptions of women with previous GDM, 3) efficacy of face-to-face lifestyle interventions, 4) efficacy of mHealth lifestyle interventions. Excel was used to record relevant content categories abstracted from the article, including the objective/purpose, study population description, description of the intervention, main findings, and limitations. The findings from these articles are summarized in this paper.

Outcomes/Results: Two meta-analysis studies found women with GDM are at a seven-fold diabetes risk as compared to women without GDM, with peak risk of diabetes occurring within the subsequent five to sixteen years postpartum. Three studies showed an early onset of T2D is associated with an elevated risk of cardiometabolic disease, including cardiovascular disease, in women with previous GDM. Six face-to-face randomized control trial lifestyle interventions found mixed results of effectiveness. Four of these studies found no significant increases in physical activity targets. Two of these studies found a reduced risk of diabetes after an intensive lifestyle intervention. Three RCT mHealth interventions reported higher retention rates and slightly positive trends in lifestyle changes. Five mHealth interventions were limited to pilot studies, though one ongoing study began to show positive trends in the use of text-messaging and activity monitors for some women with previous GDM (Cheung et al., 2019).

Evaluation/Conclusion: As the prevalence of GDM continues to increase, the development of mHealth lifestyle interventions needs to target cardiometabolic risk reduction in women with previous GDM. Larger RCT studies with longer follow-ups are needed to clarify the effectiveness of mHealth interventions in preventing long-term cardiometabolic outcomes.

Internship Abstract

Title: Transitioning to Value Based Care using Comprehensive Kidney Care Contracting Program

Name: Ololade Aluko, Intern

Preceptors: Bill Bing, MHA, Operations Manager

Agency: JNT Healthcare Consulting

Purpose: Design an implementation plan for Comprehensive Kidney Care Contracting (CKCC) program with the initial focus on administering the PAM survey to all participants.

Significance: The Comprehensive Kidney Care Contracting program was designed to help healthcare providers reduce the cost and improve the quality of care for their patients with late stage chronic kidney disease. The program aims to show patients how to take active control of their care in order to prevent the need for dialysis. A Patient Activation Measure (PAM) survey is administered to each patient, which generated a personalized activation level number that is reflective of the how capable they are of managing their own care. As part of the program they will be connected with resources that will be most valuable to their specific needs and a tailored support team that will work with the patient to improve their overall safety and satisfaction.

Method/Approach: To assemble a directory of all the Chronic Kidney Disease (CKD) patients, a patient alignment roster was filtered to create an Excel spreadsheet that included patient names, date of birth, providers, and their CKD status. The next course of action was to make sure all the patients had appointments scheduled to visit their physician before June 1, 2022 in order for the Renal Care Coordinator (RCC) to be able to meet with them. For the beginning stages of this implementation process, the main goal was to get all the patients to complete the Patient Activation Measure survey, which is a 10 to 13 question survey that assesses three key domains- knowledge, skills, and confidence that reflects the patient's ability to self-manage. If the RCC is unable to meet with the patients in person, they will then make arrangements to conduct it telephonically.

Outcomes/Results: At Ocean Renal Associates 385 chronic kidney disease patients qualify for the CKCC program, of those patients 282 of them have completed their initial PAM Survey. With the completion of the survey, each patient will receive an activation level from 1-4 which will give the provider a better understanding of their patients along with identifying what care approach will be best suited for them. The more activated the patient is we expect to see better health outcomes. Patients who are lower in activation report less satisfactory interactions with their healthcare providers resulting in them feeling overwhelmed, making any self-management task more difficult. As they continue the program we expect to see progress being made towards their healthcare goals. ORA currently has 72% of their patients who have completed the survey, ranking them at number 4 in New Jersey.

Evaluation/Conclusion: While we are still in the beginning stages of the implementation process of the CKCC program, the main objective of administering the PAM surveyed which has been going well. Ocean Renal Associates experienced some issues with scheduling patients that had drifted away during the pandemic, through some revision the RCC has made great strides in meeting with these patients and will continue to meet performance goals. The implementation process design conducted will continue to be used for future projects.

Internship Abstract

Title: Assessment of CentraState Medical Center's Weigh of Life Program and the WellPower Community Online Platform

Name: Eleni Aradas

Preceptors: Preceptor: Maryellen Dykeman RN, MSN, Director of Population Health
Direct Supervisor: Brandon Eldershaw: Supervisor of Community Wellness

Agency: CentraState Medical Center: Health Awareness Center

Purpose: To evaluate the engagement and participation of members of CentraState Medical Center's Weigh of Life program and the WellPower Community discussion forum.

Significance: According to the National Health and Nutrition Examination Survey (NHANES), around 31.1% of adults were considered to be overweight (Fryar et. al., 2021). High BMI has been linked to the growing epidemic of non-communicable diseases such as cardiovascular disease and diabetes, where the risk for these conditions increase as BMI increases. Despite having such a profound impact on the risk for non-communicable diseases, these risks can be diminished by weight loss (World Health Organization, 2021). According to the World Health organization, supportive communities can play a significant role in one's path to weight loss and overall wellness by supporting individuals on their wellness journey (World Health Organization, 2021). Furthermore, socializing can positively contribute to the health and wellness of aging individuals (Elder Care Alliance, 2017).

Method/Approach: The weight loss program (Weigh of Life) meets in-person every Tuesday for 16 weeks and is run by two instructors who host a lecture/discussion to discuss various aspects to living a healthy lifestyle, including diet and physical activity. Participants are provided with supplemental resources like goal sheets and informational packets to further elaborate on the weekly material. Furthermore, they have access to on-demand videos and resources, through the WellPowerNJ platform (which is also used by Weigh of Life Members that are exclusively online). Participants were also introduced to the WellPowerNJ application—which serves as a discussion forum to build relationships and motivate users—and given instructions on how to use it. Each Friday, a discussion prompt was posted in the WellPower Community that referenced material from the meeting held earlier in the week to further engage participants. Participant feedback for both in-person classes and the online platform was collected using a mid-course evaluation, which was answered by 7 of the 12 in-person participants. Engagement with the online course content was further viewed to assess content views.

Outcomes/Results: The evaluation form showed that every participant enjoyed the in-person meetings and interacting with the other participants. Six of the seven respondents said they would participate in this class again and would recommend this course to others. The online discussion forum showed mixed results where around half of participants reported using the online discussion forum. Engagement remained low for the first half of the course, increasing slightly after motivational phone calls were implemented.

Evaluation/Conclusion: Overall, Weigh of Life's in-person meetings were successful in garnering interaction from the participants. Participants enjoyed the weekly meetings and talking to the instructors and other participants about their experiences, accomplishments, and struggles. On the other hand, participants needed more encouragement to use the WellPower Community. In the future it may serve to send out surveys to online participants, and begin check in calls earlier in the course.

Internship Abstract

Title: Pediatric Bloodspots: Keystone to Change
Name: Valeria Arias
Preceptors: Direct Supervisor: [Ann Marie Hill](#), NAACCR Consultant
Agency: North American Association of Central Cancer Registries (NAACCR)

Purpose: To analyze state laws and regulations on bloodspots in order to match up with the National Cancer Institute's (NCI) SEER cancer registries.

Significance: NAACCR, along with the NCI, maintains records of cancer cases across the United States. States also collect pediatric bloodspots at birth to identify infant risks for genetic diseases. Bringing together these two sources of information offers researchers an opportunity to understand how pediatric cancers develop. The prevalence of Pediatric Cancer in the United States is estimated to be at 15,590 children and around 2000 children, ages 0 to 19 die yearly (NIH, 2021). This project will be able to identify markers that will aid in the development of a cure for certain pediatric cancers. In order to access these bloodspots, policy plays an impactful role in gaining permission to access this information. Understanding these laws and policies will allow the NCI and NAACCR to link the data for research purposes.

Method/Approach: A database was created including all U.S. states and territories that have cancer registries and collect bloodspots. Laws and policies for each state were then reviewed to determine how this data might be accessed for research purposes. Knowing the laws and regulations in order to contact the different departments is essential for a thorough search and following proper protocol. The database has 13 sections titled A through M. Sections A through C focus on location, D is a drop down if the state facility allows research, E and F discuss regulations and confidentiality agreements and concerns. Section H through K discuss residence location, collection, and viability as well as fee for access to the bloodspots. With the collection of this data, the National Cancer Institute will know what bloodspots are available to jumpstart their revolutionary initiative that can change the future of pediatric cancer.

Outcomes/Results: The Newborn Screening Translational Research Network provided the necessary data to complete the excel database. The primary information was listed through the NBS site, but the information had not been updated since 2020 so further investigation and research was required to update and insert the proper information in the database. Through various hours of data collection, a composite list of consensual and approving states was found. Many states that had large amounts of bloodspots collections opted to not be part of the study. However, a quarter of the states and territories of the United States opted to not provide a response at this time, but were open to the possibility of providing bloodspot samples down the line.

Evaluation/Conclusion: National Cancer Institute, North American Association of Central Cancer Registries, and all other affiliated parties continue to plan and lay the foundation for this project.. This database will be used as a guide in future proceedings for the pediatric bloodspots project. This is a multibillion dollar project that potentially may revolutionize our understanding of pediatric cancer by providing researchers with a means to link genetic risks from cancer with actual diagnoses.

Internship Abstract

Title: Developing New Marketing and Collaborative Initiatives with Non-Traditional Methods

Name: Joseph Arning

Preceptors: Alexander Deeb, CEO and CoFounder

Agency: ClassHook

Purpose: To develop a strategy for ClassHook to onboard new ambassadors, and expand their services to new educators across the globe.

Significance: Teachers want to show students why their learning is important in the real world, but they often lack resources to accomplish this goal. Presenting the relevancy of topic information increases retention. Retention drop-off is 56% in 1 hour, 66% after a day, and 75% after 6 days (Terada, 2017). ClassHook curates and organizes content from popular media that educators can use to reinforce their lessons. This curated Content Library of age-appropriate short TV and movie clips aligned to school standards allows educators to spend more time teaching and less time searching for ways to “hook” their students. The goal of this project was to increase the number of new ambassadors for ClassHook.

Method/Approach: The process of increasing the number of ambassadors at Classhook with finding the most active users. A list of Classhook's most frequent users was compiled, and all users on the list received an email to register for the program. participants who expressed interest in the program received an application to fill out. Each applicant was evaluated based on time spent using ClassHook, social media following, and their answers to the short question provided. Ambassadors either moved forward to the next stage or were sent more information on how they could be a better fit. The next stage of evaluation began with teachers making a short video about how they use the service and how it benefits them. If their video made it past this stage, they were sent to complete an onboarding call with one of the founders. This 15 to 30 minute call helped them get an ambassadorship link, access to discounts, and one-on-one access with the founders to request video content.

Outcomes/Results: The goal of this process was to gain 100 ambassadors by the end of May. 04/05/2022 there were 24 ambassadors signed up and fully onboarded and 15 awaiting approval. The most effective method was the targeted email campaign. The majority of educators contacted came directly from a list of teachers who used ClassHook in a month.

Evaluation/Conclusion: One issue that arose was the initial emails contained graphics, which caused most of them to go to people's spam folders. Subsequent emails did not contain images and the response rate was higher. Based on the response rate of the email campaign it is clear that teachers do express interest in classic, and are willing to become ambassadors when presented with the opportunity. In the future to improve the process using automated email tools will allow more educators to be contacted.

Internship Abstract

Title: Investigating Sources and Solutions for Maternal Health Disparities

Name: Yara Assadi

Preceptor: Dr. Gloria Bachmann

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

Purpose: To investigate the source of numerous maternal health disparities, the theoretical frameworks for resolving these disparities, and examples of health programs that aim to ameliorate health outcomes in vulnerable female populations.

Significance: The United States has the highest rate of maternal mortality and severe maternal morbidity in the developed world (GBD 2015 Maternal Mortality Collaborators, 2017; Tikkanen et al., 2020). New Jersey, the resident state of this research institution, ranked 47th is one of the worst rates of maternal mortality and morbidity rates in the country. In addition to the elevated maternal mortality rate, there are significant and unwavering health disparities within those statistics, especially across racial and ethnic groups. For example, Black mothers are four times more likely to die than white mothers before, during, and after birth (Creanga et al., 2015; UnitedHealth Group, 2021). There are significant social determinants of health at play, and effective interventions have yet to be implemented in many New Jersey and US hospitals.

Method/Approach: Research was conducted through a literature search of journals and peer-reviewed articles that were found on reliable search engines including Google Scholar, PubMed, and Rutgers Library. Other resources used in the research were reliable websites such as non-profit organizations and websites that are run by government agencies, such as the CDC, and local maternal mortality review committees of 48 jurisdictions (42 states, five cities, one U.S. territory). The search terms included were "maternal mortality", "racial disparities", "disparities", "prevention", "health programs", and other related search terms.

Outcomes/Results: The leading causes of pregnancy-related deaths among non-Hispanic Black women were cardiomyopathy, embolism, preeclampsia and eclampsia, cardiovascular and coronary conditions, and hemorrhage. Nearly two out of three maternal deaths were preventable (Davis et al., 2019). Common themes identified as contributing factors to the leading causes of pregnancy-related death among Black women included knowledge deficits on the part of patients and providers, inadequate training and/or personnel, lack of coordination in the management of patient care, and unmanaged chronic conditions. These incidents are not only preventable at the time of delivery, but they are also preventable through adequate prenatal care. Other risk factors of low health literacy were low socioeconomic status and incarceration status.

Evaluation/Conclusion: Though the responsibility for managing these contributing factors ranges from the patient to the provider to the systems of care, the public health community and the state government has a role to play in addressing them. With initiatives such as Nurture NJ, where New Jersey is availing state dollars and legislative support for initiatives to ameliorate maternal health outcomes, the healthcare industry should establish action-oriented solutions, such as improved training for maternity ward personnel (managing patient's risk, i.e. the use of anticoagulants and thrombolytics to prevent embolisms), and improved patient education on warning signs associated with their chronic conditions. The Women's Health Institute also partners with local and state governments, which further enforces the relationship between the scientific literature and practical applications in clinical settings.

Internship Abstract

Title: Electronic Medical Records (EMR) Filing and Assessment

Name: Ashley Atubi

Preceptors: Assistant CEO: Aditi Khadkikar,
Medical Records/ Direct Supervisor: Vicki Ciampa

Agency: Green Brook Regional Center

Purpose: To maintain the safety and confidentiality of patient medical records and making them easily accessible to patients' healthcare providers and staff within Green Brook Regional Center

Significance: Under the American recovery and reinvestment act of 2014, all public and private healthcare providers, and eligible professionals were required to adapt and demonstrate meaningful use of EMR records in order to maintain their current Medicaid and Medicare reimbursement levels. EMR records are used to improve quality, safety, and efficiency while reducing health disparities. Used to engage with clients and their families while improving care coordination in the population, electronic medical record systems have been created to maintain privacy and security for patient health information, classifying it as meaningful use. Shown in its many benefits to healthcare organizations everywhere, the use of electronic medical and health records have spread worldwide. Having the health professionals practice and understand the benefit first hand will help the process of advancing to paperless records.

Method/Approach: Over the course of three months, the filing and review of client medical records were divided into categories based on the medical need for each client. The category most used is the consults, which was what was filed into the digital records. Looking to condense the information retained in the physical client charts, the digital records will be used to initiate accessibility and efficiency for doctors and nurses on the floor. Charts for all 65 clients have been filed and organized onto the facility's global database and acts as a place for review when with their client.

Outcomes/Results: Due to the routine of having paper and physical records for each client, there was some push back from some of the doctors and nurses. Some of the staff refuse to scan and upload newly added consults and documents as needed, making the use of these electronic medical records difficult. The only way to achieve meaningful change was to break habits and show them the convenience of having digital records. However, this was hard to get used to without the help of the facility. After working with paperless records for a month, the health professionals in the facility have found it to be more convenient. Having to sign out client charts and carry the heavy binders, it has been easier for them to make use of this change. The next step would be to make the records more electronically portable by using iPads or tablets to bring to the clients' rooms when they are being treated.

Evaluation/Conclusion: Without the facility's assistance in providing electronic devices, the convenience and accessibility of the electronic medical records will become useless and nonessential. In order for this to happen, investments on tablets or laptops will be essential for the shift in habits and culture. As a way to advance this process, training on how to use the technology and how to keep up with the newly dated documents will be critical in the future and overall establishment of electronic medical records in Green Brook Regional Center.

Internship Abstract

Title: Reducing Racial Disparities In Cancer Care with PINPOINT

Name: Rebecca Ayala

Preceptors: Julianne Ani, MPH, Lab Manager

Agency: Rutgers Cancer Institute of New Jersey

Purpose: To empower Black cancer patients and their families to improve their knowledge and awareness about cancer therapies and participate in shared decision making with their doctors.

Significance: Racial disparities in cancer care have been a constant trend and continue to affect traditionally underserved populations. Among these are the Black and African American populations who have lower cancer survival rates and lower rates of accessing timely and quality care. Black men have a 19% higher cancer mortality rate than White men while Black women have a 14% higher cancer mortality rate than White women. Furthermore, mistrust of healthcare providers and researchers is common in the Black community due to historical mistreatment such as in the Tuskegee Syphilis Experiment. Consequently, the research study PINPOINT strives to empower Black patients and help patients and their families share informed decision making.

Method/Approach: The PINPOINT online intervention was created to be patient-centered and culturally tailored to improve knowledge and awareness about precision oncology and clinical trials, foster informed decision-making, and increase favorable attitudes about clinical trials. In-depth key informant interviews were conducted virtually with Black cancer patients, relatives, and providers to provide feedback and perspectives on the PINPOINT prototype. After providing informed consent, eligible participants were asked to complete a baseline survey. Participants then attended a virtually conducted 1-1.5 hour recorded interview session collecting insights and feedback used for transcription purposes and data analysis. Participants then completed an exit task assessing PINPOINT's usability and consistency of the website. Quarterly CAB meetings made up of Black cancer advocates, relatives, and oncology providers in the community were conducted in collaboration with further prototype developments.

Outcomes/Results: A total of 18 key informants participated in an hour long interview reviewing the PINPOINT prototype website. The interviewees were Black cancer patients (n=10), relatives of Black patients with cancer (n=5), and providers in oncology settings (n=3). In review of the data collected, the key themes discovered were user interface design, chatbot, stock photos, content, and cultural relevance. User interface design had positive feedback regarding the organization, color scheme, and navigation of the website. Half of participants disliked the navigation of the chatbot construct while the other half appreciated the simplicity, design, and layout of it. Stock photos around the site were critically evaluated on representation, and participants found the content to be helpful and understandable, and appreciated the resource section of the site (Financial Aid, Transportation, Wig Resources, Legal Education) and videos. Most participants felt that the site was culturally relevant, trustworthy, credible, and effectively addressed community concerns in regards to distrust and cultural mistreatment.

Evaluation/Conclusion: A majority of participants found the website to be very helpful, informative, and overall had high usability ratings. There were some technical difficulties and stock photos that needed to be changed. Following these minor revisions, pilot testing will be conducted with Black cancer patients who have not yet made a decision on their treatment. Following pilot testing, a larger scale randomized controlled trial is planned to determine efficacy. The PINPOINT intervention will then be made available to the public for broad dissemination.

Internship Abstract

Title: Rutgers Occupational Noise and Hearing Conservation Program and Area Monitoring

Name: Temilola Babalola

Preceptors: Direct Supervisor: Peter Skeels, Manager, Health & Safety Services
Project Supervisor: Rosa Kramper, Health and Safety Specialist

Agency: Rutgers Environmental Health and Safety

Purpose: To conduct area monitoring and noise measurements in various new or renovated Rutgers buildings to identify noise exposure, protect individuals from harmful noise exposures, and provide proper signage if harmful noise exposures have been identified.

Significance: Every year, REHS conducts noise monitoring and assessments to identify areas that could have potential to expose individuals to high levels of noise. According to Rutgers Occupational Noise and Hearing Conservation Program (2000), this program applies to all Rutgers employees with noise exposures that equal or exceed the OSHA Action Level of 85 decibels on the A-scale. REHS identifies the source of the noise that individuals may be exposed to through noise surveys, exposure assessments and noise exposure control strategies. The goal of this program was to identify and measure any areas that may have loud noise levels “produced by stationary sources (such as mechanical equipment) and encountered during specific work activities, monitor actual employee noise exposures to determine if they exceeded OSHA regulatory limits” (REHS Standard Operating Procedures for Noise Surveys and Assessments, 2000) & post signage in spaces that exceed the noise level of 85 decibels.

Method/Approach: To begin this assessment, it required a Noise Survey Instrument, Instrument Sound Level Calibration Check calibrator, and the REHS Stationary Source Noise Survey Form. The noise survey instrument that were used is the Quest Sound Level Meter Model #2400 and the Instrument Sound Level Calibration Check calibrator used was the Quest Q/C-10 Calibrator Model #QC 10. These instruments were used in mechanical rooms with equipment such as the Central Heating Plants, Chiller Plants, and Building Mechanical Equipment rooms containing chillers, pumps, and compressors in various Rutgers Buildings to determine whether or not the mechanical equipment being used exceeds 85 decibels. Data was collected from four mechanical rooms on Busch Campus

Outcomes/Results: Of the sample size cohort (n=4), noise monitoring was conducted in the following buildings: The Center for Integrative Proteomics Research, Pharmacy building, Waksman building, and Richard Weeks Engineering building all on Busch Campus. Of the four buildings, the mechanical rooms in Waksman and the Pharmacy building had mechanical equipment that exceeded the OSHA Action Level of 85 decibels. Readings for the Waksman building vacuum pump were measured at 90 dBA, using the Quest Sound Level Meter, which was seen as severe. The Richard Weeks Hall chilled water pump (#2) and the secondary chilled water pump (#4) read 87 dBA. The mechanical rooms in The Center for Integrative Proteomics Research and Pharmacy building did not have equipment that exceeded 85 dBA.

Evaluation/Conclusion: The assessment indicates that there were mechanical rooms that have equipment that exceeded the OSHA Action Level of 85 dBA and some mechanical rooms did not exceed that. The results from the noise survey instrument, the Quest Sound Level Meter Model #2400 indicates that mechanical rooms that exceeded the 85 dBA will require REHS to install signage indicating that hearing protection is required in the space when working operating any of the equipment there.

Internship Abstract

Title: RWJUH-Somerset Healthy Eating/Active Living Initiative (HEAL)
Name: Victoria Bertrand
Preceptors: Direct Supervisor: Serena Collado, Community Health Director
Agency: Robert Wood Johnson University Hospital Somerset-Somerville, NJ

Purpose: To promote healthy eating and active living in Somerset County by increasing fruit and vegetable consumption.

Significance: Chronic disease contributes to 7 in 10 deaths in the United States each year. In Somerset County, four of the top leading causes of mortality are cardiovascular diseases, stroke, cancer, and Alzheimer's Disease. Approximately 23.5 percent of adults were considered obese in 2017. In 2019, 53.3 percent of residents in the county were food insecure. In 2020, 8.5 percent were considered food insecure, an increase of 3.8% since 2018. To combat this problem, RWJUH Somerset has implemented a County Community Health Improvement Plan to promote a healthy lifestyle for all residents by the year 2025. This project will focus on expanding the consumption of fruits and vegetables in the community to help prevent and manage chronic disease.

Method/Approach: To address the objectives of the Community Health Improvement Plan (CHIP), research was conducted to assess the indicators and strategies. The first step focused on the needs assessment including the populations who were most food insecure and the consumption of healthy foods by race and ethnicity. In Somerset County, 90-91 percent of Asians and Whites residents were reported to eat healthy foods on a regular basis. Black and Hispanic residents reportedly ate less healthy foods on a regular basis at 77-79 percent. The towns in Somerset County that were identified as food insecure were Bound Brook, South Bound Brook, North Plainfield, Manville, and Franklin Township. Currently, there is no surveillance data available for fruit and vegetable consumption in Somerset County. The next step focused on finding research and identifying the baselines and targets for the community. The last step involved outreach through collaboration with the Healthier Somerset food policy community partners.. A list of partners who were interested was created for this objective. This outreach was conducted by holding meetings and inviting food bank representatives and stakeholders in the community to discuss the identified areas of concern.

Outcomes/Results: This CHIP objective is part of a larger strategy to address chronic disease in Somerset County by 2025. Conducting research played a key role in the progression of this objective. The metrics for this focus area were conducted through the Somerset County Health Needs Assessment and Zufall Health. About 14 percent of SNAP dollars were spent on produce in Somerset County. The estimated expenditure is \$163,359.

Evaluation/Conclusion: To determine the project's effectiveness, the project will be evaluated by The Chronic Disease Committee who will be monitoring this information on a quarterly basis. Follow-up meetings with the food policy community partners will be conducted to assess progress. The final outcome for the project will be assessed in three years. This will help to ensure that the residents of Somerset County have access to resources and education that promote long-term healthy eating habits.

Internship Abstract

Title: Analysis of the impact of Press Ganey surveys on health organizations

Name: Filobatir Beshay

Preceptors: Kristen Shlossberg (Director of Labor Relations)

Agency: Saint Peter's University Hospital

Purpose: To distribute and analyze the significance of the Press Ganey surveys on hospital quality, safety, patient satisfaction, and policies.

Significance: One of the most significant aspects of the biannual Press Ganey survey is the feedback that management receives from their employees. This feedback is used to determine the effectiveness of the methods employed by the manager. This feedback is directly correlated to the efficiency of the different departments and is used to rank these departments and their managers in tiers. Tier one is the best and most efficient department and manager while tier three is the worst and least efficient department and manager. These tiers aid upper level management in improving the inefficiencies within their hierarchical structure.

Method/Approach: The 2020 Press Ganey survey was used as a starting point to determine the hierarchical structure of each manager within the organization. With the help of the human resource information systems analyst, information was pulled and a spreadsheet was created that contained all of the employees and the manager they report to. Managers were sent an email to confirm their direct reports. And upper management confirmed the accuracy of the information. This information was then sent to Press Ganey to facilitate the production of the survey.

Outcomes/Results: There were approximately 140 emails sent out to all of the managers, and about 90% of the managers responded within the first week of receipt. These emails were sent out at the beginning of March, therefore, all of the managers have responded by now. Although the survey has not yet been distributed, we expect to gain insight on the rapport between leadership and their employees. We need this information in order to address the alarming turnover rates exhibited in our organization. It will also help determine the areas in which we should focus our attention on for improvement or change.

Evaluation/Conclusion: The Press Ganey surveys are extremely beneficial to healthcare organizations because they can help HR determine which departments are underperforming, as well as get some insight on how employees view their supervisors, which is directly correlated to departmental performance. Although the process of this survey may be long and sometimes tedious, we must fulfill our due diligence to get the most accurate results and feedback.

Internship Abstract

Title: Impact of Philanthropy Graduating Seniors Can Have on a Public University Post COVID-19

Name: Yasmin M Ibrahim

Preceptors: Melissa Halpin

Agency: Rutgers University Foundation

Purpose: To explore the impact of philanthropy on graduating seniors and how to encourage involvement within Annual Giving.

Significance: Philanthropy is a huge part of higher education. The Senior Campaign Lead oversees the Scarlet Senior Class of 2022 Campaign. The campaign was orchestrated to encourage seniors to get involved with annual giving to their “soon-to-be” alma mater to help support various programs that hold significance to the student. The senior class campaign helps build the future alumni donor pipeline. Establishing that pipeline is a large barrier within many public universities. The campaign works to educate seniors about the importance of a collective impact, which is not just one person making a large gift, but a group of donors choosing to give a little to make a large impact. Beginning in 1979, alumni financial donations became the largest source of private gifts to colleges and universities (Council for Aid to Education, 2005). Since then, alumni donations continue to make up the largest group of donated dollars – more than nonbusiness organizations, religious organizations, business operations, corporate gifts, and foundations (Cook & Lasher, 1994; Snyder & Dillow, 2012)

Method/ Approach: The Scarlet Senior Campaign allowed us to be able to observe which marketing practices would effectively raise funds. We strategized by building a committee of Rutgers seniors for peer-to-peer outreach. By holding large and small educational programs and events, the campaign has used signature events to bring attention to the importance of giving like the Senior Donor Receptions. The Senior Donor Reception would be used to thank donors and help them celebrate their graduation, supplemented by smaller tabling events to successfully educate throughout the campaign. We advertised these educational programs by posting flyers, sending emails, and leveraging social media posts. We offered donor recognition using philanthropy cords and various gifts to the senior class to recognize them for their philanthropic efforts.

Outcomes/Results: The goal of this campaign is to be able to compare the statistics on this current fiscal year of annual giving compared to previous years. Analyzing how different factors have contributed to whether the project has successfully understood what the incoming population of graduating seniors needs to be able to get involved with their alma mater. Midway through the semester, the project has been able to collect the estimated amount of over 400 graduating seniors out of 6119 students. The goal is to educate a minimum of 1000 about the importance of supporting Rutgers annually as an alumnus and hopefully, at least 500 of those seniors donate to an area meaningful at Rutgers.

Evaluation /Conclusion: Establishing benchmarks between Senior Class, allow for us to better measure our goals for the following graduating senior class. COVID 19 was the biggest barrier, impacting many students, however less than last year because students were not 100% remote nonetheless still destabilizing the academic year. Administering satisfaction surveys at the end of the campaign and at the Senior Donor Reception, to hear out the graduating seniors and evaluate the senior's take on the programs hosted and the communication involved in the process, will supplement the campaign to understand whether the efforts were sufficient to the set target demographic.

Internship Abstract

Title: Decreasing Neck & Back Pain

Name: Maria Carapucci

Preceptors: Direct Supervisor: Hetal Sojitra, PT, DPT
Project Supervisor: Rasik Sojitra, Office Manager

Agency: Care and Cure Physical Therapy

Purpose: To analyze the causes behind the increased number of patients with neck/back pain and spread awareness on the importance of physical activity.

Significance: Individuals who work from home are in need of preventive exercises and treatment exercises to relieve their pain. Not enough people are aware of how much damage bad posture can do to their body over time. Research shows that you should stand up from your seated position at least every hour to allow your body to rest the muscles engaged in sitting all day. The number of patients with back and/or neck pain has increased since the pandemic started due to working from home conditions. Patients that transitioned from the office to their home said that they found themselves taking less steps throughout the day. This evidence comes directly from patients who work from home and who are experiencing neck or back pain as a result. Awareness must be spread about the importance of good posture, lifestyle changes, and beneficial exercises.

Method/Approach: Between February 1, 2022 and April 1, 2022, complaints from fifteen out of twenty patients complaining about neck/back pain were working from home doing mostly desk work. Research was conducted using International Journal of Health Sciences, John Hopkins Medicine, and interviews with the doctor, on prevention, and causes and treatment of back pain. A list of lifestyle changes and effective exercises that target the reduction of neck/back pain was compiled into Google Docs. A variety of stretching and strengthening techniques were taken by photo and video in the office with patient permission. These were posted to the agency's Instagram with the incorporation of reels, a popular marketing tool. Consistency was kept by using the same hashtags on each post which is a method used to draw more attention to the post. In total, 8 posts were created between March 11, 2022 and April 20, 2022.

Outcomes/Results: For patients visiting the office, a handout was placed in the waiting room that lists do's/don'ts and three effective exercises to help neck and back pain. The first reel posted to the Instagram account was a success by receiving 33 likes and 3 comments from new followers. Twenty-six followers were gained from March 11, 2022 and April 20, 2022 which shows that reels do work. The second reel posted received 24 likes, making it the second most successful post out of the 8 total. The Instagram account went from 88 followers to 114 followers as a result of educational posts created to help others.

Evaluation/Conclusion: The handout in the waiting room was appreciated by patients as it acted as a reminder to complete their exercises on their off days from physical therapy. Most patients said they wish they knew about preventative exercises earlier. In the future, it will be crucial for patients to be aware of the correct work-from-home setup and incorporating physical activity into their daily routine.

Internship Abstract

Title: Catalyzing Fresh Definitions of Modern-Day “Leadership” for Equity

Name: Saily Cedano

Preceptors: Elsa Falkenberg, Principal Investigator

Agency: Urban Institute

Purpose: To analyze how Robert Wood Johnson Foundation can bring leadership development innovators together through various research and communication networks to create holistic leadership development programs for equity-focused traditional and non-traditional leaders.

Significance: For equity-focused leaders, development programs are meant to provide opportunities to form community with other equity leaders, evolve creative leadership capacities, and increase social justice education awareness. While funding for internal and external leadership development has grown over the past decade, 71% of organizations still share hesitancy that their leaders are able to lead their organization into the future. The Robert Wood Johnson Foundation contracted the Urban Institute to research effective leadership development program models that both provide the type of social justice dialogue needed and ensure equity leaders are well-nourished throughout their commendable endeavors.

Method/Approach: The project’s goals were centralized into four core questions: [1] What can be learned from leaders? [2] How can organizations or institutions enable and prioritize equity focused efforts? [3] What tools, training, and resources can RWJ provide to help these equity leaders? and [4] How can funders support new models of collective leadership? A literature review regarding current leadership challenges and development opportunities was completed. Most of my work has regarded supporting the literature process. Then I assisted with one to two interviews held with key stakeholders.

Outcomes/Results: Thus far, literature review and interview findings suggest that current development programs reinforce elitist leadership structures, diminish equity-leaders’ ability to engage with and learn from community-orientated and non-organizational projects, place leaders of color within predominantly-white development programs that disregard various socioeconomic conditions to leadership and change, and more. Effective interdisciplinary leadership programs tend to congeal critical human development opportunities outside of mere professional ones, such as addressing learning to drive change with a personal investment, building resistance against burn out, remaining agile, enforcing social emotional learning skills, creating personal barriers, and more. Leadership development programs within cohort styles tend to provide these human development opportunities the most.

Evaluation/Conclusion: Public and private sector entities have responded to the protests by giving some of these leaders mandates and/or funding to accomplish enormously difficult racial equity goals, but these amazing individuals are still profoundly under-resourced and facing entrenched resistance to change. Our goal is to help transform existing leadership development programs and inspire new collective leadership development programs so that they provide substantially more and better support for leaders of color who are seeking to advance racial justice in the wake of the 2020 Black Lives Matter protests and are now facing resistance and backlash.

Internship Abstract

Title: System Strategy 12-County Environmental Assessment

Name: Angelina Cerasani

Preceptors: Dane Denby, Director of System Strategy, Northern Region
Veronica Barone, Manager of System Strategy
Annie Steelman, Senior Vice President of System Strategy

Agency: RWJBarnabas Health

Purpose: To identify trends of specific geographic service areas and provide a snapshot of market factors that impact strategic decisions to make educated allocations of resources.

Significance: Today, residents of New Jersey still struggle to access healthcare services to maintain health. Currently, 13 out of the 21 counties in NJ struggle to access primary care (Cadmus & Weaver). The pandemic made accessing healthcare even more challenging as NJ saw a 6.8% increase in insured patients in 2019 (Hollom-Trundy). Major health systems, like RWJBarnabas Health, dominate the market in an effort to provide access to care to more people in the state. RWJBarnabas Health currently owns 27.1% of the healthcare market in New Jersey. RWJBH serves eight counties but is looking to expand market share to twelve counties to accomplish their goal to bring providers to patients. System Strategy provides major stakeholders information, to make important decisions of how to distribute limited resources and move the system forward. By analyzing a variety of data, RWJBH can draw conclusions on how to address the demographic and connect them to quality healthcare.

Method/Approach: The overall approach was to prepare and analyze 1.8 million entries through the usage of pivot tables, graphs, and formulas including Vlookup in Excel. The data was acquired from projection data from healthcare database, SG2. The data was then categorized into different elements of market share and volume by institution, service line, geographic location, age cohort, system, etc.

Outcomes/Results: From the data, RWJBH service area covers majority of NJ residents, that are growing at a slow pace. They are the market leader, but have an opportunity to improve market share in a competitive market. Compared to NY & PA hospitals, NJ residents are choosing to receive services in-state. RWJBH service lines have consistently grown, but did experience a slight decline in 2020. RWJBH continues to grow market share in the traditional 8-county area and has great opportunity in the 4-county area. RWJBH continues to serve majority of Medicare and Commercial insurance payors, but a higher self-pay/uninsured population than the market. Outpatient services continue to expand across all service lines.

Evaluation/Conclusion: The environmental assessment is performed to better understand and assess the population's need in healthcare services and the health system's positions and opportunities. From the results, RWJBH has an opportunity to grow in the new four county area. RWJBH currently has low market share in these 4 counties but that is likely due to lack of facilities in these regions. The population is growing at a slow pace, with the largest increase being in the 65+ cohort. RWJBH should focus on outpatient services and supporting declining service lines including orthopedics and neurosciences. Overall, RWJBH should focus on building a presence in the four new counties to connect more people to quality healthcare.

Internship Abstract

Title: NDSS Adult Summit: On the Road Promotion

Name: Nicole Chalecki

Preceptors: Direct Supervisor: Rachel Grimm Health Program Manager- Aging and Caregiving

Agency: National Down Syndrome Society

Purpose: To promote the National Down Syndrome Society's three one-day Adult Summit: On the Road events, in order to increase the knowledge of resources available for adults with Down Syndrome and their caregivers.

Significance: There are an estimated six million people in the world with Down syndrome, who are predisposed to certain medical conditions like congenital heart defects, sleep apnea, and most commonly Alzheimer's disease (GDSF, 2013). In recent decades the life expectancy for people with Down syndrome has increased drastically from 25 in 1983 to 60 today (GDSF, 2013). With quality educational programs, stimulating home environments, good health care and positive support from family, friends and the community people with Down syndrome tend to lead fulfilling and productive lives. This evidence shows the lack of resources and knowledge in past decades is the reason for a short life span in individuals diagnosed with Down Syndrome. The National Down Syndrome Society works hard creating opportunities like the Adult Summit to educate families and self-advocates about their options and resources available.

Method/Approach: The National Down Syndrome Society's health team actively recruited experts to speak on subjects which included topics such as mental health, comorbidities, education and employment. Informational emails highlighting the agenda and speakers were sent out to prospective attendees along with previous attendees that increased ticket sales. Social media content was created and posted to spread awareness of the event and its relevance to the target audience. Lastly surveys were created and distributed during and after the event to gain feedback for future Adult Summits. The surveys were analyzed to determine which areas and topics were a success that could be used again for future Summits.

Outcomes/Results: In total 266 tickets were sold for the in person and virtual Adult Summit: On The Road in Jacksonville, Florida. Over the course of two days there were seventeen speakers that included doctors, professors and researchers that spoke on topics such as the importance of Down syndrome research, Alzheimer's and Down syndrome, and COVID-19's impact on adults with Down syndrome. There were a total of thirteen exhibitors providing resources to self-advocates and caregivers of Adults with Down syndrome. Outcomes for the Adult Summit: On The Road in Indianapolis, Indiana, will be available in June.

Evaluation/Conclusion: Survey results conclude all sessions were beneficial and informative. Respondents all said they would come to future NDSS events. Surveys provided for the next Adult Summit in Indianapolis have concluded families want to learn more about employment options for their loved ones with Down syndrome, along with the transition between high school and college or into the workforce.

Internship Abstract

Title: Anti-Candida Diet Assessment

Name: Naomi Chee

Preceptors: Direct Supervisor: Alan Macioszek, Office Manager
Project Supervisor: Ida Boesler, MD

Agency: FFC Sleep LLC

Purpose: To analyze the effects of an Anti-Candida diet on decreasing *Candida* overgrowth in the intestinal tracts of high risk patients.

Significance: The microbiome of the intestinal tract is a complex system which consists of various organisms, one being *Candida spp.* While harmless, overgrowth of *Candida spp.* can be associated with intestinal mucosal infections. Overgrowth of this fungus can be determined through stool tests which can indicate higher than normal levels. Symptoms associated with overgrowth include fatigue, abdominal pain, bloating and constipation. The implication of an Anti-Candida diet has been introduced in some practices in order to limit the intake or eliminate the intake of sugars and carbohydrates. This is based on the reasoning that *Candida* is a fungus which primarily feeds on foods which break down into glucose. This evidence indicates that there is growing research in the effects of diet modifications on decreasing *Candida spp.* overgrowth.

Method/Approach: For this project, there were ten patients assigned to follow and track their progress with the diet program Dr. Boesler assigned to them. During this initial evaluation, a Medical Symptom/Toxicity Questionnaire (MSQ) is administered which has patients rate their symptoms to help find underlying causes for the overgrowth. An MSQ is then given to the same patient with every follow up visit in order to track progress, as a decrease in total score indicates a decrease in symptoms or symptom severity. The Anti-Candida Food Plan published by The Institute for Functional Medicine is then emailed to the patients after their first visit. Follow up phone calls and interviews are conducted to go over the patient's adjustments to their new diet and answer any questions they may have.

Outcomes/Results: Of the sample size (n=10) 6 (60%) patients showed a decrease in their MSQ total while 4 (40%) patients showed an increase in MSQ total. Each patient had their progress tracked over the course of 3 MSQ's, including the questionnaire from their initial evaluation. Of the 6 (60%) patients that revealed a decrease in their MSQ total, 4 (67%) patients indicated a decrease in the specific areas of the digestive tract and joints. Of the 4 (40%) patients who noted an increase in their MSQ total, 2 (50%) patients revealed decreases of sub sectional scores regarding digestive tract and energy/activity. All the scores above were taken in conjunction with the patients incorporating the Anti-Candida Food Plan.

Evaluation/Conclusion: At the end of the study, it was concluded that more than half (60%) of the patients saw a decrease in their symptoms due to the Anti-Candida diet as indicated by the decrease in their MSQ scores. Conversely, less than half (40%) saw an increase in their overall scores which means that the new diet did not provide much relief to their symptoms. While there are many strategies to combat *Candida spp. overgrowth*, this study showed that modifying a diet to be low on carbohydrates and sugars can effectively decrease the symptoms of such overgrowth. However, there is still much more research to be done to solidify a causal relationship as certain external factors may impact the effectiveness of a new diet. Each patient has their own individual symptoms, food intolerances and specified program assigned by Dr. Boesler. Ultimately, patient education and promotion of a new diet can aid in *Candida spp. overgrowth* but the most successful results are seen with the most compliant patients.

Internship Abstract

Title: Human Papillomavirus Vaccination Graphic

Name: Grace Chelius

Preceptors: Project Supervisor: Sandy Cowan, President of NJCCC

Agency: New Jersey Cervical Cancer Coalition

Purpose: To educate at-risk populations on the dangers of Human Papillomavirus and the effectiveness and benefits of HPV vaccines in order to decrease negative health outcomes and increase vaccination rates.

Significance: Human Papillomavirus (HPV) is the most common STI in the United States, with over 43 million infections in 2018 alone (CDC, 2018). Although 9 out of 10 HPV infections clear up on their own within the first two years, if left untreated HPV can cause a variety of health issues, ranging from genital warts to different forms of cancer (CDC, 2018). As of 2018, only 39.9% of people ages 18-26 in the United States have at least one dose of the HPV vaccine, while only 21.5% had received the recommended number of doses (CDC, 2018). The willingness on the part of parents and young adults to get their children or themselves vaccinated is also an issue for HPV vaccination rates. In fact, many parents cited that vaccinating their child against HPV will increase the likelihood that they will engage in sexual intercourse as their main reason for not getting their child vaccinated (CDC, 2018).

Method/Approach: Data was collected from a series of national surveys to better understand the reasons behind Human Papillomavirus vaccine hesitancy in parents of children ages 11 to 18. After analyzing data from the CDC and the National Cancer Institute, parents were divided into five categories of overarching reasons behind not vaccinating their children against HPV: Safety concerns, lack of knowledge of potential risks of the vaccine/contracting HPV, lack of recommendation by physicians, child not sexually active, and not necessary for child. Statistics on the safety and effectiveness of HPV vaccines were also gathered and categorized to address each of the five major hesitancy categories. Using the five categories that were identified, an infographic was developed and created to be made into a pamphlet and distributed to participants and attendees at the upcoming NJCCC 5K race in April

Outcomes/Results: The number of pamphlets distributed at the 5k race was recorded and divided into three categories: pamphlets taken by race participants (runners), pamphlets taken by general attendees (non-runners), and pamphlets that were left over. Of the 200 pamphlets that were printed, 53 were taken by race participants (runners), 82 were taken by general attendees (non-runners), and 65 were left over. The number of attendees who opted to sign up for the NJCCC general information email system was also recorded. 74 attendees who were not previously in the email network were subsequently signed up for future correspondence.

Evaluation/Conclusion: The results of the pamphlet distribution indicate that many people who were in attendance at the annual 5k were interested in learning more about the dangers of HPV and the efficacy of HPV vaccines. A large number of the attendees and participants, as well as many members of NJCCC are people who have been affected by cervical cancer in some shape or form. The hope for this outreach effort was to educate people on the dangers of HPV and the efficacy of the HPV vaccine in hopes that they would be able to make an informed decision about vaccinating their children.

Internship Abstract

Title: Pfizer Investigational RSV Vaccine Phase 3 Clinical Trial

Name: Michelle Cheng

Preceptors: Imene Beche, Senior MFM Research Coordinator

Agency: Saint Peter's University Hospital

Purpose: To screen for healthy pregnant mothers to receive Pfizer's investigational Respiratory Syncytial Virus (RSV) vaccine to assess the efficacy, safety, and immunogenicity of the vaccine.

Significance: Prevention of RSV infection in infants is a significant unmet global medical need. RSV is the leading cause of bronchiolitis and viral pneumonia in infants and can lead to fatal respiratory distress, especially in those with risk factors including underlying disease or absence of an effective healthcare system. Worldwide, RSV kills almost 118,200 children annually, with about half of those deaths occurring in infants 6 months (Shi et al., 2017). In the United States, RSV is the leading cause of infant hospitalization, with an annual hospitalization of more than 60,000 in children 12 months and younger (Parikh et al., 2017). There is currently neither specific treatment for RSV infection nor a vaccine to protect against the disease. Pfizer has developed an investigational RSV vaccine that will be administered to pregnant women, who will produce antibodies that will be transferred transplacentally to the fetus, that will protect infants against RSV disease.

Method/Approach: The ongoing investigational study on Pfizer's RSV vaccine is a multicenter, randomized, double-blinded, placebo-controlled study to assess the efficacy, safety, and immunogenicity of the ID or placebo in infants born to healthy mothers vaccinated during pregnancy, as well as the safety and immunogenicity of the mothers themselves. Mothers were deemed eligible for the study based on a set of inclusion and exclusion criteria. Inclusion criteria included healthy women between the age and gestational age of 18-49 years and 24-36 weeks, respectively; negative HIV antibody test, syphilis test, and hepatitis B antigen test; and an ultrasound performed at 18 weeks of pregnancy with no significant delta abnormalities. Exclusion criteria included having a body mass index greater than 40 kg/m², bleeding disorders, history of severe reaction to vaccines, in vitro fertilization, high risk pregnancy, history of complicated birth, maternal health complications, and immunodeficiency disorders. Mothers who passed both screenings were enrolled in the study and followed up for 12 months after vaccination, while their babies were followed up 12 months after birth.

Outcomes/Results: From Saint Peter's, a total of 531 mothers were screened. From that, 233 mothers failed the inclusion screening and 298 mothers passed. Of the 298 that passed the inclusion screening, 115 failed the exclusion screening and 183 passed. Of the 183 mothers, 180 mothers stated that they were uninterested in participating, while 3 mothers were enrolled into the study and given the RSV vaccine. On the international scale, almost 6,300 mothers have been vaccinated with 5,400 infants born from different research sites. Pfizer's goal is to have a total of 10,000 participants enrolled.

Evaluation/Conclusion: Three out of 531 mothers have been enrolled in the study from Saint Peter's research site. Because the study is ongoing and international, Pfizer has yet to compile all the data necessary to conclude the efficacy of the investigational vaccine on pregnant women. More participants and data will be needed before concluding the study.

Internship Abstract

Title: Expanding Access to Health and Hygiene Resources to the Homeless Population in the New Brunswick Area

Name: Shelina Chotrani

Preceptors: John El-Maraghy, AEMP & Kelsey Lynch, RN, BSN | Co-founders, Intern Supervisors

Agency: Archangel Raphael's Mission (ARM)

Purpose: To reduce the health disparity gap in accessible health and hygiene services to individuals in Middlesex County communities through volunteer recruitment.

Significance: For every 10,000 people in the United States, 17 people experience homelessness (National Alliance to End Homelessness, 2022). Homelessness widens the gap between individuals and their access to health and hygiene resources as well as perpetuates the severity of new and existing health problems this vulnerable populace may face. Housing is the most essential – but challenged – need, followed by the need for regular meals and adequate clothing (Fleury et al., 2021). Archangel Raphael's Mission (ARM) recognizes that health and hygiene access has been identified as an extremely overlooked service in most urban communities, including New Brunswick. The nonprofit provides nightly, community dinners to the homeless through partnerships with local businesses. On average, ARMS provides 50-70 meals a night. Through the means of social media, ARMS aims to curate a stockpile of content to share and engage with others within the community to attract and recruit volunteers to provide health and hygiene services.

Method/Approach: Social media was identified as the primary planning tool for all events relating to ARMS volunteer recruitment. Posts were uploaded to Instagram stories to spread awareness of the cause at hand– to expand equal health and hygiene access in New Brunswick– and to inform students and other community members that volunteering opportunities are available. The direct message feature on Instagram was utilized to message sorority and fraternity organizations in hopes of recruiting students, given the initiative of completing community service and outreach hours in return.

Outcomes/Results: After collecting data from the weekly meal log– which records the number of meals served nightly, the number of meals leftover after each service, and the number of volunteers present nightly– specific days within the week were identified to need more volunteers. An Instagram post was crafted and shared which included a link to a GoFundMe and a description of what a typical ARMS volunteer experience consists of. In the span of 18 days, the GoFundMe met more than two-thirds of the requested donation, \$1000. Of the interested individuals looking to volunteer, college students were the majority. Most of these students are either affiliated with sorority and fraternity organizations or are dietetic majors.

Evaluation/Conclusion: In conclusion, the volunteer recruitment was successful and ARMs was able to increase awareness of their organization. The GoFundMe link will remain active for further monetary donations. The social media content created throughout the span of the internship is considered evergreen and will be utilized between now and the future.

Internship Abstract

Title: Assessment of Drug Prevention and Recovery Outreach Efforts

Name: Moumita Chowdhury

Preceptors: Frank Greenagel, Recovery Supervisor
Field Supervisor: Jewel Savvides, Peer Support Supervisor
Task Supervisors: Cindy Charles, STAR Case Manager, and Brenda Rawles, Family Support Coordinator

Agency: Prevention Links - Roselle, NJ

Purpose: To maintain outreach efforts in the STAR and Family Support programs by creating and developing marketing strategies and collecting and inputting data for drug prevention and recovery.

Significance: In the United States, 21 million people have at least one addiction, with only 10% of those addicted getting treatment (Yerby, 2021). In Union County, 4% of the population suffers through substance use, with 48.6% of there being an unmet substance abuse treatment demand (NJ Drug and Alcohol Abuse Treatment, 2020). The unmet demand represents the need for a larger network for outreach. Prevention Links provides support services to those suffering through addiction via outreach, awareness, and prevention programs. Unfortunately, due to the pandemic, Prevention Links was underserving and not reaching participant goals. The STAR program has a minimum goal of 40 participants, and in January, there were less than 10. The Family Support program's minimum is 70 participants, and in January, there were less than 40. This project will use outreach techniques to create partnerships with other organizations in order to gain participants and resources that will help participants.

Method/Approach: There are four phases in the outreach plan. The first phase is making initial contact with the organization and getting the contact information of a case manager, director, or coordinator. The second phase is reaching out to the contact person and sending them information about the STAR program or Family Support program. The third phase is arranging a meeting to discuss collaboration and the last phase is establishing recurring meetings. The first phase of outreach was completed in this project by utilizing a list of organizations to contact in order to create partnerships. By completing this phase of outreach, it allows Prevention Links to garner more interest and create mutually beneficial relationships. Participants are able to reap the benefits of partnerships, while Prevention Links is able to create awareness in different areas.

Outcomes/Results: The work that is being done through this project is part of a larger scope of outreach methods. A total of 75 organizations were contacted for the Family Support team, with 42 being successful. Twenty-six organizations were contacted for the STAR team with 20 being successful - a success rate of 77%. The organizations that are successfully contacted are put into a spreadsheet for easy access so that the rest of the phases can continue.

Evaluation/Conclusion: Prevention Links is an organization that works with various sides of recovery, whether it be helping the families of those in recovery, directly helping those in recovery, or preventing drug abuse. The success of the project will be determined by the success of the outreach events and partnerships, which will be completed by the task supervisors monthly by the organization monthly by the organization.

Internship Abstract

Title: Using Social Media to Promote Health Education to College Students

Name: Caroline Clarke

Preceptors: Sandy Dawoud MA, College Health Initiatives Program Manager

Agency: Step Up, Vax Up - Newark, NJ

Purpose: To promote health equity and vaccine education among college students across social media for a statewide contest encouraging health education.

Significance: COVID-19 vaccines have been authorized for use for people above the age of 5 years to protect people from becoming sick or severely ill with COVID-19. There are 47 colleges and universities in New Jersey offering degrees, many of which have mandated immunization against COVID-19 as a prong in their mitigation strategies as campuses reopened for in-person instruction. Step Up, Vax Up is the newly launched program from The College Health Initiative supported by the Partnership for Maternal and Child Health of Northern New Jersey and the New Jersey Department of Health. The campaign's main project was a contest marketed to New Jersey college students to promote peer-to-peer COVID-19 education through a podcast or video submission. The growth and maintenance of the Instagram account, along with sufficient resources on the website, is essential in growing and sustaining a network of college students for future program endeavors and ensuring educational materials are available.

Method/Approach: Research for health and COVID-19 related content was sourced from the Center for Disease Control and Prevention and New Jersey Department of Health's websites. A fact sheet was produced to include information on the coronavirus disease, illness prevention, and vaccine information. A main tab on the Step Up, Vax Up website was added with this information as well. The Step Up, Vax Up content creation contest was launched December 1, 2021 and ran through April 30, 2022. An Instagram reel was created to promote the contest and outline basic guidelines. Instagram's in-app analytics feature was used to track reach and engagement.

Outcomes/Results: As of April 22, 2022, the promotional video that was posted on April 8th on Instagram reached 4,626 accounts with 48 direct interactions, including 32 likes, 7 comments, 6 shares, and 3 saves. The contest yielded 14 podcast and video submissions from students at 10 different New Jersey colleges or universities with submissions received from January 11, 2022 to April 30, 2022 that used the fact page produced as one of three authorized sources.

Evaluation/Conclusion: The use of Instagram aimed at college students attracted a growing audience based on data retrieved from Instagram in-app insights. In targeting college students, social media is a powerful tool and can provide a platform for health-related outreach and education, especially in the absence of on-campus events due to strict reopening policies. Creating a platform and network through social media allows Step Up, Vax Up to continue to share resources and grow in preparation for the next contest or campaign run by the organization. As the pilot contest comes to a close, the goal is to reach at least 30 submissions.

Internship Abstract

Title: NAMI Walks Your Way Event Assessment

Name: Ryan Coleman

Preceptor: Janet Haag, Executive Director of NAMI Mercer

Agency: National Alliance on Mental Illness (NAMI) Mercer

Purpose: To assess the impact that the NAMI Walks Your Way event in Mercer County, New Jersey, has on raising awareness of mental health in the community and propose ways to communicate its positive impact to the public.

Significance: 2022 data suggests that 1 in 5 adults (20%) in the United States experience a mental illness, which is equivalent to approximately 50 million American adults (MHA, 2022). The COVID-19 pandemic has posed an even greater impact on individuals' mental health. The prevalence of anxiety and depression has increased by 25% worldwide within the first year of the pandemic (WHO, 2022). This data indicates a dire need for access to high-quality mental health services to support individuals struggling with mental illness.

Method/Approach: The NAMI Walks Your Way Mercer County event is the county's largest mental health awareness-raising event and NAMI Mercer's biggest fundraiser. An assessment of the previous year's event was conducted to determine how the event is an effective vehicle for public health communication regarding mental health. The information gathered was then utilized to create an informational brochure that would help educate the public on NAMI Mercer's mission and further communicate the positive impact that the event has on raising awareness of mental health.

Outcomes/Results: The brochure was reviewed by the staff members of NAMI Mercer and then approved to be included in an information folder that was distributed to the individuals attending the 2022 NAMI Walks Your Way Kickoff Event on March 19, 2022. The brochure included background information on NAMI Mercer, U.S. mental illness statistics, the COVID-19 pandemic's impact on mental health, information on the NAMI Walks Your Way event, and more. The individuals at the kickoff event greatly appreciated the brochure because the information was provided in a clear and concise manner.

Evaluation/Conclusion: A satisfaction survey was sent out to those who attended the kickoff event on March 19, 2022, to obtain feedback related to their satisfaction with the event. The survey asked the attendees a variety of questions about the event, which they were able to choose from the responses: "Satisfied", "Neither satisfied nor dissatisfied", and "Dissatisfied." There was also a comment section provided at the end of each question. In regards to the question related to their satisfaction with the information they were given, including the informational brochure, 100% of the individuals who participated in the survey selected the "Satisfied" response. In conclusion, the informational brochure provided the attendees at the kickoff event a concise version of useful information related to NAMI Mercer's mission. It also proved to be an effective way to communicate the positive impact that the NAMI Walks Your Way Mercer County event has on raising awareness of mental health in the community.

Internship Abstract

Title: Investigating Patient Recruitment Challenges for Depression/PTSD Clinical Trials

Name: Julia Cordaro

Preceptors: Kaylee White, MA: Clinical Site Manager

Agency: Princeton Medical Institute

Purpose: To investigate and analyze the cause of the low attendance rate for participants in depression and PTSD clinical trials, and offer ideas to resolve those issues.

Significance: Mental health affects a large amount of the population and is a crucial part of overall healthcare. In 2020, there were 18.57% of adults experiencing mental illness in America, with 4.38% experiencing severe mental illness (Mental Health America, 2020). Research on mental health is increasing, which brings a greater understanding of mental illness as well as new treatment options that are tested using clinical trials. Princeton Medical Institute hosts clinical drug trials for Alzheimer's disease, social anxiety, binge eating disorder, smoking cessation, depression, and PTSD. There is a uniquely large number of patients that are recruited for depression/PTSD studies that do not show up for their pre-screening appointments compared to those of the other studies. This issue causes delay in the research process because research studies done for drug trials cannot be successfully completed without the recruitment of participants. Major depressive disorder is the leading cause of disability in America and affects over 6.7% of the adult population; Similarly, PTSD affects 3.5% of the adult population each year (Anxiety and Depression Association of America, 2021). The large prevalence of these mental illnesses highlights the importance of investigating this issue in order to find a solution that results in the enrollment of more participants into the depression and PTSD studies.

Method/Approach: A survey was done to collect feedback from participants who did not attend their prescreen appointments. Patient appointment logs were sorted through to collect contact information for those who had missed a depression or PTSD appointment. The survey was created with collaboration from the clinical trial coordinator for these trials. Participants were contacted via phone call or text message and asked to participate in the survey. The data was analyzed after collection was completed.

Outcomes/Results: Between January 1st 2022 and April 8th 2022, there were a total of 70 patients scheduled for a prescreening. Of the 70 patients scheduled, 20 attended, 10 re-scheduled at least once and completed an appointment, and 40 did not show up to the appointment. The 40 participants who did not attend their appointment were invited to participate in the survey, of which 13 completed. From the data collected, most patients reported that they did not attend their appointment because they had a conflicting obligation. 76.9% of participants reported text message as a preferred method of contact for appointments. When asked for feedback on improving turnout, three participants reported they would have rescheduled/ attended if they received a phone call, while nine reported there was nothing else to encourage them to attend. One participant asked to be rescheduled for a prescreen appointment.

Evaluation/Conclusion: Research is a crucial part in improving mental health treatment. Princeton Medical Institute works with drug companies to complete trials in order to test new and developing treatments. In order to make the most progress on these trials, participant inflow is important. This research took an ongoing issue of lack of appointment attendance in depression/ PTSD patients and investigated the reason in order to improve attendance and increase trial efficiency.

Internship Abstract

Title: Human Trafficking Education Assessment

Name: Marlana Dant

Preceptors: Director: Diana Starace, Injury Prevention Coordinator

Agency: Robert Wood Johnson University Hospital

Purpose: To provide educational opportunities for college students to improve their understanding of risk factors and prevention methods related to human trafficking.

Significance: Research shows that 80% of human trafficking survivors in the US are US citizens. Between 2007 and 2019, New Jersey ranked, on average, in the top 12 states of reports of human trafficking (NJ Human Trafficking Coalition, 2019). Robert Wood Johnson University Hospital collaborates with The New Jersey Coalition Against Human Trafficking to spread awareness and teach educators, students, parents, and other interested parties about the dangers of these topics. Because of the population's age and use of the internet, college students are more susceptible to becoming victims. As the pandemic continues, "there has been an increase of children vulnerable to online sexual exploitation and grooming" (Unicef, 2020). New Jersey remains a prevalent hotspot for human trafficking because of its location, dense population, proximity to major cities, and easy access to different means of transportation.

Method/Approach: The New Jersey Coalition Against Human Trafficking created a presentation that was adapted and delivered to different college groups. This project proposed an education-based intervention that has taken place on the Rutgers campus to address knowledge about human trafficking and to empower students with information to prevent human trafficking. The presentation included four polling questions to gauge preconceived knowledge that college students have about this topic. Presentations have been delivered to various classes and student organizations, either in-person or virtually. The first presentation was given to H.O.P.E's peer mentors via Zoom and was recorded. The recorded presentation was sent to instructors of both a Women's Health and Professional Practice Internship course to be posted to their canvas website. An in-class presentation took place in a Human Rights course to 10 students. The total number of students that viewed the presentation both virtually and in person is 15.

Outcomes/Results: In this study n=15 students. The first and last polling question asked students to evaluate their knowledge about human trafficking from 1-10. The total population of students showed that they had very little to no knowledge of human trafficking topics before the presentation began (students rated their knowledge $\leq 50\%$). After the presentation was complete all students scored their knowledge of human trafficking $\geq 50\%$. None of the students knew that 80% percent of persons trafficked in the US are US citizens. Only 20% of the audience knew that youth exploitation increased by 97% throughout the pandemic. An additional eight people viewed the presentation without the opportunity for polling.

Evaluation/Conclusion: 100% of the students (n=15) reported that their knowledge of human trafficking increased after the presentation was conducted. Only 20% of students were correct when answering the polling questions. Due to the small number of participants and the inability to conduct a campus-wide survey, further investigation is warranted. However, based on the data collected, it appears that education for this population is necessary, including ongoing education and outreach to raise awareness.

Internship Abstract

Title: Access to Health & Hygiene Services for the Homeless

Name: Nahom Deleta

Preceptors: Kelsey Lynch, Co-owner

Agency: Archangel Raphael's Mission (ARM)

Purpose: To expand access to health and hygiene services for the homeless community in the downtown New Brunswick, New Jersey area.

Significance: In January 2020, weeks before the COVID-19 pandemic was officially declared, a nationwide poll reported that 580,466 people in America have been experiencing homelessness (National Alliance to End Homelessness, 2021). Being homeless makes it significantly harder to access necessary everyday health & hygiene services. Experiencing homelessness is associated with significant barriers to accessing everyday services such as hand washing, laundry, and shower facilities (Leibler et al., 2017). Homeless people that lack access to these services are at an increased risk for poor physical and mental health while access to these services increases the likelihood of transitioning out of homelessness (Leibler et al., 2017). Thus, community based interventions are necessary to ensure the local homeless population have access to health and hygiene services.

Method/Approach: To expand access to food for those experiencing homelessness in the downtown New Brunswick, New Jersey area, a daily dinner service was run every day at the United Methodist Church on George street. Volunteers were recruited from the SEBS PreMedical/ PreDental Society at Rutgers University, New Brunswick to aid in running the dinner service in which about 50 meals a day were handed out. Food was locally sourced from willing restaurants or prepared at the UMC church and handed out every day from 5 p.m. to 7 p.m. Leftover meals were delivered to a local motel that housed struggling individuals who moved in and out of homelessness. To expand access to hygiene services, ARM's mobile shower unit was cleaned out and prepared for deployment along with ARM's handwashing station in early May. Additionally, in conjunction with True Cuts, free haircuts were provided to homeless individuals on the 8th of April from 11 a.m. to 4 p.m. at the newly opened True Cuts barbershop at the Yard on College Avenue. Free socks were also handed out to homeless individuals who attended the event.

Outcomes/Results: Between January 2022 to May 2022, in conjunction with the United Methodist Church, ARM provided over 5,000 dinners to individuals experiencing homelessness in the downtown New Brunswick area. Additionally, the mobile shower unit along with donations and partnerships with local businesses effectively provided hygiene services to the local homeless population.

Evaluation/Conclusion: Fundraising efforts in conjunction with volunteer recruitment resulted in an average of over 50 meals distributed daily to homeless individuals in the greater downtown area of New Brunswick, NJ. These meals provided nourishment to individuals who would otherwise go without food for dangerous periods of time. Through partnerships with local businesses, ARM was able to provide hygiene services to many homeless individuals, a service that is often overlooked but necessary to the overall wellbeing of the homeless population.

Internship Abstract

Title: Triple R Plan: Reducing Readmission Rates
Name: Jennifer Desrosiers
Preceptors: Mandela Grant
Agency: Hackensack Meridian Health - JFK Medical Center

Purpose: By minimizing the readmission rates within the JFK location, the hospital will be able to maintain financial growth to direct funds towards wellness programs and community interventions.

Significance: Hospital readmissions have negatively affected the growth and financial sustainability of many health care systems. High readmission rates are a direct reflection of poor performance, declining patient health outcomes and financial debt that will hinder the success of the institution. By reducing readmission rates, JFK University Medical Center will be able to redirect their finances towards offering wellness programs, community interventions, lower health care costs and improve quality of services.

Method/Approach: The general expectation every patient has is a right to confidentiality, proper service and a positive experience with medical staff. During the change of every shift, patient concerns were emphasized to the medical staff during the report. By doing this, staff was aware of the reason for the visit, the diagnosis and the concerns of the patient. It helped providers show more compassion towards the needs of each patient and answer any questions or doubts one might have. Emphasizing the importance of the completion of patient feedback forms and follow-up calls would also help in factoring improvements of the quality of services.

Outcomes/Results: Showing compassion has directly improved patient satisfaction and lowered readmission rates. In many of the completed feedback forms and documented follow-up calls, patients have expressed their gratitude towards the medical staff ensuring their comfort and proper treatment. Over the past 2 months, there was a drastic decrease in patient volume returning for the same concern because they were addressed during the first visitation. Readmission rates dropped by 16%. Extensive stays; which is considered anything beyond 3 days has also been reduced by 39%. In the months of February and March, patient satisfaction was 59% ranging from average to very satisfied. In April, satisfaction rates were 77%. Noticing the decrease from one month to the next and the increase of patient satisfaction presented an opportunity to tackle other issues such as; access to healthcare in the community, improvement of treatment plans, and insurance and billing.

Evaluation/Conclusion: Readmissions are costly and can cost hospitals millions of dollars. The purpose of the Triple R plan was to reduce readmissions rates and redirect the finances. Overall the plan was a success because of the cooperation of medical staff and compliant patients who shared their experience. Though readmissions are still present, it has been a drastic decrease and quality of service has improved. In the months to come, there will be active approaches in place to incorporate community interventions for the summer and the fall.

Internship Abstract

Title: Real World Late Phase: Site Operations

Name: Amanda Dominguez

Preceptors: Stephanie David, Program Director & Dawn Powell-Rogers, Associate Director, BU Operations Management

Agency: Syneos Health

Purpose: To highlight and analyze clinical trial phases and understand the pharmaceutical industry, specifically the Real World Late Phase, which tests drugs already in the market.

Significance: The pharmaceutical and biotechnology industry has changed healthcare drastically. The ability to test and produce new medicines for those inflicted by illnesses is incredible. Syneos Health is a NASDAQ American clinical research organization based in North Carolina. Specifically, Syneos Health, is a biopharmaceutical solutions group, which allows expediting and testing medications both in Early Phases and within the market, in Late Phase. This uniqueness in a clinical research organization stands from the Syneos “Biopharmaceutical Acceleration Model,” which is “an end-to-end concept, working across our clinical and commercial capabilities and driven by each and everyone one of our approximately 28,000 employees” (Syneos, 2021). Some examples of the Biopharmaceutical Acceleration Model are therapeutic expertise in all major categories, demonstrated results advancing clinical and commercial success, and a collaborative approach to development and ultimately commercialization of the new medicine (Syneos, 2021). The company has sites all over North America, Latin America, Europe, Asia Pacific, the Middle East, and Africa.

Method/Approach: In the role of a Project Specialist Intern, the goal was to be able to see and understand the scope of the pharmaceutical industry through a Clinical Research Operation. By establishing meeting minutes, preparing oral reports in regards to the study progress, and ensuring the deadlines were being met, it allowed for these studies to be completed and undergo official review. Furthermore, any studies that were officially complete would be properly filed and documented. Through the platform of the Veeva Vault system, which contains the documents and files from clinical trials all over the world, the project specialist team is able to organize and maintain the proper documentation required for clinical trials. This is the most crucial step during a Clinical Trial and allows for multiple to occur at one time.

Outcomes/Results: After attending over 75 meetings in regards to various clinical trials occurring throughout the organization and participating in 200 training modules, each study that was assigned was then meticulously closed out and archived in the Veeva Vault System. The finalization of these studies is required in order to properly follow clinical research guidelines. Ultimately, 50 studies, from clinical trials, all over the world were properly documented for. As well, working cross-functionally with different team members also ensured that all aspects of a clinical trial were being properly documented.

Evaluation/Conclusion: In conclusion, the experience at Syneos Health has been extremely rewarding. The increase in ability to create an efficient work environment while also viewing a different sector of the healthcare industry has been extremely purposeful. The impact that a Clinical Research Organization has on healthcare, is so unique and has the ability to change lives.

Internship Abstract

Title: Policy Review & Update- Social Work Services Department

Name: Traci Drakeford

Preceptors: Jamila Hughley, Program Director Social Services

Agency: Rutgers, Eric B. Chandler Health Center

Purpose: To review and update the Social Work Services Department Policies and Procedure manual to ensure that the department is working from the lens of the Cherokee Behavioral Health Integration model; thus improving integrated primary care within the health center.

Significance: In 2020, over 23% of adults with a mental health illness reported a lack of access to treatment. Many may not know where to begin or may feel hesitant to seek mental health services. In fact, "74% of Americans who seek help for depression or symptoms of depression will go to a primary care physician rather than a mental health professional" (Cassano, Fava, 2002). The Eric B. Chandler Health Center pursues an integrated primary care approach, where patients seen for medical issues are also given resources or counseling from the social services department. This project involves updating policies and procedures to reflect the Cherokee Behavioral Health Integration model- ensuring high-quality, patient-centered care.

Method/Approach: The Social Services Department manual consists of policies and procedures for integrated primary care. These policies and procedures will be reviewed and updated to reflect similar language and goal requirements of the Cherokee Behavioral Health Integration Model. Such changes will include a shared delivery of care across a team of providers and behaviorists, access to a behavioral health coordinator regardless of visit type, open line of communication and care coordination, etc. Upon completion, the preceptor will review the updates and will share the new policies and procedures with the different teams at the health center.

Outcomes/Results: The policies that were updated include: Safety Procedures Of Staff Providing Client Services At Community Locations And During A Home Visit, Reimbursement for Behavioral Health Visits, Referrals To Social Workers, Psycho-Social Assessments, Referral To Social Services - Alcohol/Drug Referral, Procedures For The Medication Assistance Program To Patients, Management Of Patient With Intentions To Harm Themselves Or Others, and Social Services Department Operational Manual. After being updated and reviewed, the policies and procedures were incorporated into the current workflow at the Eric B. Chandler Health Center. Rates of patient progression will be collected after the implementation of these policies and procedures for the social services department.

Evaluation/Conclusion: Such policies are meant to support the need for integrated care for the New Brunswick community. For instance, approximately a quarter of New Brunswick residents (26.4%) report that someone in their household has depression, anxiety, or other mental health condition (Weiner, et al., 2011) compared to fewer than ten percent of Middlesex County residents (8.1%) who reported that they saw a provider for an emotional or mental health problem in the past 12 months (Chakravarty, et al., 2012). Updating these procedures serve as an effective tool to (a) stress the need for integrated care, and (b) improve the current workflow to reflect the goals of the Cherokee Behavioral Health Integration model. Limitations may include lack of 1-1 interactions with a patient in need of a BHC/CHW/LCSW due to COVID-19 restrictions (i.e. rate of infection increases, telemedicine may only be offered by certain providers).

Internship Abstract

Title: Patient and Community Outreach Assessment
Name: Jamiah Dunson
Preceptors: Laura West, New England Patient and Community Outreach Coordinator
Agency: Leukemia and Lymphoma Society

Purpose: To examine the educational impact of patient community outreach techniques for children and adults living with blood cancers and lymphomas, through patient communication, resources, networking events, and advertisements.

Significance: Cancer is among the top leading causes of death in the United States. There are nearly 2 million incidences of cancer cases annually in the U.S. and of the existing cases, nearly 600,000 people die yearly. Leukemia encompasses approximately 500,000 of these cancer cases, however, there are other common blood cancers as well, such as multiple myeloma, Hodgkin's and Non-Hodgkin's Lymphoma, Myelodysplastic Syndrome, and plenty of other blood cancers. NJ has a cancer mortality rate of "486.7", while the U.S. has a rate of "448.6" (Cancer.gov). Neither of these numbers are anything to celebrate, and in fact, they are very alarming. The Leukemia and Lymphoma Society (LLS) aids in combating the medical expenses as well as emotional toll that blood cancer places on its survivors, as well the families of the survivors. The organization provides financial assistance such as copay, transportation coverage, medical reimbursement, and support resources such as peer and family support, first connection, and grief counseling. The project is centered in the New England region of the US, with a specific focus on the rural regions of these states due to lack of accessible healthcare.

Method/Approach: Responsibilities include setting patients up with necessary resources to aid with their treatment as well as helping to design and orchestrate events that are meant to bring together members of the cancer community, in an effort to beat cancer through education. 300 patients were entered into the Salesforce system to receive educational resources after having received financial aid such as copay, or emergency assistance. Upon calling patients (about 150 calls thus far), there were three general categories to place them, (1) either they needed additional resources, (2) they did not need anything, (3) or they were not able to be reached and in applicable cases, there were left a voicemail and follow-up email.

Outcomes/Results: Of the 300 patients entered, around 150 (50%) were called so far to inquire about further resources. Of the 150 patients, about 20 (13.3%) needed further assistance, nearly 70 (46.6%) needed no further assistance, and the remaining 60 patients (40%) were left voicemails or could not be reached at all. Additionally, there was a Waldenstrom's Syndrome virtual event held in which 600 patients were registered and due to technical difficulties, about 200 (33.3%) patients attended. Of the 200 patients, data was entered into the system for 48 patients (24%) to receive educational resources from our IRC and 100 patients (50%) had data entered for them to receive a phone call from staff in our FCP.

Evaluation/Conclusion: Most patients did not need extra educational resources. However, phone calls and virtual events prove to be effective methods of spreading educational resources about blood cancer to the general LLS community. Spreadsheet data is also an effective method for being able to easily transfer information into the LLS patient database. All patients have not yet been reached through our educational resources and events, but LLS staff are actively working to ensure that it happens.

Internship Abstract

Title: Understanding the 5 Food Groups Through Nutrition and Health Lesson Plans

Name: Olivia Echeverria

Preceptors: Gina Stravic

Agency: Raritan Valley YMCA

Purpose: To measure the success of a 10-week nutrition and health education program on understanding the 5 food groups that are presented to the Raritan Valley YMCA pre-k class.

Significance: Eating healthy is important in childhood and adolescence years for a number of reasons. It is recommended that people who are 2 years or older follow a healthy eating pattern. This includes eating a variety of fruits and vegetables, whole grains, fat-free and low-fat dairy products, a variety of protein foods, and oil. A way to follow this pattern is by using the MyPlate poster provided by the U.S. Department of Agriculture. My goal is to create nutrition and health lesson plans that will address the importance of eating a variety of fruits, vegetables, grains, protein foods, and dairy and fortified soy alternatives. These nutrition lesson plans will also aim to improve the knowledge about healthy eating to the youth.

Method/Approach: The nutrition and health education programs were formatted into lesson plans for the Raritan Valley YMCA pre-k class. Each lesson plan consisted of learning objectives, an introduction to the topic of discussion, a read aloud, and an activity. The size of the pre-k class was 16 children, ranging from ages 4-6. Pre-test and post-tests were created for the pre-k class to test their knowledge before and after the lesson plans. The pre-test was interactive for the pre-k class and the concept of the pre-test was to take the children grocery shopping. Individually, the child was asked to shop for five food items. In this pre-test, money was also incorporated. The children were also able to practice addition. Each child was given five dollars to buy their five items. Each child was told to buy one food item from each of the five food groups: vegetable, fruit, protein, dairy, and grain. The children were instructed to put each of the food items in their grocery basket and go to the cash register to pay with the money they were given. The post-test was exactly the same concept.

Outcomes/Results: After the 10-week nutrition and health education lesson plan, the post-test showed an increase in knowledge among the pre-k class. The post-test was the same format as the pre-test and all of the children except for one were re-tested. Due to one child dropping from the pre-k class, the size of the class went down to 15 children. Although one child withdrew from the class, the results of the post-test showed about 53% of the children understood the 5 food groups. The results of the post-test also indicated that many of the children were able to understand the dairy, protein, and grain food groups that they were previously not familiar with.

Evaluation/Conclusion: The ultimate goal of these nutrition and health lesson plans were to increase the knowledge of food groups for the pre-k class ages 4-6. To review the fruits and vegetable food groups but also introduce and focus more on the other three food groups that the children were not familiar with. Incorporating these nutrition and health lesson plans will help implement healthy eating habits and allow young children to explore the variety of foods in each food group.

Internship Abstract

Title: Practice Enhancement Training Policy Review & Improvement

Name: Betsally Falcones

Preceptors: Shawn Dungo, Associate Director of Practice Enhancement, Emergency and Hospitalist Services

Agency: RWJBarnabas Health Jersey City Medical Center

Purpose: To evaluate scribe training guidelines and draft new policies to improve the patient flow process in the Emergency Department at JCMC.

Significance: Studies, such as *Impact of Medical Scribes on Physician and Patient Satisfaction in Primary Care* (Pozdnyakova et. al. 2018) and *Impact of Medical Scribes in Primary Care on Productivity, Face-to-Face Time, and Patient Comfort* (Zallman et. al. 2018), have shown that the aid of medical scribes reduces physician burnout and increases their satisfaction in the workplace without negatively affecting the patient's satisfaction. By improving the process to train said scribes, the JCMC Emergency Department is moving towards an overall increase in efficiency and patient satisfaction. The need for this improvement comes from the work output of the scribes at JCMC lacking over the past couple of months. Clinicians and the lead scribe have seen a dip in performance and have offered follow-up training and mentoring meetings, but more needs to be done. Scribes should be confident in the charts they are responsible for and be meticulous to ensure the chart is accurate, to avoid future problems.

Method/Approach: The medical scribes listen to dictations from the clinician and will begin the chart for a patient, which allows the clinician to focus on their patients. While the scribe is charting, the clinician has the time to order medicine or tests, make calls to other doctors to discuss a case, or be in the room with the patient learning more. By reviewing the scribe trainers' guidelines, tweaking them, and developing new policies, the medical scribes can be more prepared and provide charts that the clinicians feel comfortable signing with minimal editing. One policy included the addition of quizzes after each section of a practice chart. These were tested on the class of scribe trainees that were in session during the creation of the quizzes. The feedback from the trainees taking these quizzes was also considered for further edits to use for future classes.

Outcomes/Results: Policies were developed that directly impacted the virtual training portion of the onboarding process to be a medical scribe at JCMC. Along with the trainers' guidelines, these policies will ensure proper coverage of material for every scribe. Procedures include an absentee policy and how that would affect the rest of that scribe's training, the completion of all practice chart assignments, and the addition of quizzes for the trainees to take in order to prove their competency of the material learned. Furthermore, there is a final quiz that a scribe needs to complete, which will determine if they are sufficiently trained to start the in-person training, or require more virtual training.

Evaluation/Conclusion: The quizzes provided to the class of scribe trainees during the semester show that the examinations helped reinforce the main points of the virtual training session. These quizzes allow the scribe trainees to strengthen the foundation of knowledge that will be built upon during the next training session. The quizzes will be reviewed prior to each new class of scribe trainees to ensure cohesiveness to the material and the medical scribe position. The policies that were developed will guarantee that no scribe trainee will be left behind due to a lack of presence at training sessions or a lack of foundational knowledge, and they will enter the in-person training shifts with the skills to make them successful at the job.

Internship Abstract

Title: Patient Experience Training Presentations

Name: Elizabeth Fayer

Preceptors: Sandy Festa, Executive Director, Therese Wilkerson, Director of Patient Experience

Agency: AtlantiCare Federally Qualified Health Center

Purpose: To improve patient experience across the Federally Qualified Health Center through researching patient experience in order to create a patient experience presentation to present to staff along with assisting in planning a video about patient experience at the FQHC.

Significance: Patient Experience in clinical settings is one of the most important aspects of health care that often gets overlooked. According to the Beryl Institute, patient experience is the sum of all interactions shaped by an organization's culture which influences patient perceptions across the continuum of care. According to the Federally Qualidies Health Center(FQHC), the patient experience is the sum of all interactions throughout every touchpoint across the continuum of care. It includes several aspects of healthcare delivery that patients value highly when they see and receive care such as obtaining timely appointments, a clean environment, easy access to information, good communication with health care providers and being valued as a patient. Patient experience is an essential component of healthcare quality and it reflects on the ability to attract and retain patients.

Method/Approach: The responsibilities of this project included researching patient experience and engaging in weekly meetings with the Director of Patient Experience of the FQHC in order to create a presentation to show new and old employees of the FQHC. The research was done through listening to podcasts about patient experience, reading articles and journals, as well as reading books about patient experience. The presentation consisted of 36 slides engaging employees through visuals and written information along with videos. The presentation was presented to new and old employees at the FQHC and feedback was taken from the participants. The goal of the training sessions was to have at least 8 new or old employees from 4 different departments at every Patient Experience Presentation training session. This project also consisted of planning a video presentation of employees at the FQHC showing how they are a part of the patient experience.

Outcomes/Results: The first Patient Experience presentation was shown to 2 new and old employees from the same department. The second Patient Experience presentation was shown to 8 new and old employees at the FQHC from 4 different departments. The presentation will continue to be shown to employees in training sessions organized by the Director of Patient Experience. The presentation will also be modified depending on what audience is participating in the presentation. The presentation that was created will help teach employees about patient experience. This will likely improve employees' interaction with patients which will in turn improve patient satisfaction and the ability of the FQHC to attract and retain patients.

Evaluation/Conclusion: This project can be evaluated through feedback from employees who have participated in these presentations and reported back to the Director of Patient Experience, Therese Wilkerson, and also myself until the end of the internship. This feedback can help to revise the PowerPoint while also giving an indication of whether the presentation was effective. There is always more information to learn about patient experience and many different methods to improve patient experience. It is important to note that the patient experience is always at a continuum and there is always room for improvement.

Internship Abstract

Title: Reduction in Length of Stay and Readmissions in the Enhanced Perioperative Unit (EPA) for Bariatric and Gynecological surgeries

Name: Abigail Faynshteyn

Preceptors: Luciana Cinicolo, Regional Director, Jenifer Stein, Patient Navigator, Bariatric and Colorectal Surgery, Caitlin Tauro, Women's Health Patient Navigator

Agency: Cooperman Barnabas Medical Center

Purpose: Compare length of stay and outcome measures such as readmission between the EPA and the medical surgery unit for Bariatric and Gynecologic populations.

Significance: The Cooperman Barnabas surgical department includes the EPA which has 10 beds. The EPA promotes an efficient use of hospital beds and services without compromising patient outcomes. A shorter period of hospitalization reduces the risk of hospital-acquired infections, increases the patient satisfaction and yields more efficient use of hospital beds. Bariatric surgeries such as the Sleeve Gastrectomy and Gynecologic surgeries such as hysterectomies are used in this study because they have similar post-surgery care plans. The goal is to enlarge the EPA unit to serve more patients.

Method/Approach Post-surgery care plans were used to monitor patients released into the EPA. Standard care included pain management, physical therapy, post-operative nausea, and discharge planning. To reduce readmission rates, patients were evaluated using a surgical risk assessment developed by the American College of Surgeons to ensure there were no post-surgery complications.

Outcomes/Results: Inpatient data was collected for Gynecological Hysterectomies and Bariatric Sleeves from 1/1/2021 through 12/31/2021. There was a significant decrease in length of stay compared to the previous year for both hysterectomies and sleeves. A total of 309 cases were evaluated for Bariatric Sleeves. The length of stay in the EPA was 1.10 days compared to the 1.50 days for medical/surgery unit length of stay. This totaled a 10-hour reduction in length of stay for the EPA. One hundred and fifty-five cases were evaluated for Hysterectomies. The length of stay in the EPA was 1.10 days compared to 1.82 in 2020. This totaled a 17- hour reduction in length of stay for the EPA for the previous year.

Evaluation/Conclusion: Patient recovery in the EPA reduces length of stay for both Bariatric Sleeves and Gynecological Hysterectomies. A shorter length of stay increases patient satisfaction and efficient use of hospital beds. There is also a decreased risk for additional infection with a shorter length of stay. The findings were enough for the hospital to be satisfied and apply to get permission to expand the unit.

Internship Abstract

Title: I-9 Documentations Audit
Name: Maliha Fayyaz
Preceptors: Christina Gorman and Nikkia Bruce
Agency: Metropolitan Dermatology

Purpose: To assist in conducting an I-9 audit of 190 employees to verify their identity and employment authorization to ensure that Metropolitan Dermatology is in compliance with employment laws.

Significance: The Immigration Reform and Control Act (ICRA) requires all employers in the United States to have their employees complete an I-9 form given it is integral for employers to verify the identity and employment eligibility of each person they hire (U.S. Citizenship and Immigration Services, 2022). Conducting a bi-annual internal I-9 audit can ensure that employers remain in compliance with employment laws and help prepare employers for I-9 audits that are carried out by the U.S Department of Homeland Security's Immigration Customers and Enforcement (ICE).

Method/Approach: Thoroughly review copies of active and terminated employees I-9 documents and organize documents into appropriate files. To then create a spreadsheet using data validation, conditional formatting, and filtering techniques on Microsoft Excel to consolidate a list of 190 employees I-9 records. The spreadsheet consisted of important aspects of I-9 completion and record-keeping such as 1) I-9 on file 2) Employee identification documents on file 3) Section 1 of the I-9 correctly completed and signed by the employee, and 4) Section 2 of the I-9 correctly completed and signed by the employer/authorized representative. The process of this review is to ensure complete accuracy and reliability of employee documents and to confirm work eligibility. Of the I-9s that were not completed correctly or were missing identification documents, the Human Resources Manager reached out to employees to address the need for rectification and required employees to provide the appropriate documentation and signage and, if needed, to complete a new I-9 form.

Outcomes/Results: From reviewing the employees I-9 records, it was found that four I-9 documents needed to be completed from scratch due to unacceptable written/signage mistakes, and six employees needed to provide up-to-date identification information for I-9 forms due to expired and missing IDs. The Human Resources Manager reached out to these employees to collect the correct information and stressed to the employees that the documentation must be provided as soon as possible. All employees were cooperative in this process by providing the up-to-date identifications and completing documentation within 3 business days of being asked. Now the I-9s of all 190 employees are up-to-date, completed correctly, and filed separately by employment law standards.

Evaluation/Conclusion: Conducting a bi-annual I-9 audit is integral for organizations as these audits provide employers with the chance to reveal errors that are present in the I-9 form and rectify those changes accordingly. The I-9 audit can ensure that all Metropolitan Dermatology employees are authorized to work in the United States and can ensure managers are ethical in their recruitment processes by The Immigration Reform and Control Act (ICRA) standards. Completion of this audit will prepare Metropolitan Dermatology for I-9 audits that are carried out by the U.S Department of Homeland Security's Immigration Customers and Enforcement.

Internship Abstract

Title: Restorative Medicine Gut Health Guidance

Name: Gabrielle Fernan

Preceptors: Project Supervisor: Iza Boesler, M.D., Medical Director
Direct Supervisor: Alan Macioszeck, Office Manager

Agency: Fresh Fit Consulting

Purpose: To educate patients on how to improve their diet to support better gut health.

Significance: Fresh Fit Consulting works with patients who exhibit problems with gut health under restorative medicine. Dr. Boesler performs consultations and tries to find the root of the problem with gut health through a stool test and/or a questionnaire called the Medical Symptom/Toxicity Questionnaire (MSQ). Symptoms are rated on a scale of 0-5 then divided into different types of symptoms, including digestive tract, joints/muscles, emotions, and others. Patients then rate specific symptoms such as increase in anxiety, acne, or weight. For each visit, patients fill out the MSQ to measure changes in score. If scores decrease over the period of their visits, patients are benefitting from Dr. Boesler's treatments. If scores increase, they may need another form of treatment. Supplements and diet recommendations are given to each patient. This project concentrated on creating simple diet plans to encourage patients to encourage program adherence.

Method/Approach: Between February 1, 2022 and March 15, 2022, 10 patients visiting the doctor were given the Medical Symptom/Toxicity Questionnaire (MSQ). A higher score indicates a worse gut health while a lower indicates better gut health. Each patient was tracked over the course of 3 MSQs or 3 visits to the practice to determine what the issues were related to their gut health. Between visits, patients were given diets and occasionally supplements and stool tests for major issues. These scores tallied on the paper questionnaire and scanned into the EHR system.

Outcomes/Results: Of the sample size (n=10), 6 patients reported a decrease in MSQ scores which correlates to an increase in gut health. Four patients indicated an increase in MSQ scores. Of the 60% of patients that scored lower in ongoing visits, 4 out of the 6 (66%) indicated a decrease in their MSQ score specifically in joints/muscles and digestive tract. Of the 4 patients who noted an increase in score, 2 revealed an increase in scores regarding digestive tract. All of the MSQs were taken in conjunction with the new diets that were assigned to each patient. When patients still had higher scores after subsequent visits, compliance to diet was examined and supplements were added.

Evaluation/Conclusion: At the end of the study, 60% of patients saw a decrease in their symptoms and a decrease in MSQ scores. Less than half of the patients saw an increase in their symptoms. The main cause of a decrease in scores is due to the curated diets. If patients are compliant to the diets, then they most likely will see a decrease in their symptoms and an increase in their gut health. Many of the results though are variable due to specific diets of patients and also other co-existing health issues, medications or other supplements they take.

Internship Abstract

Title: Endoscopy Department Capital Upgrade
Name: Francesca Ferri
Preceptors: Kyle Coble, Project Manager
Agency: Robert Wood Johnson University Hospital

Purpose: To analyze the upgrades desired by the endoscopy department in order to create a business proposal justifying the costs, which will be presented to hospital senior leadership.

Significance: As artificial intelligence advances, scientists and medical professionals are given the ability to improve their techniques and evolve their practices (American Institute of Medical Sciences & Education, 2021). Artificial technological advancements have shown 96% accuracy in localization and identification during endoscopy screening practices (Urban et al., 2018). The equipment had last been upgraded in the endoscopy department of Robert Wood Johnson University Hospital in 2009. The equipment proposed for the endoscopy department included upgrading to Pentax equipment, an Olympus EUS system, surgical boom upgrades, and upgrading the Erbe system.

Method/Approach: An evaluation of the endoscopy staff, equipment, rooms, and revenue projections was performed. An interview of physicians and staff members was conducted utilizing a series of nine questions that assessed what equipment upgrades were included in the rooms, issues with the current equipment, how safety, efficiency, sustainability and revenue would improve, and if any foreseen problems/risks were predicted to arise or continue after the upgrade. The staff was then accompanied inside of the procedural rooms to evaluate the current equipment being used. The new technologies were then researched, along with utilizing the information the endoscopy staff had provided through interviews, to gain a better understanding of the new equipment. Evaluating the revenue projections allowed the analysis of the total net patient service revenue (NPSR) over a four-year time period to see if the revenue justified the capital expense. The return on investment was then assessed.

Outcomes/Results: The equipment upgrades included in the Pentax room involved better scope image quality. This was through maneuverable scopes with the ability to access more areas in the body, advancing therapeutics and diagnostics. Upgrading to the Erbe system reduced bleeding in dissections and cauterizations, along with limiting complications and improving patient recovery. The upgraded Olympus EUS system would enhance image clarity, leading to a more accurate diagnosis and procedural times cut in half. The surgical booms were shut down approximately once a month, putting revenue and precious time at risk. Dumbbells were being used to keep the booms in place, along with wires coming out of them deemed as unsafe practices. The total NPSR is \$187,014,634 with total new and capital expenses \$121,686,376. This projects a positive difference of \$65,328,258.

Evaluation/Conclusion: In two years revenue will make up for capital expenses. The NPSR is projected to be \$49,738,622 in 2025, which means that in 2025 revenue will more than double, almost triple, the capital expense (x 2.9). It was delineated in the outcomes/results that the revenue justified the capital expense with a return on investment (ROI) of 53.7%. It is concluded that the upgrades proposed by the endoscopy department were warranted and sensible. Limitations projected by the staff in the foreseeable future is the continuation of using third parties to maintain scopes and equipment instead of the manufacturer.

Internship Abstract

Title: Robert Wood Johnson Barnabas Health - Supply Chain
Name: Ryan Finnegan
Preceptors: David Rieth, Director of Supply Chain
Agency: Robert Wood Johnson University Hospital, Supply Chain

Purpose: To assess, provide, and distribute medical supplies for various departments across the entire organization of Robert Wood Johnson University Hospital.

Significance: Large hospitals across the country are in constant demand for medical supplies and utilities to assure their patients receive the highest quality of care compared to the next organization. In doing so, health care systems like Robert Wood Johnson University Hospital must have and maintain a well-rounded supply chain network that has all areas of the facility covered and under distribution control daily.

Method/Approach: In order to allow for successful distribution of medical supplies, goods, and materials throughout the massive university hospital, the supply-chain network must be under constant supervision. At several times of the day, health care logistical companies drop off needed medical equipment and supplies that are then later used for medical providers and their patients. After these large shipments are received and sorted, material handlers then take the pre-packaged necessities to their assigned departments. While assisting each medical department with goods and supplies, lists are created with other items that were not replenished during the trip. After all is said and done, these supply rooms are then electronically scanned while the information is sent to the third-party logistics center to repeat the process again.

Outcomes/Results: The overall outcomes of this opportunity with Robert Wood Johnson University Hospital revolve around the concept of learning and operating within the supply chain of a large-scale operation. The complex nature of the health care world is carried upon the shoulders of a successful supply chain team as well as the management that oversees it from the ground up.

Evaluation/Conclusion: Being granted the valuable opportunity to help the supply chain of Robert Wood Johnson University Hospital bettered my understanding of the health care system. Each and every day that I am there, I am truly taken away how such a complicated field can be simplified by having a strict schedule as well as extremely dedicated and hardworking employees. By gaining knowledge about different departments and how their floors operate, I can say that the methodology behind the entire supply chain system is a perfect example of how a health care organization should be run.

Internship Abstract

Title: Methods for Improvement of Musculoskeletal Conditions in Ante/Postpartum Women

Name: Gabriella Florio

Preceptor: Dr. Donna Cantalupo

Agency: Chiropractic Center of East Hanover

Purpose: To review care protocols and line of treatment for female patients of the practice who are expecting or postpartum. Extra care must be taken in treating their musculoskeletal ailments during adjustments, so as to keep both mother and baby safe.

Significance: The scientific literature on the gestational period points to numerous, drastic physiological changes for women. Due to maternal weight gain, biomechanical changes in the spinal column, asymmetry of sacroiliac joint laxity and hormonal changes (Lisi, 2006), a woman may experience pain not only in the lower back, but also in joints of the extremities. This pain and discomfort may cause great physical and emotional distress while a woman's body continues to adjust to both biological and environmental changes of motherhood. The Chiropractic Center of East Hanover provides comprehensive chiropractic care and screening for expectant and postpartum mothers who are experiencing musculoskeletal-related pain and discomfort to help ameliorate these concerns.

Method/Approach: When patients arrive for treatment seeking pain management, they are screened for common musculoskeletal issues of the pregnant and postpartum body. We often evaluate and treat for lower and upper back pain, cramping, pelvic girdle pain, carpal tunnel, and discomfort resulting from pedal edema. Safe treatments for expectant and postpartum mothers provided within the practice include massage therapy, myofascial release, laser and ultrasound therapy (on extremities only), gentle manual adjustments, and Pro-Adjuster adjustments (which introduces light force to the vertebra). As mothers themselves, the doctors of this practice take pride in the care of their pregnant and postpartum patients, knowing firsthand how the body is impacted through gestation.

Outcomes/Results: Over the course of a patient's care plan, our doctors and chiropractic assistants monitor patient charts closely to look for a decrease in pain and discomfort over the duration of treatment. With each visit, pain from 1-10 on an objective pain scale is noted, as well as the quality and location of pain. If improvement is not seen, treatment protocols will change accordingly. Changes in protocol are individual to the patient's needs and depend on the severity of their condition and the goals for their improvement. When circumstances suggest a more complicated issue, our doctors refer to their network of countless medical specialists to ensure that the woman is seen and cared for in a timely fashion.

Evaluation/Conclusion: In providing proper treatment to mitigate pain and chance for further injury, our doctors ensure that mothers are one step closer to optimal health and wellbeing through their transition into motherhood and beyond. It is with the continuity of care, extensive knowledge of our doctors, and their first-hand empathy for the pain and discomfort of motherhood, that a lasting positive impact has been made on the mothers in our community. Our practice has received over 140 5-star reviews and patient testimonies noting improved quality of life and lasting improvement of pain. We take pride in these testimonies and intend to continue to deliver the highest quality of care for mothers and for all.

Internship Abstract

Title: Decreasing Barriers of Access for Atlantic City High Schoolers

Name: Gina Fuentes

Preceptors: Direct Supervisor: Sandra Festa, Executive Director FQHC

Agency: AtlantiCare

Purpose: To decrease health issues amongst children in Atlantic City through developing access to proper resources by expanding health center services in a FQHC.

Significance: According to the Centers for Disease Control and Prevention, one in every five children are considered to be affected by obesity (CDC, 2022). It is estimated that 1 in 3 children born after 2000 will be diagnosed with diabetes in 2050. In a New Jersey state assessment, Atlantic County's obese rate rose from 23.8% in 2011 to 26.2% in 2018 (NJSHAD, 2021). AtlantiCare is working to improve the health of individuals in the community through early intervention. Currently, AtlantiCare has placed a health services site within the Atlantic City High School, giving the organization a more hands-on approach. Through expanding school health center services, health outcomes in the future of the county will improve. Children will be given the necessary guidance and exercise regime to practice proper healthy habits.

Method/Approach: It was necessary to first perform a SWOT analysis of the population. Most of the community is either Hispanic/Latinx or African American. From the findings it became apparent that Atlantic County has higher teen pregnancy rates and lower life expectancy than the state average. It was deemed necessary to show students the medical services the school based health center (SBHC) provides as well as educational resources. One of the biggest obstacles for the area is lack of insurance. The best way to indicate services are provided to all students, regardless of insurance status, is through social media outlets and visual exposure to students. Flyers and posts were created to be shared through social media accounts of the high school and in the nurse's office itself. It was necessary to grab the attention of students since they would be the ones relaying information to their parents. In these media posts and posters it was necessary to share what the SBHC offers and how it is here to create a network of care. This would help to increase the amount of students the SBHC serves.

Outcomes/Results: The SBHC has seen a steady increase of students acquiring their services. As of now the center is serving 316 students of the student population since its opening in September. This is about 17.48% of the school. The baseline from this year will be attributed to determine next year's numbers. Not enough outreach has been done to determine whether the posts and posters have made a significant change in the amount of students coming to the center. However, the center is determined to perform more outreach work to educate more students.

Evaluation/Conclusion: More time is needed in assessing the overall change the SBHC has made in the student population health. The program was just developed less than a year ago, and implementation was top priority. A review will be conducted before the end of the school year, and another on September 1, 2022 since it will mark one year since opening. The center has received positive feedback from the students, and there will be better measuring instruments put in place as the center grows. Outreach and marketing becomes quite difficult when things have to be pre-approved by other branches within the organization. As of now, 17.48% of students are receiving care that they may have foregone if not for the SBHC.

Internship Abstract

Title: Opportunities for Lactiga's Biotherapeutics
Name: Mariah Gagliardi-Wilson
Preceptors: Viraj Mane, PhD, Chief Scientific Officer/ Co-Founder
Agency: Lactiga

Purpose: Market Opportunity Assessment: To identify and explain diseases and infections that would benefit from Lactiga's biotherapeutics

Significance: Mucosal infections are extremely common. They range from mild and simply treatable to life threatening and persistent, especially in immunocompromised people. Mucosal infections can be very uncomfortable for the patient and disrupt their quality of life. Lactiga's innovative biotherapy uses antibodies from human breast milk to cater to unmet needs of immunocompromised people dealing with mucosal infections. This internship project aids in Lactiga's mission by describing mucosal infections and diseases that Lactiga's biotherapy can assist with. The project also explains Lactiga's market opportunity in treating these conditions.

Method/Approach: The approach to this project was completed in phases. The first phase was the disease discovery phase. Different diseases were reviewed for compatibility with Lactiga's biotherapeutics. The vetting phase was next, where the site preceptor and researcher reviewed the diseases and decided which were suitable from the perspective of product development and market opportunity. In the final phase, data collected on the diseases were put together in the paper and formatted for final review. Other sections include regulatory frameworks and market incentives for product development, and a bibliography.

Outcomes/Results: There were 8 different diseases found that would work with Lactiga's biotherapy. The final paper contributes to Lactiga's larger market opportunity because the organization now has a concrete resource with all of their featured diseases in one space. When an investor, healthcare stakeholder, medical specialist, or other medical provider asks for evidence of Lactiga's clinical indications, Lactiga will have a comprehensive white paper that clearly lays out pathology, epidemiology, current treatments and limitations, as well as cost benefit analysis. The outcome of this project is a market intelligence asset for Lactiga to clarify to stakeholders how valuable their biotherapeutics are.

Evaluation/Conclusion: The report justifies a multi-billion dollar opportunity for Lactiga in domestic sales upon clinical product approval. The report contains a completed bibliography in a standard format to allow preceptor and future readers (e.g. investors and health stakeholders) to review and confirm the assertions made in the report. Lastly, the report is provided to at least 1-2 prospective investors interested in performing due diligence in Lactiga's Series A financing round, currently scheduled for Fall 2022.

Internship Abstract

Title: Developing a full Business Plan for Mental Health Magazine

Name: Anthony Gonzales-Hoyos

Preceptors: Maggie Rose

Agency: The Inspired Co.

Purpose: To develop a business plan for a magazine that features mental health related articles in an effort to raise awareness of the subject.

Significance: The Inspired Company's mission is to save lives by serving as a resource for people struggling with mental health problems. Suicide has been identified by the CDC as the second most common cause of death among Americans ages 10 through 30. It is the tenth leading cause of death overall. According to the WHO, stigma, perceived ineffectiveness, and a desire to handle treatment on their own were identified as the biggest barriers for individuals who were in need of mental health treatment. The magazine will further the company's mission and business goals. To further guide the development of the magazine into a full scale publication, a business plan is necessary.

Method/Approach: LivePlan was used to create an outline for the business plan. Major elements such as target market, magazine mission and vision, and expectations were brainstormed collectively by the team. Input was received from the Inspired Company CEO to guide the process. Individual sections of the business plan were divided between the intern and the magazine director. The business plan was developed on a shared document to allow collaboration and guidance. Market research on existing competitors and alternatives was conducted to assess the viability of the plan. The completed magazine business plan was presented to the CEO.

Outcomes/Results: A 23-page business plan was developed that will serve as a guide to the development of the magazine. Major elements developed within the plan were the problem and solution, target market, market segments, competitor analysis, competitive advantage, marketing plan, sales plan, and forecast. A budget was developed to explain capital requirements and what the money would go towards. An analysis of the existing market was conducted and revealed that of all the existing competitors, none are found within the US, and further, none target US readers. The business plan was approved by the CEO.

Evaluation/Conclusion: The best evaluation tool for the success of the business plan is the number of readers the magazine picks up and revenue generated in the years following the implementation of the business plan. The magazine's business plan has forecasted expected subscriptions and revenue for several years. The pricing strategy of the magazine allows for there to be a discrepancy between number of readers and revenue generated. Therefore both metrics will be necessary. One factor that may affect evaluating the plan's effectiveness is the fact that the business plan is a living document. The business plan will be changed over time to better meet its goals. All in all, the business plans development was a success. The plan was able to present its goals and strategy for achieving them. The plan was also able to demonstrate that it can successfully compete in the current market. The magazine is currently publishing digital articles in a raw form online. This business plan will help to transform it from the passion project it currently is into a successful magazine.

Internship Abstract

Title: Electronic Health Record (EHR) Patient Data Transfer and Analysis
Name: Sky Gonzalez
Preceptors: Direct & Project Supervisor: Dr. Annette DaSilva DO., FAAPMR, FAOCPMR
Agency: The Center for Medical Healing

Purpose: To analyze the benefits of the EHR system and create a workflow to transfer paper medical records to the EHR, AdvancedMD program.

Significance: A primary benefit of utilizing an Electronic Health Record (EHR) system is improving the efficiency of a healthcare facility. According to the US National Library of Medicine, the use of an EHR system was found to improve the time efficiency of patient encounters by 12.6% to 45.5% (Poissant, L. et. al.). The results of the study show that utilizing an EHR system increases documentation time of physicians by 17.5% (Poissant, L. et. al.). EHR is a tool that can transform work processes and healthcare efficiency, and while promoting the innovation of patient care.

Method/Approach: Prior to AdvancedMD utilization, both patient encounter time and the documentation time of the physician were recorded in Microsoft Excel. Patient encounter time is the amount of time it takes for a patient to be seen by the physician from the moment they check-in to the moment they check out; the documentation time of the physician is the time it takes for the physician to complete the patient's medical note in full. To ensure the system was completely set up, demo videos were watched and representatives were contacted. Once all system features were in place, the paper files for each patient were obtained and organized so that the transfer process could begin. The first step was to create each patient profile, which includes entering their name, demographic data, and insurance information. Following, all patient medical notes from 2021 were scribed into the system with coinciding charge slips; all notes preceding 2021 with bills that had already been paid were scanned and imported into the system. Once all information was transferred and the system was ready to use, patient encounter time and the documentation time of the physician were again recorded in Microsoft Excel.

Outcomes/Results: The files of all patients were successfully transferred to the AdvancedMD system. As a result, this project has improved office efficiency because it decreased patient encounter time and physician documentation time. Before AdvancedMD, patient encounter time was recorded for 20 patients in Microsoft Excel, and the average encounter time was calculated to be approximately 29.6 minutes. After implementing AdvancedMD, the average patient encounter time of 20 patients was reduced to 23.2 minutes. Now, the doctor does not have to spend as much looking through the patient's chart for previous medical history, and the office manager is able to easily check the patient in and out, record and collect patient co-pays, and generate patient bills. In addition, the documentation time of the physician was recorded. Prior to AdvancedMD, based on a sample of 20 patients, to record one patient note by hand, it would take the physician approximately 11.4 minutes. After AdvancedMD, to record one patient note using a computer, the average documentation time was calculated to be approximately 6.8 minutes. This can be attributed to the templates already set in the computer, with pre-set text options, and patient medical history being copied electronically from one note to another, as opposed to handwriting all of this information.

Evaluation/Conclusion: An EHR system has proven to be beneficial because it decreases both patient encounter times and physician documentation times. Consequently, this improves office efficiency and the care each patient receives, improving overall health. This process should be repeated to ensure that the EHR system is consistently improving the efficiency of the healthcare facility.

Internship Abstract

Title: Resident Voice Strategic Plan

Name: Julian Goodman

Preceptors: Tyler J. Breaux

Agency: Monmouth Acts

Purpose: To improve the distribution of resources to residents in need by developing a strategic plan that will help guide the implementation of resident voice in the Community Engagement Network for Monmouth Acts.

Significance: Many residents in Monmouth County, New Jersey still struggle to maintain the basic needs of living despite the county having a better socio-economic status than most other counties in the state. A human needs assessment was conducted in 2016 by the county with over 1,100 participants. The assessment found that 14% of residents in the county are foreign born and 18% of these residents speak a language different from English at home. Among older populations in the county, results from the assessment determined that residents were aging at a greater rate than the state and country with 16.1% of residents being older than 65 years of age and 1,287 of these residents raising their grandchildren. Additional findings were that 9.3% of residents are suffering from food insecurity, 23% of eligible children are not enrolled in free lunch programs, 30% of households earn less than \$50,000 per year, 30% of suicides are completed by people under the age of 18, and transportation is limited in the Western part of the County. The key recommendation of the assessment is that there is a requirement for innovation in community sharing and resource navigation. It is the goal of the Strategic Plan to guide the implementation of improved resource distribution by giving a platform for Community Voice.

Method/Approach: The Resident Voice Strategic Plan was modeled by a similar initiative completed by the Annie E. Casey Foundation. Initial research was conducted on the method of acquiring Resident Voice through relationship building. Three phases have been determined to complete this initiative: seeding relationships, deepening relationships, and creating a sustainable leadership model. It is the goal of the Community Engagement Network to make 150 community connections. The first step of this approach was to compile all the connections made in the Community Engagement Network and identify locations that lack substantial connection. An onboarding process was created to form a connection in the network. This is done through data collection through a survey completed and stored on a connection's services, purpose, and needs. The final step was to create a method of information distribution using the service Constant Contact. Through this service, packages of information have been distributed for housing, food, and mental health aid.

Outcomes/Results: Officially, 116 connections have been established out of the 150 goal. Among these connections are faith-based organizations, community-based organizations, local government officials, and non-profit businesses. Over 25% of the established connections have completed the onboarding survey. The use of Constant Contact to distribute information packages has started and official initiatives for resident feedback data collection are in a developmental phase.

Evaluation/Conclusion: The data collected by the initiatives detailed in the Resident Voice Strategic Plan will be compiled into interactive maps and reports that will be further used to further improve the services provided by Monmouth Acts and its partners.

Internship Abstract

Title: Profitability initiatives for KidStart Learning Center

Name: Ashley Graham

Preceptors: Kevin Drakes, President

Agency: Kidstart Learning Center

Purpose: Increase businesses profitability by reducing cost and increasing enrollment with the use of marketing strategies.

Significance: Due to Covid-19, Kidstart Learning Center has faced many financial challenges. The facility was at capacity of 69 students and now because of the pandemic, the enrollment has drastically decreased to 28 students. For the year 2021, the business lost over 192,000 in tuition because students were out with Covid-19 related matters and accounts were credited. The company also noticed that payroll expenses were over \$30,000 a month which made it very difficult to cover payroll taxes. To combat this issue for the year 2022, the goal is to cut expenses in payroll and increase marketing to drive new clients.

Method/Approach: The first step to identifying the amount of money lost for the year, was to review the business financial reports from the previous years to date. This included tuition, miscellaneous, credits and payment charges. From here it was decided that it would be best to create a new efficient classroom and staff schedule to control cost. Initially there were multiple teachers in each classroom due to classroom demands. However, due to the different age ranges of the children some rooms only required one teacher. In addition to attracting new customers, the company made a decision to revamp the business's current marketing tools. These tools included a commercial, new brochure and continuous social media updates for the daycare.

Outcomes/Results: Due to the shift in the marketing strategy the company was able to have 9 new enrollment as of April 1st, 2022. If the company continues to trend on this path they will have between 35-40 new enrollments by the end of the year. KidStart Learning Center's social media has gained the attention of new viewers and it led to 3 tours of the daycare. In addition, one family out of the three enrolled their child into the program. As a result of the effective new schedule, the company was able to cut expenses by \$5,000 per month. The decision was made to cut employee hours and pay employees for hours worked rather than hours scheduled.

Evaluation/Conclusion: The project results demonstrated that the company was able to increase profitability and enrollment. Although the company saw a decrease in expenses it also came with a cost, resulting in the loss of employees. In addition, once a child is enrolled into the daycare, it will now be verified how the clients found the business. Continuous social media postings were key for attracting new customers and it was proven by the verification process of the new enrollees, that the increased presence on all social media platforms was a significant factor in how the business enrollment increased overall.

Internship Abstract

Title: Advocacy for Juveniles Waived to the Adult Prison System

Name: Elizabeth Haddad

Preceptors: Kathy Wright, Executive Director

Agency: New Jersey Parents' Caucus (NJPC)

Purpose: To advocate for juveniles that have been waived to the adult prison system.

Significance: New Jersey law mandates that youth waived to the adult prison system must be protected from solitary confinement, and those under the age of 21 be given the opportunity to be incarcerated in a juvenile prison. Yet New Jersey children who are tried as adults continue to be subjected to inhumane conditions such as solitary confinement beyond 30 and 60 days, and are incarcerated in an adult prison upon sentencing, regardless of their age. The New Jersey Parents' Caucus Youth Justice Initiative collaborates with organizations throughout the state of New Jersey to reform the practice of juvenile waiver, solitary confinement, youth transfer, and racial and ethnic disparities in New Jersey's Justice System. This project helped to spread information about the children waived into the adult corrections system, as well as advocate for them.

Method/Approach: The first step in increasing advocacy was creating a program called NJPC Watchmen. NJPC Watchmen consisted of a weekly article written and promoted on social media platforms talking about specific injustices seen by the Department of Corrections (DOC). These injustices were reported by NJPC Youth Caucus members currently incarcerated, communicated through JPay. A petition was created requesting NJ legislators to hold the DOC accountable for injustices seen in the Justice System. Biweekly "Treating Youth as Youth" Campaign meetings were held that focused on strategies for avocation for youth waived. New Youth Caucus members in the NJPC were added to the database. Four outreach events were held to inform the public about the programs and support offered by the Youth Justice Initiative.

Outcomes/Results: Ten social media posts were added to each platform (Facebook, Twitter, and Instagram) between February 3 and April 5. The NJPC Watchmen posts averaged over 2,000 views per post. As of April 12, the petition has received 111 signatures. Six new Youth Caucus members were added to the database between January 24 and April 10. Over fifty individuals were reached during the outreach events and were given brochures and flyers to further assist their needs.

Evaluation/Conclusion: The advocacy for juveniles waived to the adult prison system will help raise awareness of the inhumane treatment taking place in prisons throughout the State of New Jersey. Those with children being waived will have an organization to reach out to. Legislators and the Commissioner will be aware of the injustices seen in the Criminal Justice System, and pressure will be applied to the DOC and JJC to make drastic changes of the current procedures in place. The database will help NJPC keep track of all its Youth Caucus Members and analyze the data to create fact sheets and informational reports.

Internship Abstract

Title: Low Vision Program Assessment

Name: Eruj Hamid

Preceptors: Dr. Bethany Fishbein, Low Vision Program Director

Agency: Low Vision Center of Central New Jersey

Purpose: To evaluate the current Low Vision Program and make modifications that will improve each patient's low vision evaluation and overall achieve greater patient satisfaction.

Significance: Individuals with low vision (caused by diseases such as macular degeneration and diabetic retinopathy) struggle with their day to day tasks, as their vision is often significantly impaired (National Eye Institute, 2022). According to the American Medical Association, age related macular degeneration affects more than 1.75 million individuals in the United States, and this number is projected to increase over the next few years (American Medical Association, 2004). The Low Vision Center of Central New Jersey focuses on helping people with vision impairments to maintain their independence, have the ability to perform their daily tasks, and improve their overall quality of life through the use of optical and non optical vision aids. The Low Vision program is intended to adjust the low vision process in order to allow patients to have a more comprehensive and higher quality eye care experience.

Method/Approach: Prior to the implementation of the Low Vision Program reevaluation, low vision patients underwent a prolonged period of time filling out forms, or providing extensive medical information. In order for patients to be able to spend more time being evaluated by the doctor, a procedural change was implemented to keep track of incoming low vision patients and their information through a spreadsheet. When scheduling their evaluation, patients were given appointments to answer screening questions through a phone interview. In this 20 minute phone interview, patients were asked a comprehensive set of questions that would allow for doctors to have complete medical history and information. On the spreadsheet, information was noted. On the day of the patient's evaluation, the medical information was copied over to their medical record, which made them eligible to begin their evaluation upon arrival.

Outcomes/Results: After implementing procedural changes to the Low Vision program, it became evident that the modifications had resulted in significant facilitation of the entire process. After a thorough evaluation and implementation of procedural changes, all incoming low vision patients were accounted for. It was identified that each low vision patient saw a significant reduction in time for pretesting, which allowed them to spend a greater portion of their evaluation time with the doctor. Furthermore, it was calculated that the practice began to see weekly pretesting time averages of around 15 minutes, instead of 40 minutes, which was the amount of time that it would take prior to the implementation of modifications.

Evaluation/Conclusion: It is important to consider how much information patients are willing to provide over the phone interview, their mobility, how many glasses/devices they have that need to be checked, among other factors when evaluating how much time they have to spend during the evaluation. However, consistency with the modifications in the program (tracking each patient, taking patient information, conducting phone interviews) leads to the most efficient results in the overall patient experience as well as the Low Vision program.

Internship Abstract

Title: Low-Income Patients Maternity Episodes of Care Accessibility

Name: Angelina Haw

Preceptors: Stacey Knowles, Director of Managed Care
Project Supervisor: Jennifer DiGirolamo, Managed Care Coordinator

Agency: Saint Peter's Healthcare

Purpose: To study the New Brunswick area's low-income population's accessibility to maternity episodes of care and how to address the population's social determinants of health.

Significance: New Jersey is currently ranked 47th in the nation for maternal deaths and has one of the largest racial disparities for maternal and infant mortality. Saint Peter's University Hospital, located in New Brunswick, delivers more babies than any other facility in central New Jersey, having delivered more than 5,300 babies in 2021 and, with their Women's Health Clinic meeting 40,000 to 50,000 patients yearly. The U.S. Census showed that 34.4% of the population in New Brunswick live in poverty and studies have shown that low income women suffer from more chronic conditions and risk factors that can have a negative impact on maternal health and birth outcomes. By finding out what social determinants affect the low income maternity patients in accessing prenatal care and offer solutions, maternity episodes of care can increase in participation and make quality improvements.

Method/Approach: A review was conducted to assess the proportion of low-income women who visit the Women's Health Clinic. Data was exported and compiled into an Excel spreadsheet highlighting the maternity volume of patients in the Women's Health Clinic and the Saint Peter's University Hospital. Interviews were conducted with multiple staff members at the clinic regarding their screening process for low-income women. Their screening process consisted of perinatal risk assessments, meetings with financial counselors and social workers, and packets containing social service resources.

Outcomes/Results: In 2021, 981 out of 1,251 (78.4%) women were insured by Medicaid/Managed Medicaid or Charity Care. Looking further, 49 patients were pending Medicaid. 24.9% were straight Medicaid, 2.23% were Charity Care, 49.5% were Managed Medicaid, 17.6% were commercial plans, and 6.55% were self-pay. According to the clinic's staff, the main social determinants patients faced were lack of accessibility to transportation, education, child care, food, and stable cell services.

Evaluation/Conclusion: More than three quarters of the maternity patients who attend the Women's Health Clinic were insured through low-income programs. The various services offered at the clinic, such as nutrition, social work, resources, etc. address the multiple social determinants patients experience through educational pamphlets/packets; collection of numbers to social service resources, such as food banks, transportation services, and domestic abuse hotlines; bilingual employees; and assistance in enrolling in insurable programs like Charity Care and the NJ Medicaid plan. Education and information relayed by the staff are catered to those with low-income by adjusting food recommendations to healthy, yet non-perishable, fiber intensive, low-cost meals. Paper and phone appointment reminders, continued risk/financial screenings, sit-down education/counseling on offered services, and community outreach programs will help effectively address the social determinants faced by low-income maternity patients. Observation of the low-income population and their social determinants will continue in order to provide improvements.

Internship Abstract

Title: Urgent Care Telehealth Trends and Analysis

Name: Eva He

Preceptors: Alexandra Natale Jackson, MSHI, Director of Digital Transformation

Agency: Virtua Health

Purpose: To analyze data on volume, patient demographics, and wait time trends in Urgent Care Telehealth from November 2021 to February 2022.

Significance: Telehealth has grown exponentially over the past few years, in part because of the COVID-19 pandemic. There was a 38 time increase in telehealth utilization using pre-pandemic data (Bestsenny, Gilbert, Harris, & Rost, 2021). With a greater increase in usage, telehealth trends need to be analyzed to understand the needs of our community to ensure that patients are receiving appropriate, timely, and quality care. There are a variety of patients that use our services and we need to have the proper resources and data to provide care. An analysis can be made on how to move forward in telehealth by using patient data and volume trends.

Method/Approach: Gathering data and relevant information from November 2021 to February 2022, charts and graphs were used to show trends before, during, and after the COVID-19 Omicron variant surge. The graphs and charts were developed to be concise and clear to follow. In preparation for the data and analysis, research was conducted to provide information on telemedicine. In addition, there was research on the surrounding health care systems and their telemedicine service to compare with Virtua Health in services provided, price, and accessibility. Once all the necessary information was prepared, trends of the data within Urgent Care Telehealth was analyzed. Excel was used to create charts, graphs, and for mathematical equations for the analysis.

Outcomes/Results: Examining the 3,625 patients that used the Urgent Care Telehealth service, those in their 30s and females utilized the service more than any other age group. However, those in their 40s saw the greatest increase from pre-Omicron at an increase of 286%. Males also had the greatest increase from pre-Omicron at 236%. Analyzing volume, there was an 189% increase from pre-Omicron surge data. In analyzing wait time, patients are scheduled out days in advance to manage the increase in volume during the surge. The median wait time from when patients were scheduled to when they were seen by the provider is 154.23 minutes, which is an 8.8 time increase from pre-Omicron data. During the 7 o'clock hour, it experienced the longest wait time, whereas, in pre-surge data, the longest wait time is during the 10 o'clock and 11 o'clock hours.

Evaluation/Conclusion: Telehealth is growing, and understanding the community's needs will better prepare for the changes. The uptick in demand during the Omicron surge prepared the department for future adjustments. To ensure that data on patient demographics is complete, the team should be cognizant of missing or incomplete information. Focusing on the wait time - communication is needed in order to set proper expectations for patients and to let them know to be ready for their turn. Without consistent communication, delays are bound to occur, which will push back on the schedule. There are also a few outliers within the wait times data that can be addressed by ensuring that proper steps are taken on Epic for when the visit starts and ends.

https://docs.google.com/document/d/1yZapWvpcHfsrpVusnwc_XE76E3v_XBcDkZPjU97cI3k/edit

Internship Abstract

Title: Newark East Ward's Community Health & Wellness Fair

Name: Carolina Heleno

Preceptor: Colette M Barrow, MPA, PhD - Executive Director of Community and Population Health

Agency: University Hospital

Purpose: To enhance access to culturally competent care for University Hospital's (UH) patients and assess Ironbound community health needs through the implementation of a community health fair.

Significance: UH serves the Ironbound area of Newark, NJ, but many of the neighborhood residents are unaware of the healthcare options offered and available to them. The Ironbound is predominantly composed of immigrants and their descendants from Portugal, Brazil and Latin America, and Africa. Unfortunately, there is a lack of health data with these communities which reveals that not much community health outreach has been done. Outreach into this neighborhood assists UH in delivering culturally and ethnically diverse health care services and resources. Sponsoring periodical community health fairs is one way to increase awareness of the hospital and its services.

Method/Approach: Weekly meetings with the planning committee were held until the day of the event. Multilingual promotional materials like flyers (in Spanish and Portuguese) were distributed in the area to reach community members. Multilingual surveys (Google forms) were created to collect attendee demographics and linked to an Excel spreadsheet to facilitate event evaluation. Upon entry, attendees were assisted while completing the surveys and directed towards the screenings/services they needed.

Outcomes/Results: At the event there were 81 staff/vendors and 84 attendees present. The following was attendee location distribution: Newark (65, 77.38%), Kearny (7, 8.33%), and Elizabeth, Hillside, and North Arlington each had 2 (2.38%). These locations each had 1 (1.19%): Clark, Union, Bond Brook, Linden, Mountainside, N/A. The following was the ethnicity distribution: Portuguese (57, 66.67%), Brazilian (18, 21.43%), Black/African American (2, 2.38%), N/A (2, 2.38%). These ethnicities each had 1 (1.19%): African, Colombian, Ecuadorian, and Mexican. The languages most preferred to receive care were: Portuguese (58, 69.05%), English (15, 17.86%), and Spanish (3, 3.57%). The most requested medical services were general medicine (22), dental care (16), and insurance (10). The following screenings were done: audiology (27), blood pressure (BP) (75), and glucose (54). There were 3 SDOH intakes completed, 45 dental and 5 charity care appointments made, 27 appointment inquiries, 12 appointments made, and 5 appointments brought back to office to be scheduled.

Evaluation/Conclusion: Attendees represented the main ethnic backgrounds in the Ironbound. 22.62% were not Newark residents, highlighting UH's effective promotional efforts at providing outreach. More than half received BP and glucose screenings. Some factors that affected the turnout and services given were: location of event, connectivity issues, limited number of PCs, and inadequate number of translators. Some data was unable to be evaluated due to poor data collection amongst staff/volunteers onsite.

Internship Abstract

Title: Rutgers Day for Gun Violence Awareness
Name: Soraya Herrera
Preceptors: Patrice Harley, Communications Specialist II
Agency: NJ Gun Violence Research Center

Purpose: To gather information and prepare events for the 2022 Rutgers Day event.

Significance: In the United States, around 40,000 people are killed due to gun violence annually. Sixty percent of suicide deaths result from firearms. NJ Gun Violence Research Center focuses on prevention, safety measures for responsible gun ownership, identifying the nature of the gun violence, and effectiveness of current laws and policies. Through communication with government and local officials, they increase awareness of interpersonal gun violence within communities affected for safer environments. This project increased awareness and solutions to the rise of interpersonal gun violence for the public at the 2022 annual Rutgers Day event.

Method/Approach: The communications specialist constructed a budget. The Rutgers “swag” representative was contacted to choose appropriate Rutgers branded items. To advertise Rutgers Day and Research Day (in May), estimates were gathered from radio stations Magic 98.3 and 101.5 and local newspapers NJ Patch, the Star Ledger, and the Trenton Times. A Google search was conducted to find local artists who focus on gun violence to display at the event. Mason Gross School of the Arts was also contacted to find volunteer artists as well. A trivia game was compiled by the team to be used at Rutgers Day. Visitors who answer correctly get a chance to spin a wheel to win one of the swag prizes. Information was gathered about the Center for a tri-fold brochure, which included the mission, vision, infographic of a recent study, a QR code directed to the website, and social media accounts.

Outcomes/Results: From the Rutgers “swag” site, 25 masks, 150 keychains, and 24 t-shirts with the center’s logo were chosen and ordered. Magic 98.3 and NJ 101.5 along with the Star Ledger, The Trenton Times, and the NJ Patch were contracted for advertising. Local artists were hired to share gun violence driven art and stories behind gun violence shared with these artists. One hundred tri-fold brochures were created in Canva and sent to CRW Graphics for printing.

Evaluation/Conclusion: Planning for Rutgers Day was a fun experience. Rutgers Day is an opportunity to educate and engage many people in the local communities about the different organizations and the mission and vision it entails. One challenge was not being able to have a projector to display some visuals due to timing and setup. Another was finding out Rutgers only allows purchasing items from their website, which didn’t carry some items the organization wanted. Future events should start at the very beginning of the spring semester, start brainstorming early and get everyone involved.

Internship Abstract

Title: Pathways to Trust's Time to Listen to Rare Disease Campaign

Name: Shane Honkisz

Preceptors: Cheryl Galante, Executive Director

Agency: Pathways to Trust

Purpose: To find potential rare disease partners, stakeholders, collaborators and sponsors to develop programs that elevate the patient's voice in their medical care and increase their access to care.

Significance: In the United States, rare diseases affect an estimated 20-30 million people. These patients experience a myriad of difficulties, including limited options for treatment, severely reduced access to proper care, and barriers to obtaining an accurate diagnosis. Pathways to Trust brings the various stakeholders of the healthcare industry together to create programs for physicians and patients for the purpose of increasing patient-provider awareness and understanding of the little-known pathophysiology, complications, and treatments associated with rare diseases. By implementing such programs, Pathways to Trust and other stakeholders increase health care provider familiarity with rare diseases, leading to an increase in the quality of, and access to, medical care provided to patients with rare disease.

Method/Approach: Potential grant makers or foundations were identified with the capability to provide funds through grants to applicants and added to a spreadsheet. First, Google Search was used to locate the majority ($x > 75\%$) of the potential grantmakers/sponsors/partners, and governmental websites were used for the rest ($x < 25\%$). Second, potential grantmakers/sponsors/partners were added to their respective page on the spreadsheet. Third, each organization was researched to determine their viability (alignment with Pathways to Trust's organizational mission and patient-centered culture). Lastly, all findings/information were reported to the preceptor. Project proposals were reviewed, and adjustments made based on health administration concepts such as value-based reimbursement, continuum of care, and HCAHPs.

Outcomes/Results: Data for 43 local/community sponsors, 71 foundations, 77 pharmaceutical sponsors, 24 partners/collaborators, 8 national corporate sponsors, and 6 media partners were exported and organized into the shared spreadsheet. Within the spreadsheet, notes and additional information was recorded for each grantmaker/sponsor/partner, regardless of viability. In terms of viability, 100 grants found on New Jersey Grant Watch's website were inspected, with 9 of those being deemed viable choices. Time to Listen project proposals were accepted by Newark Beth Israel Medical Center, Overlook Medical Center, and 83 Bar. 83 Bar and NBI expressed interest in funding these programs. Due to success in partnering with Global Genes, 31/152 (20.4%) of patients participating in Global Genes' rare disease programs reached out to Pathways to Trust's website.

Evaluation/Conclusion: The primary pain point included an initial lack of a structured/linear grant search process, which was developed later into the internship. Given the data of the grants sample discussed in the Outcomes/Results section, it can be understood that even after applying multiple variables to narrow down the search process for grants, only a relatively small (9% in the case of the sample) amount will be truly viable after a second review.

Internship Abstract

Title: Raising awareness and connecting new patients to Blood Cancer resources

Name: Soriya Huynh, Student Intern

Preceptors: Erika Pomares, Senior Manager, Patient & Community Outreach

Agency: The Leukemia and Lymphoma Society - the Gulf Coast

Purpose: To address, inform, and connect new patients of the numerous blood cancer education, support, and services available through the Leukemia and Lymphoma Society (LLS).

Significance: In 2021, an estimated total of 186,400 people in the U.S. are expected to be diagnosed with leukemia, lymphoma, or myeloma in 2021. Blood cancers account for 9.8% of diagnosed cancers within the U.S. in 2021. Cancer can be a difficult battle to fight and is also a very expensive one as well. According to a report in 2018, cancer patients in the U.S. spend up to \$5.6 billion in out-of-pocket cancer treatments. To help alleviate some of these costs, LLS offers many resources for financial assistance for its blood cancer patients. In addition, LLS offers other resources like nutritional guidance from a specialist or linking cancer patients with others alike so they can speak to one another about their experience. This project focused on connecting new patients to LLS resources in the Gulf Coast.

Method/Approach: Patients were identified through Salesforce. Patients from the Gulf Coast were contacted via phone or email to communicate any needs or assistance they may want from LLS. Resources from LLS were provided as well as connecting them to programs offered by LLS and then were followed up with an email.

Outcomes/Results: Of the patients (n=50) contacted, only 16 patients (32%) responded to the call. They received additional resources from LLS and were informed of any programs needed. The remaining 34 patients (68%) who did not respond to the calls were left with a voice mail. Emails with a link to different resources the LLS offers were sent to them. Although more than half of the patients were left with voice messages, it was made sure that the patient still had a way to contact LLS for any resources or assistance they needed. Sharing assistance to blood cancer patients contributed to LLS's mission.

Evaluation/Conclusion: More than half of the patients contacted were no answer phone calls while some were able to respond. Different factors can contribute to the outcome of reaching out to patients who could not answer the phone can be due to the fact that a) an NJ area code was used to call the patients thus making them hesitant to answer, or b) they were busy, at work, etc. These are not the only factors that contribute to the lack of responses. If a phone with a Gulf Coast area code was used, the outcome might have been better. LLS's mission is to contact patients with resources and despite not being able to speak with a patient, they were still given contact information to learn more about financial assistance and programs. Ongoing communication and contact with LLS patients are still continuing to help blood cancer patients with what needs they have.

Internship Abstract

Title: MCRHC Lead Exposure Public Outreach Assessment

Name: Isagemni Inofinada

Preceptors: Direct Supervisor: David Henry, Health Officer
Project Supervisor: Dominick Astino, Senior REHS, Lead Inspector/Risk Assessor

Agency: Monmouth County Regional Health Commission #1

Purpose: To research and evaluate a proposal for conducting lead inspections among higher-risk populations living in apartments and multi-family dwellings within Monmouth County.

Significance: The World Health Organization estimated that lead exposure accounted for 900,000 deaths worldwide in 2019. Generally, it's difficult to gauge an exact death toll for lead poisoning due to the long-term damage in adults, including increased risk of high blood pressure and neurological damage. The CDC lists children's (< 72 months) confirmed blood lead levels (BLL) by NJ counties from 2017 and 1.9% of all Monmouth County children had a BLL ≥ 5 $\mu\text{g/dL}$. For reference, the median blood lead level in children ages 1 to 5 years in 2013–2016 was 0.7 $\mu\text{g/dL}$, which means 132 children in Monmouth County have a 614.2% increase in BLLs compared to the national average. Chapter 182 is an act concerning certain lead-based paint hazards, and residential rental property, that will be passed in July of 2022; MCRHC continues to establish a lead-based paint hazard program, based on the research found.

Method/Approach: In order to create an approach there needs to be an understanding or assessment of where high-risk areas are so that the population can be made aware of the life-threatening effects before they occur. Step 1 is to identify lead hazards and the stemming problems that create elevated blood levels, such as apartments and homes constructed before 1978. Step 2 is to get lead inspectors out in the field with lead meters to assess the magnitude of lead in homes. Step 3 is to mitigate nervous system and brain damage in children under 6y/o by having PH Nurses and community representatives advocating for parents and tenants to have lead properly removed or treat lead-contaminated areas.

Outcomes/Results: It was determined that out of the 63,274 residential homes in Monmouth County Regionals jurisdiction, 57% had the potential to be contaminated with lead, with them being built before 1978. Finding areas that have been contaminated with lead-based paint would correlate with socioeconomic status in that specific community. Children living in high socioeconomic status would most likely have lower lead levels compared to a child living in lower socioeconomic status. Benefit Analysis: The cost of treating a special needs child into adulthood, such as schools providing special educational resources is much greater than the cost of a lead exposure program and proper professional preventative treatment or remediation options.

Evaluation/Conclusion: The MCRHC is attempting to create a lead remediation proposal to have the ability to conduct lead testing and remediation in-house, without the need for 3rd party services. Chapter 182 became effective in July and the State has not given an 'instruction manual' on how to approach lead remediation, which led to MCRHC taking the initiative to lessen elevated blood lead levels in their jurisdiction, regardless of socioeconomic status. This project should be relooked at for relevancy and any potential changes/updates needed when the law is official in July 2022.

Internship Abstract

Title: Accreditation from the ADA as Following DSMES Standards of Quality: Standard 2

Name: Sharileen Javines

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

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

Purpose: To extract data within Children's Specialized Hospital's (CSH) data collection system, REDCap, the Electronic Medical Records (EMR) system, MediTech, and the patient information system, Salesforce, in order to measure quality of care, population served, and ability to access resources within the Chronic Illness Management Program (CIMP) according to the American Diabetes Association's (ADA) newly released 2022 Diabetes Self-Management Education and Support (DSMES) Standards.

Significance: Approximately 37.3 million people in the United States have diabetes and 96 million people are at an increased risk of developing Type 2 Diabetes (CDC, 2022). More than 122 million Americans are at risk for developing chronic conditions such as hyperglycemia which is becoming increasingly prevalent in children and adolescents (ADA, 2022). The mission of the CIMP is "to provide the children with the best tools to effectively manage their illness, maximize their quality of life, and achieve their family-centered goals of care" (Hamilton, 2022). The CIMP offers a comprehensive, multidisciplinary 4-week inpatient program and outpatient services that is unparalleled within the tri-state area. By following the ADA's standardized DSMES guidelines, CSH is able to ensure individualized care across: psychology, physical therapy, occupational therapy, recreational therapy, child life, medication and disease-specific education, nutritional counseling, and most of all, ensure quality care.

Method/Approach: A collection of patient data from REDCap, MediTech, and Salesforce was pulled into an excel report. This report of patient data from October 2021 to April 2022, quantified the demographics of the CIMP by measuring the race of the population, diagnosis of the patients, treatments currently used, needs of the population, and ways CSH is able to serve patients who experience barriers to care. Using the data collected and the ADA's Standard 2 rubric, the diabetes education specialist can document that CIMP's resources, design, and delivery methods align with the target population's needs.

Outcomes/Results: Of the nineteen patients seen in the past six months, the Standard 2 report indicates that the CIMP, serves the target population and provides many opportunities for educational success. More specifically, 95% of those nineteen patients are 19 years or less in age, 68% have Type 1 Diabetes, 26% have Type 2 Diabetes, 32% are on Individualized Education Plans (IEPs), 58% are technically savvy, and 53% are under Medicaid Insurance. With 100% of the patients benefiting from CIMP's physical facility, the patients are able to use DSMES tools to incorporate what was learned throughout their 4-week inpatient stay routinely and are followed-up with at 3, 6, and 12-month post-discharge. The data collected shows the CIMP's population served and alignment with Standard 2.

Evaluation/Conclusion: Working closely with the diabetes education specialist to receive accreditation as a nationally recognized education program for complying to DSMES Standards benefits the hospital and the patient in a multitude of ways. The hospital can ensure quality in accordance with standardized expectations, be reimbursed for their services, and also receive further referrals. This is especially important in improving the patient experience, ensuring that the delivery of care is maintained, and being able to continuously complete the mission of serving the diabetes community and its unique needs.

Internship Abstract

Title: Community Outreach & Assistance for Cancer Screening in Korean American Population

Name: Euikyeom (Tristan) Jeong

Preceptors: Dara Herman, Research and Data Evaluation Manager

Agency: Englewood Health

Purpose: To lower the barrier to access preventive screening methods for lung and colorectal cancer (CRC) for the Korean American (KA) population.

Significance: The KA population has a high incidence and prevalence of colorectal cancer and lung cancer- “Colorectal cancer (CRC) is the second most common cancer among Korean Americans, after lung cancer for Korean men...” (Ma et al., 2019). The high incidence and prevalence of CRC in the population could be attributed to socioeconomic reasons, access to healthcare, and demographics/cultural reasons, such as the traditional Korean diet. The biggest barriers to screening for the KA population are the “...lack of insurance, language inefficiency...” (Ma et al., 2019). By assisting the KA population by offering free cancer screening and assisting with language, more KA men and women are expected to participate in the cancer screening program.

Method/Approach: The Korean Center (KC) team used various methods to reach out to the KA population. The methods included (1) using ‘KakaoTalk’ messengers, (2) newspaper advertisements for the older KA population, (3) translating hospital brochures and smoking cessation booklets into Korean, and (4) creating YouTube videos regarding smoking cessation. For the participants, the KC team dispersed the Fecal Immunochemical Test (FIT) kits and smoking cessation booklet via mail, with collaboration from ScreenNJ. The KC team added free colonoscopy sessions for those with abnormal lab results from the FIT kit, with the uninsured population at highest priority. For the KA population with a history of smoking or status of currently smoking, the KC team offered low-dose computed tomography (LDCT). The KC team sent out 35 FIT kits on 3/31/22 with the return date of 4/11/22. Two weeks were given to return the samples to the hospital, with follow-up calls from the KC team throughout the period.

Outcomes/Results: The project consisted of assisting the KC team with community outreach, such as assisting with operations, translating for Korean patients, and making follow-up phone calls. There are 39 participants who signed up for either the FIT kit, smoking cessation/LDCT or both. From the sample size cohort (n=39), 27 participants (69%) picked up the phone, with 25 participants (64%) who have either received the FIT kit or returned it to the hospital already, as a result of the follow-up phone calls. Of the two participants (5%) who did not receive the FIT kit, 1 participant did not provide an address, while 1 participant did not receive the kit for unknown reasons; the KC team obtained the address for the participant. Two participants (5%) dropped out of the program to get examinations in South Korea. Twelve participants (31%) did not pick up the phone.

Evaluation/Conclusion: The program’s success was measured by the number of participants, since the project’s intention is to increase KA participation in cancer screening programs. The sample size cohort (n=39) is limited to the first round of sign-ups; there will be more rounds to receive more KA participants. The continuing project will be evaluated and monitored every month for success with follow-up phone calls. This project had limitations of: (1) the KC team having other hospital duties, resulting in limited time spent on this project and (2) having limited KC team staffing, resulting in the ability to manage small sample cohorts, one round at a time.

Internship Abstract

Title: Quality Improvement Design Addressing Nurse's Anxiety Through Coloring

Name: Andrew Joe

Preceptors: Two Researchers

Agency: Large healthcare system in Northern New Jersey

Purpose: To assess the effects of a Mandala color mural as an anxiety reducing intervention, improving resilience in nurses during a pandemic.

Significance: The hospital setting is an anxiety-inducing environment, especially for nurses. In the hospital acute care setting, over 92% of nurses experience anxiety on a moderate to a high level. This can in turn cause nurses to experience neuronal atrophy and difficulty in performing their daily duties (Maguire et al., 2020). Nursing anxiety has only increased since the beginning of the Covid-19 pandemic. Nurses are quotidianly exposed to Covid-19, living with the fear of not knowing if they have been infected. (Labrague & De los Santos, 2022). Nurses have to worry about both contracting the disease and possibly spreading it to others (Labrague & De los Santos, 2022). Untreated anxiety can lead to decreased work performance and job satisfaction. Nurse managers have the responsibility of helping their frontline nurses during this anxiety-inducing time, as organizational support will help reduce anxiety greatly (Labrague & De los Santos, 2022). One intervention to the anxiety that is mentioned in much-published literature, is coloring therapy. The study aims to use an innovative coloring method to alleviate nursing anxiety by giving nurses a meditative space to escape the chaotic work environment.

Method/Approach: A pilot study was conducted at a large healthcare system in Northern New Jersey. The system delegated six sites to implement the study. At each site, a Mandala coloring mural was hung in a chosen unit. The murals were only intended for healthcare system nurses. Pre- and post-surveys were available via a QR code placed next to the murals. The surveys consisted of three questions. Anxiety levels were measured through a visual analog scale for anxiety (VAS-A). VAS-A is a reliable self-rating tool that assesses state anxiety before and after an intervention (Abend et al., 2014). Red Cap was used as the data repository and Mini Tab was used to analyze the data. The study duration was one month.

Outcomes/Results: Of the sample size cohort (n=51), 46 nurses filled out the pre-survey while 51 nurses filled out the post-survey. The anxiety of the nurses in the pre-anxiety survey (M=55.59, SD=22.50) significantly reduced after interacting with the color mural (M=27.94, SD=19.59). An independent t-test was used as the groups were not matched exactly. The findings from the study proved to be statistically significant, proving that the results did not occur by chance ($p < 0.001$).

Evaluation/Conclusion: The Mandala murals were of great success in reducing anxiety levels in nurses across many different units. The mural completions were posted on the nurses' communication system, increasing the number of inquiries from different units regarding the steps needed to adopt this intervention. The Mandala murals were used to introduce an innovative method of reducing anxiety in nurses in the acute clinical care setting. As many nurses look to alleviate their everyday anxiety, the need for interventions like the colorful mural is in demand. Further comparative research with other interventions may prove worthwhile in helping nurses today.

Internship Abstract

Title: Investigating Social Determinants of Health among Underserved Populations

Name: Amanda Johnson

Preceptors: Suzanne Cornell, Director of Strategic Partnerships and Engagement

Agency: NJ YMCA State Alliance- Trenton, NJ

Purpose: To investigate social determinants of health in underserved populations that prevent access to the YMCA Lifestyle Change Programs and propose potential solutions to improving access and retention.

Significance: Over 88 million American adults have prediabetes and more than 8 in 10 adults are unaware that they have it. Without treatment, prediabetes will turn into diabetes and increase the risk of stroke and heart disease, which are two of the leading causes of death. Studies have shown that lifestyle change programs can reduce the risk of type 2 diabetes by 57% for those who are at high risk. Rural New Jersey counties (Cumberland & Salem) have the highest rates of diabetes when compared to other parts of New Jersey. This can be attributed to their lack of access to healthcare, transportation, cultural barriers, and the digital divide. These factors lower the chances of someone being screened for prediabetes and referred to one of the YMCA healthy lifestyle change programs. Through an effective marketing campaign, partnership with health networks, and implementation of community screening centers, access to the YMCA programs can be improved which will result in getting people the care they need.

Method/Approach: In order to improve access and build awareness of the Diabetes Prevention program the facility implemented an online bilingual (Spanish) Diabetes marketing campaign, partnered with physician offices in the NJ area, and provided in-person community wellness days for employers at local YMCAs. Through the marketing campaign we have reached over 33,000 people and have received over 180 Facebook leads that specify who is interested in the program. Additionally, the YMCA partnered with three physician offices in the South Jersey region and held two employee wellness days. During these events and programs, data was gathered to determine which marketing method was most effective in recruiting and enrolling patients into the Diabetes Prevention Program.

Outcomes/Results: Out of the 180 Facebook leads that were received through the online marketing campaign, there were about 40 people who were interested in joining the program. Each individual was provided with the necessary steps to get enrolled into a class. With the three physician offices the program received 12 referrals and placed the individuals at a local Y that suited their needs. After providing two employee wellness days and serving over 70 employees and local community members, 25 individuals were pre-screened with an A1C within the prediabetes range of 5.4% to 6.7%. Those 25 individuals were given the necessary steps to enroll in the program and supplied with healthy lifestyle tips.

Evaluation/Conclusion: To conclude it was found that the online bilingual Diabetes marketing campaign was the most effective tool in reaching the most people possible and increasing the rate of enrollment. For the other individuals who may not be active on social media, they were able to be reached through the partnership with the physician offices in South Jersey and the in-person community wellness days that provided screening services to employees and members of the community. The bilingual online marketing campaign closed the language barrier gap, while the in-person community wellness days gave those who were not online the opportunity to get screened and enrolled in a program that will provide them the help they need.

Internship Abstract

Title: ACS Cancer Action Network Lobby Day 2022

Name: Siddhi Joshi

Preceptors: Lindsay Nicholson, Cancer Control Strategic Partnerships Manager

Agency: American Cancer Society

Purpose: Strengthen outreach strategies and plan for the Cancer Action Network Lobby Day; an event that requires the presence of legislators to approve of the Failfirst/Step Therapy Bill.

Significance: Access to clinical treatments, medications, and therapy is fundamental to decreasing suffering and death from cancer and other chronic illnesses. However, too many patients face out-of-date insurance policies that hinders access to treatments that address, manage, and prevent the condition. Fail First, also known as step therapy, is a method employed by insurers in an ineffective attempt to manage costs. It stops patients from receiving the treatment prescribed by their doctor by forcing them to attempt and ultimately fail one or more alternative medications. Committing to legislation that would guarantee health care providers have the final say in what medication is best for their patients, and sharing the stories of patients who have faced these challenges and barriers, will amplify voices to our legislators and encourage stricter protection of patients from these unnecessary hardships. This bill enforces the quality of life by barring third party sources (i.e health insurance) from disapproving initial treatment for patient diagnosis given by providers.

Method/Approach: Analyzed bill text for Failfirst/Step Therapy Bill using various Cancer Action Network resources via the MA Grassroots team. Reviewed legislative contact information to compile social media handles of 50 participating House Representatives for participants to outreach post events. Reviewed data with Strategic Partnerships and began outreach to local organizations in and around colleges at Tufts University SOM, Umass Dartmouth, and Umass Amherst for constituent recruitment among campus groups and participation for the virtual event. Utilized social media to promote Lobby Day event as well as continue constituent recruitment among campus groups; publicized #MACancerLobbyDay, #KnowYourPlan. Attended and participated in MA Lobby Day training events to increase publicity for the event. Participated in follow up emails with lawmakers, social media debriefs and grassroots management debrief.

Outcomes/Results: 70 attendees for the virtual Kick-Off and over 50 participants for the legislator meetings. Over 40 meetings were held with legislators. The purpose of Cancer Action Lobby Day is to engage society in transforming quality of care by supporting the increased funding for the Massachusetts Tobacco Cessation and Prevention Program to \$8.25 million and restore it to its own line item (line item 4590-0300). In addition, increase in patient safety, advocacy, and appropriate patient protections by supporting consumer access to the Health care plan prescription drug information before a plan is purchased; including cost to the patient in real dollars and drugs covered.

Evaluation/Conclusion: Failfirst Bill was successfully approved in the last legislative session from the Senate. The House budget for the 2022-2023 fiscal year has been sponsored/co-sponsored by representatives for act S.756, an act relative to Step Therapy and patient safety sponsored by Senator Julian Cyr. The next step is to get the Senate to pass the amendments and increase budget priorities through transparency with legislators. And finally, support H.1311: An act empowering healthcare consumers sponsored by Senator Brendon Crighton to influence change and impact the future of cancer.

Internship Abstract

Title: Lead Notification Program Performance Assessment

Name: Shahara Kabir

Preceptors: Direct Supervisor: Peter Skeels, Manager of Rutgers Environmental Health and Safety
Project Supervisor: Rosa Krampert, Health and Safety Specialist

Agency: Rutgers Environmental, Health, and Safety (REHS)

Purpose: To analyze the rate of compliance for the lead notification program at Rutgers University and propose interventions to improve adherence to guidelines.

Significance: Lead poisoning symptoms in children include headaches, muscle/joint weakness, fatigue, behavioral problems, and loss of appetite. Lead-based paint was utilized in construction projects before the government issued a ban on consumer use in 1978. The Environmental Protection Agency (EPA) issued a regulation in 1996 that requires property owners to disclose to lessees, prior to signing their lease, of lead-based paint and/or lead-based paint hazards in housing built before 1978. The intent of the regulation is to reduce childhood exposure to lead, thereby reducing lead poisoning cases in children less than 6 years of age. The rule applies to housing that is likely to have children present, including Rutgers apartments, excluding dorms. Interventions will address gaps to improve the performance of the program.

Method/Approach: A retrospective review by the health and safety specialist staff was completed to assess the compliance of the lead notification program. Data for 282 buildings were exported to a spreadsheet, and of those, 32 were built before 1978 and are required to complete the disclosure form for lead-based paint and/or lead-based paint hazards. The disclosure forms were categorized to address 3 types of results 1) no reports or records pertaining to lead-based paint and/or lead-based paint hazards 2) records of inconclusive lead-based paint results 3) records of positive lead-based paint results.

Outcomes/Results: Of the sample size cohort (n=32), 18 buildings (56%) had no records indicating the presence of lead-based paint, two buildings (6%) had inconclusive results, and 12 buildings (38%) had positive results. Of the 18 buildings that had no reports, 11 (61%) completed the disclosure form. Of the two buildings that had inconclusive lead-based paint results, none (0%) completed the disclosure form. Of the 12 buildings with positive lead-based paint results, 3 (25%) completed the disclosure form.

Evaluation/Conclusion: More than half (n=32, 56%) of the buildings from the sample did not complete the disclosure form for lead-based paint and/or lead-based paint hazards. Yearly audits, e-mail reminders, and collaboration from department administrators will serve as effective strategies to (a) enhance initial and long-term adherence to the notification program procedures and, (b) improve lead-based paint and/or lead-based paint hazard disclosure form compliance. Ongoing monitoring of lead-based paint and/or lead-based paint hazard compliance within the university will ensure improvements for the future.

Internship Abstract

Title: Assisting the needs for the *Voices Against Violence Gala*

Name: Tabreez Kara

Preceptors: Sashay Turner, Communications and Development Manager

Agency: Day One- New York

Purpose: To evaluate the organizational needs and physical needs for the upcoming *Voices Against Violence Gala* in April and in New York City.

Significance: Day One is a nonprofit that is continuously raising money for various programs that educate the youth on intimate partner violence and show them what healthy and safe love looks like. The CDC estimated 26% of women and 15% of men experience some form of dating abuse before the age of 18. This is a concern that needs to be addressed through the programs Day One offers. In order to achieve this, meetings for funding need to be scheduled with New York City Council Members and research on any previous funding allocation and the work that has been accomplished for those services needs to be summarized and prepared for those meetings. Auction items for the Gala's silent auction also need to be secured so that funding goes towards more programs and awareness on social media.

Method/Approach: The method to tackle these problems was a joint effort of continuous outreach to new and previous donors and maintaining organized with the items and services we already have. This was primarily measured by the number of items that could be secured for the Gala, with our goal being 100 items. 100 items came from the previous year's Gala which had just under 100 items for their silent auction. On the other side of this is also the upcoming meetings with various members of New York City Council. This included reaching out to newly elected officials and introducing Day One- New York to them. These meetings were a successful start to gaining recognition from local city officials and possibly acquiring funding for the organization.

Outcomes/Results: The outcome from these methods are measured primarily qualitatively because fewer donors could have had a larger impact on Day One- New York. Eventually the goal of securing 100 items or more for the Gala was successfully met and consisted of a broad range of high quality and thoughtful items like a weekend stay in Delaware, guest passes to a local spa, and various gift certificates to NYC restaurants. The Gala will be able to raise a significant amount of money from them and that will be used to fund prevention programs and support systems for youth affected by domestic violence. The New York City Council Members were also reached and at least 25% of elected officials will now be able to recognize Day One- New York and possibly allocate city funding for the programs they are pioneering.

Evaluation/Conclusion: The goal of surpassing the previous year's Gala donation total was successfully completed and the range of items for the silent auction will hypothetically raise more money than the previous year's Gala. This will positively benefit the programs Day One- New York runs and hopefully add additional programs in more schools that focus on preventing dating abuse and teaching young people what and how a healthy relationship looks like. The measurement for success was to increase the amount of donations and items from the previous year's Gala and this is a helpful unit, but will eventually need to be changed by increasing the size of the Gala or the areas in which Day One- New York works in. Currently the organization only works in New York City, but has the potential to be taken to a nationwide organization with community led initiatives.

Internship Abstract

Title: Improve Efficiency in New Jersey EMT Initial Certification

Name: Robert Karch

Preceptors: Candace Gardner, New Jersey Office of Emergency Medical Services Program Manager

Agency: New Jersey Department of Health - NJOEMS

Purpose: To decrease the delay in providing emergency medical technician (EMT) applicants with EMS certifications, specifically regarding initial certification.

Significance: The State of New Jersey has had, since the early 1980s, tens of thousands of EMTs. Currently, there are around 35,000 certified New Jersey EMTs. The stakeholders in EMS in NJ, at all levels, agree that there is a profound shortage of EMTs in the labor force; while addressing the root causes of this issue, namely salary and work environment, have proven to be exceptionally difficult hurdles to overcome, it is within the capabilities of the Office of Emergency Medical Services to address the matter by ensuring timely approval of initial EMT certifications. The goal is to refine that process, using statistical analysis of what historical data we have available to locate shortcomings.

Method/Approach: A retrospective review of data for NJ EMT initial certification was undertaken, to determine the elapsed time between initial contact with NJOEMS and the completion of the certification process. Data from 4/1/2021 through 3/24/2022 were used: 550 exam verifications were found and initially 206 included, 878 exam result validations were found, and 659 initially included. 31 verifications and 9 validations were noted as unsuccessful, usually for technological or digital issues, and were not included. Additional exclusions were for exams other than EMT initial examination verifications and validations. Of the included EMT initial examination applicants, only 23 individuals could be positively identified as having been verified as eligible to take the National Registry of Emergency Medical Technicians' written examination and then having those results validated by NJOEMS and not by some other entity, and thus the data could be considered with greater confidence in the accuracy of dates of exam verification and results validation.

Outcomes/Results: The longest times from the completion of an initial EMT program to contacting NJOEMS for verification were 13 and 17 months and were considered outliers. 18 of the 23 applicants reviewed (78%) contacted NJOEMS for verification in three months or less, with a mode of less than one month from course completion to verification (n=7, 30%) and an average of 2 months. Three out of five (n=13, 60%) applicants contacted NJOEMS after less than three months. After verification, the longest time that elapsed prior to an applicant contacting NJOEMS to validate examination results was 6 months (9% of applicants), with a mode time of 2 months (30% of applicants) and an average of 3 months, with almost two-thirds (n=15, 65%) of applicants contacting NJOEMS in less than four months.

Evaluation/Conclusion: The numbers above demonstrate that an average new EMT will take around 5 months after completion of their initial EMT class to contact NJOEMS to validate their national test results and receive an initial EMT certification. However, certification in less than one month is clearly achievable, so the matter must not be a technological limitation but instead some human issue. Communicating the need to students and training staff for EMT students to contact NJOEMS for test-related issues must be made clearly, especially for validating a passed examination. Continuing this data gathering and observation going forward can ensure the effectiveness of this communication.

Internship Abstract

Title: Challenges in Transition with Epic Software from a Patient Perspective

Name: Amirah Khan

Preceptors: Direct Supervisor: Genesis Rivera-Pomales, Patient Access Department
Project Supervisor: Mary Kelso, Regional Director of Patient Access Department

Agency: Robert Wood Johnson University Hospital

Purpose: To research and analyze the benefits and utilization of the MyChart patient portal through the launch and transition to the new healthcare software Epic in the process of change management.

Significance: Epic is a new healthcare software system used to help hospitals and patients manage and access medical information more conveniently. The MyChart patient portal allows the patient to see medications, test results, appointments, bills, request medication renewals, arrange for online follow-ups or in person appointments, communicate with their doctor through secure messaging, and check in for their in-person appointments online. The software also allows for interoperability between hospitals. As RWJUH inherits Epic as their primary healthcare information management software, RWJUH wanted to assess the utilization and integration of the new system from a patient perspective.

Method/Approach: Multiple Epic training sessions were attended to become familiar with the software. Two interviews were conducted with people from other regional hospitals and employees from corporate with extensive experience using Epic and MyChart. Two other healthcare facilities currently using or pursuing to use Epic and MyChart had also been visited to evaluate the registration process. The specific registration process using kiosks provided at RWJ-Somerset had been observed, allowing for a swift registry. Several patients were interviewed at the hospital to gain insight regarding their experience using MyChart.

Outcomes/Results: With the launch of Epic and MyChart within surrounding RWJ hospitals, there were a total of 35% of patients who activated and used MyChart. Throughout the 6 month period between Oct. 2021 to Mar. 2022 there was a peak of 12% of appointments scheduled online using MyChart and 9.1% of patients used the eCheck-in option before their appointment. Around 38.7% of self-pay payments were made and 80% of patients have used paperless statements with MyChart since June of 2021. Patients have stated their appreciation for the ease of sending messages to their doctor, requesting an appointment or refill, and pre-appointment check-in processes. Complaints included issues with getting used to the system and with the inconsistencies in the use of MyChart across different RWJBH practices.

Evaluation/Conclusion: Being able to experience the effects of the transition first hand allowed for a wider perspective on the difficulties and simplicities of Epic, especially with MyChart. After multiple consultations with staff and patients with a considerable amount of experience with Epic, there are only benefits to the transition. Challenges include patients being technologically challenged where there is hesitancy to succumb to the use of a new system yet to integrate throughout all RWJBH practices.

Internship Abstract

Title: Resource Guides for Cancer Patients and Underserved Populations

Name: Amy Khan

Preceptors: Megan Smith, Patient Outreach Manager

Agency: Leukemia and Lymphoma Society

Purpose: To create resource guides for blood cancer patients and underserved populations in the Eastern PA and Delaware region.

Significance: There have been slight advances in cancer resource centers and treatment options for cancer patients in the previous and present years. However, even though these avenues exist, poorer geographical areas where certain types of populations live are not able to access these resources. Additionally, due to their lower socioeconomic status, these populations are also not made aware of resources that might be available to them. The purpose of this project is to create a guide for issues relating to cancer treatment options, financial assistance options, mentoring, hospital locations and support centers that can be distributed to these populations. By creating this guide, a cancer patient is able to utilize the information for any assistance that they may need, including important information that they might not have received due to their geographic location. The purpose of LLS is to relay this type of information to the patient and by creating this guide, it is much easier to give patient's this information. This project contributes to the solution by making sure cancer patients in underserved areas are given access to the help that they need.

Method/Approach: To address the issues concerning underserved populations, research was done to showcase how many underserved populations are affected by cancer. With the assistance of the internship supervisor, current data and research on African Americans and Myeloma was available to use for the project. Data and statistics about how prevalent myeloma is among the African American population was reviewed and used to develop the guide. Since the resource guide is meant for the underserved population as a whole, other populations were also researched. Research was completed to include the Hispanic population, women and breast cancer, veterans diagnosed with cancer and the LGBTQIA population who are diagnosed with cancer.

Outcomes/Results: The results for this resource guide focused on the Eastern PA and Delaware region and about ten to twenty cancer communities or resources were found for each region. There were also two to three services that were specifically targeted for each underserved population. As of right now, this is still a work in progress and the ten to twenty service mark has not been targeted. Coupled with this, it is increasingly difficult to find community resources that do cater to these specific populations, so much more research and time is needed in order to hit the intended target populations.

Evaluation/Conclusion: To determine the effectiveness of the resource guide, the internship supervisor will utilize the finished guide by distributing it to the patients of this underserved population. A record will be kept on how many patients utilize the resource guides and whether it was helpful to them or not helpful. The resource guide will also be utilized among the entire Leukemia and Lymphoma society team, volunteers and interns. The same record will be kept concerning the effectiveness of the resource guide. Follow up calls to patients will also be made to personally ask the patients whether the resource guide was helpful.

Internship Abstract

Title: Feelings of Caution and Isolation among Young Adults Coping with Racial Stressors and Experiencing Psychosis

Name: Aysha Khawaja

Preceptors: Ana Stefancic, Ph.D., Associate Research Scientist

Agency: Columbia University, Department of Psychiatry

Purpose: To explore feelings of caution and isolation among young adults who are coping with racial stressors and experiencing psychosis and identify how mental health providers can address these concerns.

Significance: Racism has a profound negative impact on the mental health of young adults that belong to historically minoritized populations. Young adults who experience episodes of psychosis are at a disadvantage as experiences of racism can worsen symptoms and exacerbate the potential for social isolation. There is a need to identify the impact of everyday racial stressors in the lives of young adults receiving early intervention services for psychosis so that they can be better supported. By acknowledging and addressing the unique experiences that people of color have to endure and the effect they can have on an individual's mental health, providers can help young adults navigate racial stressors and symptoms.

Method/Approach: Semi-structured qualitative interviews were conducted with 14 OnTrackNY participants (i.e., clients receiving early intervention services for psychosis) who were from minoritized racial groups and 12 family members. Interviews explored experiences of racism and how individuals cope and were recorded and transcribed. A thematic analysis approach was used wherein transcripts were coded and code reports were reviewed, analyzed, and grouped along key topics (e.g., negative impact, caution, isolation) to identify concepts and themes emerging from interviews.

Outcomes/Results: OnTrackNY participants and family members described a range of experiences with racism and discrimination in settings such as school, the workplace, and out in public. These experiences led many individuals to feel “out of place,” to become more cautious, and to cope by limiting certain activities or social interactions. Participants reported not participating in certain activities in school or seeking out health services from specific neighborhoods out of fear of feeling misplaced, misunderstood, or mistreated based on past experiences. Participants also emphasized the lack of diversity in work or school settings that left them feeling isolated. Other participants mentioned limiting interactions with the mental health system and law enforcement, feeling that their lives could be endangered, which caused them to be cautious: “If we increase the amount of interactions, we know the potential for [Black males] being killed increases; that fear is underneath and infuses every way that we interact with the system to get our brothers the help that they need.”

Evaluation/Conclusion: These findings highlight how experiences of racism have instilled fear within many participants, causing them to avoid certain interactions and settings as a way of coping and limiting possible exposure. To better support individuals with psychosis from minoritized racial groups, providers should have more active conversations on racism and the experiences that participants have gone through. This includes helping individuals to address these feelings and navigating the emotions surrounding them, developing healthier coping methods, expanding social support, and utilizing providers from underrepresented communities to represent participants of OnTrackNY.

Internship Abstract

Title: Recruiter Intern, New York Metropolitan Area

Name: Adem Kilic

Preceptors: Jill Rowland

Agency: A+ Personnel

Purpose: To work with local businesses, corporations, and healthcare facilities in the New York Metropolitan area to locate and qualify candidates utilizing our database, job boards, and research skills to help companies find people as well as help people find companies.

Significance: The unemployment rate in the New York Metropolitan area for the past two years, due to Covid-19, has had a significant impact on employers. After looking at the seasonally adjusted unemployment rate of 12.0 percent in December 2020 to now a decrease of 8.8 percent in December 2021, although Covid-19 has changed the nature of the work environment, employees are still less inclined to return to work and many positions are requiring people to return to work in-person. A+ Personnel is contracted to work for employers who struggle with vast vacancies for critical positions to make businesses and healthcare facilities run effectively and efficiently. This project helps to combat issues businesses or healthcare facilities may come across to fill those much-needed positions and return to a somewhat pre-pandemic state of normalcy.

Method/Approach: To achieve the goal of fulfilling the current needs of health related businesses and healthcare facilities, the agency used a three step approach. The first step is by conducting a search through our existing database for potential candidates in each job order that our clients submit to us. The next step is to use a variety of job boards to look for candidates that are actively searching jobs and that meet the requirements of the clients, primarily using LinkedIn, Monster, and Indeed for our searches. After which we would then search for passive candidates that are not currently in the job market and research their contact information to further discuss the opportunity.

Outcomes/Results: From the months of January 2022 to April 2022, a total of 30 positions were addressed for job orders that varied from medical, technology, or business. Through the usage of job boards and the agency's database, roughly 3-4 candidates with qualified resumes were sourced per position, which was then moved to an interview stage prior to job acceptance. Of the 30 positions, 14 of these positions were filled and the other 16 positions are still in process. These job orders can take quite a bit of time as some positions are for non-profit agencies and scheduling interviews can be difficult if candidates aren't available at the allotted times.

Evaluation/Conclusion: A+ Personnel's work will always be ongoing with a constant influx of people looking for employment and employers looking for positions to fill. A+Personnel's work thus far has been making a productive difference in the New York Metropolitan Area by continuing to help employ hundreds of individuals after the mass employment vacancies created from the Covid-19 pandemic. There are still limitations to this as the company's mission is to bridge the connection between the candidates and the employers by bringing them together, as it is ultimately up to the candidate and company if they deem each other a fit.

Internship Abstract

Title: PTSD in Women who Have Experienced a Miscarriage/Fetal Demise

Name: Rachel Kim

Preceptors: Dr. Gloria Bachmann, Dr. Allison Cabinian

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

Purpose: To review the literature on post-traumatic stress disorder in women who have a miscarriage/stillbirth and identify areas of patient care that may need improvement.

Significance: Post-traumatic stress disorder (PTSD) is a consequence of experiencing extreme trauma, which arouses intense negative emotions in the individual involved. A miscarriage or stillbirth may fall under the category of a traumatic event, especially if parental bonding had occurred and if the patient was exposed to unpleasant sights such as blood or tissue (Engelhard et al., 2006). In the United States, miscarriages are experienced by approximately 10 to 20 percent of pregnant women who are aware of their pregnancy; one study found that 67.9 percent of their sample had PTSD after a miscarriage or perinatal loss (Daugirdaitė et al., 2015). In addition to miscarriages, there are 2.5 million stillbirths worldwide, and 60 percent of a sample of women who had experienced a stillbirth met the criteria for PTSD (Westby et al., 2021). One of the Women's Health Institute's missions is to optimize the wellness of women on a national and global scale through its research. In order to improve the mental health outcomes of women who have experienced a miscarriage or stillbirth, it is crucial to research and review the literature that already exists on this topic while providing healthcare professionals and families with considerations for best-practice care.

Method/Approach: A literature review was conducted using peer-reviewed journal articles from databases such as Google Scholar and PubMed. The searches revolved around three general subtopics: PTSD in women who have a miscarriage/stillbirth, risk factors for PTSD after a miscarriage/stillbirth, and miscarriage/stillbirth care practices. After analyzing and selecting ten relevant articles, a comprehensive literature review was created to discuss the existing research on PTSD in women who have experienced a miscarriage/stillbirth and the improvements that can be made in caring for these patients.

Outcomes/Results: Eight journal articles discussed the development and prevalence of PTSD following a miscarriage or stillbirth. One of these studies found that within one sample of women who had a miscarriage, 25% had PTSD after one month (Engelhard et al., 2001). In contrast, a study of women who had a stillbirth showed that 11% had PTSD after two to four months and 8% after fourteen to sixteen months (Horsch et al., 2015). Four articles discussed risk factors for PTSD after a miscarriage/stillbirth, which can include trauma history, no prior pregnancies, income, age, gestational age, education, and neuroticism. One of these studies found that women who had Negative Cognitions about the Self and about the World following a stillbirth showed a higher number and frequency of PTSD symptoms (Horsch et al., 2015). Three articles discuss best practices for care and patients' experiences with miscarriage management; perceived emotional support from either professionals or friends and family proved to be crucial for the recovery of patients after the loss of their baby (Horsch et al., 2015).

Evaluation/Conclusion: Developing PTSD after a miscarriage or stillbirth is not uncommon. However, the negative psychological impact of the traumatic event may be lessened over time through high levels of emotional support by health professionals, friends, and family. Thus, it is especially crucial for health professionals to show sensitivity towards these vulnerable patients following the loss of their babies.

Internship Abstract

Title: Promoting Health and Hygiene Through Community Outreach
Name: Anjelica Kiriakatos
Preceptors: Kelsey Lynch and John El-Maraghy, Co-Founders, Intern Advisors
Agency: Archangel Raphael's Mission (ARM)

Purpose: To empower those in need and provide access to services that promote health and hygiene within the New Brunswick area.

Significance: As of 2020, there were approximately 9,663 men, women, and children experiencing homelessness across New Jersey. In Middlesex county alone, 629 people were considered homeless on any given night and 175 of those are identified as chronically homeless. The highest rates are seen in the city of New Brunswick. Many of these individuals do not have access to a meal or personal hygiene care services. Not only is a lack of hygiene risky to a person's health but it also makes it difficult for an individual to sustain a job or develop relationships. Archangel Raphael's Mission (ARM) is a nonprofit organization that is located at the United Methodist Church in downtown New Brunswick. This organization is dedicated to empowering the community by helping those in need and providing meals as well as access to services and resources designed to maintain personal hygiene.

Method/Approach: Between January 15 and April 30, information about ARM services was provided at dinner events at the United Methodist Church 1-2 times per week. One event was a fundraiser to raise money to help expand our mobile shower unit which took place on Saturday April 30, 2022. Approximately 15 volunteers were recruited to help at different times throughout the day between the hours of 10 a.m. to 4 p.m. This involved a marketing campaign using social media to get people interested in helping the organization's cause between the dates of April 1st to the 30th. On the day of the fundraiser, a table was set up outside of the Rutgers' College Avenue student center where baked goods were sold and participants donated money to play an activity. Informational pamphlets were also given out at this fundraiser to raise awareness about ARM and the services provided for those in need.

Outcomes/Results: Currently, as of May 1, 2022 our efforts include raising a little over \$200 at a fundraising event created to help the homeless community of New Brunswick. In addition, approximately 100 informational pamphlets have been distributed to individuals educating people about community health outreach and ways they can get involved. This information also involves places, times, and dates where those in need can access various resources in terms of meals and personal hygiene services. An additional 15 volunteers were recruited to aid in our fundraising efforts throughout the day on Saturday April 30, 2022. Overall, in total another 20 volunteers were signed up throughout the semester to help with the organization's daily dinner service at the United Methodist Church in New Brunswick which is run between the hours of 6 and 7 p.m.

Evaluation/Conclusion: The health and hygiene services that ARM provides for the community are basic essentials that should be available to all. In providing these resources, ARM is increasing preventative care efforts within the homeless community of New Brunswick. In providing individuals with hygiene and healthcare products or services, this reduces the spread of disease and infection. The dinner service also allows families who are worried about where their next meal will come from the assurance that they will be fed.

Internship Abstract

Title: Heart Disease and Hypertension Educational Modules

Name: Monaver Klenja

Preceptors: Vanessa Ingrid Farrell, MPH, MCHES, Founder and CEO

Agency: VI Health and Coaching, LLC

Purpose: To develop an educational curriculum consisting of seven modules that raise awareness for hypertension and heart disease in women with busy lifestyles.

Significance: Only 56% of women are aware that heart disease is the number one killer of women in the United States (CDC). Approximately 299,578, or about 1 in every 5, female deaths are a result of heart disease (CDC). Hypertension impacts African American women more in comparison to any other racial groups. In the U.S., nearly 58% of African American women have high blood pressure compared to about 41% of white and Hispanic women. For African American women, death rates from high blood pressure-related causes are nearly double that of white women and more than twice the rate for Hispanic women. VI Health and Wellness Coaching, LLC provides personalized health coaching to women who have hypertension. Clients are coached using the organization's signature C.O.N.T.R.O.L. curriculum which is made up of seven modules providing women with lifestyle change information on how to manage and control their hypertension.

Method/Approach: Each educational module is in correspondence with the VI Health and Wellness Coaching, LLC company's framework. The curriculum consists of various web page articles that speak about proper nutrition, physical activity, how to measure blood pressure, goal setting, reducing sodium levels, and stress management. The fall semester intern provided research which was augmented by additional search via Google. Each module was compiled into a 1-2 page document. Five to eight questions per topic were created to be used at a later time as pre/post tests for clients. After the preceptor approved each write-up, they were added to the agency website. A social media intern created posts to promote the webpages for Instagram, Facebook, and LinkedIn.

Outcomes/Results: Between January to March 2022, four educational modules and related questions were completed. For the first module "Clarity" was an informational post about what hypertension is, how it affects you, intervention plans, and coping skills. The second post was titled "One Size Does Not Fit All", which speaks about goal setting. "Nutrition and Physical Activity" is the third module and it works on building better eating habits and finding ways to incorporate exercise into your daily life. The fourth module was "Taking your Blood Pressure at Home" and it informs each client on how to safely use a monitor at home. Each module was finalized and published on the VI Health and Wellness Coaching, LLC website and the Facebook Group: Healthy & In Charge. Between January to March 2022, 120 people on average viewed the educational modules.

Evaluation/Conclusion: These resources will be used to improve the lives of African American women with hypertension. The seven educational modules will help positively modify each client's behavior who are trying to reach their health goals. Success of the project will be measured in part by how many people visit the various C.O.N.T.R.O.L educational modules online and enroll in health coaching. The educational modules will elevate the reputation of the agency and attract new clientele.

Internship Abstract

Title: Middlesex Water Contaminant Health Education Campaign

Name: Taylor Lavalla

Preceptors: Ezra Helfand, Executive Director & CEO

Agency: Wellspring Center for Prevention

Purpose: To develop a health education campaign to help understand the prevalence and health effects of water contaminants and promote efforts to protect the community, while promoting healthy water drinking.

Significance: According to the EPA, if drinking water contains unsafe levels of contaminants, it can cause adverse health effects, such as gastrointestinal illnesses, nervous system or reproductive effects, and chronic diseases such as cancer (EPA 2022). Recently, Middlesex County found harmful contaminants, including PFO/PFAS, chromium, and arsenic, in tap water that exceed Environmental Working Group (EWG) Health Guidelines. Most of these contaminants are harmful to human health and lead to adverse health effects. The purpose of this health education campaign will be to use evidence-based research to educate the community on the impacts of drinking dirty water and how to protect oneself from these water contaminants. By presenting these issues that are affecting the community, Healthier Middlesex and Wellspring Center for Prevention aim to increase individual's knowledge on what is in their local water and take actionable steps for improving their water quality.

Method/Approach: To educate the people of Middlesex County on the existence of contaminants in their water supply and ways to maintain clean drinking water, an educational presentation was created. To create this presentation, information was collected using comprehensive research on the prevalence of the water-related issues in Middlesex using the EWG Tap Water Database. To evaluate the presentation, a survey was created to measure people's awareness of what is in their local drinking water and what resources are available to them. By working with Healthier Middlesex, a PowerPoint presentation was developed that could be presented to the Middlesex Health Department, the Middlesex County Humans Services Advisory Council, local officials, and residents of Middlesex County. The components in this presentation include: what contaminants existed, the health effects these contaminants cause, the importance of effective water filtration and different filtration methods that can be used, and other preventative measures.

Outcomes/Results: Based on the 46 responses from the questionnaire, 74% of people do not know where the water they are drinking comes from. A good proportion of people (37%) do not use a type of water filtration method at home. More respondents (59%) have received a water use advisory, such as "boil water", but only (13%) of people felt very prepared for this advisory with the information given. The majority of respondents (67%) do not know where to go to find more information about the water they are drinking.

Evaluation/Conclusion: Based on these results, people need to become better informed on safe drinking water. This health education campaign is in the planning phase and the next stage of this program is the execution phase where the presentation will be delivered and widely available. After the presentation is executed, similar questionnaires will be implemented to measure whether or not it helped educate people and if the campaign was effective. There is a future consideration f

Internship Abstract

Title: “Healthy Eats” Food Security Promotion

Name: Jihong Lee

Preceptors: Manuel Castaneda, Director of Community Health

Agency: New Brunswick Tomorrow - New Brunswick, NJ

Purpose: To educate the community about healthier eating through educational posts on social media and to provide food-based educational social media content in order to promote nutrition and overall wellness.

Significance: Live Well-Vivir Bien New Brunswick focuses on raising awareness as well as educating the community about food security “Eat Well”. Live Well helps connect information and community resources to help gain access to healthier foods and make lifestyle changes that can help you lose weight, lower blood sugar, fight obesity improve blood pressure, and possibly lower your cholesterol. Social media allows the agency to reach a large audience. This project will use Instagram, Twitter, and Facebook to promote the “Eat Well” campaign. New Brunswick is a food desert as there is no close access to grocery stores or markets and the community must rely on convenience stores or fast-food restaurants for their main food source.

Method/Approach: Between April 3 and April 28, each week had two days of posts where content included interactive stories, educational posts, and mindfulness videos. The analytics were measured through Later, a scheduling platform for social media. Content included how we can use food as medicine, recipes, and dishes to incorporate into everyday life. The analytics showed how the weekly posts in April improved compared to the previous month's March and saw how engagement had improved through the measurement of likes, shares, reach, and impressions. This information would also help Live Well see how different kind of food content and recipes will help the community better their care and expand their knowledge on food health. A focal point to food security is eating healthier. Food security is tied to income but for those with lower incomes in food deserts, accessing fresh healthy foods may be difficult. My posts correlated taking basic everyday foods to eat healthier with what is available to the community now.

Outcomes/Results: Analytics were measured through Later, a scheduling platform for social media. For the month of April, nine different topics on healthy eating went up. On average, the number for Instagram stayed pretty consistent and ranged from 145 to 151 and the engagement was consistent with each post. When analyzing the reach and impressions, posts with specific foods to help with health, as well as recipes, had gotten more traction than posts without. Comparing Instagram story analytics, the month of April's healthy eats posts did better than March's posts of food security content. For March, the Instagram stories remained at a combined total reach/impression of 73 and for April, Instagram stories had a reach of 182 and impressions at 184.

Evaluation/Conclusion: Live Well's Instagram had positive growth and engagement compared to the previous month's posts on food security. The reason may be that it was a new perspective on the Eat Well focus point of Live Well. Moving forward, Live Well can continue to create educational content on healthier recipes. They can take advantage of when followers are online the most to better plan their posting schedule and get even more engagement and reach.

Internship Abstract

Title: The Impact of Social Interaction in Senior Citizens

Name: Tiffany Liao

Preceptors: Kate Ann Brace, Program Development Specialist

Agency: New Brunswick Senior Citizen Resource Center

Purpose: To promote social activity and cognitive learning among senior citizens by researching and creating interactive games for them to engage in once in-person activities are allowed at the senior center.

Significance: As older adults age, it becomes harder for them to have social interaction and engagement amongst each other. In 2019, around 28% of older adults in the US (14.7 million people) lived alone (AoA, 2020). This can cause them to feel more isolated from the outside world. As a result, their health can gradually deteriorate. It was found that social isolation in older adults, aged 50 and older, was associated with around a 50% increased risk for dementia. Poor social relationships among seniors led to 29% increased risk for heart disease and 32% increased risk for stroke (CDC, 2021). The New Brunswick Senior Citizen Resource Center acts as a place for seniors to interconnect with each other in a fun, safe, and healthy environment. This project on researching and creating interactive games can stimulate cognitive learning and thinking, and can allow the participating senior citizens to enjoy themselves and take a break from life at home.

Method/Approach: Research was conducted by investigating through the internet what games older adults were interested in. A PowerPoint, created in a Jeopardy template/format with facts on various potential games, was presented to senior citizens to see what games they found the most interesting and which would be the most engaging and entertaining. A short survey was conducted before the survey asking about their previous knowledge and/or enjoyment of games. A survey was also conducted after the presentation on which games they would enjoy the most and any feedback or suggestions to make them more exciting.

Outcomes/Results: At the start of the presentation, the seniors were asked about some games that they enjoyed playing in their own time. Some responses included card games and board games. When the presentation ended, they were asked if they learned anything new about games, any games mentioned that they were interested in playing, and if they would join more in-person events at the senior center if these games were introduced. All attending seniors said they learned something new and were interested in attending more in-person events if more activities involving interactive games were put in place. Some games that were mentioned included monopoly, dominoes, and bingo.

Evaluation/Conclusion: Overall, the survey and presentation were successful; they expanded the seniors' knowledge on the dynamics of games and had them more interested in participating in in-person events at the senior center. Some limitations during the implementation of this project included several uncontrollable variables. The number of seniors attending each presentation was unknown, making it difficult to get relatively unbiased responses. Some seniors were not interested in the presentation topic on games and in playing board games at the center, causing there to be less engagement when responding. Ongoing surveying will be carried out as the senior center starts opening up to more people, allowing there to be a bigger sample size and fairer responses.

Internship Abstract

Title: Mental Health of Women Post-Miscarriage

Name: Victoria Lipari

Preceptors: Gloria Bachman

Agency: Rutgers RWJMS Women's Health Institute

Purpose: To conduct a literature review on the mental health of women post-miscarriage and create an educational essay with a poster to present at the New Jersey Obstetrical and Gynecological Society's 70th Annual Meeting to raise awareness of this topic.

Significance: Pregnancy, regarded as a joyful time, can be turned into a shocking loss and tragic event for those going through pregnancy loss. In 2008, 1.1 million pregnancies ended in miscarriage, resulting in about 20% of woman becoming symptomatic for depression and/or anxiety (Nynas, 2015). Psychiatric morbidity following miscarriage impacts quality of life and potential future pregnancies for many. The *Human reproduction Update* found in their study that early pregnancy loss (EPL) has a significant risk of psychological morbidity with up to 41% self-reporting clinically significant levels of anxiety, 36% depression, and 39% self-reported post-traumatic stress disorder (PTSD) at 3 months (Farren, 2018).

Method/Approach: Information will be collected by conducting a literature review of scholarly articles and studies done on women post-miscarriage to gain more of an understanding on the negative impacts on women's mental health. After completing the literature review, a research essay will be created and the poster for the New Jersey Obstetrical and Gynecological Society's 70th Annual Meeting will be developed and submitted for final review by April 15th. The final presentation will be presented to all those attending the New Jersey Obstetrical and Gynecological Society's 70th Annual Meeting using a poster board format and delivered in Atlantic City on May 20th, 2022 to spread awareness on this ongoing public health issue.

Outcomes/Results: Upon completing and submitting the paper and poster on April 15th, 2022, they have been accepted and registration for the event is complete. Findings from the project have shown that psychiatric morbidity, anxiety, depression, and PTSD are all significant risks of those post-miscarriage. Reproductive trauma is medically common due to traumatic loss of the pregnancy and sense of self. Women who have suffered through miscarriages go through both physical and mental trauma. The process of their bodies' healing can be more challenging due to mental stability. Support groups and psychotherapy are the most effective ways to improve mental health. These women can have PTSD when pregnant in the future; grieving and processing time are needed.

Evaluation/Conclusion: As the presentation won't take place until after the completion of Professional Practice presentations, final data of participants and receipt of the project will not be available. I have high expectations that those attending the event will be aware and acknowledge how psychiatric morbidity, anxiety, depression, and PTSD are all significant risks of that post-miscarriage, along with how prevalent these mental impacts are.

Internship Abstract

Title: Compliance at Home Health Agency

Name: Natalie Lopes

Preceptors: Natallia Pranko RN BSN

Agency: Home Care For You Inc.

Purpose: To collect and review compliance documents from employees to ensure compliance with agency and state regulations and procedures.

Significance: Home Care For You is a privately-owned agency that provides home care services to the elderly, ill, and disabled through certified home health aides who travel to the patient's homes. The agency strives to schedule continuous and reliable care to allow patients to continue to live in their own homes. Home health agencies are highly regulated and it is crucial that regulations are consistently monitored. Factors such as the COVID-19 pandemic, transitioning to working from home, transitioning from paper records to electronic records, and understaffing contributed to the disorganization of mandatory compliance procedures. This project focused on compiling necessary documents to assure compliance.

Method/Approach: The agency's electronic medical record (EMR) system, CareCenta, was used to export an Excel worksheet that showed what compliance information the home health aides were missing. The agency was relying on CareCenta and physical files for home health aide and patient data. Data missing from CareCenta was located and added from the paper files. Other missing compliance documents such as the yearly TBQ forms, expired I-9 documents, and mandatory in-service tests were identified. Home health aides missing critical information were contacted via mail to their home address.

Outcomes/Results: Out of 75 home health aides, 37 missing TBQ forms were collected, 12 I-9 forms were updated, and 32 missing mandatory in-service tests were collected. All missing documents were received through email, text message, fax, return mail and by person. Documents were scanned electronically, uploaded and updated to CareCenta. Exceptions were added to the database for future audits. These exceptions for overdue compliance included home health aides that were on vacation, were sick in the hospital, or were no longer working for the company.

Evaluation/Conclusion: Most of the information needed was easily collected with a simple follow up phone call. Understaffing of the office staff in the home health department impeded time for following up on missing compliance documents. However, CareCenta is now updated with all the missing documents and information. The office staff can be more secure and time efficient in their work because all staff from multiple offices can access the home health aide's profile through the EMR system. The home health aides are also held accountable for the proper compliance tasks that need to be followed to remain an employee of the agency. The agency is ultimately more prepared for when the Board of Nursing does a mandatory 2-year audit.

Internship Abstract

Title: Pharmaceutical Competitive Intelligence Performance Assessment

Name: Brandon Low

Preceptors: Emanuele Criscione, CEO and Ankit Patel, Pharmaceutical Analyst

Agency: LCN Consulting Inc - West Caldwell, NJ

Purpose: To provide market research and competitive intelligence in West Caldwell to pharmaceutical companies.

Significance: Every year the Food and Drug Administration approves around 40-60 drugs that impact many therapeutic areas. The United States also has 451 Generic Pharmaceutical Manufacturing businesses. New Jersey happens to be one of the largest hubs of pharmaceutical companies that compete against each other. LCN Consulting performs a dimensional intelligence investigation on the current market space and provides a comprehensive analysis and recommendations to pharmaceutical clients to aid them in business operations. This project focuses on providing pharmaceutical companies with a strategic advantage through primary and secondary investigation.

Method/Approach: A meeting was held with managers to outline the new competitive intelligence report for the client. Investigational research on top pharmaceutical companies involves using Clinicaltrials.gov, Investor Presentation, SEC Filings, and Primary Interviews. A second meeting later reviews the findings and determines what further steps are required. For cases that require primary research, cold calls and interviews with C-Suite level executives are scheduled promptly. The purpose behind these interviews is so that LCN Consulting can acquire quotes about the market state from key opinion leaders. A draft report (usually PowerPoint) is created based on previous templates from the firm. Quotes from key opinion leaders and graphics in the report are there for supporting evidence. A pitch was made to the client via Zoom to gather any additional information or answer questions.

Outcomes/Results: Between January 20th and April 8th, many Competitive Intelligence reports were completed. The average deliverable was >80 slides and covered topics such as companies' promotional messages, incoming investigational therapies, and any news within the last period. The number of companies investigated ranges from 4 to 10 and can be greater depending on the client's needs. All meetings resulted in positive feedback towards LCN Consulting. Additional comments and edits were addressed immediately for client satisfaction.

Evaluation/Conclusion: One of the most challenging aspects of creating an intelligence report was identifying the most relevant and updated data that pertained to the client's focus. Gathering information through primary or secondary research can be very tedious and time-consuming. Many datasets hide through large documents such as SEC filings and investor presentations. Because of this, it becomes difficult to discover public information because the key information hides beneath 100s of documents. Designing and finalizing the report based on these findings can be difficult at times due to inconsistent levels of significance. Overall, the deliverables throughout this internship proved helpful to the client's and their company's growth.

Internship Abstract

Title: The Development of a Clinic in Kenema (Mondema), Sierra Leone.

Name: Abiba A. Macauley

Preceptors: Kim Kokett, Hindolo Pokowa

Agency: Sierra Leone Foundation for New Democracy (SLFND)

Purpose: To develop an organizational process of building and staffing a health clinic on a 20 acre project site for the “Sierra Leone Foundation for New Democracy”. This includes obtaining sponsorships for supplies, and developing a guide for staffing and maintaining the clinic based on best practices as determined by research of culturally focused health development projects completed by similar organizations.

Significance: The creation of the clinic will serve as a community health center in the Modeman rural area of Sierra Leone by providing care in underserved communities, especially for those with the inability to pay for healthcare. Sierra Leone has medically underserved areas that are defined as having a high percentage of people living in poverty, scarcity of primary care physicians and other healthcare professionals, higher than average infant mortality rates and high percentages of the elderly. This clinic will serve as an investment to create job opportunities for healthcare professionals in these rural areas in Sierra Leone. In addition, the organization will be collaborating with healthcare training institutions across the country and have professionals deploy in this region to serve the community.

Method/Approach: The methodology of this project is a slow one as we have a two-year timeline to set things in motion. In no particular order, we set up deliverables to help us get there. The first deliverable includes finding a land to build on, find grants and partners and apply to said grants. The second deliverable consists of the budget for the construction of the building, contractors and creating an income source locally. The third deliverable is all about our social media presence. Fourth deliverable deals with medical staffing and medical supplies. Lastly, the fifth deliverable is all about the postmortem on the whole project and tying any loose ends.

Outcomes/Results: The organization’s social media presence is already in the works as we have Instagram, LinkedIn and YouTube accounts to put us out there. The goal to be financially independent is a deliverable we hope to achieve once the clinic is up and running and as of right now, we are in the process of creating a marketable feature on our website which includes the sale of African body products to people all over the world and these products will be made in Sierra Leone.

Evaluation/Conclusion: The project is moving along as it should as I work in part to finding partners, grants and fundraising opportunities to help us succeed. In the coming weeks as grants applications open up, I will be applying to them and increase our social media traffic as much as possible. The acquiring of medical supplies will be in the works as well once the funding for construction is secured. In addition, I hope to continue working on this project even after the internship ends. It makes sense to do so as I hope to continue offering my services to see the end of the project and possibly start new projects or enhance others within the organization.

Internship Abstract

Title: Collection of Articles on U.S. Policy Toward Europe and Russia

Name: Matthew Mai

Preceptors: Adam Lammon

Agency: The National Interest

Purpose: To publish three article-length analyses proposing revisions to long-standing U.S. security policy in Europe and outlining options for improving relations with Russia.

Significance: Since the end of the Cold War, the U.S. has maintained a robust and steadfast political and military commitment to European security through the North Atlantic Treaty Organization (NATO), while relations with Russia have steadily worsened. Today, even though the original *raison d'être* of NATO (the Soviet Union) has disappeared, there are over 75,000 U.S. air, land, and sea forces stationed on more than thirty military bases and installations in Europe. More specifically, the dominant policymaking paradigm has neglected to consider the implications of NATO enlargement and European powers' buck-passing on defense to the U.S. Publishing article-length analyses that challenge these underlying assumptions will help shape the policy discourse as the risks and costs of U.S. security commitments, relative to the benefits accrued, continue to rise.

Method/Approach: The first step was to connect the subject with an ongoing policy event. The first article, which discussed the U.S.-Germany security relationship, used the impending invasion of Ukraine as the hook. Second, a thesis was formulated that was pitched to the editor. After receiving feedback, a draft was written that divided the analysis into four sections. The key to writing a compelling analytical article is to articulate and defend specific policy assumptions, and then outline what the concrete implications of those assumptions are. Finally, after receiving edits, the language of the analysis was tightened before submitting it again for final publication on the magazine's website.

Outcomes/Results: Between January 18 and April 6, three articles on U.S. foreign policy towards Europe and Russia were published on <https://nationalinterest.org/>. The first article argued that Germany would be a better U.S. ally if, in close partnership with France, it became a "framework nation" in the European security order. To do so, the U.S. needed to downsize its military commitments in Europe to incentivize greater German defense spending and investment. This article received sixteen likes and 494 impressions on LinkedIn. The second article addressed the ongoing crisis in U.S.-Russia relations as a result of the invasion of Ukraine. This piece argued that the long-term consequences of making Russia an untouchable pariah would be a grave strategic miscalculation that harms U.S. national interests. The world's preeminent nuclear powers must still find a way to cooperate on critical issues such as arms control. To that end, the U.S. should condition the lifting of sanctions on the withdrawal of Russian forces from Ukraine following a political settlement. This article received twenty-six likes and 784 impressions on LinkedIn. The third article, which was prominently featured on the website's homepage, examined a critical document recently released by the European Union: the Strategic Compass. The analysis focused on the document's spending priorities, strategic focus, and implications for the transatlantic relationship.

Evaluation/Conclusion: A significant indicator of the future of U.S. security policy in Europe will be the release of NATO's Strategic Concept this upcoming June. Similar to the Strategic Compass, this document will be examined and assessed in light of the proposed revisions to U.S. policy in Europe.

Internship Abstract

Title: Community Program Tool for Newark
Name: Haseeb Malik
Preceptors: Colette Barrow, Director of Population Health
Agency: University Hospital- Newark, NJ

Purpose: To observe health and social needs in Newark by analyzing focus groups and interviews

Significance: Newark, has a poverty rate of about 27% as compared to New Jersey's 9%. The rates in health outcomes are lower than average as well. Newark has an issue accessing healthcare, reporting that 19% of the population in Newark does not have health insurance. The ratio of residents of Essex County seeking health care to primary care physicians is 1180:1 which makes it a large need for physicians. This indicates higher rates of health disparities in one of NJ's most socially, economically challenged cities. The Community and Population Health team at University Hospital combats this issue by addressing issues of homelessness, lack of health coverage and more for patients residing in Newark and its surrounding areas.

Method/Approach: Nineteen focus groups and 15 interviews were held with Essex County residents and leaders between February-November 2021. A total of 247 people participated in the focus groups and 16 in the interviews. These were held in person and via Zoom. The recordings were downloaded for analysis. Using Microsoft Word, transcripts were organized into four domains: Community Assets, Community Concerns, Healthcare Needs and Suggestion for Improvement. A summary was created based on the collected comments and sent to the preceptor to be included in a working draft of the Community Health Needs Assessment.

Outcomes/Results: Two hundred and twenty-one people out of 267 completed a demographic survey. 170 (77%) were between the ages of 30-69; 152 (73%) self-identified as a Black or African American and 61 (29%) as Hispanic. Six or 55% of the key informant interviewees were 30-49 years; 6 or 54% were Black/African American and 5 or 45% White; 9 or 82% were non-Hispanic, followed by 2 or 18% Hispanic. Topics for improvements centered around shelter/housing, community involvement, education, workforce development, counseling, and food accessibility. Topics in healthcare were clinical and behavioral health, accessibility to healthcare and insurance coverage. Community members felt that programs such as charity care were not sufficient enough to cover the burden of costs placed on the individual while accessing healthcare.

Evaluation/Conclusion: Connecting with various groups in the community has greatly helped with the objective of this project. However, it is difficult to address the needs in the community based on this assessment alone. Additional research among different members of the community may be beneficial; and there should be other research methods used such as home to home surveys, community meetings and direct observation. The next steps to assure that the project can be successful is implementing new strategies that University Hospital does not already have to satisfy the health needs of the community.

Internship Abstract

Title: Increase Promotion of Sexual Health and Wellness Education Through Instagram

Name: Jasmine Manglavit

Preceptors: Stephanie Franklin, Founder and Executive Director

Agency: Masakhane Center - Newark, NJ

Purpose: To extend the reach of sexual health and wellness educational content from Masakhane Center through the utilization of social media, specifically Instagram.

Significance: Across the United States, sexuality education programs vary widely in content and effectiveness. According to the National Conference of State Legislatures, as of October 1, 2020, only 30 states and the District of Columbia require public schools to teach sex education; only 28 of these states require both sex education and HIV education (2020). Comprehensive and inclusive sexuality education is incredibly crucial, as it yields positive outcomes, such as preventing child sex abuse & intimate partner violence, increasing appreciation for sexual diversity, and improving environments for LGBTQ students (Goldfarb & Lieberman, 2021). Masakhane Center addresses insufficient and ineffective sexuality education by providing sex-positive, pleasure-focused, comprehensive sexuality education in and around Newark, NJ through their workshops and social media platforms, as most youth and young adults are active on social media. In fact, according to Pew Research Center, about 71% of 18- to 29-year-olds say they use Instagram, with younger users being more active on the site (Auxier & Anderson, 2021). They say that around 52% of teens (ages 13 to 17) use Instagram (Anderson & Jiang, 2018). This project seeks to have Masakhane Center continue to spread sexual health and wellness education through Instagram while improving their performance by identifying and posting at a peak time.

Method/Approach: To identify the optimal time for posting, Instagram analytics were collected to compare performances from Masakhane Center's account for 10 posts about health and sexual wellness that were posted within two time periods: five posts from February 2022 and five posts from March 2022. During February 2022, the posts were posted online at 10:30 A.M. During March 2022, the posts were posted online at 3:00 P.M., as that is when the school day ends for most students. Content interactions (likes, comments, shares, and saves), reach, and engagements were tracked and analyzed on Instagram Insights for the 10 posts to see if the timing of the posts made an impact on the account's performance.

Outcomes/Results: Thus far, Masakhane Center's Instagram insights have increased considerably. To be more specific, for the five posts from February 2022, the average number of accounts reached was 323.6, the average number of accounts engaged was 28, and the average number of content interactions was 35.4. For the five posts from March 2022, the average number of accounts reached was 474.4, the average number of accounts engaged was 45, and the average number of content interactions was 59.6. This data analysis shows that a 46.6% increase, a 60.7% increase, and a 68.4% increase were seen in the reach, engagement, and content interactions, respectively, for the posts after the timing was changed from 10:30 A.M. to 3:00 P.M.

Evaluation/Conclusion: The Masakhane Center Instagram account had an overall positive change in its performance after changing their posting time from 10:30 A.M. to 3:00 P.M. This positive change in its performance allows them to conclude that they were able to educate more individuals and extend the reach of their sexual health and wellness educational content through their Instagram.

Internship Abstract

Title: Covid-19 Emergency Response

Name: Isatou Manneh

Preceptors: Lori Karabinchak, Health Educator Risk Communicator & MRC Coordinator
Margaret Owusu, B.S Public Health, CEO of Fit2Stretch

Agency: Middlesex County Medical Reserve Corps & Fit2Stretch

Purpose: This project aims to carry out a detailed analysis of the COVID-19 response in New Jersey by diving into the emergency response process throughout Middlesex county and analyzing the increase in interest of health and wellness during the pandemic.

Significance: The COVID-19 epidemic has wreaked havoc all over the world, causing enormous physical, financial, psychological, and sociological problems. Despite the high rates of infection and mortality, testing is nearly double the population of 9.4 million people in New Jersey. As social distancing has been one of the most effective methods in preventing the virus's spread, many aspects of people's lives, including routine fitness activities, have been hampered by the imposed lockdown. This has resulted in the closure of businesses, public places, fitness and activity centers, and overall social life, leading to health concerns. Individuals' attitudes toward fitness, health, and wellbeing have evolved after months in quarantine, and more individuals are taking care of their health than ever before.

Method/Approach: Data was collected from The Middlesex County Health Department. The data outlines different components of response which focuses on vaccine clinics, testing sites, and call centers. The data was organized into a pie chart to examine the effectiveness of these response methods in decreasing COVID-19 rates in New Jersey. In relation to overall health, digital tools such as social media were powerful ways to promote health and wellness during the pandemic. The second component of my project was at Fit2stretch which entailed managing social media outreach programs, developing flyers that were marketed for wellness campaigns, and company promotions. The Instagram postings were made up of stock photographs and text-based visuals. Captions beneath the post focused on how one can improve their entire physical and emotional wellness with Fit2Stretch's designed massage techniques. These social media tools were utilized to measure community engagement and evaluate interests in wellness behavioral change.

Outcomes/Results: Under the Middlesex County Medical Reserve Corps, volunteers with a total number of 4665 hours spent at vaccine clinics, call centers, and testing sites were collected from the dates 3/13/2020 to 2/17/2022. 27% of hours were spent at vaccine clinics in New Brunswick, 26% were spent at testing sites in Edison, 17% at vaccine clinics in Perth Amboy, 13% at testing sites in New Brunswick, 11% at call centers, and 5% at testing sites in South Brunswick. Fit2Stretch's Instagram campaigns yielded the following results: 23.8% increase in accounts reached, 22.5% increase in accounts engaged, and a 1.3% increase in total followers from February 7th, 2022 to March 8, 2022.

Evaluation/Conclusion: This data demonstrates that New Jersey has done an excellent job scaling up testing and administering vaccines. Additionally, the data demonstrates that most of the volunteer time was spent at either vaccine clinics or testing sites which has been the most effective in decreasing the amount of COVID-19 cases in New Jersey. Overall, the data from Fit2Stretch's Instagram campaigns has also increased awareness in utilizing wellness to maintain positive mental health. In terms of future implications, the response to the campaigns demonstrates the effectiveness of utilizing social media to promote ways to keep up with one's overall health during a pandemic.

Internship Abstract

Title: Transportation Assessment and Outreach to Support ScreenNJ's Program Expansion

Name: Brooke Margolin, Research Intern

Preceptors: Dr. Rita Musanti, Assistant Director

Agency: Rutgers Cancer Institute of New Jersey - Community Outreach and Engagement

Purpose: To analyze state and local transportation options in New Jersey counties and determine where partnerships can be built to implement the transportation voucher program in the ScreenNJ program.

Significance: Cancer is the second leading cause of death in New Jersey killing over 15,000 people in 2019 (NJ Department of Health, 2021). In New Jersey, there are significant barriers to patients' ability to be screened for disease due to limited public transportation lines having service to medical facilities. The ScreenNJ program based out of the Rutgers Cancer Institute of New Jersey provides free screenings for breast, skin, and prostate cancers, cancers related to genetic risk factors, and HPV-related cancers for individuals who would not be able to otherwise for financial or transportation reasons (ScreenNJ, 2022). Transportation is one of the main factors preventing individuals from being screened (Wang, 2016). This project will analyze the current transportation systems and build partnerships with local taxi and transportation businesses to build partners in the community to further ScreenNJ's mission of expanding cancer screenings in the State.

Method/Approach: To effectively implement transportation mechanisms that will reach patients with the highest risk, a two-pronged research approach was required. The first part focused on understanding what local companies currently exist in each county in New Jersey. To execute this, research was conducted using online databases. Once the information was collected, outreach to the individual companies was made via telephone and email to gauge their interest in partnering for the new ScreenNJ transportation voucher program. The second part focused on understanding the larger factors that have allowed the transportation disparities in New Jersey to exist. Research on the history of public transportation was conducted as part of the literature review. This information was supplemented with mapping by the Principal Statistician to display still images of New Jersey's bus, rail, and light rail routes and stations/stops; Area Deprivation Index by census block; and an interactive cancer surveillance dashboard. The combination of qualitative and quantitative research was used to determine the highest areas of need in the state based on a number of indicating factors.

Outcomes/Results: Through research on existing locally-based transportation companies in New Jersey, counties in the northern and central regions of the State, including Hudson, Passaic, Bergen, Morris, Somerset, and Middlesex, had the most organizations. Counties with large cities, specifically Camden city in Camden county, had higher rates of transportation companies compared to other areas of the county and other counties with fewer population dense areas. Systemically, redlining played a significant role in creating the housing patterns and, in turn, transportation lines that disproportionately affect marginalized populations, especially in the more rural areas of the State.

Evaluation/Conclusion: An evaluation identified rural communities and South Jersey counties as the most medically underserved communities as well as the areas with the greatest potential for community partnerships for the transportation voucher program. Ongoing research on barriers in accessing screenings in New Jersey is imperative as the rollout of the transportation voucher program occurs.

Internship Abstract

Title: URAC and ACHC Medly Pharmacy Indicator Performance Assessment

Name: Cecilia Marino

Preceptors: Aleksandr Tsoy - Pharmacy Operations Quality Control, Miral Patel - RX System Analyst, Juan Garcia - Senior Compliance Manager

Agency: Medly Pharmacy - Brooklyn, New York

Purpose: To research and collect data about current Utilization Review Accreditation Commission (URAC) and Accreditation Commission for Health Care (ACHC) patients' health history in Initial Assessment and Re-Assessments for the Patient Management Program (PMP).

Significance: Each year, in the United States alone, 7,000 to 9,000 people die as a result of a medication error. Between the years of 2014 and 2017, there were a total of 223 cases of serious patient harm, near death events or patient deaths in the state of New York as a consequence of medication errors. Medly Pharmacy pharmacists oversee all prescription dispensing in compliance with state and federal law and regulations. Pharmacists and pharmacy technicians will function in accordance with the pharmacy's policies and procedures and job descriptions, accepted ethical and professional practice standards, and in accordance with all applicable federal, state and local laws and guidelines set by the board of pharmacy. By researching and collecting data about URAC and ACHC patients' health history in Initial Assessment and Re-Assessments, Medly Pharmacy will be able to identify if patients are being prescribed the correct medication depending on their diagnosis. This will help minimize deaths and help patients get the correct treatments.

Method/Approach: A retrospective review within current Medly Pharmacy's patients was performed for which there were Initial Clinical Assessments completed. A total of 1,705 categorized as URAC patients were HIPAA compliance-called to complete such assessment which concluded of collecting information such as place of medication administration, allergies (if any), dietary restrictions, medical condition (principal diagnosis, secondary diagnosis, comorbidities, IDC10 code), prescription/ OTC medication/ supplement strength/ dose, route and frequency patients consumed, and pertinent health information. The data was categorized as 1) Completed Assessment, 2) MDO Delivery, 3) PMP-Out, and 4) Other. Here, a total of 237 URAC patients decided to move forward with our Patient Management Program (PMP) and enrolled for evaluation of progression made towards treatment/ prescription goals with our pharmacy.

Outcomes/Results: Of the 1,705 URAC patients, 237 URAC patients completed the clinical assessment, 479 URAC patients receive MDO Deliveries (medication is administered at doctor's office), 258 PMP-Out (did not enroll our PMP) and 731 URAC patients had other circumstances for not enrolling such as unsuccessful communication with them (no answer or left voicemail), and/ or refused to conclude assessment due to them not being on a certain prescription for long enough to provide us with the information we needed (> than 2 months).

Evaluation/Conclusion: About (n=239, 14%) of URAC patients from the total number (n= 1,705, 100%) decided to enroll in our Patient Management Program (PMP). Professional telephone counseling, prescription inquiries, and health progression serve as effective schemes to intensify initial and long-term adherence of follow-up diagnostic treatment. Ongoing monitoring of clinical assessments for URAC patients will be launched to assure continued improvement in the future.

Internship Abstract

Title: SWOT Analysis of RWJBH Market Share by Service Line

Name: Bilal Matin

Preceptors: Direct Supervisor: Annie Steelman, Senior Vice President of System Strategy
Project Supervisor: Elizabeth McNutt, Assistant Vice President

Agency: RWJ Barnabas Health (RWJBH)

Purpose: Conduct a SWOT analysis on market share metrics for patient episode counts and revenue estimates to find opportunities for improvement and expansion.

Significance: In strategic planning, market share plays a pivotal role in understanding the development of the quality and profitability of an organization's product (Delombre & Bruzelius, 1977). Specifically for regional health systems, market share for both in-patient data and revenue estimates can be used to evaluate how service lines are performing. This project uses SWOT analysis to convert market share metrics into opportunities projections.

Method/Approach: This study looks at patient leakage and opportunity by patient type, service line, and rendering/referring provider. The data required for this analysis comes from the Trilliant Health Database and is exported to Tableau and Excel for analysis. The data is looked at by its data field (medical, surgery, radiology) and then is critiqued based on leakage from referring/rendering providers, the hospitals where cases are going, and the service lines and medical groups that account for the most leakage. The data for leakage is then converted to opportunity using market share metrics to identify where there is room for development and improvement in the health system.

Outcomes/Results: Episode count is the filtering metric to generate market share and opportunity metrics. The most opportunity in the dataset comes from Radiology (78.45%) and Surgery (73.98%). The greatest strength for RWJBH is medical patients, where they hold 34.49% of the market share, and the best county for this field is Essex County (56.53%). Along with radiology, outpatient surgery (74.52%) has the most significant opportunity for RWJBH to expand its patient base. The biggest threat to RWJBH is competition in Middlesex County because of its low market share (25.42%) despite having key facilities in the county.

Evaluation/Conclusion: This study uses revenue per case and episode count by patient type from the Trilliant Health database to identify the biggest areas of opportunity for RWJBH. This analysis found that the biggest sources of opportunity come from procedures in outpatient (OP) settings such as radiology and OP surgery. This is because episode count in these fields is significantly impacted by physician referrals which are controllable aspects of care.

Internship Abstract

Title: Underserved Communities: Rural Challenges and Available Support

Name: Gabrielle Meier

Preceptors: Dawn Guerrero, Manager Patient & Community Outreach

Agency: Leukemia & Lymphoma Society

Purpose: To create a free educational program based on the challenges and lack of resources experienced by cancer patients in rural areas.

Significance: About 17-20% of U.S. residents live in rural areas. Only about 3% of medical oncologists practice in rural communities and over 70% of counties in the U.S. lack medical oncologists (Kirkwood et al., 2016). The lack of medical oncologists in rural communities leads to many cancer patients constantly traveling for cancer care. Resulting in many cancer patients having feelings of isolation, being unaware of available resources, and lacking a strong relationship with their cancer team. It has been seen that rural cancer survivors experience higher rates of anxiety and depression than urban cancer survivors. This is because only about 2% of health social workers in the U.S. practice in rural areas (Charlton et al., 2015). This makes it almost nearly impossible for rural cancer patients to seek out mental health care, leading them to have higher rates of feeling isolated or a loss of sense of community.

Method/Approach: A patient education program has been implemented to discuss the challenges and available resources for cancer patients in rural communities. There are two speakers, an oncology nurse, and a social worker, that will present the education program virtually. The speakers will discuss how to build a stronger relationship with their cancer teams, become more aware of their available resources, and learn how to combat feelings of isolation. Virtual and paper flyers were created and issued to cancer facilities, patients, and members of LLS. Online QR codes and a signup website were created and distributed as well.

Outcomes/Results: The first patient education program was conducted on April 7th. The points discussed were the major challenges that rural cancer patients face. There was a post-evaluation sheet sent out to all participants. The questions that were asked were based on the main objectives of the program. Which includes: I understand the challenges that patients residing in rural communities may face when managing diagnosis and treatment, I have learned how to build a strong relationship with my local cancer team and I feel I have gained the tools to combat isolation. There was also a section at the end asking what the patients like and dislike about the program. There were 15 participants and 5 of those individuals completed the post-program evaluation sheet. 100% of the participants agreed that they have a better understanding of the challenges rural patients face and how to combat feelings of isolation. 80% of the participants agreed that they learned how to build a stronger relationship with their local cancer team.

Evaluation/Conclusion: This program educates rural cancer patients on their available resources while traveling, resulting in better care and cancer patients seeking out a greater variety of available services even while living in rural communities. Bringing awareness to these challenges will help decrease feelings of isolation and lack of sense of community leading to a stronger relationship between patients and their cancer teams. Based on participant feedback, program components will be edited and revised as needed. Positive data will potentially lead to the implementation of this program in other regions and with other populations.

Internship Abstract

Title: Newark Pilot Community Compost Program

Name: Amanda Melchiorri

Preceptors: Emilio Panasci, Co-Founder & Executive Director

Agency: Urban Agriculture Cooperative - Newark, NJ

Purpose: To create and monitor a pilot community compost program in Newark, NJ, with the intent to spread environmental awareness and minimize food waste.

Significance: The city of Newark has a long history of environmental injustices. Newark includes some of the worst food deserts in the state, with over 180,000 residents lacking access to affordable, fresh produce (New Jersey Economic Development Authority, 2022). Urban Agriculture Cooperative works to promote a sustainable food system in Newark. One component of the sustainable urban food cycle is composting, which reduces the amount of food waste that ends up in landfills and creates new, healthy soil. New soil is essential to supporting community gardens and urban farms that can grow local, accessible produce. Furthermore, reducing the amount of food waste that ends up in incinerators or landfills helps fight air pollution and climate change. Newark's trash incinerator can be linked to air pollution and respiratory disease (National Research Council, 2000). Landfills are also currently the third largest source of methane emissions in the United States (Environmental Protection Agency, 2019).

Method/Approach: A pilot composting program was launched as part of a community composting initiative in Newark. Small amounts of food waste and carbon rich material (i.e. woodchips, sawdust, etc.) were processed through the ASP (aerated static pile) systems at an urban farm. A data collection log was created to properly monitor waste input and processing success—noting details like temperature changes and moisture—to better understand the capacity and efficiency of the ASP systems. In addition, a new webpage was created under the Urban Agriculture Cooperative website to explain to the public the importance of composting and goals of the program. Informational fliers were created to distribute to the community to spread awareness about the initiative and collect contact information for potential participants.

Outcomes/Results: The composting pilot program was created to set the framework for a future community composting collection program. The successful processing of 208 gallons of food waste in eight weeks demonstrates that the ASP systems are capable of composting food waste from the community.

Evaluation/Conclusion: The pilot composting program will transition to a community food waste collection and composting program once approval is obtained from the NJ Department of Environmental Protection. A compost collection program would provide Newark residents with a way to compost their food waste, thus contributing to a sustainable food system and fighting pollution. The pilot program must continue operating until then to efficiently process food waste and spread awareness to the community about the significance of composting.

Internship Abstract

Title: Healthcare Product Marketing to Develop Training Material, Trade Show Content, and General Research Programs

Name: Julia Morris

Preceptors: Tiffany Cochran

Agency: Tent Collective Healthcare Marketing

Purpose: To analyze the effect that different marketing programs, social media content, and advertisements have on the growth of a variety of different healthcare companies/organizations.

Significance: One element of TENT Collective is the advertisement for healthcare companies, brands, and organizations, in an attempt to help expand their reach and grow their business. Another element is product training and product use content to train field sales and users on how to use these healthcare products with patients. Two major clients are Mindray Technologies and L&R Ultrasonics. Both companies are influential in the healthcare industry. For this project, an analysis of multiple sales videos for trade show marketing and website development to see how it can help impact business growth was conducted. This assessment was also designed to look at product training content for future sales representatives and its potential usefulness in the marketing of the targeted clients.

Method/Approach: To improve sales, important tools were developed that assist these companies in selling their products and reach a wider range of customers. This includes expanding the reach of these companies to get such products to patients that will greatly benefit from their use. To complete these projects various methods were used including a review of the competitive set, an evaluation of each company's business strategy, an understanding of each product's technical features and advantages, and research about the healthcare technology industry and its impact on healthcare systems and patients.

Outcomes/Results: One outcome is learning about two healthcare companies who are global leaders in the healthcare technology industry. Another outcome is learning how to market products for healthcare organizations that include nurses, hospitals, dentists, etc. Due to the timing of both trade shows and product launch on ecommerce (June, 2022) detailed results were unable to be collected. However, client feedback was that the work products will contribute to bottom line improvements and direct sales.

Evaluation/Conclusion: Project success was determined by client satisfaction for an exceptional and professional set of marketing materials, as well as successful sales results as it relates to the materials developed, and a high quality score by supervisors for strong project management, creativity, and an understanding of the category. L&R Ultrasonics is, for the first time, offering a line of products direct to customers, opening up new avenues for sales of their cleaning solutions to additional markets beyond dentistry. Mindray continues to develop and deploy cutting edge technology to keep up with shifts in the healthcare landscape, and expand their footprint beyond hospitals into universities, ambulatory centers, and large integrated healthcare facilities. The completion of the marketing and training tools lend towards long term application and overall improvement in marketability.

Internship Abstract

Title: Veteran Healthcare Services Job Fair

Name: Tahmeda Munim

Preceptors: Aaron Hajart, Chief Operating Officer
Kayla Loughlin, Project Supervisor

Agency: Bergen New Bridge Medical Center (BNBMC)

Purpose: To engage the local veteran, military, and first responder community in participating in Bergen New Bridge Medical Center's Veteran Healthcare Services

Significance: Implementing veteran health programs is necessary because many veterans are left without resources when they complete or leave service. Veterans may deal with physical handicaps, mental health issues, unemployment, substance abuse, and homelessness. Studies have shown that about 20% of veterans that have served in Iraq or Afghanistan deal with depression and posttraumatic stress disorder. Bergen New Bridge Medical Center specializes in Veteran healthcare. BNBMC implemented mobile health units that serve veterans, military, and first responders. BNBMC also hosts a veteran-specific career fair to aid in unemployment. Career-related services such as resume building and headshots are also offered to veterans. A career fair was planned for May 3rd to connect veterans with local veteran-owned businesses.

Method/Approach: This year's job fair included veteran-related organizations in Bergen county. Using Google search and the Veterans Owned Business website that lists all veteran-owned businesses, a list of preliminary businesses was compiled. The project supervisor prioritized the list. Each business was contacted via phone and email to see if they wanted to participate in the May 3rd event. Those who wanted to be included were emailed to get their details. This list was sent to the Marketing division to be included in the advertisements for the event via email, printed flyers and social media. This information was also used to create materials for their table at the event.

Outcomes: Of the original 52 businesses identified, thirty-five were contacted. The job fair has space for seven vendors. Five vendors agreed to participate in the May 3rd job fair. Eleven veterans and 10 community members attended the job fair this year.

Evaluation/Conclusion: The veteran population is often overlooked and issues such as PTSD, suicide, and unemployment persist. The community outreach initiatives and educational programming held by Bergen New Bridge Medical Center raise awareness and provide support for the veteran community and their families. The collaborative efforts between BNBMC and local veteran organizations will accomplish identifying gaps in care and eliminating barriers to care. This year's job fair will track how many veterans were able to secure employment at a later time.

Internship Abstract

Title: Mental Health Assessment During The Pandemic

Name: Erin Murphy

Preceptors: Robin Vlamis, Health Educator

Agency: Hillsborough Health Department-Hillsborough, NJ

Purpose: Analyze mental health statistics, conduct interviews, compare results from a national level versus state level and propose interventions to help support affected populations.

Significance: The pandemic has caused great distress to the U.S population with “overall, 40.9% of respondents reported at least one adverse mental or behavioral health condition, including symptoms of anxiety disorder or depressive disorder (30.9%), symptoms of a trauma- and stressor-related disorder (TSRD) related to the pandemic† (26.3%), and having started or increased substance use to cope with stress or emotions related to COVID-19 (13.3%)” (Czeisler MÉ , Lane RI, Petrosky E). In New Jersey, “roughly 42 percent of respondents reported symptoms of anxiety and/or depression from Jan. 20, 2021, through Feb. 1, 2021, 20 percent of whom reported an unmet need for counseling or therapy” (CHART 2021). The Hillsborough Health Department is “boots on the ground for public health services”, meaning the department is responsible for providing the necessary tools and services to the public within Hillsborough Township. That includes gaining insight into the statistics of mental health in the area and then taking action accordingly. To address issues around mental health, an action plan will be developed.

Method/Approach: Data and information for the action plan will be collected through one on one interviews and general research of current resources throughout Hillsborough. The action plan will identify the population affected most by the pandemic as it relates to mental health, and recommended steps to help support this group. The Hillsborough Health Department provided resources of local mental health providers in the area ranging from high school counselors to church counselors. Thirty minute zoom interviews were conducted, gaining background on the individual; gaining insight on their opinions about mental health during the pandemic in Hillsborough/Somerset County pertaining to affected populations, issues, and possible solutions.

Outcomes/Results: Of the three interviewed professionals, all stated the group they believed was impacted the most during the pandemic was young families (adults and children) as well as lower socioeconomic groups. Issues mentioned as possible causal factors of this disproportionate effect were accessibility to services (ex. location or technology), appointment availability, service affordability, and specified service access. Interviewees all agreed that Hillsborough/Somerset county shares the same issues observed nationally. Possible solutions provided were to create a network of information on providers of all specialized services, increase flexibility and availability of providers, affordability, and provide resiliency and crisis preparedness training.

Evaluation/Conclusion: Young families with small children and marginalized groups, specifically in lower socioeconomic areas, suffered greatly during the pandemic. Little to no access to services, or specified services, such as support for anxiety or depression, had immense impacts on the state of their mental health. Isolation through lockdowns and quarantines further exacerbated the effects of the pandemic, as some were unable to access services from a lack of technology such as devices or internet/WIFI, a pivotal means of communication during this period.

Internship Abstract

Title: Montgomery Township Health Department Compliance with Public Health Accreditation Board (PHAB) Standards and Measures

Name: Solomiya Mykolyk

Preceptors: Devangi Patel, Health Officer

Agency: Montgomery Township Health Department (MTHD)

Purpose: To analyze Montgomery Township Health Department accreditation compliance to improve administrative and collaborative processes that ensure positive community outcomes.

Significance: Local health departments play a vital role in the health outcomes of residents as they provide resources and health programs to decrease negative health effects. Public Health Accreditation Board (PHAB) established evidence-based standards to ensure the highest quality of care. According to PHAB, 289 local health departments achieved accreditation, with Montgomery Township Health Department as one (PHAB, 2022). By following the set of accredited standards, MTHD provides health education and resources to the communities they serve. This project explores how accreditation standards are implemented and their impact on public health.

Method/Approach: To ensure accreditation standards are being adhered to, the PHAB created a document with standards and measures that health departments need to implement into their administrative processes. The Community Health Improvement Plan (CHIP) and Community Health Needs Assessment (CHNA) are a part of the objectives that MTHD needs to accomplish; they partake in the planning, implementing, and evaluation processes of the needs assessment. After reviewing accreditation standards, a checklist was created with specific domains and measures that need to be in accordance with PHAB. The CHNA and CHIP included key components like collaboration, priority health needs, and strategic plans to address those needs over three years. Additionally, the checklist helped identify needed documentation of collaboration.

Outcomes/Results: The checklist highlighted domains 1 and 5 from the PHAB standards and measures document. Domain 1 requires MTHD to conduct and disseminate assessments that focus on population health status and issues facing the community, and domain 5 focuses on developing public health policies and plans. Each domain included four standards that MTHD needed to follow and provide documents of participation and collaboration. The checklist included measures for each standard, cross-referenced with Somerset and Mercer County CHIP and CHNA documents for proof of contribution, participation, and implementation of priority health needs stated in the documents. The MTHD successfully adhered to these standards by implementing measurable objectives identified in the CHIP documents.

Evaluation/Conclusion: The checklist is evaluated by completing objectives from Somerset and Mercer County CHIPs and participation in the collaborative process. As members of the steering committees in both counties, MTHD helped identify and collect community data. The health department hosted COVID-19 testing sites and weekly vaccination clinics, which fulfills priority area one that discusses COVID-19 impact on Mercer county residents. One of their focuses was increasing COVID vaccination rates. The CHNA reported that Pennington Boro had 91% of its residents vaccinated, which is higher than any other municipality in the county (CHNA, 2021). By reviewing compliance, this project identified health data that correlates with the increased effort of the MTHD to decrease disparities due to COVID-19.

Internship Abstract

Title: Multi-disciplinary cancer genetic counseling care for transgender youth

Name: Justin Najimian

Preceptors: Sherry Grumet - Director of the LIFE Center, MA, MS, LGC
Sandra D'Elia - Project Coordinator, MS, LGC

Agency: LIFE Center - Rutgers Cancer Institute of New Jersey

Purpose: To communicate the need for an established protocol to treat transgender youth seeking cancer genetic counseling services involving a multi-faceted care model from various health professionals.

Significance: Currently, 0.6% of adults identify as transgender in the U.S, with identification rates among youth ranging from 0.7% to 3.2% (Wilson et al, 2017). With the recorded rise of younger individuals identifying as transgender, there is a growing need for providers to be aware of the unique ethical and medical needs that transgender youth require regarding cancer genetic counseling (Zayhowski et al, 2019). The drafted perspectives paper provides an explanation of the different risks that can be associated with transgender patients and cancer, and a protocol for multi-disciplinary care in a cancer genetic counseling setting for transgender youth.

Method/Approach: A literature search was conducted using databases such as Google Scholar, PubMed and Rutgers Library. In order to refine the search, select keywords included “transgender”, “cancer risk”, “genetic counseling”, and “hormone replacement therapy”. The literature search was divided into two different sections: evaluating potential cancer risk as a result of hormone replacement therapy and acquired evidence for need of involvement from endocrinologists and social workers within in genetic counseling care and care for transgender youth. The literature search was then translated into a perspectives research paper in accordance with *Transgender Health* journal publishing standards and submitted for editorial review.

Outcomes/Results: The literature review yielded 13 different articles that were incorporated into the final paper that was produced. Cancer risk research highlighted the potential association between hormone replacement therapy (HRT) and lifetime risk for developing cancer, which is more pertinent to transgender youth who often start these regimens at younger ages, especially those who may have hereditary risk factors for cancer. Research into the role of endocrinologists revealed an existing professional relationship with genetic counselors for referrals for endocrine-related cancer syndromes and a reported reluctance to recommend HRT without ruling out hereditary cancer risk. Research into the role of social workers revealed their role in guiding transgender youth through processes of informed consent.

Evaluation/Conclusion: More research needs to be conducted to establish a link between certain types of HRT and cancer risk as the literature on the subject is scarce. The association is one that all transgender youth and their families seeking cancer genetic counseling services and considering HRT should be properly informed of before decisions are made on gender-affirming care. Endocrinologists and social workers must be included in the entire genetic counseling process in order to ensure that informed consent is achieved and the best possible understanding of cancer risk if acquired. The paper was not approved for publication at this time, but can be incorporated into a poster presentation for The National Society of Genetic Counselors annual conference and refined for resubmission to the *Transgender Health* journal or a different publication.

Internship Abstract

Title: Educating the Public about the Center's Initiatives and Research

Name: Angel Nguyen

Preceptors: Angela Centellas, MPH & Patrice Harley

Agency: NJ Gun Violence Research Center (NJGVRC)

Purpose: To educate the public about gun violence research and bring awareness to the center's initiatives through social media content & events like Rutgers Day (April 30th) and NJGVRC Research Day (May 20th).

Significance: Over 40,000 Americans die due to gun violence every year. In New Jersey, 465 people die by a gun in an average year, with a rate of 5.3 deaths for every 100,000 people. NJ Gun Violence Research Center at Rutgers combats this by developing research on gun violence causality and prevention and translating it into policies and programs to form safer communities. This project contributes to the solution by raising awareness of the center's initiatives to educate the public and get more donors to continue to fund its research on gun violence.

Method/Approach: First, educational posts were created and posted on the NJGVRC's Instagram and Twitter Page. The contents cover news and policies related to gun violence to educate the public. An Instagram page was created and included reposted posts from NJGVRC's Twitter and Facebook accounts. In addition, new posts were created for Facebook and Twitter using programs like Hootsuite and Canva. Second, planning and development of promotional materials for Rutgers Day and NJGVRC Research Day were completed. Four artists were recruited to showcase their artwork related to gun violence at Rutgers Day and NJGVRC Research Day. Additionally, we developed a list of merchandise and brochures to give away on Rutgers Day. Finally, advertising services via Rutgers suppliers, newspapers outlets, radio stations, billboards and websites to spread awareness about NJGVRC Research Day was completed.

Outcomes/Results: The agency purchased 100 pens, 25 masks, 150 wrist strap key holders, 24 t-shirts, 150 hand sanitizers, 150 bags, and 3 banners for Rutgers Day. As for advertising, using Rutgers Suppliers was found to be more expensive than using advertising services directly from newspapers outlets, radio stations, etc. The agency approved using advertising services from Radio Station 98.3 and National Media. As for social media, the NJGVRC Instagram is at 13 followers and will take some time to gain more followers due to it being early in the social media site's development. The response from Twitter has been good because the site already had more followers. Since taking a more active interest in the social media sites, there have been more views on newly created videos than typical posts. Infographics based on interpersonal violence articles recommended by the research team were made via Canva that may be posted on either social media or the NJGVRC website.

Evaluation/Conclusion: About 250 people attended the GVRC booth, and about 150 people registered for GVRC Research Day. Supplies were running out after two hours of Rutgers Day starting because the team allowed people to take one of each merchandise. As a result, the team went back to the School of Public Health building to get more supplies such as t-shirts, bottles, and books written by the head of the center. The most popular items were the t-shirts, bottles, books, and cable locks. Next year, the center should order double the amount of supplies needed to handle the number of people attending Rutgers Day and limit one or two merchandise per person. Additionally, the team will present their work on Student Research Day (May 6th) and attend GVRC Research Day (May 20th).

Internship Abstract

Title: Employee Immigration Process Through H-1B CAP Season

Name: Teresa O'Keefe

Preceptors: Jaime Young, Senior Counsel Immigration

Agency: Tesla Inc.

Purpose: To assist Immigration Counsel and Specialists in the registration and application process of Tesla employees and assisting with employment authorization (work visas) within the United States.

Significance: There are specialized employees hired from Tesla Inc. that require employment authorization to work within the United States. The H-1B program, specifically, is run by the U.S. government's U.S. Citizenship and Immigration Services, also known as "USCIS." The H-1B program allows U.S. based companies and employers to temporarily employ foreign specialized workers in occupations that require a unique knowledge and skill sets. The H-1B program is subject to the congressionally mandated cap of 65,000 H-1B visas, referred to as the "regular cap" program. There is also an exemption from the mandated H-1B cap program for those with advanced degrees, with a master's degree or higher from a U.S. university or college. The number of individuals who are exempt based on U.S. advanced degrees is approximately 20,000. The Immigration team oversees the collection and completion of Tesla, Inc.'s registration and filing of petitions. It is important to work with data and keep complete records of Immigration files within Tesla to ensure employees can properly apply for work visas to assist with their continued employment authorization in the U.S.

Method/Approach: It is the Immigration team's job to prepare visa applications to register foreign national workers into the H-1B CAP lottery for the H-1B CAP program, the Immigration team must organize and audit information to ensure that employee registrations can be processed and entered into the randomized H-1B lottery system. For FY 2023, USCIS received 483,927 H-1B registrations. In the first round of selections 127,600 were selected (USCIS.gov).

Outcomes/Results: The H-1B visa application and registration program is active at this moment in time. The first lottery selection occurred around March 31st. The Tesla Immigration team is now working on filing petitions and gathering further information and materials needed from selected beneficiaries. A second lottery may occur later in the year.

Evaluation/Conclusion: Limitations include the randomized nature of the H-1B system that is set in place to select beneficiaries. The Immigration department needs to be efficient, empathetic, and detail-oriented during the process to properly complete the process for employees. The annual completion of this work from the Immigration team will help ensure Tesla, Inc. employs individuals with the correct specialized skill set and knowledge for the job.

Internship Abstract

Title: Digital Health Startups and their Effects on Healthcare

Name: Sean O’Flaherty

Preceptors: Sara Chokshi, Research Coordinator

Agency: Health Information Technology Lab (HITLAB)

Purpose: To explore new startups and organizations and to evaluate/ research how their innovations and products could better serve the digital healthcare sector.

Significance: “The US healthcare system is the costliest in the world, accounting for 17% of the gross domestic product with estimates that the percentage will grow to nearly 20% by 2020” (Institute for Healthcare Improvement, 2022). In addition to cost, the United States also has issues pertaining to access and quality. In recent years there has been a boom in the sector of digital healthcare, bolstered by COVID-19, paving the way for new innovations to try and address some of the issues in healthcare. “Providers and stakeholders are using digital health technologies in their efforts to: reduce inefficiencies, improve access, reduce costs, increase quality and make medicine more personalized for patients” (Food and Drug Administration, 2020). HITLAB works to identify startups, evaluate/research their products, and then put them in contact with consumers in organizations that would benefit. By allowing startups to launch their product into the healthcare sector some of these problems could be improved upon.

Method/Approach: In order to review the products, members of the team received prototypes or were given access to the software. Other more experienced members of the team did research on the products and evaluated their efficacy. Next, the tasks shifted to examine which consumers would benefit most from the products. Customer personas were created for each startup and their products. This helped to identify the specific consumers that would benefit from using these products and helped to highlight issues that may occur as well as considerations to make for different populations. Using HITLAB’s contacts, pharmaceutical companies were researched to see if they had clinical trials in stages 1 or 2 that were recruiting. This was important to make sure that one specific startup was put in contact with the consumers that they most wanted to target.

Outcomes/Results: Some of the products are still in prototype stages and are not being used yet in the field. Since the products are not being used in the digital health sector currently, an accurate evaluation of their efficacy in the field could not be truly evaluated. Success will be achieved when these products are being used to optimize outcomes, improve satisfaction, or increase the availability of healthcare to other communities.

Evaluation/Conclusion: Efforts will be successful when these products are being used in the digital health and healthcare fields exhibiting a pivotal role in optimizing outcomes. Future evaluation of the product will happen after the internship has been completed. There will be a symposium with all the members of HITLAB and everyone who has assisted on the project. During this time, any advancements or improvements that have been made will be discussed. Also, there will be a review of the products and everything that has occurred during the project. It is possible that evaluations such as surveys or quantitative evaluations could be done in the future.

Internship Abstract

Title: Healthy Housing
Name: Olutosin Oladipo
Preceptors: Manuel Castaneda: Director of Community Health
Agency: Live Well New Brunswick

Purpose: To increase the number of New Brunswick residents that are aware of housing issues and provide information on resources and resolutions to keep their homes healthy.

Significance: Live Well - Vivir Bien New Brunswick is a health communications initiative committed to health promotion in the City of New Brunswick. This project falls into their “Be Well” and “Be Safe” focus areas; the general community’s safety and social determinants of health are important factors to improve health outcomes. Although Live Well has previously done work in this healthy housing sector, this project will bring a new focus on elements of home safety - In particular, fire prevention, proper air quality/well-ventilation, pest invasions, and home cleaning. It will also go further to provide easy and reachable solutions to the issues that are aforementioned.

Method/Approach: The Live Well - Vivir Bien New Brunswick campaign was focused on strengthening the public’s knowledge about the common dangers that can occur in a household and was dedicated to supplying information - tips - to the population on how to protect themselves. Each week there will be two flyers designed and created to bring awareness and resolutions to the specific housing issue that is assigned for the week - week 1 & 2 focus on home cleaning and maintenance, week 3 focuses on proper air quality, and week 4 focuses on fire prevention. The social media content will last for 4 weeks - resulting in 8 posts in total. The analytics from these 8 posts will be gathered from the various social media platforms and will be compared to previous content on healthy housing to assess the level of impact and engagement the public had.

Outcomes/Results: Analytics for this project were measured through the application “Later,” a social media content scheduling platform. For April, the data demonstrates that the social media engagement for healthy housing posts on Twitter and Facebook for the first two weeks was similar, ranging from 2-3% and then dropping to 1-2% for the remaining three weeks. The engagement on Instagram started at 3% the first week, then jumped to 6% the second week, and then went back to 3% for the last three weeks. The number of times the posts were viewed on Facebook and Twitter was similar - starting from 48-50 times for the first two weeks and then reducing drastically to 20-26 times for the last three weeks. Instagram’s impressions were powerful and stayed constant throughout the five weeks: 45-50. Healthy housing posts’ average reach - on all platforms - decreased from the beginning of the month to the end - averaging at 50 and then ending at 33.

Evaluation/Conclusion: Live Well’s Instagram had an overall positive change in performance in the healthy housing posts compared to the prior month’s similar posts. The reason is that the healthy housing content in April was put out twice a week. The first post focused on bringing awareness to an issue - fire safety, air quality, etc. - and the second one provided tips and solutions for these issues. Live Well can continue to make content for the New Brunswick community and give realistic and straightforward answers to the problems they introduce on all social media platforms to reach and engage with a larger audience.

Internship Abstract

Title: Increased Risk of Myeloma in African Americans
Name: Rayelle Pagan
Preceptors: Stacy Kriezman, Senior Manager of Patient and Community Outreach
Agency: Leukemia & Lymphoma Society

Purpose: To spread awareness about Myeloma risk by using outreach techniques to contact different Black supporting organizations.

Significance: The CDC (2018) reported that Myeloma is twice as common and twice as deadly in Black Americans than in White Americans. Around 13 per 100,000 African Americans are diagnosed with Myeloma compared to 5.9 per 100,000 White Americans. As for the deaths, 5.6 per 100,000 African Americans die from Myeloma and only 2.8 per 100,000 White Americans die from Myeloma. Socioeconomic factors play a large role in the increased risk factors of this cancer. African Americans that are a part of a lower socioeconomic status may have issues receiving adequate health care that would help treat their Myeloma. In addition, evidence suggests that genetic susceptibility can put an individual more at-risk of being diagnosed with Myeloma.

Method/Approach: Between 02/10/2022 and 05/01/2022, research was performed to gather information about Black supporting organizations in and around Newark and other areas of NJ that have a higher percentage of members of the Black community. Connections were established with the Community Network Association (CNA) as well as the Black Cancer Disparities Impact Council (BCDIC), and other Black supporting organizations to educate them and provide them with information on the incidence and prevalence of Myeloma. This was done by communication through email and attending online webinars. Also, created a Myeloma fact sheet that addressed signs and symptoms, risk factors, as well as the disparities of Myeloma in the Black community. Leukemia & Lymphoma Society (LLS) attended Rutgers Day to hand-out these facts sheets and further information on ways LLS can help Black communities.

Outcomes/Results: Out of the 78 African American organizations that were identified, 36 organizations were sent emails explaining the risk of Myeloma in African Americans. Out of the 8 CNA organizations contacted, we were able to attend 2 of their webinars where LLS was connected with over 25 different professionals and organizations to briefly discuss the month of March being Myeloma awareness month and explain what Myeloma is and how it impacts African Americans. At Rutgers Day we handed out over 30 flyers with information about the signs and symptoms of Myeloma, as well as the incidence and prevalence rates of Myeloma in African Americans. We were also able to connect with 3 professionals/organizations, in-person, that are also participating in projects focused on helping the Black community, like the Rutgers Cancer Institute of NJ.

Evaluation/Conclusion: Through the research collected and the results of this project, it is clear that there is an overall lack of knowledge on this health disparity, especially in the African American communities. The organizations that LLS was able to connect with, and continue to connect with, were not aware of the drastic differences in the health outcomes from this cancer amongst the different racial groups. African Americans lack access to adequate healthcare, have higher rates of poverty, and lack education on their high-risk diseases. These factors contribute to the high rates of Myeloma in African Americans which is why LLS is doing what we can to help spread awareness to the Black communities.

Internship Abstract

Title: Evaluation of TI-ROSC Implementation in Sussex County, NJ

Name: Nina Paranjpe

Preceptors: Morgan Thompson, CEO of Prevention Links

Agency: Prevention Links

Purpose: To advance TI-ROSC program implementation in Sussex County, NJ and provide county-specific recommendations for systems transformation to a recovery-oriented system of care.

Significance: Between 2015 and 2020, drug overdose deaths in New Jersey increased from 16.7 to 32 per 100,000 people (KFF, 2021). To address this, thought has shifted to acknowledge that substance use disorders (SUDs) do not occur in isolation; in 2020, over 50,000 New Jersey residents discharged from SUD treatment suffered from another mental disorder (DMHAS, 2020). The Trauma-Informed Recovery-Oriented System of Care (TI-ROSC) framework requires that systems be person-centered and utilize the strengths of communities to target SUDs from prevention to recovery. Systems change at all levels of SUD intervention is necessary to implement the TI-ROSC framework and provide communities with the tools to address substance use disorders more effectively.

Method/Approach: A fact sheet using data from the 2020 Census, the New Jersey Department of Health Data Dashboard, and the New Jersey Drug and Alcohol Abuse Treatment Substance Abuse Overview for Sussex County, among other sources, was created. The fact sheet was circulated to Sussex County stakeholders by the New Jersey Coalition for Addiction Recovery Support (NJ-CARS) and used to develop interview and focus group questions. A Recovery Asset Map for Sussex County was built based on research into available services. The fact sheet, interviews, and asset map were analyzed for patterns. Recommendations were developed based on identified priorities for Sussex County.

Outcomes/Results: Systems change evaluation includes considering changes in “drivers of system behavior,” “behavior of system actors,” and “overall behavior of the system” (Cabaj, 2018). A primary issue identified was the high number (three percent or 35) of those who received SUD treatment in 2020 who were in the custody of the Child Protective Services. While stakeholder interviews suggest that social support for pregnant women is a successful initiative, places to consider continual change in system behavior is investment in youth and family support. Service evaluation in Sussex demonstrated that resources are primarily located in Lafayette, Sparta, and Newton townships. Continually, residents are often directed outside the community for recovery programs. Stakeholders agree that a lack of common knowledge about available services and transportation issues are often barriers. Actors may be able to align mission with action by increasing outreach about services, providing language training in spaces that offer tangential resources, and offering regular transportation to services. System behavior changes should target stakeholder alignment and utilize those in recovery to generate new initiatives.

Evaluation/Conclusion: Systems change recommendations made relating to this project were tied to statistical data and the perceptions of key informants that lived and work in Sussex County. Because this project was part of a larger implementation strategy, NJ-CARS will need to revisit these recommendations as more data near the end of the project’s one-year term. Future recommendations that affect the treatment of health of Sussex County residents must continually be evaluated for evidence-based roots and buy-in from relevant stakeholders.

Internship Abstract

Title: Minimizing the long term effects of glaucoma and cataracts by addressing patient concerns about seeing an eye doctor during a post-pandemic.

Name: Arma Patel

Preceptors: Mrs. Suzanne Park

Agency: Edison Ophthalmology Associates

Purpose: To ensure patients, especially those of age 55 and above, come back for their annual checkups and feel safe as the pandemic continues.

Significance: Edison Ophthalmology Associates is a private practice that specializes in treating patients that require diagnoses and surgery for glaucoma and cataracts as well as comprehensive exams and routine eye exams. Due to COVID-19 many of the patients have not returned for their annual eye exams which is a problem, especially for those patients 55 and older. At this age, cataracts start to become an issue and they are also the leading cause of blindness (CDC, 2020). To ensure the best treatment for patients they have to feel comfortable coming to the doctor's office during the pandemic. This time has been frightening for this population and due to how COVID-19 has disproportionately affected them.

Method/Approach: Currently there are 51,124 patients in our system that have at least come to our office once in the last 10 years. We started analyzing the patients that haven't returned back to the office since 2020 because that is the year the pandemic began. With the help of our system we were able to find out whether or not all the patients had returned in the last two years and if they were coming regularly. For those who had not we put them on a recall list. With the help of a new system the office has integrated, Televox, the office was able to send out reminders to set up their appointment this year, as a yearly eye exam is essential. With the reminder, messaging was also added that masks were still required in the office, are maintaining 6 feet distance between patient to patient and are requiring patients to wait in their car for their turns to maintain a safe and healthy environment.

Outcomes/Results: From this patient outreach program Televox Edison Ophthalmology Associates went from seeing an average of 1,223 to 1,504 patients, which shows an increase of 23% patient recurrence on a monthly basis from pandemic to post pandemic. The main concern addressed post pandemic was that certain patients could not be contacted using the Televox system because many patients within the demographics of 55 and plus in age did not use a smartphone and similar devices to receive automated reminder texts about their upcoming appointments. Therefore, the use of old-fashioned outreach marketing had to be used to contact those who could not be reached by a text message to remind them of their appointment time or to set up an appointment.

Evaluation/Conclusion: When interacting with patients when they came in for their visits most of them shared the concern of coming to a doctor's office due to the pandemic and the risk of contracting COVID-19. Something else that had been brought up many times was that they had simply forgotten about their appointments or to make them due to their age, and with the reminders that they are now receiving it has made their lives easier. Their minds were also eased when they saw that COVID-19 protocols and safety measures were being taken. This shows the importance of comforting patients and listening to their needs to help them feel safe and want to return to the office.

Internship Abstract

Title: Social Media Tuberculosis Acknowledgment Discussion Campaign

Name: Kajal Patel

Preceptors: Rosaura Garcia, CHES, Health Educator II, Education and Training Department

Agency: Global Tuberculosis Institute (GTBI) - Rutgers New Jersey Medical School

Purpose: To synthesize, augment knowledge, and visibility by engaging the Global Tuberculosis Institute's audience and sharing current TB data and barriers to TB elimination through social media.

Significance: Worldwide, TB is the 13th leading cause of death and the second leading infectious killer after COVID-19 (WHO, 2021). Only 1 in 3 people with drug resistant TB accessed treatment in 2020 (Soeroto et al., 2021). Previously, GTBI never implemented a social media campaign. Twitter chats are in demand for organizations to quickly share reliable public health information publicly. Social media campaigns serve as an effective method to share reputable and reliable public health information in digestible pieces. The Global TB Institute's Department of Education and Training provides TB training and education for healthcare workers and public health staff nationally and globally. Research and promotion will allow people to understand, fund, and improve treatment.

Method/Approach: An all-day discussion was held following World TB Day on GTBI's Twitter account following a Q&A format, providing a forum to engage learners with easy and quick discussion. Ten questions were shared and topics included stigma, lessons from COVID-19 to end TB, barriers to vaccines, biggest challenges to end TB, social costs of patients, strategies for providers to "think TB," etc. An instructional how-to-join a Twitter chat flyer, GTBI-themed marketing flyer, and question graphics were used. Questions were posted hourly and provided insight on TB prevention, treatment, and care. TB activists and experts were invited to participate. Participants were asked to use the hashtag of "#morethan1day4TB." A moderator monitored the event and actively retweeted and "liked" engagement.

Outcomes/Results: Participants including 3 physicians, 1 scientific researcher, and 3 survivors shared responses to the prompts. Respondents concurred breaking stigma is a collective role and a new vaccine is easily possible with political investment due rapidly-produced COVID-19 vaccines. Additionally, survivors highlighted TB heroes, including activists and physicians. GTBI's Twitter profile visits grew to 12,400 (752%), mentions increased to 75 (630%), and tweet impressions increased to 14,300 (309%). March's top tweet earned 3,383 impressions of the marketing flyer. The top media tweet was asking the audience to tag TB heroes for recognition. The top mention earning 160 engagements was an image of a child reading Vidya Krishnan's book, "Phantom Plague" elucidating how TB shaped history. In March, GTBI's following almost doubled with 28 new followers compared to 16 new followers in February.

Evaluation/Conclusion: Overall, these results indicate an increase in GTBI's visibility and engagement. Newly identified topics for future education and training include TB funding, vaccine development, and reducing TB stigma. Health education webinars will train providers to break TB stigma, support TB patients, and treatment. Online training programs will improve TB investment, diagnosis, prevention, and treatment adherence for disease elimination. Providers will be educated on "thinking TB" to improve diagnosis. GTBI will work closely with global governments, researchers, and physicians to advocate investment for new vaccines. Chat engagement will gain greater respondents by inviting TB activists a month earlier. GTBI will repeat this campaign due to this year's substantial engagement and effectiveness.

Internship Abstract

Title: Raising Awareness about the Covid-19 Vaccine for Children

Name: Kalindi Patel

Preceptors: Gina Stravic, Executive Director

Agency: Raritan Valley YMCA

Purpose: To plan and execute a series of children's Covid-19 educational programs for parents and guardians in collaboration with the East Brunswick Public Library.

Significance: In the United States, Covid-19 has resulted in over 12.9 million cases among children ages 0-17 and nearly 1,140 precious lives have been lost (AAP & CDC, 2022). Specifically, in New Jersey since the start of the pandemic there have been 14 Covid-19 deaths among children 0-17. Despite the vaccine being available for children 5-11 years old, they have a vaccination rate of only 30% compared to other eligible groups (NJ Department of Health). The Raritan Valley YMCA and East Brunswick Public Library are committed to improving community health through primary prevention methods. As a partnership both entities have recognized the need to carry out educational programs to ensure parents are equipped with essential information to make an informed decision.

Method/Approach: The educational programs were able to be carried out by a vaccine grant provided by the YMCA of the USA. Primarily, the Raritan Valley YMCA reached out to their community partner, the East Brunswick Public Library to plan, develop and implement 2 programs- a tabling event and a Zoom event. With the help of a Y board member, a pediatric infectious disease specialist was recruited to deliver information about the Covid-19 vaccine for children. Following these events, educational flyers were created using the CDC's website as a resource to distribute at the tabling event. A promotional flyer for the Zoom webinar was developed to distribute at both facilities and post on social media to reach a broader audience. The flyer was also shared to the Y's mailing list consisting of 7,000 recipients. Proper communication between the Y and library community and doctor was critical to ensure both programs operated successfully.

Outcomes/Results: To measure the effectiveness of the Zoom webinar a brief questionnaire survey was created. Participants were asked to indicate their level of agreement or disagreement using a scale with the following options-strongly disagree, disagree, neutral, agree, or strongly agree. More than half of the participants strongly agreed that they found the information presented to be helpful and gained new knowledge to make an informed decision. Furthermore, 56% of the participants stated that they feel more confident about the vaccine since it first became available. As a result of the Zoom webinar being recorded, the Raritan Valley YMCA was able to circulate it among other community members through various platforms. It was shared on the East Brunswick Public Library's YouTube channel which has 32 views to date. It has also been posted on the Raritan Valley YMCA's website and will be shared to other Y's across the nation. As a result of the success from these 2 events the team was given the opportunity to present at a National YMCA meeting.

Evaluation/Conclusion: The ultimate goal of the project is to increase the vaccination rate among children ages 5-11. Through primary prevention and education for this population, it is the intention that the program will boost parents' confidence when the vaccine for 6 months- 5 years becomes available.

Internship Abstract

Title: Insurance Coverages with Primary Care

Name: Kamal Patel

Preceptors: Pratim Pathak, MHA

Agency: Patel Healthcare LLC

Purpose: To analyze how having an insurance plan and not having an insurance plan can affect a patient's treatment plan.

Significance: An individual's treatment plan varies from others based on many different factors. One of the main factors is one's insurance coverage that is based on an individual's occupation, income, etc. Some patients have a higher copay than others when coming to see a primary care physician and some do not even have a copay at all, others are paying all out of pocket as their deductible is still not met. Patients are stopping care right after the primary care visit even though the physician referred him to get further testing done or to go see a specialist. Two patients may require the same treatment for the same medical issue but their care will vary greatly due to their insurance coverage and what they are willing to spend for healthcare.

Method/Approach: A random selection of five uninsured patients and five with private insurance were treated by the primary care physician. The patients were monitored at the checkout window on further appointments needed such as prescription for a specialist, a follow-up appointment, a prescription for medication, or no further testing to be done.

Outcomes/Results: Out of the five uninsured patients, four of them were asked to make a follow-up appointment due to abnormal blood test results and three out of the four patients declined to make a follow up appointment at the office during the checkout process. One of the five patients had normal blood test results and was not needed to be seen in the office again. From the five patients with various private insurances, all five were asked to make a follow up appointment and four of the five patients did on the way out of the office on the same day. The nine total patients were asked to come back for further testing to be done such as a X-ray, an EKG, and/or NST which are performed by a cardiologist that comes to the office Tuesdays and Fridays. The patients with private insurance had to pay an average PCP copay of \$15, while the uninsured patients paid \$50 each to see the primary care and will have to pay the same copay again for a follow up and pay out of pocket for the various testing to be done as well. Patients with private insurance were able to get testing done without spending nearly as much out of pocket as it was in the network and covered by the insurance.

Evaluation/Conclusion: Although all nine patients were asked to make a follow up appointment as requested by the primary care physician, the five uninsured patients were unlikely to make that appointment to get tested and receive the care they need. The uninsured patients are going to be monitored on whether or not they come back to get more testing done. As a result, insurance plays a huge role in preventing certain long term issues that can potentially be serious or life threatening. The insured patients will be able to be proactive and have early detection when it comes to their health problems as the uninsured patients will be reactive to their health problems as it might be too late. Health care costs are still high and especially during the pandemic, many families have lost their jobs and health insurances are struggling to afford the care they need.

Internship Abstract

Title: Healthcare Recruiting Software Implementation

Name: Krupa Patel

Preceptors: Robert Reyes, Lissette Cintron

Agency: Spring Hills Post Acute - Princeton, NJ

Purpose: To implement a pilot program for recruiting and onboarding new employees, and simplify healthcare job posting for human resource management professionals.

Significance: According to the Peterson KFF Health System tracker, nursing care facilities have seen a 15.0% drop in employment since February of 2020 (Wager, 2021). The purpose of Apploi is to combat the problem of a healthcare worker shortage by helping healthcare HR professionals recruit, hire, and onboard the right healthcare employees at volume and in a more efficient way. Apploi is especially effective because it streamlines the hiring process by enabling job posting across multiple sites and job boards. Between January 24, 2022 and March 14, 2022, Spring Hills Post Acute Care piloted the software to see if it improved staffing shortages.

Method/Approach: During the pilot, Apploi was used on a daily basis to view applications for jobs positions such as maintenance helper, housekeeper, receptionist, nursing, and activities assistant. As applications came in, interview requests were emailed to qualified applicants. Interviews were scheduled and a confirmation email was sent that included the office's address and contact information. If the administrator, department director, and the HR coordinator wished to move forward with the hiring process, Apploi was used for the onboarding process.

Outcomes/Results: With the launch of Apploi at Spring Hills Post Acute Care, the total number of new employees accumulated to 25. Throughout the four month period between January 2022 to April 2022, there was a steady increase in the number of employees in each department. During the months of January and February, the front desk gained 1 new receptionist, the maintenance department got 2 new helpers, and the housekeeping department gained 2 workers. Throughout the months of March and April, the activities department got 2 new assistants and the nursing department gained 9 new nurses which consisted of CNAs, RNs, and LPNs. Additionally, there were 9 new professionals hired to work in the administration.

Evaluation/Conclusion: Being able to work on the new healthcare recruiting system first-hand was very beneficial because it allowed for a greater understanding of the effects that a healthcare worker shortage has on a company. At first, it was difficult to fill the vacant positions because of no-show interviewees and applicants who turned down full-time offers because of schedule conflicts. However, in the end each department received the help they needed in order to make their workdays go by more efficiently. Spring Hills Post Acute Care will not be continuing its use with Apploi in the future because of a management acquisition that will require the utilization of a different recruiting software, but the pilot was successful overall.

Internship Abstract

Title: Underage Tobacco Sales during the COVID-19 Pandemic.

Name: Reenal Patel

Preceptors: Christopher Ackerman, MPH - Research Project Manager

Agency: Rutgers Center for Tobacco Studies

Purpose: To compare Rutgers Center for Tobacco Studies NIH-funded covert tobacco purchase data with FDA tobacco retailer compliance inspection data to determine the effects of the COVID-19 pandemic on underage tobacco sales in New Jersey.

Significance: Although there have been significant declines in cigarette smoking in the United States, concerns about youth tobacco access remains. Raising the minimum age to 21 years old to purchase tobacco products is a successful strategy for combating underage tobacco use (Campaign for Tobacco-Free Kids, 2020). However, enforcement of age-of sales policies was limited by the COVID-19 pandemic. Rutgers Center for Tobacco studies conducted a research study with 18-20 years olds to investigate retailer compliance with tobacco age-of sale laws in New Jersey before (2019) and during (2021) the pandemic. The center's research identified a need for enhanced enforcement of age-of-sale policies to minimize youth access.

Method/Approach: Records from FDA compliance check inspections of tobacco product retailers were analyzed for: 1) Total number of inspections and 2) inspections resulting in a violation involving a minor in New Jersey from 2019 to 2021. Rates of FDA violations involving a minor were compared to results from Rutgers Center for Tobacco Studies Tobacco 21 (T21) study. The T21 data was analyzed for: 1) total purchase attempts and 2) successful purchase attempts.

Outcomes/Results: Before the pandemic in 2019, there were 4,891 FDA inspections resulting in 569 stores with a violation involving a minor (11%). Rutgers T21 study reported 780 purchase attempts in 2019, with 330 successful purchases (42.3%). During the pandemic in 2020, there were 1,051 inspections conducted by the FDA, resulting in 139 stores with a violation involving a minor (11%). The T21 research study was suspended in 2020 due to the COVID-19 pandemic. Similarly, in 2021, 627 FDA inspections resulted in 177 stores with a violation involving a minor (28%). Rutgers T21 reported 842 purchase attempts in 2021, resulting in 573 successful purchases (68.1%).

Evaluation/Conclusion: This study investigated tobacco retailer age-of-sale compliance before and during the COVID-19 Pandemic. Significant differences were found when comparing FDA compliance data to the T21 research conducted by Rutgers CTS, specifically with rates of tobacco retailer compliance. The number of FDA compliance checks decreased during the COVID-19 pandemic, and retailer non-compliance increased, as seen in the FDA Compliance Database and Rutgers T21 Study. Although FDA inspections involving retailer compliance with tobacco age-of-sale laws decreased due to the COVID-19 pandemic, more research is needed to identify ways to keep existing public health needs a priority.

Internship Abstract

Title: Career and Professional Development Program for RWJBH's EPIC Training Team

Name: Nick Phillips

Preceptor: Maria A. Moffa, Assistant Vice President of EPIC Training

Agency: Robert Wood Johnson Barnabas Health (RWJBH)

Purpose: To design a continuing education and professional development program for Credentialed Trainers (CTs) interested in developing their skills and achieving career goals.

Significance: The EPIC training team at RWJBH consists of CTs, Principal Trainers, and various managerial positions. The common belief is that a CT moves from a principal trainer to an analyst position. While this may be the case for some individuals, it isn't the only option for individuals seeking professional development. Professionals seeking to improve their skills and develop their knowledge require challenges that push their capabilities. Furthering an individual's responsibility may be daunting but rewarding when there's a tangible increase in skill and experience. Monetary compensation and promotions are not sustainable options for retaining employees. Professionals strive for opportunities to improve their skill set, knowing their commitments are returned over time. To retain employment, professionals need to be offered rewarding and challenging tasks.

Method/Approach: Three programs were created: Training Operations, Management and Leadership, and Principal Trainer/Analyst. Four subsections were made for each category: professional development, career development, activities, and course offerings. Interviews were conducted with key opinion leaders on the team to design significant changes. The program was developed based on the feedback received. Once parties agreed on the design, the final program was created.

Outcomes/Results: The major changes introduced in the program are a newly promoted position, a mentorship program, and a structured certification program. The program introduces a new senior-level position called "Senior Credentialed Trainer." Current CTs who excel in their position may be considered for promotion. The position would entail more responsibilities but acknowledges the individual as an asset and resource on the training team. The mentorship program is an official handoff from when a new hire finishes their onboarding. Freshly onboarded CTs will be provided a mentor who will further situate them into their new role. The certification program allows credentialed trainers who have been with the company for six months to complete a "proficiency" and anyone who has been in the team for nine months to complete a "certification."

Evaluation/Conclusion: An organization that invests in its employees has a better chance of retaining them. A report conducted by LinkedIn shows 93% of employees would stay in a company for longer if the company invested in their career development. A study conducted by Employee Benefits News discovered the average cost of losing an employee is 33% of the employee's annual salary. Employees are an investment to an organization with direct effect on ROI. This program encompasses the initiative RWJBH is taking to develop its employees and provide growth opportunities. The programs limitations come down to its initial implementation and buy-in from its intended audience. Through trial and error the program will continue to develop and maintain focus on providing its recipients with a practical, organized resource for career and professional development.

Citations: <https://docs.google.com/document/d/1xLqawpbGfRBFaFF-h3RWjCuWUQVOxkQSA84xw18gkPw/edit?usp=sharing>

Internship Abstract

Title: Healthcare's Institutionalized and Systematic Racism: The Effects On Both Patients and Workers

Name: Hanan Pickett

Preceptors: Annie Steelman

Agency: RWJBarnabas Health, System Strategy

Purpose: To smoothly transition the 2021 RWJBH Ending Racism Together (ERT) Strategic Plan from its planning phase to its implementation phase.

Significance: One of the roles of the System Strategy team at RWJBarnabas Health is to strategically observe operations from the inside out and translate strategic plans into easy to follow action plans, which lead to better outcomes. The RWJBH ERT Strategic Plan addresses provider/employee behavioral issues with the goal of creating an unbiased, safe space that caters to all races. The plan was created in response to the environment where Black communities face a multitude of healthcare disparities including access to quality care, health insurance, and PCPs/Specialized physicians due to a range of social determinants. Institutionalized racism and racial bias also contribute to unequal care. The process to assist the health system in transitioning the ERT Strategic Plan was a collaborative effort between the RWJBarnabas Health Office of Social Justice and Accountability and the System Strategy teams.

Method/Approach: The strategic plan consists of four goals that address healthy and sustainable communities, high-quality patient care, an innovative and efficient delivery system, and an antiracist and inclusive culture. High-level strategies were also created as part of the strategic planning process. Our task was to add the necessary level of detail to the implementation plan so that it can be successfully deployed and operationalized across the RWJBarnabas Health System. First, we reviewed the plan in detail and held multiple meetings with the Social Justice and Accountability team to gain a clear understanding of the plan, its drivers, and its vision for the future. Then, we took the goals and strategies from the plan and formulated one-year objectives, metrics, tactics, and responsibility for each of the four goal areas. For example, the first goal area (healthy and sustainable communities) addressed late-stage breast cancer in Black and African American women, maternal complications, diabetes, sickle cell disease, pulse oximeters that may accurately gauge reading on all skin tones, and Medicaid coverage.

Outcomes/Results: Action plans for Goal 1 were created, including six objectives, 11 metrics, and 32 tactics. Responsible departments across the health system were identified for each tactic. The action plan for Goal 1 was reviewed with the Office of Social Justice and Accountability team for content and accuracy. Action plans for Goals 2, 3, and 4 were drafted and will be further developed over the next three months.

Evaluation/Conclusion: The RWJBH ERT Strategic Plan is a significant step forward in RWJBH's organizational shift to become an antiracist organization. One of the first of its kind in the United States, the RWJBH ERT Strategic Plan addresses health disparities, racism, and discrimination within its healthcare settings and facilities. It is clear that RWJBH is committed to this plan to welcome not only patients but also employees into an antiracist environment through behavior conducted, policies created and re-evaluated, and practices displayed in the workplace.

Internship Abstract

Title: Social Media Analysis for Increased Audience Engagement

Name: Mrinalini Pillai

Preceptors: Direct Supervisor: Shannon Bishop-Green, Senior Director

Agency: McCabe Message Partners

Purpose: Identify and implement pivotal tactics and trends yielding increased engagement on the Align for Health Facebook page.

Significance: Within the past decade, cross-sector collaboration has served as a catalyst for the improvement of population health and health equity (Hamer & Mays, 2020). For national initiatives like Align for Health, a program established by the Robert Wood Johnson Foundation to promote the collaboration between public health, social services, and healthcare, social media can serve as a powerful tool to promote the benefits of cross-sector collaboration (Shawky et al., 2019). By identifying trends on an existing social media platform, engagement with a targeted audience can be fostered. This project seeks to compare the performance of the Align for Health Facebook page within the last 2 years as a method of increasing outreach to public health officials and policymakers.

Method/Approach: Data was compiled from all posts on the Align for Health Facebook page from January 2020 to December 2021 through Sprout Social and Meta Business Suite. The posts were initially compared by collecting total impressions, total engagement, net reactions, and other interactive social media analytics. Posts published in this period were then analyzed based on the type of media content shared in the post. These forms of media include images, videos, and links to external sources. Data regarding the demographics of the current audience, frequency of engagement, and page growth were also collected and analyzed. Lastly, data was compiled comparing organic and paid social content.

Outcomes/Results: Based on the data collected from the Align for Health Facebook page, there were a total of 0 paid posts in 2021 and 2022, while 3 were noted in 2020. The 3 paid posts accounted for 96% of all engagements for 2020. Between January 2020 and December 2021, total impressions decreased by 96.1%, while total engagements and net reactions decreased by 94.4% and 85.1% respectively. Though the number of engagements decreased within this period, the overall engagement rate increased by 42.7%. Of the 280 posts published in the span of 24 months, 16 posts contained videos, 140 posts contained external links, and 124 posts contained images. Since 2020, Wednesdays and Fridays experienced the greatest frequency of posts published, while audience engagement was found to be highest on Tuesdays. It was also found that the majority of the page's audience is most active around 8:00 pm EST. In terms of growth, there was a 98.9% decrease in users reached with a 40% decrease in net followers. It was also found that the majority of the Facebook page's audience is comprised of women over the age of 65.

Evaluation/Conclusion: The results obtained indicate that investing in paid posts, publishing content on Tuesdays, posting around 8:00 pm EST, and posting content relevant to the majority audience are effective tactics in increasing overall engagement on the Align for Health Facebook page. These results were shared with the Vice President of the public relations firm and were immediately implemented on the Facebook page. Continuous monitoring of the page is necessary to determine the success of the implementation of the proposed tactics in fostering increased engagement and outreach to public health officials and policymakers.

Internship Abstract

Title: Literacy Promotion for Latinos Study

Name: Mariana Posso

Preceptors: Network Director: Jennfier Hemler, Research Assistant
Program Director: Silvia- Perez Cortes, PhD

Agency: Department of Family Medicine and Community Health, Research Division

Purpose: To transcribe and analyze the linguistic output of parent- child interactions and find effective strategies to reduce disparities in literacy promotion amongst low SES Latino families.

Significance: According to Healthy People 2020, literacy and language are the precursors to low educational attainment, one of the 5 domains classified as a social determinant of health. In 2007, Sentel and Braun looked into a community survey conducted in California to compare health literacy amongst different ethnic groups. It revealed that Latino respondents had the second lowest prevalence of health literacy. The Literacy Promotion for Latinos Study at the Pediatrics Department of Robert Wood Johnson has recruited participants from local clinics to supplement guided parent-child interventions through shared readings. By analyzing the parent-child behaviors, researchers can calculate the measure of linguistic proficiency. Improving social skills and language proficiency during early childhood development should help reduce the disparities seen in low health literacy amongst ethnic minorities.

Method/Approach: In a 3 arm randomized clinical trial, investigators will test mechanisms of learning interventions for families. A total of 630 low-income Latino participants from local health centers will be assigned to an arm and evaluated at the age of 9 months and followed up at the age of 18 months. The first arm is reach out and read (ROR) which is commonly used in pediatric care. The second arm is ROR with text messages that are meant to serve as reminders. The third arm combines ROR, the text messages, along with access to resources to reduce poverty. These 3 arms will allow investigators to test their hypothesis that the implementation of ROR with additional commodities will result in higher scores based on social and emotional development of the child. Investigators will also gain a better understanding of the socioeconomic barriers that parents experience and how it impacts their child's cognitive development.

Outcomes/Results: A randomized control test was used by researchers in a longitudinal study to gather the mean length of utterances from shared readings in recordings. A child's language development is based on a count of individual morphemes in each utterance. In a 18 month old participant's recording, a total of 69 utterances were transcribed and divided by the number of morphemes. Using an excel spreadsheet, the total MLU of the participant came out to be 4.88. However, after a year follow up, a second interview would be required to compare the child's MLU to the age equivalent mean of language development.

Evaluation/Conclusion: Observations from the recordings have indicated that parental input, code-switching, and language are triggered by the reading environment. Limitations for the MLUs from a theoretical perspective, include the presence of another parent or child, technology, or the type of book selected. Trends have shown that the children tend to become distracted during shared readings when another person is in the activity. This behavior was also taken into account when transcribing videos that had the presence of televisions, cellular phones, and other electronics. During readings, it was observed that bilingual books had a relation to greater rates of engagement from the child.

Internship Abstract

Title: Ergonomics for Your Health Educational Program

Name: Saira Prasanth

Preceptors: Claudia Zurlini, Senior Coordinator II

Agency: Hospital for Special Surgery Education Institute, Community Education & Outreach Department

Purpose: To develop a program to increase skills and knowledge of ergonomics for sitting, driving, and other occupations needed to promote orthopedic health in diverse communities.

Significance: According to the U.S. Department of Labor's Occupational Safety and Health Administration, or OSHA (n.d.), work-related musculoskeletal disorders (MSDs) are one of the leading reported causes of restricted or lost work time. Creating an ergonomic setup that allows for proper posture and movement can reduce the risk of workplace injuries and musculoskeletal disorders (MSDs) (U.S. Department of Labor, n.d.). According to Kumar et al. (2020), MSDs account for approximately one-third of all health-related absences among workers in industrialized nations. Radauceanu et al. (2019) found long driving times and perceived driving-related physical constraints to be associated with low back pain among male postal workers. Kumar et al. (2020) show that MSDs can be prevented through training on vehicle ergonomics. This evidence suggests that occupational vehicle drivers are exposed to significant risks, and that education on ergonomics can reduce the risk of MSDs and lost productivity across various occupations.

Method/Approach: Email outreach was conducted to request collaboration with three HSS physical therapists with expertise in ergonomics in developing educational video content. The live program, titled Ergonomics for Your Health, was marketed with a short description through the Education to Empowerment program brochure. An Eventbrite page was developed and published for program registration. A webinar brief will be developed to facilitate discussion by panelists. Panelists will be secured from HSS staff, with the HSS Body Mechanics Coordinator identified as a potential speaker.

Outcomes/Results: The final program will be held on May 18, 2022 as a 1-hour virtual lecture over Zoom. 19 participants are currently registered. Program objectives aim for at least 90% of participants to gain knowledge of the role of ergonomics in musculoskeletal health and gain skills to improve their own workplace setup by identifying risk factors and using ergonomic principles. Participants will be able to use the chat and Q&A features on Zoom to pose questions to panelists. The lecture will be recorded and posted to the HSS YouTube channel as enduring content.

Evaluation/Conclusion: Impact evaluation will utilize an online survey developed in Alchemer. Survey questions will use Likert-style response choices to measure participants' level of satisfaction, self-management, and likelihood of recommending the program. Open-ended questions will allow participants to provide qualitative feedback. Four post-test multiple choice knowledge questions will be developed to measure knowledge of ergonomics. Results will be examined again mid-year and end-of-year to compare outcomes and plan Summer or Fall session programs.

Internship Abstract

Title: Barriers and Facilitators of Physician-Patient Communication at CINJ

Name: Daniel Quizon

Preceptors: Frances Di Clemente, Program Analyst

Agency: Rutgers Cancer Institute of New Jersey (RCINJ) - Precision Medicine Oncology

Purpose: Address language discordances at RCINJ through the creation and evaluation of possible tools to improve patient health literacy.

Significance: Recent RCINJ data indicates precision medicine in cancer produces optimistic health outcomes for Latino-ancestry patients, even in advanced stage cancers. However, observations show that Spanish-speaking patients have difficulty understanding information about their diagnosis and treatment (Rodriguez-Rodriguez, 2019). Communication breakdown is attributed to factors like language discordance and a patient's educational attainment (Aelbrecht et al., 2019). In 2018, English proficiency for immigrants was only 53%, warranting possible medical information comprehension issues. Immigrants have recorded lower levels of educational attainment in comparison to their US-born counterparts (Pew Research Center, 2018). RCINJ wants PPC modified to make medical information easy and understandable. Latino patients have positive attitudes and the willingness to participate in genomic testing (Ramirez et al., 2015). Reducing communication barriers may increase Latino patient visits at RCINJ, thus promoting earlier testing, genomic profiling of tumors, and saving more lives through precision medicine. Communication boards (CBs) are a potential intervention to this communication breakdown. Patient satisfaction increased when CBs were used to facilitate communication between the healthcare provider and patients. (Kaur, 2018). Optimal PPC allows proper expression of needs, thoughts, and feelings despite language barriers.

Approach: A literature review was conducted to identify the importance, barriers, and facilitators of PPC. A prototype communication board (CB) was drafted in Spanish for the recommended use of non-English speaking or limited English proficient patients. The board is intended to be used electronically on a tablet for accessibility. Prototype CB evaluation will be done with bilingual speakers to test information comprehension, first impressions, and preferred recommendations.

Outcomes: Objective of prototype CB is to provide clear information about a patient's cancer diagnosis, treatment options, and RCINJ's precision medicine work. It will support conversations with a medically proficient individual in the patient's language for any questions post-diagnosis. A survey was conducted after CB evaluation to record level of health literacy and comprehension among subjects. Subjects were given five questions to score between 1 to 5, and four questions asking "yes or no." Every subject voted "yes" on the "yes or no" portion of the survey, but there were a variety of answers on the scored questions. Every scored question fell between the range of 3 and 5.

Conclusion: Results from survey indicate a positive impression of the prototype CB. For health information and communication, the CB is very useful. Recommendations were given, such as cancer support group resources and improving translation & grammar. Increases in patient-centered care through the CB involve outcomes like increased compliance, treatment adherence, improved health outcomes, and patient satisfaction (Tongue et al., 2005) at RCINJ. Until further evaluation and improvements, patient access to CB will be barred. Subsequent tests with CINJ staff are needed for a healthcare professional perspective and to refine CB for medical use. Overall, the CB was found to have success among subjects to present important but understandable cancer health information.

Internship Abstract

Title: Combating Food Insecurity throughout New Jersey
Name: Samantha Ramos
Preceptors: Consultant: Theodore Siggelakis, Consultant: Gabriella Cancemi
Agency: Soup Kitchen 411

Purpose: To acquire a monetary grant in order to combat food insecurity in the expecting, and existing food deserts throughout New Jersey.

Significance: Hunger and food insecurity burdens millions of families across the nation, especially after the global pandemic. This is a rising epidemic in New Jersey, as 762,530 people are facing hunger - and of them 192,580 are children, as reported by Feeding America in 2021. As a result, Soup Kitchen 411 has launched a campaign to support these individuals and provide hot meals to all regions with expecting or existing food deserts. This is done by partnering with local restaurants that face business challenges or closure, due to the damaging impact of the pandemic. This campaign has successfully provided meals to vulnerable families and has helped stimulate local economies and salvage businesses. Continuation of this campaign will further combat the insufferable consequences of food insecurity in New Jersey.

Method/Approach: An extensive grant proposal was written and submitted to multiple funders in order to obtain sufficient funding for the continuation of this project. This included analytical research on the top food deserts in New Jersey with the most vulnerable populations. Further research was conducted on the struggling restaurants within the 21 counties of New Jersey. In order to draft a successful grant proposal for funders, the following sections were completed and peer-reviewed for submission: 1) Cover Letter, 2). Abstract, 3). Needs Assessment, 4). Letter of Intent, 5). Goals and Objectives, 6). Organizational Capacity, 7). Budget, 8). Implementation Plan, 9). Evaluation Plan, and 10). Sustainability.

Outcomes/Results: The anticipated outcome will be an approved and provided monetary grant of \$200,000 from The Provident Bank Foundation. This grant will be used to strengthen the infrastructure of the Soup Kitchen 411 organization as a whole, through means of establishing more collaborations with restaurants, soup kitchens, and community centers to distribute hot meals. This grant will also contribute to more competitive wages in order to maintain successful operations and staff members. It is anticipated that hot meal distribution will increase by 50%, in comparison to distribution totals in 2021. It is anticipated that 1,000,000 hot meals will be distributed in a one-year period, and there will also be a 50% increase in distribution locations within each county.

Evaluation/Conclusion: Internal records and data will be used for comparison when evaluating the outcomes of the campaign, quarterly. Individuals will be encouraged to complete an anonymous, exit satisfaction survey after receiving their hot meal, in order to maintain positive community outreach contentment. Ongoing data collection of meals served and survey results will continue throughout the entire year and will be reviewed quarterly to ensure goals are being met.

Internship Abstract

Title: ARM's Promoting Hygiene in New Brunswick's Homeless Community

Name: Marivi Rodriguez

Preceptors: Co-Founders: Kelsey Lynch & John El-Maraghy

Agency: Archangel Raphael's Mission

Purpose: To engage the community of New Brunswick to lead an active role in serving the underserved in their city.

Significance: The United States has over 500,000 homeless people on any given night (NAEH 2021).. The city of New Brunswick has a large homeless population; there are roughly over 200 homeless people every year, including those in shelters and those on the street. Our homeless population does not have access to proper hygiene products or do not have the ability to practice good hygiene (New Brunswick Today 2021). Over 5,000 homeless people died in the year 2020 due to a lack of proper hygiene. During COVID-19, the homeless population has suffered tremendously, with lack of access to proper PPE, shelter, and meals. This project will aim to aid the homeless population in promoting access to adequate hygiene and quality of life.

Method/Approach: ARM aims to set up hygiene stations on the streets of New Brunswick to encourage our homeless population to practice good hygiene. ARM has small hand-washing stations and will run a shower program in the spring. ARM has recruitment events planned to increase donor and volunteer engagement. Along with these efforts, interns also hand out nightly meals and supply any individual with any hygiene needs. These events help the homeless community tackle the disparities their community faces. At the nightly dinner service, interns and volunteers will hand out masks, hand sanitizer, gloves, etc; these products serve to provide some defense against the COVID-19 pandemic. On weekends, interns would help facilitate a haircut service that provides this population with free haircuts.

Outcomes/Results: As ARM was pending approval for the hygiene shower units and hand-washing stations, ARM served 6,300 meals from the beginning of the year to mid-April. ARM dispersed around 200 personal hygiene items, including socks, masks, hand sanitizer, and shoes throughout the semester. The shower unit and hand-washing stations will begin the first week of June in New Brunswick. On 4/10/2022, a haircut event at the United Methodist Church of New Brunswick took place, serving about 15 community members. ARM hosted a recruitment event with Rutgers' organizations and were able to recruit 10 new consistent volunteers. Along with volunteer recruitment, ARM hosted a fundraising event, earning over \$200 for the organization.

Evaluation/Conclusion: ARM's community efforts reduce the detrimental impact improper hygiene has on the homeless population. This outreach program supplies this community with a sense of comfort and reliability; they can always get a hot meal and hygiene supplies. This organization tackles the health disparities the homeless community faces. ARM focuses on distributing hygiene products at their daily dinner service, along with setting up a shower unit when it is warm. ARM keeps track of the weekly users and looks for growth in numbers. When the shower units begin, there will be a chance for this population to visit weekly and shower in a comfortable and safe environment.

Internship Abstract

Title: Analyzing Why Market Research Matters

Name: Jaclyn Rosa

Preceptors: Direct Supervisor: Jessica Steinacker, Group Supervisor: Tim Holland

Agency: BGB Group

Purpose: To analyze the process of marketing a product with specific survival data and discussing how the agency and client partner to deliver the ultimate in market material.

Significance: Gastric cancer is a disease that touches the lives of so many people. It occurs when cancer cells form in the lining of the stomach. Each year about 26,000 people in the United States get diagnosed with gastric cancer and last year over 11,000 people died due to gastric cancer. It is an extremely intense cancer with a low survival rate, so it is important that people get the help they need through drugs that could prolong their life. BGB partners with pharmaceutical holding companies to market and promote these drugs to doctors through pharmaceutical marketing promotional materials.

Method/Approach: To go into the market research process and deliver marketing material BGB partners with Bristol-Myers Squibb to align on marketing strategies and create educational and promotional materials to market medications. The drug that is being promoted goes through extensive clinical trials and testing to be approved by the Food and Drug Administration. After approval or while awaiting approval BGB partners with companies to create materials to bring to market. The Market Research process begins where the clients identify the desire for a marketing solution. The agency and clients discuss marketing goals and pull together project briefs for specific creative and probes for the market research. After, the agency kicks off with the internal team and develops specific market research creative materials to help guide the interviews and understand HCP insights. Market research interviews are held, and feedback is discussed. The agency then begins development of in market materials based on the insights gained from market research.

Outcomes/Results: By going through the market research process and developing potential materials to help position and market survival data, BGB was able to partner with clients to adapt and continue to develop marketing materials based on insights gained. Through collaboration between the Account Team, Project Management Team, Copy Team, Strategic Team, and Art Team along with the client's vision BGB can create marketing materials that satisfy the client's needs and promote the medication in a positive light.

Evaluation/Conclusion: Through a thorough understanding of the market, Healthcare Professional insights, and the market research process, BGB can provide clients with materials that meet the client's needs and ultimately provide doctors with educational materials detailing the data they need to understand to treat a patient.

Internship Abstract

Title: LLS Patient and Community Outreach
Name: Jazmin Sallit
Preceptors: Leila Evangelista: Patient and Community Outreach Manager
Agency: The Leukemia and Lymphoma Society (LLS)

Purpose: To help patients with cancer by giving them LLS resources that can be helpful to them in their journey and to promote the services we have to offer.

Significance: Blood cancers, including Leukemia, Lymphoma, and Myeloma, cause about 57,750 deaths in the US. Approximately 186,400 people in the US are expected to be diagnosed with a blood cancer in 2021. The Leukemia and Lymphoma Society has put \$1.3 billion in research for blood cancers. They also provide free support, education, and financial services to blood cancer patients. This project contributes to the solution because at LLS we give patients knowledge of our services in order to help them.

<https://www.lls.org/>

Method/Approach: The goal at The Leukemia and Lymphoma Society is to give resources to as many patients with blood cancer as possible. . We strive to be there for patients and try to help them in their journey with cancer. We give patients educational, support, and financial resources as well as being there to talk to them and answer any questions or concerns they may have. Something that we specifically do, which is a part of our support services, is set up First Connections for patients so they can have someone to talk to and share their experiences with. We also provide them with which financial services they qualify for and help them apply. There are also education programs and lectures that we tell patients about if we think they would be helpful for them. Lastly all interactions are uploaded and information on patients onto Salesforce to further help all patients.

Outcomes/Results: While being at LLS, there have been 160 new households entered into our system and 15 First Connections. We have called numerous patients and family members and given them the resources that would work for them. We have also made a great deal of First Connection matches. The First Connection program is for patients and family members to get matched with another patient or family member who has already “been through it” and they are able to talk to them and ask any questions as well as share experiences with them. Another achievement we have made is getting patients to go to our educational lectures and conferences. These accomplishments have all helped LLS and all the patients that go through our agency.

Evaluation/Conclusion: Overall, many patients find the resources to be very helpful and they are usually grateful that we can help them in any way. It seems that many patients mostly appreciate the financial services and also the support services. It is usually helpful for patients and family members to get support because cancer is a very difficult journey.

Internship Abstract

Title: Regulatory Affairs and Document Retention

Name: Kayla Sampayo

Preceptors: Direct Supervisor: Sandy Suh, VP of Regulatory Affairs and Chief Compliance Officer
Project Supervisor: Jennifer Howard, Regulatory Affairs Specialist

Agency: Recordati Rare Diseases, Inc. (RRD)

Purpose: To archive regulatory correspondence documentation using the Veeva Vault RIM platform to maintain compliance with Title 21 of the FDA Code of Federal Regulations.

Significance: Pharmaceutical companies are licensed to research, develop, market, and distribute drugs for healthcare purposes. Each of these functions require the efforts of the regulatory affairs department to establish and maintain procedures to control all documents required by 21 CFR Part 820 (Tartal). This documentation needs to be readily available and retrievable. Without record retention and document management, the pharmaceutical company will no longer be able to develop drug products, conduct clinical trials, market the products, nor distribute products to patients in need. These documents must be reviewed and approved by designated individuals and must maintain compliance with FDA regulations. To ensure compliance, the Veeva Vault RIM platform will be used to organize and backup regulatory documentation in a way that will increase accessibility and prevent loss.

Method/Approach: To determine which files were to be migrated into the Veeva Vault RIM platform, all correspondence files in the RRD repository were viewed and organized. There were a total of 20 products, each product repository contained correspondences with health authorities and internal communications. Each individual file was assessed and placed into categories to prepare for upload into the Veeva Vault RIM system. These categories include, deletions, reclassifications, and completions. Documents categorized as deletions were deemed unnecessary to migrate into Veeva, reclassifications were documents belonging to outside departments that would not need to be migrated into Veeva, and completions were files that were approved to migrate.

Outcomes/Results: Rather than listing all 20 products, the most significant reviews will be listed. Of the total files for Carbaglu (n=3,113), 6 (0.2%) documents were reclassified, 1,456 (46.8%) documents were deleted, and 1,651 (53.0%) documents were migrated. Of the total files for Desoxyn (n=1,396), 11 (0.8%) documents were reclassified, 624 (44.7%) documents were deleted, and 761 (54.5%) documents were migrated. Of the total files for Elspar (n=810), 61 (7.5%) documents were reclassified, 239 (29.5%) documents were deleted, and 510 (63.0%) documents were migrated. Of the total files for Panhematin (n=792), 161 (20.3%) documents were reclassified, 275 (34.7%) documents were deleted, and 356 (45.0%) were migrated.

Evaluation/Conclusion: More than half of the total regulatory correspondence files of Carbaglu, Desoxyn, Elspar, and Panhematin (n=6,111, 53.6%) were migrated into the Veeva Vault RIM system. With historical documentation moved to this online platform, this harmonized format will be useable by FDA and shareable between companies within the organization (Handoo et al., 2012). Now that these files are easily accessible, RRD will be prepared for audits and business development pursuits.

Internship Abstract

Title: The Effects of Diet on Menstrual Pain

Name: Serah Sannoh

Preceptors: Dr. Gloria Bachmann, Director of the Women's Health Institute

Agency: Women's Health Institute

Purpose: To study the effects of diet on the level of menstrual pain adolescent and college aged women experience through existing literature.

Significance: Dysmenorrhea, or menstrual pain, is the leading cause of school absences (French, 2005) and has a prevalence rate of 90% among adolescent girls (Coco, 1999). Despite the high prevalence of menstrual pain, many adolescent girls do not seek treatment for it. This pain is typically managed with the use of over-the-counter pain medication, but many times this does not remedy the pain which affects the quality of one's life. Evidence has highlighted that diets high in omega-3 fatty acids and low in processed foods, oil, and sugar reduce inflammation, which is a key contributor to menstrual pain. The Women's Health Institute promotes women's health research and brings light to areas in women's health often forgotten, such as the dysmenorrhea many adolescent girls face. Dietary solutions to menstrual pain should be researched more because one's daily diet influences their health outcomes. This project will study the effect of diet on menstrual pain and will evaluate which foods contribute to dysmenorrhea in adolescent girls and which foods can reduce the negative lifestyle effects of this condition.

Method/Approach: Research was conducted through a literature search of peer-reviewed articles and journals which were found using the search engines Rutgers Library, PubMed, and ScienceDirect. Multiple studies evaluating the relationship between period pain and specific diets were analyzed. To narrow the search results the advanced search tool was used to search for keywords such as "diet", "dysmenorrhea", "foods", "menstrual pain", "period pain", and other related terms. The advanced search tool was used to narrow my search by using "and" between keywords and by using "or" to widen my search. This study is targeted towards adolescent and college-aged girls, which is why the search terms "adolescent", "college", and "university" were also used.

Outcomes/Results: The results from the multiple studies were collected from nested control case studies, questionnaires, and random assignment. These studies examined the dietary patterns that result in menstrual pain. It was found that diets high in animal meats, oil, sugars, salts, and coffee contribute to an increased risk of dysmenorrhea. Studies found that foods high in omega-6 fatty acids promote inflammation and foods high in omega-3 fatty acids reduce inflammation (Deutch, 1996). It is very common for college aged girls in America to eat diets high in omega-6 fatty acids, since this is the bulk of the American diet. Since menstrual pain results from inflammation, it is important to have a balance of omega-6 and omega-3 fatty acids in your diet or have more omega 3- fatty acids in your diet

Evaluation/Conclusion: The findings from multiple studies suggest that diet does have a role in menstrual pain. To reduce this pain, it is advisable to avoid diets that trigger inflammation. The muscles in the uterus contract due to prostaglandins, which are very active in inflammatory responses. When measuring one's Dietary Inflammatory Index, it was found that those on a vegan diet, which excluded animal fat, had the lowest rates of inflammation (Turner-McGrievy, 2015). It is advisable to adopt a diet that avoids inflammatory foods to remedy dysmenorrhea.

Internship Abstract

Title: Community Outreach
Name: Nusaiba Sayed
Preceptors: Vivian Arroyo, NU-DAY Program Director
Agency: Prevention Links

Purpose: To educate and assist the youth and their families, who have been affected by substance use disorder, by providing free mentorship and counseling services.

Significance: A survey found that substance use disorder is fairly common among Americans and that over 20 million people suffer from problematic substance use in the United States. During recent years, the annual average prevalence of marijuana was 6.5%, alcohol was 11.2%, and illicit drug use was 7.3%. Prevention Links consolidates local and state resources to eliminate the deleterious effects of drugs, alcohol, violence, and inadequate educational and health institutions in the communities. This project helps to connect organizations and facilities with Prevention Links by educating them about the program and subsequently receiving referrals from the said institutions to help individuals who might be battling with substance use disorder.

Method/Approach: In order to bring more awareness and connect with various organizations throughout Middlesex county, a list of all the schools, treatment providers, detention centers, and community leaders was compiled including emails and phone numbers of those that were in charge of the youth (and their families). Through this process, emails were sent to guidance counselors and healthcare professionals in order to educate them about the program. For organizations that had no emails on their websites, they were contacted by phone where discussions were held about the program as well as obtain an email address of a primary contact to send flyers and brochures

Outcomes/Results: After conducting outreach and attending meetings led by community leaders for about thirteen weeks, the total enrollment number for the program increased to twenty-eight youth participants. Prior to this large amount of enrollment, there were only thirteen kids considered active in the NU-DAY youth program. 8 of these participants became enrolled through outreach strategies which consisted of sending emails with flyers/brochures and contacting facilities by calling them as well. 7 of these participants became enrolled through referrals from community meetings such as CIAAC of Essex and CNA of Union.

Evaluation/Conclusion: Prevention Links will continue to help individuals who are in need of assistance due to their substance abuse disorder and provide them with the necessary resources to better their lives. As this internship is coming to a closure, I expect to continue the work that I do and potentially reach out to significantly more organizations within the next few days to help further the program and allow more youth to take part. The efficiency and effectiveness of this program can be determined through participation of the youth.

Internship Abstract

Title: Social Awareness Campaign for CLEAR-TB

Name: Rachael Scarinci

Preceptors: Emily Douglass, Clinical Research Program Manager

Agency: New Jersey Medical School - Newark, NJ

Purpose: To raise awareness about Tuberculosis and new research on new CLEAR-TB social media platforms.

Significance: Each year, tuberculosis takes 1.5 million lives globally. Tuberculosis still remains the leading cause of death from a single infectious disease agent. Approximately 10 million people globally were infected with TB in 2018 (MacNeil, Adam, et al.). Fukunaga, Rena, et al. (2021) found that even with tuberculosis infection rates decreasing from year to year, millions of people around the globe are still battling the fight against infection and disease. This being said, the collaborators associated with CLEAR-TB want to raise awareness and share information about the novel research being conducted by the consortium in TB endemic countries around the world. Social media platforms such as Twitter and LinkedIn are powerful tools that can be used to reach large target audiences to educate the public and other researchers or institutions about how CLEAR-TB collaborates with its international partners.

Method/Approach: CLEAR-TB is a consortium of experts in the field of Tuberculosis around the world including the United States, South Africa, Peru, and Uganda. A questionnaire was formed and sent to the international site locations in order to compile information and photos. That process gauged how each collaborator contributed to the scientific objectives laid out in the clinical and basic science protocols developed by CLEAR-TB, highlighting their efforts and expertise. Social media accounts, such as Twitter and LinkedIn, were established as a platform to share information about the projects, collaborators, and progress being made and to bring awareness to tuberculosis and the fight against it. The Twitter page captured analytics on how each post engaged with other Twitter users. On top of the Twitter page, a website is being developed to inform people further about CLEAR-TB programs.

Outcomes/Results: Upon reaching out to key collaborators and site leaders of the FEND-TB Novel Diagnostics Consortium in South Africa, Peru, and Uganda, a total of 43 items were collected. South Africa was able to provide five images and two educational paragraphs, while Peru was able to provide 24 images and eight educational paragraphs, and Uganda was able to provide three images and one educational paragraph. Of those 43 items collected from the FEND-TB collaborators, 14 Twitter posts were created to raise awareness about tuberculosis and educate the public on World TB Day. Once the Twitter posts were uploaded, within two weeks, the Twitter page had obtained 872 impressions, 601 profile visits, and two followers. The top tweet gained 171 impressions while the top media tweet acquired 74 impressions.

Evaluation/Conclusion: Of the three international locations, Peru provided the most resources about their site. More specifically, the children's hospital in Peru had the youth construct posters for World TB Day, and the top posters were shared on Twitter. Since they provided the most information, tweets regarding tuberculosis awareness in Peru trended more when reviewing the analytical results. South Africa ranked second for impressions, while Uganda ranked third. With continuous collection of material, future Twitter posts will be more engaging to gain more page traction.

Internship Abstract

Title: New Jersey Population Health Cohort Study Recruitment

Name: Johnathan See

Preceptors: Direct Supervisor: Swati Kumar, MD, Research Coordinator
Project Supervisor: Dan Dychtwald, PhD, MPH, MS, Senior Project Manager

Agency: Rutgers Institute for Health, Health Care Policy and Aging Research

Purpose: To recruit for an upcoming longitudinal research study examining the effect stress, resilience, and other factors has on population health in New Jersey, with an emphasis placed on historically disadvantaged groups, multi-generational families, and immigrant groups.

Significance: There has been no large-scale longitudinal study that identifies factors impacting the health and wellbeing of the population of NJ from a multidimensional perspective. There is also a lack of focus placed on historically disadvantaged groups, multi-generational families, and immigrant groups when conducting research, even though they are more susceptible to the negative consequences of these factors and disparities. Minorities currently represent over 30 percent of the U.S. population yet only around 17 to 18 percent of clinical trial and research participants are from minority groups (George et al., 2014). The New Jersey Population Health Cohort Study will be the largest study of its kind in New Jersey and seeks to address these gaps in research participation, with the data and knowledge collected used as a potential basis for future interventions and programs.

Method/Approach: Probability sampling was the first method of recruitment with three subcategories: mailing lists, outbound calling, and in-person canvassing. Households were assigned and contacted. The study was explained and if the household accepts enumeration, their eligibility for the study is determined and participation offered if they are accepted. Recruitment was also done in-person in two person teams assigned a certain geographical region of New Jersey to cover, or through respondent-driven sampling, or RDS, with the goal of oversampling refugees/asylees and 9 immigrant groups. “Seeds” were identified, recruited and given three coupons to recruit other members of their immigrant group for the study that met the criteria for participation. The recruited members were then given three more coupons to disseminate amongst their network. Contact was done in different languages when necessary. Documents and flyers related to the study were translated to disseminate among the associated population.

Outcomes/Results: Recruitment and training for the study has been an ongoing process since February and will continue for three waves over 10 years. An estimated 10,000 to 20,000 New Jerseyans will be recruited. Outreach for RDS has yielded partnerships with numerous community organizations, consulates and businesses to identify “seeds”. Tagalog translation of consent forms, study flyers, and coupons was done and will be used in the study. Calling and emailing for recruitment has begun and several people have already expressed interest in participating. Training on the canvassing tool, survey portion, and actigraphy and device portion has been completed.

Evaluation/Conclusion: Preliminary evaluation of the recruitment methods for the study show much promise. RDS will serve as an effective tool to reach underrepresented populations in research, with the potential of exponential growth in recruitment through the “seed” and coupon program. Translations of survey items and documents as well as communication in potential participants’ preferred language made them feel comfortable and more willing to participate. Recruitment methods will be continuously reviewed and reevaluated to assess the effectiveness of the team and the methods themselves.

Internship Abstract

Title: Implementation of an Improved EHR System
Name: Aayush Shah
Preceptors: Nomaan Ashraf, MD, Orthopedic Spine Surgeon
Agency: Comprehensive Spine Care, P.A.

Purpose: To implement a new Electronic Health Record system throughout the four offices of Comprehensive Spine Care, P.A. in order to improve efficiency in billing, scheduling, communication, and the overall patient care experience.

Significance: It is estimated that nearly 30% of all spending in the United States healthcare industry is inefficient and essentially wasted ([Shrank, et al., 2019](#)). In a nation that spends more on health care than any other country in the world, a value of over four trillion dollars, it is no doubt any degree of inefficiencies are detrimental for all factors of the patient care process ([Waters & Graf, 2020](#)). Furthermore, many outpatient ambulatory surgical centers, such as Comprehensive Spine Care, employ only 25 individuals, making every man-hour valuable and significant to overall expenditures. Inefficiencies in the form of documentation failures, scheduling errors, failure of care coordination, and billing discrepancies can all be eradicated with the proper and full implementation of an appropriate electronic healthcare record. This can in turn lead to more profits for the organization and possibly even more affordable care for the patient.

Method/Approach: Implementing a new EHR software first requires understanding the limitations of the current program. After deliberating with the medical assistants, billing department, Physicians, and administration, the next step was to determine what baseline necessities as well as the ideal program would possess. Research and communication with EHR providers in the form of meetings came next, allowing the team to become more familiar with the features of the various, potential programs. After taking into account pricing, limitations, user interface capabilities, and customer service accommodations, the most appropriate software was determined. Finally, repeat evaluations and critiques were made to best construct a variation of the program that fits the needs of the office.

Outcomes/Results: The goal of the project is to implement a new EHR system for Comprehensive Spine Care. This software will ideally possess capabilities for live patient notes during the Physician-patient encounter, a forum for communication with insurance agents, and billing software to accurately report and document procedures as per the updated Current Procedural Terminology (CPT) codes set by the American Medical Association (AMA), all while improving efficiencies in this process. The work conducted here plays a vital role in improving the patient care experience while making scheduling and treating patients as efficiently as possible.

Evaluation/Conclusion: A definitive conclusion on the effectiveness of the implemented program can only truly be determined after testing the software in the real world. Documenting all obstacles to delivering the expected and efficient patient care experience as well as monthly communications with the program developer will ensure swift amendments be made at the earliest possible time. Additionally, more frequent and transparent communication between the staff and administration of Comprehensive Spine Care will allow for the collective concerns of the new program to be evaluated. Due to the numerous stakeholders involved, follow-up evaluations can only be effective if active discussions on processes that work and need to be amended are made on a regular basis.

Internship Abstract

Title: Role of a Caregiver in the Oral Care Received by the Intellectual and Developmental Disabilities (IDD) Population

Name: Disha Shah

Preceptors: Dr. Irina Grafova, Dr. Patricia Findley, Dr. Emily Sabato

Agency: SPICE Project - Rutgers School of Dental Medicine, Newark, NJ

Purpose: To evaluate knowledge of oral healthcare and oral hygiene for caregivers of patients with special needs.

Significance: A literature review that included twenty-seven peer-reviewed studies has shown that those with intellectual disabilities often have higher prevalence of dental caries and periodontal disease than those who do not have intellectual disabilities (Anders & Davis, 2010). Prior studies found that 22.5% to 69.2% of adults with intellectual disabilities demonstrated a significant level of disease, demonstrating a clear need for better oral care to be given to this vulnerable population (Ward et al., 2019). This project will use surveys to better understand the quality of oral care given to the intellectual and developmental disabilities population to drive more evidence-based interventions in the future.

Method/Approach: Caregivers to special needs individuals (n=9) who sought dental care for their patients at the Rutgers School of Dental Medicine (RSDM) Special Care Dental Clinic and Oral Medicine Clinic in Newark, NJ were surveyed from March 9th, 2022 to April 6th, 2022. Respondents were surveyed on their oral care delivery, knowledge, and attitudes. Using SPSS we will conduct univariate analysis to determine frequency of variables.

Outcomes/Results: As of now, no definitive results have been found as the survey continues to be collected from participants. To date, nine survey responses have been collected, with most responses indicating that they have not received specific training related to the IDD population. The results produced from this study hope to demonstrate the quality of oral care that is received by those with IDD to drive further studies and encourage enhanced training of caregivers through interprofessional education (IPE) and further clinical practice.

Evaluation/Conclusion: Research findings will be looked at through statistical measures to dictate if survey results are significant and if oral care has improved throughout the years. With that, this project should continue on a yearly basis to understand the quality of care being given and see if improvements are being made by caregivers. An important limitation to this study is inefficient sample size, especially when comparing to past years' data.

<https://docs.google.com/document/d/1-WyFvd3staM5zoieSp5EEuI5shkLULud2GziBf5Vgbk/edit?usp=sharing>

Internship Abstract

Title: Lunch and Learn Seminar - Mental Health
Name: Drashya Shah
Preceptors: Kate Brace - Program Development Specialist
Agency: New Brunswick Senior Citizen Resource Center

Purpose: To educate and raise awareness about the prevalence of mental health issues to older adults.

Significance: As time goes on, the world population is becoming older. Within the next 30 years, the proportion of the world's older adult population is expected to almost double from 900 million to two billion people over the age of 60 (WHO, 2017). About one in four older adults suffer from some type of mental disorder and due to the rapid aging of the population, the number of senior citizens suffering from mental disorders will also double in the next ten years (Mitchell, 2014). The most common disorders in this age group are depression, dementia, and anxiety with many others following behind (WHO, 2017). Unfortunately, many older adults with mental health problems are unable to recognize the early signs and do not get the treatment they deserve. The New Brunswick Senior Citizen Resource Center acts as an information hub for their senior citizens. They offer Lunch and Learn seminars where senior citizens are able to learn about healthy living, and my goal is to emphasize the importance of mental health and help senior citizens recognize the early signs and symptoms of mental illness.

Method/Approach: Research was conducted regarding the importance of mental health issues in the older adult population. The data was collected using credible websites such as the U.S. Department of Health and Human Services and the National Center for Biotechnology Information. A PowerPoint presentation was created using all of the facts and information to educate the seniors about the growing number of senior citizens, common mental illnesses prevalent in older adults, and healthcare gaps in treatment. This PowerPoint was presented via Zoom during a Lunch and Learn Seminar to eight senior citizens. To assess their comprehension, a pre and post survey was verbally administered over Zoom to determine the efficacy of the presentation.

Outcomes/Results: Before the presentation, 50% of seniors responded "Yes" in response to the pre-survey question, "How many people feel they have some basic knowledge about mental health issues in senior citizens?" After the presentation, the seniors were asked two follow up questions: "How many people felt that they learned something new from the presentation today?" and "How many people feel more confident about mental health issues in senior citizens?" For both questions, 100% of those in attendance stated that they learned something new today and felt more confident about handling mental health issues in older adults.

Evaluation/Conclusion: Based on the survey questions, it is reasonable to conclude that the Lunch and Learn Seminar positively impacted the senior citizens. After the presentation, many participants had questions about some of the mental illnesses in specifics and many others expressed their gratitude in regards to the seminar. One of the biggest challenges during this project was being unable to administer paper or electronic surveys for data collection, per the center's privacy and confidentiality policies. In the future, this limitation would be overcome by conducting the presentations in person so it would be more interactive and comprehensible (this was not possible at this time due to COVID pandemic).

Internship Abstract

Title: E-Commerce Brand Hygiene for a Competitive Place in the Market

Name: Nina Shah

Preceptors: Melanie Treeson, Senior Director Strategic Operations, and
Yaffa Franco, Senior Specialist Marketplace Operations

Agency: Packable - Islandia, NY

Purpose: Optimize product listings and determine growth opportunities on the back-end of Walmart, Target, Kroger, and eBay marketplaces to increase conversion rate and provide value to consumers.

Significance: Consumers worldwide turn to e-commerce marketplaces to buy products across many of categories. If these products are uploaded or listed incorrectly, consumers may be left with a negative experience. For instance, with a shortage of supplies during the COVID-19 pandemic, consumers sought out different trusted markets to buy disinfectant products. For a consumer to initiate a transaction, the product information must be well-curated. Trusted marketplaces such as Walmart, Target, Kroger, and eBay must have accurate product information displayed on their sites for the consumer to digest easily. As a third-party retail seller, Packable challenges the status quo in working together to tackle brand hygiene and fix back-end errors for a smooth consumer experience. Updating listings with correct product information and accurate inventory ensures customer loyalty.

Method/Approach: To improve brand hygiene and provide value for consumers, the marketplace team determines the best-selling products and then updates the content on the product listing. Walmart Seller Central is used to figure out how a product is performing and the steps that need to be taken to create an exceptional product listing. Errors such as inaccurate product descriptions, image resolution issues, and other related information are examined to ensure the most up-to-date information is available for the consumer. Changes to the back-end system ultimately reflect on the consumer-facing front-end website, leading to an improved customer experience.

Outcomes/Results: By taking advantage of the growth opportunities, the marketplace team increased the quality of Packable's assortment of Walmart's listings from 62% to 66% in a short-term period. Focusing on updating best-selling products ensures the overall listing quality increases. Improving product listings creates more trust on the consumer end. It also leads to Walmart granting our account the Pro Seller Badge, which will make us a more trustworthy seller. The Pro Seller Badge increases visibility and gains consumers' trust as an authorized seller.

Evaluation/Conclusion: Figuring out the best-selling products and updating those listings increases seller credibility and enhances customer experience. A high listing quality ensures that all the product information is filled out correctly for consumers to digest. The department will monitor the project overtime to ensure that the product listing quality score increases and that consumers can easily discover the content.

Internship Abstract

Title: Giving People Seeking Safety or a Better Life the #WelcomeToCanada They Deserve

Name: Hadiqa Shahid

Preceptors: Amanda Alampi, Senior Campaigner
Ziva Luddy Juneja, Digital Campaigner

Agency: Human Rights Watch

Purpose: To educate and mobilize the Canadian public to take action and gradually end their government's practice of holding immigration detainees in provincial jails.

Significance: In 2020, the world faced an abundance of human rights challenges. These included issues pertaining to international justice, refugees, terrorism, etc. One tool Human Rights groups employ to raise awareness and combat these challenges is digital advocacy campaigning. Built on the back of grassroots research, investigation, and reporting, digital campaigns make it possible to learn about and address human rights issues in a unique but informative way. Through email to target online petitions, influencer marketing, and paid media ads, the Public Engagement Division at Human Rights Watch is currently running an online campaign calling on Canadian provinces (beginning with British Columbia, Quebec, and Nova Scotia) to cancel their contracts with the federal government which allows immigration detainees to be held in provincial jails, often under abusive and inhumane conditions.

Method/Approach: Since October 15, the #WelcomeToCanada campaign has been underway. Prior extensive research for this campaign has been documented by Human Rights Watch staff on the ground in Canada. Since February, ideas and content for Instagram and Twitter were drafted. This included creating potential hashtags, taglines, an online email to target action, and email samples for advocacy groups. Ten social media posts were shared on Instagram to highlight the campaign. Four separate videos acknowledging the state of Canada's immigration centers and the stories of inmates were also shared. Ultimately, 21,951 emails were sent to provincial leaders in British Columbia, Quebec, and Nova Scotia, demanding that the federal government end its practice of incarcerating immigration detainees.

Outcomes/Results: Since the start of the campaign, 90,000 people have visited the #WelcomeToCanada website. Overall, the Instagram posts received a total of 11,868 likes, and the posts with the most interactions were those that included real stories of victims who had experienced life inside the detention centers. No reels, however, were posted on the Instagram page. Instead, actual videos of the conditions inside the detention centers were shared across social media to illustrate the inhumane abuse that immigrants had to face. Of the top five highest-performing tweets, the one with the best performance received 56 retweets and 370 likes. Similar to the results from Instagram, the highest performing tweets were the ones where real stories of people who were incarcerated in immigration facilities were shared.

Evaluation/Conclusion: To further amplify this campaign on social media, sharing content through the form of Instagram reels should be considered. Past Human Rights Watch reels have shown viewership as high as 95,000. Additionally, all five of the highest performing tweets also incorporated some type of visual imagery, including some type of emoji, graphic, and/or video. This strategy should be repeated moving forward. Enhanced and more creative social media practices should be implemented to direct a greater number of people to the campaign website who can put pressure on the Canadian government to end all human rights abuses against immigration detainees.

Internship Abstract

Title: Worker Productivity in current vs EPIC state: Authorization Process for Car T and Transfer Patients

Name: Preeti Sharma

Preceptors: Mary Kelso, Regional Director of Patient Access

Agency: Robert Wood Johnson University Hospital (RWJUH)

Purpose: To measure worker productivity when completing complex authorizations for CAR T and Transfer patients when using EPIC process vs the current process

Significance: Robert Wood Johnson (RWJ), is one of the latest hospital systems to join in implementing the electronic health record (EHR) EPIC. EPIC, which contains over 253 million patient records and in 2022 was ranked the # 1 EHR for the 12th time in a row; the EHR will help RWJ to streamline their healthcare processes by connecting various departments into one system like billing and registration and consolidating their various patient portals, applications under one system. This project contributes to the installation of EPIC by comparing worker productivity when undertaking the complex authorization process (C.A.P) for two types of patients CAR T and Transfer; in the current system vs EPIC.

Method/Approach: First, research was done on the C.A.P, and CAR T patients. Second, workflows were created. The workflow for the C.A.P for CAR T patients were obtained, and for Transfer Patients meetings were held to map out the current workflow, and gather documents. Transfer Patients had 11 steps and CAR T Patients had 7 steps. In EPIC the process was simplified down to ~ 5 steps and there were three main benefits. 1. Hard stops meant that errors/missing information had to be fixed before the next step can be started 2. Systems were reduced and consolidated into one place 3. Because the systems were connected, information that had been already inputted (ex. Diagnosis codes) would be pre-populated for future steps. Finally, all the workflows were made into images and both were inputted into an excel sheet that can be crosswalked.

Outcomes/Results: Upon analyzing the excel sheet The increase of 40 - 50 % in workers productivity was measured in two ways: 1. Creating 3 equations that combined the amount of systems and documents used for CAR T, Transfer Patients and EPIC. 2. Total process completion times were compared for CAR T, Transfer Patients and EPIC.

Transfer Patients = 3 emails + 1 insurance website + 5 systems + 6 documents

- Total process time = ~ 2 days

CAR T = 3 emails + 1 insurance website + 5 systems + 23 documents

- Total process time = ~ 7 days

EPIC = 1 system + 1 insurance website

- Total process time = ~ 4 days for CAR T Patients
- Total process time = 1 day for transfer patients

Evaluation/Conclusion: In completing this project, it is clear to see the benefits that installing EPIC will provide to the patient access department. In addition a true evaluation will not be possible until all the hospitals have installed and used EPIC. This is because until all the hospitals are accustomed to using EPIC, some old systems will need to be used to help the transition process.

Internship Abstract

Title: Implementation of Updated Sign In System

Name: Roshni Shenoy

Preceptors: Rani Patel - Office Manager

Agency: Medicenter Urgent Care of Edison

Purpose: To implement a new sign-in system for patients to use to increase efficiency of COVID patient influx and urgently needed care.

Significance: According to the CDC, the flu has resulted in nine million - 41 million illnesses, 140,000 - 710,000 hospitalizations and 12,000 - 52,000 deaths annually from 2010 to 2020 while COVID-19 has infected over 78 million people in the United States (CDC, 2022). In New Jersey alone, there have been reported to be over 1,000 COVID cases weekly (NJ Health, 2022). Medicenter Urgent Care of Edison strives to provide quick and comprehensive medical care for patients of all ages without compromising quality care. With the pandemic, it has been increasingly important to prioritize patient satisfaction while also decreasing risk of illness simultaneously. By creating a new sign-in system catered to limiting staff to patient and patient to patient interaction, there will be a decrease in wait time as well as spread of illnesses. This will allow the facility to ensure the safety of staff and other patients.

Method/Approach: The wait time can be anywhere from 20-minutes to an hour or more depending on the patient volume. The facility keeps track of how many patients come in on average, how many leave without being seen, how many choose not to wait in the waiting room, etc. To reduce the wait time and increase patient satisfaction/efficiency, a sign in system was implemented so that patients are able to hold their place in line, know roughly how many patients are in front of them, and wait elsewhere to limit exposure. This allows them to minimize exposure and stay familiar with the wait time as it gets closer to their turn.

Outcomes/Results: From the 100 phone calls received daily, at least 40-50 of those calls are pertaining to the wait time and how quickly they can be seen by the doctor. That is about 40% of possible new or existing patients expressing interest in being seen for a visit but often shy away because of the wait time. From the 50 patients that walk in each day, about five to ten leave and say they will come back another day/time because the wait time is too long for them. With the implementation of this sign in system, the amount of time to register an individual decreased significantly from about 10-15 minutes per person to about five minutes per person. This meant that the wait time was almost half of what it used to be and when polled, eight out of ten patients reported being satisfied with their visit.

Evaluation/Conclusion: After implementing the new sign-in system, there was a noticeable decrease in the number of patient complaints/questions regarding the wait time via phone, email, and Google Reviews. As the overall patient satisfaction increased, so did the Google reviews. The once negative reviews pertaining to the extensive wait time changed to positive comments detailing experiences with the staff and healthcare providers. The focus shifted from the wait time to the actual visit itself which satisfied the staff as well as they now had more time to register patients and verify insurance details. Future plans include transferring this system to an online platform so that patients are able to sign in remotely and ultimately limit the use of paper resources. Limitations do exist with this sign in system due to the fact that people need to be in the office in order to check in and fill out necessary forms.

Internship Abstract

Title: Nutrition and Cancer Virtual Education Program

Name: Abhijeet Simak

Preceptors: Angela Austin, Patient and Community Outreach Manager

Agency: The Leukemia and Lymphoma Society

Purpose: To educate blood cancer patients about nutrition habits during/after treatment, and to inform them about ideal diets for improving immunity.

Significance: Cancer, like any disease, can be combated more efficiently with proper nutrition and a healthy diet. Food provides valuable nutrients to blood cancer patients. Eating well during treatment helps to speed recovery, ease side effects, and keep the treatment plan running smoothly (LLS, 2015). Malnutrition, like not eating enough or not eating the right foods, can cause harmful effects for blood cancer patients, including higher risk of hospitalization and poorer quality of life. About 34% to 39% of patients with cancer are malnourished (Abraham, 2017). With the major goal of reaching as many patients as possible, the Society hosts virtual events via Zoom to inform and assist patients regarding certain topics, like this one.

Method/Approach: The virtual education program was set up through an outline of the program and a design for a flier. The main highlights of the program were to provide a better understanding of the importance of nutrition and dieting plans during cancer treatment, explain risk factors with improper nutrition, and explain the effects of nutrition not just during treatment but after treatment and for survivorship as well. Therefore, a program prep sheet was designed first, with these highlights listed as the major points of discussion. Research was performed on the impact of nutrition with blood cancer, and facts were listed under each highlighted point. Then, a flier needed to be designed to promote the program. The flier is laid out with a simple description of the speaker, who is a registered dietitian. It describes the purpose of the program, which is to educate blood cancer patients about the importance of nutrition, and it has links and a QR code to access the program on April 19, 2022, held on Zoom. The program is promoted through routine calls and emails to patients, since patients are always contacted for more information about the Society's resources and services.

Outcomes/Results: The program will be held on April 19, 2022 from 5:30 P.M to 6:30 P.M. There are a total of 37 participants registered for the program. Patients have the ability to lay out specific diet plans, choose proper foods, and treat their cancer at a more efficient rate. Patients will leave the meeting with a better understanding of the importance of nutrition and the effects of nutrition on cancer, treatment, and survivorship.

Evaluation/Conclusion: There will be a program evaluation form emailed to each participant when the program ends. The form will first ask a few questions about the patient and contact information. The form will examine the program's efficiency by asking questions regarding patient understanding, lessons learned, what was beneficial and what was confusing, questions posed by patients, and what was liked/disliked about the program. The form will offer information about the organization's resources and services, so patients have access to information after the program ends as well. The program was successful as the evaluation forms showed positive feedback as well as 37 participants registering for the meeting.

Internship Abstract

Title: The Impacts of COVID-19 on Anxiety and Depression among Hispanic/Latino Essential and Non-Essential Workers

Name: Isabelle Souza

Preceptors: Pamela Valera, Ph.D., and Sarah Malarkey, Research Assistant

Agency: The Community Health Justice Lab (CHJL)

Purpose: To examine the impact of COVID-19 on feelings of depression and anxiety among Hispanic/Latino essential workers and non-essential workers.

Significance: Hispanics/Latinos are the largest racial and ethnic minority group in the United States, accounting for approximately 19% of the population (U.S. Census Bureau, 2020). Hispanics/Latinos are overrepresented in essential jobs (e.g., grocery, warehouse, cleaning). Due to their job function, they continue to experience a rate of infection from COVID-19 nearly twice their share of the population because of being on the frontlines (Center for Disease and Prevention [CDC], 2022). The COVID-19 pandemic has also increased the rate of depression and anxiety in essential workers across the globe (American Psychological Association [APA], 2021). Exploring the mental health implications associated with the pandemic in Hispanics/Latinos can help us better understand the needs of essential workers.

Method/Approach: A cross-sectional web-based survey and paper survey was distributed from August 2021 to April 2022 to examine the impact of COVID-19 on Hispanic/Latino health. The survey took approximately 45 minutes to complete and was available in Spanish and English. Respondents who identified as Hispanic/Latino and over 18 years old were eligible to complete the survey. Consent was provided prior to completing the survey. Participants were asked if they were considered essential workers (yes vs no). Bivariate analyses were calculated for these two groups including sociodemographic characteristics including age, race, sex, gender, sexual orientation, education, income, and employment status. Additionally, bivariate analyses were conducted to analyze whether people experienced more anxiety and depression during the COVID-19 pandemic. All reported p-values are two-sided, and $p < .05$ was considered statistically significant. Analyses were performed using SPSS v27 and SAS v9.4.

Outcomes/Results: Of the 458 participants that completed the survey, 174 participants (38%) are considered essential workers, and 284 participants (62%) are non-essential workers. The median (IQR) age for the total sample was 24 years (18), 26 years (20) for essential workers, and 23 years (17) for non-essential workers. Most of the sample identified as White (62%). About half (48%) of essential workers and almost two-thirds (61%) of non-essential workers reported that they are experiencing or experienced more anxiety during COVID-19. One-quarter (25%) of essential workers and one-third (34%) of non-essential workers reported that they are experiencing or experienced more depression during COVID-19. There was a significant difference in experiencing anxiety ($p=.0072$) and depression ($p=0.046$) among essential and non-essential workers.

Evaluation/Conclusion: The next steps will include adjusting for sociodemographic characteristics such as income, race, and employment status and/or analyzing for effect modification. Further exploration will be done to determine whether there are any differences in the results between ethnicities and countries of origin. Additionally, further research can consider the economic impacts of COVID-19 on housing and quality of life and its contributions to stress, anxiety, or depression.

Internship Abstract

Title: Rise Up Recovery Center Mutual Aid Meeting Evaluation

Name: Samantha Speirs

Preceptors: Kenneth Bae - Senior Peer Services Coordinator
Philip Brunke - Recovery Engagement Manager

Agency: Rise up Recovery Center - Prevention Links

Purpose: To conduct a program evaluation to help determine which programs should be continued, replaced or improved.

Significance: U.S. Drug overdose statistics have increased by 25.8% between the years of 2020 and 2021. Individuals in recovery still have a 40-60% chance of relapse. The Rise Up Recovery Center provides free non-clinical substance abuse services to help combat these increasing rates. These services are valued by participants who are unable to afford other treatments and by participants already in recovery. This project served as a baseline evaluation of the mutual aid meetings offered. This evaluation allowed for evidence-based decisions to be made in regards to which mutual aid meetings are doing well and which need improvement or should be removed. These conclusions and adaptations can increase attendance and participation, as well as allow the organization to better tailor meetings to the participants coming into the program.

Method/Approach: First The Grants and Program Manager provided client participation data on the mutual aid meetings offered between 10/1/21 and 3/1/22. The mutual aid meetings analyzed the All Recovery Meeting, Harm Reduction, LGBTQ2+, Linx to Recovery, Dharma Recovery, SMART Recovery, and the Smoking Cessation Meeting. Activity attendance and demographic information had the most usable data for an evaluation. The data was transferred to an Excel spreadsheet to analyze mutual aid meeting attendance trends and referral trends.

Outcomes/Results: SMART Recovery, Harm reduction and Recovery Dharma consistently had the highest attendance rates over time. The LGBTQ2+ meeting had one of the lower attendance rates, ranging between 1-4 participants, however the patterns demonstrated were consistent and increasing. Linx to Recovery had a consistent attendance rate of 3-4 participants per meeting. There was a slight decrease in 2/2022, but appears to be increasing. The Smoking Cessation meeting showed to be the least successful meeting. Forty-five percent of the meetings had no participants and the maximum participants present was 3 which is the lowest max out of all meetings. The All Recovery Meeting was also not successful overall. Between 11/1/21 and 2/1/22 participant attendance rates decreased by 77.78%. Out of the 110 participants enrolled, 50% of participants were referred by an educational workshop, 21% from an event, 14% from Narcan training and 15% from other sources.

Evaluation/Conclusion: This program evaluation will help determine if some of the programs should be eliminated or reworked to get better attendance. It also highlighted which ones are the most successful and should be continued and even expanded. A majority of participants were referred by educational workshops, and those participants often follow the 12 step route to recovery. This data will help with future outreach efforts.

Internship Abstract

Title: Network Expansion to Address Community Health Needs

Name: Lori Srivastava

Preceptors: Direct Supervisor: Marissa Lewicki, MBA, Director of Marketing and Communications
Project Supervisor: Scott Wolfe, President

Agency: St. Luke's University Health Network- Warren Campus -Phillipsburg, NJ

Purpose: To analyze market opportunities around Phillipsburg, NJ and propose strategies of addressing community health needs in the area to grow St. Luke's University Health Network and help communities.

Significance: St. Luke's University Health Network is one of the leading health networks with hospitals and services located in Pennsylvania and New Jersey. After the acquisition of Warren Hospital in Phillipsburg, NJ, the Network is looking to expand their services into other locations in the northwest New Jersey region where there is a demonstrated need for additional services.; this according to market research conducted on behalf of St. Luke's. According to the St. Luke's University Health Network Warren Campus Community Health Needs Assessment for June 2022, "Warren County has a ratio of individuals in the population of PCPs of 1,680:1, which is well below the state of New Jersey which has an overall ratio at 1,180:1" (Reed et al. 37). This observation proves that there is a lack of primary care physicians in terms of the population of Warren county. Through competitive analyses, community health needs assessments, and market opportunities, St. Luke's will expand their services to populations who lack access to primary care physicians and other services.

Method/Approach: In an effort to refocus the task, the primary steps in this process were to examine how preexisting St. Luke's facilities could be strengthened as opposed to new services being created. One of the existing departments looking to expand its services is St. Luke's Occupational Medicine. Occupational Medicine builds relationships with employers in the area to allow employees access to St. Luke's occupational health services, including physical examinations, care of work related injuries, and drug testing for jobs. A spreadsheet of over 800,000 businesses was compiled. From this list, the goal was to isolate businesses within 15 miles of three St. Luke's clinic sites: Belvidere, Clinton, and Phillipsburg, NJ. This group of businesses was then further cut down to indicate only the businesses which had over 10 employees in order to target bigger companies.

Outcomes/Results: Using a pivot table, conditional formatting, and a distance calculating program, thousands of businesses were isolated and identified. There were 9,899 businesses within a 15 mile radius of Belvidere, 9,790 businesses within a 15 mile radius of Clinton and 15,571 businesses within a 15 mile radius of Phillipsburg. When these lists were shortened to indicate only the companies with at least 10 employees, the results were as follows: 1,467 businesses near Belvidere, 1,494 businesses near Clinton, and 2,629 businesses near Phillipsburg.

Evaluation/Conclusion: With the list of potential business relationships with St. Luke's Occupational Medicine being cut down from over 800,000 to only a few thousand, the health network will be able to strategically begin creating relationships with these companies in order for their employees to access the health benefits of Occupational Medicine. Therefore, the initial goal of expanding the network has been refocused more towards strengthening existing departments to better serve the communities where the network already has a presence.

Internship Abstract

Title: Optimizing NU-DAY Program Enrollment through Community Partnerships

Name: Suhaila Still

Preceptors: Vivian Arroyo, Program Director

Agency: Prevention Links: NU-DAY Program

Purpose: To cultivate a network of partnerships with Essex County community leaders to help optimize NU-DAY program enrollment.

Significance: Amongst teens, alcohol and drug use is the leading cause of death or related injury. Even teens who use substances occasionally are at an increased risk of future drug and alcohol issues (University of Michigan Health, 2020). While it is estimated that 1.5 million teens meet the criteria for substance abuse disorder, roughly only 7% of those teens receive any type of treatment due to a variety of factors including a lack of consistent, quality adolescent programs (Winters and Botzet, et al., 2011). NU-DAY integrates peer support and community with therapeutic clinical services (mentorship, counseling, family support and social functions) to address youth drug use. This project will use different networking strategies to create partnerships in the community while increasing program enrollment, and expanding treatment services.

Method/Approach: The main goal of this project was to increase program enrollment by creating partnerships with community leaders in the Essex County area. One action taken to achieve this goal was conducting outreach through phone calls, emails, and attending committee meetings. The first step was to formulate a directory and outreach tracker of contacts involved in juvenile services. The next step was to reach out to local middle and high schools for referrals of at-risk youth. While attending committee meetings, it was vital to connect with community leaders in order to share program information.

Outcomes/Results: After twelve weeks of conducting outreach and attending community meetings, the total program enrollment number increased to twenty-eight youth participants. Previously, there were only thirteen kids considered active in the NU-DAY youth program. Eight of these participants became enrolled through outreach strategies consisting of sending emails with flyers and contacting facilities. Seven of these participants became enrolled through referrals from community meetings such as CIAAC of Essex and CNA of Union.

Evaluation/Conclusion: The expectations are to increase the number of youth enrolled in the program in an effort to address the issue of youth substance abuse. In order to measure effectiveness, the youth will constantly be surveyed and outreach tracker will be updated on a weekly basis. Youth are given entrance surveys which are used to address certain behaviors and challenges the individual may be struggling with. In addition to this, exit surveys will be given to the youth upon leaving the program or referral to adult programs. It is vital to optimize enrollment numbers, but it is even more important to ensure the youth stay consistent with the program. Therefore, this information will be reviewed each week to ensure the youth are attending meetings and meeting consistently with their mentors.

Internship Abstract

Title: Client Feedback and Program Evaluation of a Community Food Bank

Name: Rebka M. Tages

Preceptors: Ms. Quadai Palmer, President

Agency: From Jersey With Love - Asbury Park, NJ

Purpose: To analyze the program's growth by creating and collecting client surveys, including the increase in food pantry use and understanding the percentage of those who continuously receive the weekly services.

Significance: Individuals that reside in Asbury Park vary in income levels, which leaves a part of the population in need for assistance from various organizations such as food pantries to fulfill their needs. In 2020 alone, From Jersey With Love served many families by distributing 100,000 pounds of food and increasing that amount in 2021 to 250,000 pounds of food. This demonstrated the need for these aids to support individuals and their family members. By gathering surveys from the families, the organization will be able to improve access and implementation of the services provided. It aims to have a 5% increase in participation of eligible new families within a year. Increasing from 150 to 200 families per month. Overall, the survey analysis will help accomplish the goals that are set for the organization's future while improving the structure of the program to best serve the population.

Method/Approach: The main methodology and approach used for the project is via surveys. A google form survey was developed to gather responses in three different methods. These methods consisted of sending out a link to previous/current clients; making phone calls to those who do not have access to the link; and distributing physical copies of the survey to the families on one of the pantry days so that they could respond in real time.

Outcomes/Results: The survey results show a successful and well-managed program that meets the majority of the client's needs. 55% of those who took the survey chose Saturday as the best day to pick up the food rather than Wednesday. This information is critical as it is vital to understand which day works best for the clients and it shows that permanently switching from Wednesdays to Saturdays is essential to best serve the community at large. 83% of the responses showed that the clients are very satisfied with the helpfulness of the staff. While 11% were satisfied and 5% of the response was neutral. Overall, there aren't any negative responses toward the staff at the pantry. In addition, 89% of the clients who took the survey were very satisfied with their overall experience at FJWL, and the rest, 11%, were satisfied. This proves that the program is running smoothly by meeting its customer satisfaction goals. Regarding the nutritional value of the food items, 83% said they are very satisfied with it, while 17% are satisfied, which is another key component of the program; as far as the quality of the service, 94% of the client's responses shows that they are very satisfied and 6% being satisfied.

Evaluation/Conclusion: Based on the survey responses collected, the majority of the feedback is positive and ensures that the program is doing well. A few adjustments that would need to be made are permanently changing the pantry date to Saturdays and working on advancing and improving the program to reach 100% client satisfaction.

Internship Abstract

Title: Guide for Clinical Home Health Visits

Name: Jacelyn Tarn

Preceptors: Deborah Handler, Research Program Administrator

Agency: Global Tuberculosis Institute

Purpose: To produce a safety and cultural training guide for healthcare personnel conducting clinical home health visits.

Significance: Over the last couple of years, home health care services have continued to increase. Home healthcare workers are a vulnerable occupational group as they work in an environment with limited control over safety and health hazards that may arise (OSHA, n.d.). “Since 2005, the rate of violence in home health services has increased by 130%” (Leigh J. et al., 2004). Providing culturally competent care prepares healthcare workers to deliver quality care to patients with diverse beliefs and values (Tulane University, 2021). The project aimed to act as a training resource for home healthcare workers performing home visits to recognize a new area of potential hazards and take appropriate steps when conducting patient visits. In addition, it educated healthcare workers on improving cultural competence in their roles and building effective patient rapport.

Method/Approach: By interpreting scholarly articles and incorporating practical experiences from home healthcare workers who have conducted clinical home visits, the information had been prepared in a detailed guide utilized for training purposes. Analyzing the information present in articles and including the experiences of home healthcare workers resulted in identifying significant components of home visits. Shadowing staff members in the field and monitoring their tasks provided additional valuable insight for the guide. Communicating with different departments, such as the Education and Training department and field personnel team, ensured that the material was current, accurate, and informative. The guide aimed to identify new information that has lacked attention in available resources and regenerate material designed to be current and user friendly.

Outcomes/Results: The goal was to provide a guide that supported home healthcare workers safely performing home health visits. By communicating with different departments and individuals at the Global TB Institute, the project provided a detailed overview of essential concepts for home healthcare workers to educate themselves on as they prepare to visit patients in their homes. Elements of the guide included potential health hazards that could arise, a culture section to educate home healthcare workers about cultural competency, patient rapport building, and appendixes to provide additional expanded resources and recommendations. The guide had been published by the Education and Training department and available on Rutgers, Global TB Institute’s webpage. The guide could be accessed by any public health personnel or individuals visiting the site for training purposes.

Evaluation/Conclusion: The guide educated healthcare workers about preparation for home visits before and during the visits. It covered topics on health hazards, culture, and the importance of building patient rapport. The guide had limitations as it may lack information that a home healthcare worker encounters. Having healthcare workers and field personnel collaborate in the final edits ensured the guide’s accuracy and effectiveness. Public Health programs and health care personnel could easily adapt the guide to fit the needs of their organization.

Internship Abstract

Title: Quality Management Evaluation of After-Hours Patient Care

Name: Carlene Tavares-Walls, RN

Agency: VITAS Healthcare

Purpose: To improve the quality of care provided by hospice staff to patients, and to increase the satisfaction of patients and families with care received at the end of life, in New Jersey.

Significance: Implementing quality of care improvements and best practices, for excellent customer experience with, and satisfaction in hospice services provided in the United States. Published research in the past 30 years has indicated a beneficial correlation between health providers' ability to effectively communicate with patients and caregivers, and positive health outcomes.¹ Centers for Medicare and Medicaid Services (CMS) use a tool to measure care provided by, and interaction with health professionals that impacts patients' and their families' overall experience, called the Consumer Assessment of Healthcare Providers and Systems (CAHPS). A post-death survey, conducted monthly, that seeks to obtain caregivers' perception of care provided to the patient. Communication is a Key Performance Indicator (KPI) of an agency's success. VITAS Healthcare trends below the national average, between 2019 to 2021, by 6% to 8%. The Triage department interacts with VITAS' customers after hours, on weekends, and during holidays, providing care and addressing needs, and is the setting used for this project.

Method/Approach: VITAS Healthcare has instituted enhanced communication training for their staff to improve their ability to actively listen, empathize, and explain the plan of care effectively, among other expressed needs, in their interaction with patients and families. VITAS Healthcare also conducts regular and random evaluations that scores staff's communication during interaction with customers, to exceed their customers' expectations and raise the scores of their CAHPS measure. These calls are scored on an average to achieve 90% or greater for the employee. Partial scoring is given for some areas that are completed as required. Some sections are 'Key Performance Indicators with a possible score of zero if these areas are incomplete.

Outcomes/Results: Using data from 22 evaluations out of a total of 103 recorded patient interactions, between February 1, 2022 and April 6, 2022, the results found: 1) room for improvement in scripting, 2) obtaining consistent scoring of 90% and above in every evaluation, and 3) turning average quality score of 75.02% around by the end of June 2022. An area for improvement was the stipulated 'introduction of silence time', every 9 to 20 seconds, regardless of the length of the interaction. An area of quality result was patient assessments.

Evaluation/Conclusion: Using formal scripting, which is inflexible, during individual patient experience to fit every situation, also, using non-clinical evaluators with very limited healthcare experience and education to analytically score clinical personnel, makes it difficult to determine the eventual impact on VITAS' national satisfaction score at this time. Clinical personnel, such as nurses, should have been consulted as to how to better standardize the key performance indicators necessary for quality patient satisfaction. After all, patient satisfaction relies on employee satisfaction.

Internship Abstract

Title: The Importance of a Yearly Eye Exam

Name: Nicola Teves

Preceptor: Dr. Harin Rajeev, O.D.

Agency: Eye Care Associates of Princeton

Purpose: To encourage annual eye exams as a way to detect eye disease and combat Myopia/Nearsightedness in children.

Significance: Myopia is an ongoing epidemic and the recent increase in screen-time has only aided its progression. Routine Eye Exams are a great way to combat Myopia and other ocular diseases before it starts affecting you. Eye Care Associates of Princeton has various Myopia Management programs to help children keep their Myopia at bay. One of the programs involves Orthokeratology. For short, Ortho-K is a vision therapy that utilizes hard gas permeable lenses that patients go to sleep with. If the treatment is successful, the patient wakes up with 20/20 vision and slowed down myopia. The second program is CooperVision's MiSight program. MiSight is for patients that don't want to use hard lenses, as they are disposable daily soft lenses that provide vision therapy and vision correction. This project focused on these programs and providing a liaison for the patients.

Method/Approach: Myopia Management is best taken care of at a young age (six and up in our practice). The doctors would discuss the benefits of Myopia management to the parents. Parents who were interested were given the different options of Orthokeratology and MiSight. Questions about costs, protocols, and parents' concerns were answered. Marketing and/or public relations events were also used. Our practice participated in a Health and Wellness Fair on February 28, 2022 that showcased hundreds of businesses and brought in many local patrons. Lastly, we decided to train staff to initiate a short discussion with the patients prior to seeing the doctor. Our technicians would then discuss services we offer or they would suggest additional screenings that they would then perform on the patient.

Outcomes/Results: Between January 18, 2022 and March 31, 2022, there were ten Ortho-K patients and four MiSight patients compared to January to March 2021, there were eight Ortho-K patients and zero MiSight patients. A few patients were referred to us by their friends who were current Ortho-K patients of ours. We had a few interested patients from the Health and Wellness Fair but none that completely pursued the program. The four MiSight patients started off as Ortho-K consults from our doctors' referrals or word-of-mouth from current patients, but based on the patients' lifestyle, the doctor decided MiSight was best.

Evaluation/Conclusion: While amplifying our current patients' experience didn't exactly bring in the Myopia management patients we expected, our patients left our practice happier and more took advantage of new therapies compared to the previous year. Many of our in-house referrals and curious patients, turned down the program due to its high out-of-pocket cost. Another barrier was age. Contact lenses can be daunting for young children. Patients who were not successful with inserting and removing contacts were not included in the count but we hope to see them again in the following years whether it be for a routine eye exam or myopia management.

Internship Abstract

Title: Patient Monitor, Clinical Operations Department

Name: Fatou Thiam

Preceptors: Tamanna Ahsan, Office Manager
Sara Barsoum, Nursing Manager: Patient & Virtual Monitors

Agency: Robert Wood Johnson University Hospital

Purpose: To work alongside the nursing staff as part of the Clinical Operations Department to ensure the safety of all patients who are considered high risk for falls.

Significance: At Robert Wood Johnson University Hospital patient care is at the forefront of its mission statement; being that this hospital is one of ten trauma centers in New Jersey, there is so much that goes into the maintenance of patient care. There are several factors that make patients vulnerable to falling: age, mobility problems, altered mental status and some medications. Studies have shown that falls occur at a rate of 3-5 per 1000 bed days and the Agency for Healthcare Research and Quality estimates that 700,000 to 1 million patients fall annually (PSNET, 2019). Where digital monitors for patient activity are not always accessible, Patient Monitors work to monitor any sudden changes in the patients, giving nurses the ability to place more focus on patients with more detrimental health-related issues.

Method/Approach: Ensure the health and safety of patients through completion of the Patient Environmental Safety Checklist during every shift and serving as a liaison between the patient and other professional medical staff. Patient Monitors are to maintain patient well-being in and out of the hospital room. Conducting environmental safety checks is a requirement for every patient room entered, wires, sharp objects, pens, anything deemed harmful needs to be either adjusted or removed. Alarm systems also serve as an intervention in preventing falls by alerting medical staff when patients attempt to leave their beds.

Outcomes/Results: Based on a 2022 Quality Summary Report for two different units in the hospital, data was collected on the basis of the number of falls within 109 and 164 days, as well as per 1000 patient days. With a yearly initiative of zero; Zero falls were recorded between January to March 2022.

Evaluation/Conclusion: Overall, Robert Wood Johnson University Hospital is following through with their goal to make sure that all patients are safe while staying at the hospital. Several situations have presented themselves where older patients are unable to get off or on their beds without assistance; the advent of bed alarms across multiple hospitals is a convenient system even when a Patient Monitor is in the room with a patient; hearing the bed alarm can notify medical staff that their patient may be awake or feeling restless.

Internship Abstract

Title: Quality and Perception of Care Survey Evaluation

Name: Danielle Towle

Preceptors: Lisa Cox, VP Operations; Kerianne Belbachir, Director of Quality Improvement

Agency: Rutgers - University Behavioral Health Care (UBHC)

Purpose: To analyze monthly chart review results and quarterly patient perception of care surveys from each program within the organization to develop ideas to improve the overall quality of care.

Significance: Healthcare systems collect monthly Chart Reviews to ensure that clinical documentation is completely and accurately providing critical information to employees to deliver the most effective services possible. If the area in question does not reach 90% compliance, then there is room for improvement to more adequately provide care. Rutgers' UBHC is committed to quality improvement initiatives that enhance our services and increase the quality of care for consumers and their families, yet only 5 out of 14 monthly chart review questions exceed 90% compliance (UBHC 2021 Chart Reviews). Healthcare systems also collect quarterly perception of care (POC) surveys to gauge the level of patient satisfaction with the services they have received. Rutgers' UBHC specifically collects data from each program and facility, and is mandated to submit the findings to the McLean database. Some other responsibilities include streamlining this process through Microsoft Excel so that all of the results are in a submittable format.

Method/Approach: The University Behavioral Health Care system works to combat low compliance rates by adjusting physician and chart reviewer protocols to ensure that the reports are accurate and the process by which patients are treated is more thorough. Another way that the organization addresses quality of care is by reviewing patients' perceptions of care through quarterly POC surveys for each program. Manipulating the raw data from these surveys into a form that is compatible with that of the McLean database allows UBHC to submit their patient satisfaction results. This manipulative work is very important because the ability to use Microsoft Excel in an advanced way reduces the large amount of tedious work.

Outcomes/Results: Patient perception of care data from the Outpatient, Intensive Outpatient, Coordinated Specialty Care, Early Intervention Support Services, Child and Adult Partial Hospital programs are being reported as the deadlines close. Utilizing this information from UBHC and comparing it to the national average according to McLean has yielded the following results. According to a sample hospital report from the *McLean Basis Plus*, the average global evaluation of Outpatient care from 2012 is 92.82/100. The average evaluation of care for UBHC Outpatient care in Q3 and Q4 of 2021 is 82.9/100.

Evaluation/Conclusion: Based on these results, the need for improvement in patient satisfaction is clear. Although the numbers achieved by UBHC are below the national average, there were outliers in the data that skewed lower than the majority of actual evaluations have shown. However, there is always room to improve, which is why the organization recognizes the importance of providing the highest quality care and accurately recording perceptions of care. Identifying particular problem areas through the POC surveys allows UBHC to take a strong approach to rectifying these issues.

Internship Abstract

Title: Grief Facilitation for Children Facing Loss

Name: Julia Ullman

Preceptor: Susan Laird, Program Manager

Agency: Good Grief - Princeton

Purpose: To facilitate discussion about grief to children 3-10 years old who lost a parent or sibling by participating in activities while encouraging peer support and providing tools to rebuild their lives.

Significance: [One in fifteen children will experience the death of a parent or sibling before the age of 18. In the United States, this equates to roughly 5 million children.](#) These deaths have been exacerbated by the COVID-19 pandemic, which as of June 2021 resulted in more than [140,000](#) children losing a parent or grandparent caregiver. Good Grief provides free services for children who have experienced the death of a parent or sibling by teaching resilience and self-advocacy and fostering peer relationships. Access to peer support is shown to be beneficial for those dealing with death as it allows for individuals to share their experiences amongst those who have faced similar adversity, share coping strategies, and ultimately realize they are not alone in the grieving process.

Method/Approach: Children participating in Good Grief's programs come to the center for their designated Night of Support. The night begins with a pre-group for facilitators and team coordinators to review the night's activity and clear the mind in preparation for the Night of Support. Next, facilitators break into their group room to review the activity and determine the best method of approach for the given task based on their specific group members' personalities and needs. This is also a time to discuss the breakdown of roles, such as who will review group rules and who will lead the activity, to ensure the night runs smoothly. While this preparation is taking place, Good Grief families arrive at the center and participate in the opening circle run by team coordinators. This is a space for families to share their person who died. Once the opening circle is dismissed, participants go to their age designated room and the Night of Support begins. Facilitation occurs through guided activities and discussion. At the conclusion of the night, families participate in a closing circle and once they are dismissed, facilitators and team coordinators join back together for a post group to discuss how the night went.

Outcomes/Results: Despite grief being the most universal human experience it is often the one that is spoken of least frequently, especially in conversations with children. Serving as a facilitator during Nights of Support encourages participants to engage in conversation about grief with peers who are experiencing similar adversity. This work provides a safe environment for children to express themselves without judgment, fosters self-growth, and equips them with the tools to cope with crises.

Evaluation/Conclusion: The effectiveness of Good Grief's services was evaluated using satisfaction surveys amongst 16 youth participants (n=16). When posed with the question, "Coming to Good Grief has helped me," 9 participants (56.25%) answered that they agreed and 7 (43.75%) answered that they strongly agreed. Participants were also asked if "Good Grief provides me with a supportive community where I can meet others going through similar experiences." A single participant (6.25%) answered that they were neutral, 6 participants (37.50%) agreed, and 9 (56.25%) strongly agreed. These results suggest that Good Grief's services benefit grieving children. Surveys will be conducted every year to ensure continued improvement of the program and satisfaction amongst participants.

Internship Abstract

Title: Increasing Community Outreach Efforts for Central Jersey Diaper Bank (CJDB)

Name: Nila Uthirasamy

Preceptor: Direct Supervisor: Heather Nover, Executive Director

Agency: Central Jersey Diaper Bank

Purpose: To expand the CJDB's partnerships with stakeholders in the community to increase funding and donations to support families in need.

Significance: 5.2 million babies and toddlers live in low-income families who cannot afford the cost of diapers, and 30% of mothers report diaper need (Smith et al., 2013). Helping families receive diapers eliminates \$4.3 million in medical costs (Massengale et al., 2016). The CJDB provides families in need with free diapers and other essentials through volunteer support, diaper drives, and fundraisers. They are the dedicated diaper bank for Middlesex County, NJ, and the COVID-19 pandemic has dramatically increased the number of requests for services by 248%. In 2021, the CJDB was able to serve 2,120 families and support 406,237 diaper changes. However, community outreach with key stakeholders needs to increase to secure funding to meet the high demand for diaper bank services in Central NJ. This project involves building relationships with the local community through organizing a Community Advisory Council (CAC) meeting, designing a brochure for distribution to raise awareness, and creating a diaper drive toolkit for volunteers hosting diaper drives to further increase funds and resources for the CJDB.

Method/Approach: For the first project of creating a tool kit, The National Diaper Bank Network's tool kit was explored and examined with the CJDB staff. After discussion, key topics for inclusion were listed, and the website *Canva* was used to design the kit. The brochure was also created using *Canva* and included information such as COVID-19's impact on the organization, diaper need facts, and ways to support the CJDB. An outreach email was drafted with the Executive Director to initiate the CAC meetings. Next, the contact information of community partners was gathered, and an email was sent out. Responses were tracked in excel, and the meeting agenda is currently being planned for a virtual meeting.

Outcomes/Results: The final diaper drive tool kit is an 18-page PDF document that the CJDB has uploaded to their website. The CJDB has averaged one to two diaper drives a month in previous months. Since the tool kit's release in March, the public has viewed the site 57 times, and the CJDB has eight confirmed diaper drives, a 300% increase in diaper drives. The CJDB also printed out the brochures and distributed 100 to the East Brunswick Regional Chamber Commerce Meeting and the public at a Rutgers University tabling event. While planning for the CAC meeting is in progress, 28 of the 43 partner organizations have confirmed their attendance, and the remaining have yet to confirm their attendance.

Evaluation/Conclusion: All three projects have increased communication with the local community and its partners, increasing opportunities for funding and raising awareness for diaper need support. The CJDB will send post-diaper drive surveys to volunteers hosting drives to evaluate the barriers and facilitators to running a diaper drive. Responses from these can help to understand better how the CJDB can support volunteers to increase diaper and monetary donations. The diaper drive tool kit should be updated with the latest organizational updates and statistics every two to three months. The CJDB will send a satisfaction survey to attendees after the CAC meetings. This will help inform future CAC meetings better by understanding what partners valued during the session and what they felt could be improved.

Internship Abstract

Title: Stress Assessment of Students Enrolled in the Rutgers Future Scholars Program

Name: Kristen Vazquez

Preceptors: Aaron Reevey, Senior Program Coordinator

Agency: Rutgers Future Scholars

Purpose: To assess the stressors that affect high school students who are members of the Rutgers Future Scholars program that are low-income high school students and will be first generation college students.

Significance: Each year, Rutgers Future Scholars accepts approximately 215 first generation low-income students into its program to assist them in their journey to college. Many of these students often feel very stressed and academically unmotivated due to factors such as less financial resources, poor time management, fear of acceptance, and feelings of isolation. Many first generation and low income students often elect not to attend college due to these reasons as well as a lack of knowledge on how to go through application processes properly and personal fears of failure. This often indicates a difference in academic performance and stress levels. A stress assessment will assess these differences in order to assist and improve stress levels among students who are part of the Rutgers Future Scholars program.

Method/Approach: A questionnaire completed by the staff of the Rutgers Future Scholars was given to the scholars of the program asking certain questions regarding their program as well as assess their stressors. Data for 217 scholars who are aged 13 to 18 years was collected through a Google form template. Of those 217 scholars, 176 participants answered the questions regarding their stressors. When being asked questions about their stressors, scholars had an open text box and were given the opportunity to individually write their answers.

Outcomes/Results: Of the sample size cohort that answered these questions (n=176), 24 scholars (14%) said they had no stressors, 16 (9%) had stressors related to focus, 21 (12%) had stressors related to motivation, 3 (2%) had stressors regarding college, 42 (24%) had stressors involving school and classes, 14 (8%) had stressors regarding finding themselves, 14 (8%) had stressors related to feelings of depression or anxiety, 17 (10%) had stressors involving time management, 8 (5%) had stressors regarding procrastination, 5 (3%) had stressors related to sleeping patterns, and 3 (2%) had stressors regarding familiar issues.

Evaluation/Conclusion: Only 14% of scholars (n=24) from the sample size cohort (n=176) indicated that they had no current or ongoing stressors. Introducing presentations on topics such as mental health, motivation, focus, time management, and college readiness as well as helping the scholars navigate school and providing academic assistance will serve as a successful plan of action to (a) increase the percentage of scholars who claimed to have no current stressors, (b) to help assess the stressors affecting the scholars, and (c) to assist the scholars in being able to manage their stressors.

Internship Abstract

Title: 2022 National Caregivers Conference - *Emerging Forward, Together*

Name: Cristal Velez-Rosa

Preceptors: Renata Svincicka, Community Health Manager

Agency: The Family Resource Network

Purpose: To assess how unpaid family caregivers in the United States were affected by the COVID-19 pandemic in four categories: environmental, technological, societal, and economical.

Significance: The nation's 63 million family caregivers are front and center in providing everyday care. Changes due to the pandemic have disrupted many aspects of caregiving for these individuals, which includes a disruption in community and financial support systems, a smaller circle of caregivers, changes in family dynamics, transition to care in homes, etc. The Family Resource Network is hosting a National Caregivers Conference to create a space for meaningful support and collaboration to raise awareness because despite being such a vital part of our nation's healthcare system, their own well-being is often forgotten. This project focused on the planning and implementation of the conference planned for October 16-17, 2022.

Method/Approach: The first step in advancing the implementation of the conference was deciding on a theme. The next step was assembling a potential sponsor list. This was done by extensively researching public health establishments, past public health conferences, and analyzing sponsorship lists from previous National Caregivers Conferences. Next was crafting the sponsorship letters for the potential sponsors. Previous sponsorship request letters from past National Caregivers Conferences were used as a template. Next was deciding on a keynote speaker, workshop, and breakout session presenters for the conference. Topics of presentation must fit the conference theme and potential speakers must meet our criteria of having background and experiences as a caregiver. A crucial step was providing support on social media by sharing posts specifically broadcasting information on the conference as it was being updated on the website. The content mainly came from the National Caregivers Conference website and social media pages where there are constant updates on registration, important dates, chosen keynote speaker, presenters, and sponsorship opportunities.

Outcomes/Results: As of March 28, 2022, 420 potential sponsors have been identified and 54 speaker proposals were received. In result, the conference committee decided on Racheal Fosu as the keynote speaker and out of the 54 proposals, 21 speakers were selected.

Evaluation/Conclusion: The ultimate goal of the conference is to bring together individuals who share a passion for caregiving in hopes to create a reinforced community that will provide the necessary resources for caregivers across the nation by coming together to create long-term relationships in hopes to in the end, improve the services available to caregivers.

Internship Abstract

Title: Integrating Equity into New Jersey State Government

Name: Isaac A. Velez

Preceptors: Dennis Zeveloff, Deputy Chief Policy Advisor; Jayné Johnson, Director, Office of Diversity, Equity, Inclusion, and Belonging (Office of Equity)

Agency: The Office of New Jersey Governor Philip D. Murphy

Purpose: To integrate and promote equity principles in New Jersey state policy and improve the outcome of state programs and services by expanding access to opportunities and increasing the presence and participation of historically underserved communities.

Significance: Black and Latino households in New Jersey face many disparities compared to their white counterparts. Ensuring that equity is incorporated in New Jersey policy implementation is an important action to diminish these inequities. For instance, in New Jersey, the median household wealth of white families is \$322,500, while the average median household wealth for Black and Latino families is \$21,900, presenting more than a \$300,000 wealth gap. To address these disparity issues, The Office of Equity within the Governor's Office aims to dismantle inequity within State government based on race, ethnicity, and other protected characteristics and to expand opportunities for underserved New Jerseyans.

Method/Approach: The first deliverable, in response to a federal mandate from the Biden Administration, was to develop an equity framework that supports the Infrastructure Investment and Jobs Act (IIJA) funding applications. This framework was drafted by researching national best practices relating to government equity principles and usage requirements for other federal relief funding. Additionally, a binding legal document and a data protection agreement were drafted to underpin the work of the Wealth Disparity Task Force (TF). The Office of Equity serves as the Governor's Office liaison to the TF which is tasked with examining the causes of and remedies for the wealth disparities in New Jersey based on race and ethnicity. The agreement was drafted by conducting open source research along with reviewing office templates. Lastly, work was initiated to secure consultant support to advance the effort for an internal government equity infrastructure assessment, pursuant to the Governor's Executive Order No. 262. This process was conducted by reviewing related State documents, while working with Governor's Office staff and procurement staff within the NJ Department of the Treasury.

Outcomes/Results: The IIJA equity framework is still in its preliminary stages and under further review with state government stakeholders. Secondly, a five-page agreement and two-page data protection agreement were drafted for collaborators and researchers of the Wealth Disparity Task Force to adhere to. Copies were sent for further legal review. Lastly, considering the robust State contracting process, the document is continuously under development.

Evaluation/Conclusion: The implementation of equity priorities within the Governor's office will help to reduce barriers that people of color face in New Jersey. While newly established, the Office of Equity has found success in ensuring that equity is intentionally integrated throughout the policymaking process. However, to sustain these efforts, the next step in evaluating the state's success in diversity, equity, inclusion, and belonging throughout state government is to integrate them throughout the bureaucracy. This would help ensure that these equity actions are preserved and endure beyond the current administration.

Internship Abstract

Title: Expanding Access to Cancer Information in Dallas County, Texas

Name: Stefany Vigo

Preceptors: Andrea Semlow, Cancer Screening and Prevention Program Manager

Agency: Parkland Health - Dallas, Texas

Purpose: To provide equitable access to information on cancer prevention, screening, and cancer care services at Parkland Health in an effort to reduce health disparities.

Significance: Access to cancer screening and other forms of cancer care are affected by a variety of factors, such as transportation, health insurance, and education. The community served at Parkland Health varies from the national average, with 22% of patients diagnosed at a late stage, compared to the national average of 16% (Parkland Health, 2021). Fifty-nine percent of cancer patients served at Parkland are uninsured, compared to the national average of 2% (Parkland Health, 2021). The cancer program hopes to reduce inequities and address disparities present in cancer care in Dallas County by informing their community of the resources available to them through the use of social media accounts on Instagram, Twitter, and Facebook. With increased access to knowledge around cancer prevention, screening, and symptoms, Parkland hopes to increase awareness and reduce disparities found in cancer care.

Method/Approach: For this project, the internship consisted of creating social media posts for the Cancer Program at Parkland Health website and their accounts on Instagram, Twitter, Facebook, and LinkedIn. Responsibilities included promoting cancer awareness days and months through social media as well as ensuring that the information being provided is accurate and readable for a general audience. By completing an action item plan as well as a timeline, a schedule of all assignments due for the rest of the semester was made. The action item plan and timeline was used as a guide for completing assignments and recording progress throughout the internship. There were semi-weekly meetings with the preceptor to discuss assignments and to ensure that all goals were being met. Creating social media content that spreads awareness of cancer care to the Dallas County community was one of the assigned responsibilities. The goal was to achieve a good amount of engagement on social media in order to reach many people and inform them of the cancer screening guidelines for early detection, resources for prevention, and general information about cancer care.

Outcomes/Results: At the end of the project, the goal is to reach a high engagement rate through interactions and profile visits. The bigger picture of this project was to raise awareness of cancer screening and access to information about services available to Dallas County residents. Our recommendations will hopefully promote health in this community. The results of this project have not yet been determined and should be completed by May 2022.

Evaluation/Conclusion: One will know if the project was successful when information is received on the engagement data on Parkland Health's social media accounts. An increase in the number of engagements will signify that there has been success in reaching a broader audience as well as relaying valuable information to them. There will also be an evaluation at the end of the internship with the preceptor to go over my performance during the internship. Consistently checking engagement data on their social media accounts will ensure that they are working towards reaching their goals in increasing awareness of cancer care.

Internship Abstract

Title: Westfield Regional Health Department's Response To Non-COVID Calls-To-Action

Name: Kayla Vuoso

Preceptors: Megan Avallone, MS, Health Officer

Agency: Westfield Regional Health Department

Purpose: To analyze the Westfield Regional Health Department's ability to perform its non-COVID public health duties during the pandemic.

Significance: On average, 75% of emerging infectious diseases are zoonotic, according to the United Nations Environment Programme and International Livestock Research Institute (2020). In New Jersey, 105 health departments were tasked with managing their departmental duties while taking on additional public health responsibilities that the emerging infectious disease, COVID-19, brought to communities. In Union County, New Jersey, the Westfield Regional Health Department serves eight municipalities. Services include inspections, vaccine clinics for people and animals, responding to community public health complaints, and logging vital statistics. This review of the Westfield Regional Health Department will analyze if the beginning into peaks of the COVID-19 pandemic affected performing the non-COVID public health duties of the department. The goal will be to identify public health infrastructures that may have been weakened during 2020 into 2021 due to the COVID-19 pandemic.

Method/Approach: A retrospective review was conducted to assess response times of inspections and complaints brought to the Westfield Regional Health Department between 2019 and 2021. The data was provided from a specialized application the Environmental Department uses to categorize monthly reports. The data was analyzed and cataloged in Microsoft Excel to identify patterns. The pivot tables included 1) the number of monthly inspections and 2) response times to types of inspections and complaints. Each municipality was reviewed separately due to the communities having separate stakeholders. This method may allow the department to reevaluate how to perform public health operations when another emerging infectious disease outbreak happens.

Outcomes/Results: All municipalities reported restaurant health inspections and environmental complaints. The response times varied based on inspection types, complaints, and other factors such as the number of event inspections and additional walk-in inspections per month per municipality. For restaurant health inspections, data was evaluated for percent increases or decreases in reinspection responses. For example: in 2019, Municipality A averaged 26.96 days to close from the date of response. In 2020, Municipality A averaged 122.29 days to complete from the response date (77.95% decrease); and averaged 74.89 days to close from the response date in 2021 (63.29% increase from 2020 but a 64% decrease from 2019).

Evaluation/Conclusion: Limitations include the cooperation of civilian interactions. The department's efficiency was based on the timeliness of closing cases, but civilian interactions were an integral part of closing them. While the COVID-19 pandemic may have caused lagging timeframes for specific sectors, the Westfield Regional Health Department could keep pace with what was brought to their attention. Based on each municipal report, consideration may include accounting for active participation by residents and specific dates for when the case was open to closed. As of December 2021, complaints are logged monthly, and health inspections may be evaluated daily. Providing specific dates may allow this report to provide accurate timelines for future review.

Internship Abstract

Title: Fundraising for a Non-Profit Organization
Name: Jenna Walling
Preceptors: Wafaa Saad, founder and owner
Agency: Women And Families Ascending Association (WAFAA)

Purpose: To carry out a fundraising campaign for the non-profit, WAFAA Organization to raise money to support WAFAA's mission and programming.

Significance: WAFAA Organization is a non-profit that is 95% privately funded. WAFAA has been serving others for more than 20 years. Since the Covid-19 pandemic the cost of living has increased dramatically. People can no longer afford their houses or food. We have seen an increase of people suffering from mental health issues and domestic violence. Nearly 52.9 million adults suffer from mental health illnesses and 10 million adults suffer from domestic violence in the United States. WAFAA Organization offers many services to help those in need and suffering. It offers services such as counseling for mental health illnesses, domestic violence, anger management and crisis intervention. They also offer a food pantry and shelter, emergency housing and legal assistance. The goal of this project is to carry out a fundraising campaign to support the WAFAA Organization.

Method/Approach: The major fundraising event is held on March 26. It is a dinner event at the Crowne Plaza in Saddle Brook, NJ. There will be an estimated 150 - 200 people that participate in the event. There will be donations, raffles and silent auctions throughout the night. The WAFAA organization has a goal of raising \$1000.00. The highest donor will be announced at the end of the night and rewarded with a prize. The information to promote the event was posted on all social media outlets and on Eventbrite. The organization sent over 1000 emails inviting various people to attend the event. Promoting all of the organization's social media pages throughout the event is essential to gain followers and supporters. The fundraiser will raise awareness of the WAFAA Organization and the services they provide. To promote all of the services and learn more about the WAFAA Organization is crucial since the organization relies heavily on donations.

Outcomes/Results: 132 people attended the fundraiser at the Crowne Plaza in Saddle Brook, NJ. A total of \$1,465.00 was fundraised during the event. Out of all the donations, a total of \$1,320.00 was collected. A total of 9 people donated. Our highest donor contributed \$500.00 and was rewarded with 2 free nights to the Crowne Plaza. The raffle yielded \$145.00. The silent auction produced \$0.00 since nobody participated in it.

Evaluation/Conclusion: Overall, the fundraiser raised a great deal of money and supporters for the WAFAA organization. The success of this project was measured by the amount raised at the fundraiser. Overall, the donations collected were the largest contributor. The organization's goal was exceeded.

Internship Abstract

Title: Effects of Sexism on Mental Health and Efficacy of Intervention Programs

Name: Yumin Wang

Preceptors: Doctor Gloria Bachmann Associate Dean for Women's Health Director
Women's Health Institute (WHI)

Agency: RWJMS Women's Health Institute

Purpose: To analyze the relationship between sexism and its effects on mental health in women, and determine the best intervention approach.

Significance: Sexism is an ongoing, systemic, and traumatizing issue that affects the well-being of women (The Representation Project, 2019). In addition, women who experience sexism are three times more likely to experience depression (The Representation Project, 2019). By devaluing femininity and women, and privileging masculinity and men, it directly affects the mental health of women and significantly increases psychological distress. Sexism takes place in schools, the workplace, in relationships, institutions, and public, it also takes part in increasing risky sexual, drug, and suicidal behaviors; but remains absent in political conversations. Therefore, it is crucial to address and bring attention to the effects of sexism on the mental health of women, the importance of challenging society, and detaching from exploitive sexist influences.

Method/Approach: Lights4Violence, an intervention program aiming to reduce sexist attitudes in young European people by promoting health assets, includes a quasi-experimental study of 1146 students from six different European cities, aged 12-17 years old (Sanz-Barbero et al. 2022). With no intervention conflict, this study conducted an online questionnaire before the intervention, and another one was administered approximately six months after the intervention ended (Sanz-Barbero et al. 2022). Subscales of the Ambivalent Sexism Inventory: benevolent sexism (BS) and hostile sexism (HS) are used to measure the difference in the two waves of questionnaires (Sanz-Barbero et al. 2022).

Outcomes/Results: The study of the Light4Violence intervention program states, “in girls, we observed a decrease in BS in the intervention group compared to the control group ($\beta = -0.101$; $p = 0.006$). In the wave2, BS decreased more in the intervention group compared to the control group in girls with mothers with a low level of education ($\beta = -0.338$; $p = 0.001$), with a high level of social support ($\beta = -0.251$; $p < 0.001$), with greater capacity for conflict resolution ($\beta = -0.201$; $p < 0.001$) and lower levels of aggressiveness ($\beta = -0.232$, $p < 0.001$)” (Sanz-Barbero et al. 2022). In reality, all cultures are affected by sexism differently, and it is a challenging issue that requires the attention of all individuals globally.

Evaluation/Conclusion: Previous research on Lights4Violence advocates the positive relationship of interventions in decreasing sexism in young women, promoting positive interpersonal relationships, and highlighting the importance of integrating young men into these changes concerning egalitarian relationships (Sanz-Barbero et al. 2022). By the same token, a study on the impact of gender discrimination on a woman’s mental health concluded, “because these more subtle forms of perceived gender discrimination are so ingrained in our societal systems, reversing them will be hard, requiring international cooperation from health and social advocates, and from government and policy-makers of all genders” (Vigod and Rochon, 2020). The effects of sexism on mental health will continue to be studied, and the influence of intervention programs on this issue will be monitored to improve their effectiveness.

Internship Abstract

Title: COVID-19 Vaccine Webpage Creation for Healthcare Providers and Patients

Name: Maci Wert

Preceptors: Dr. Selina Haq, President and CEO

Agency: New Jersey Primary Care Association (NJPCA)

Purpose: To create a COVID-19 vaccine webpage for New Jersey Primary Care Association's members that focuses on vaccine hesitancy and misinformation in order to increase vaccination rates.

Significance: Since March 2020, over 900,000 people have died from COVID-19, and more than 4.5 million people have been hospitalized with complications related to the disease since August 2020. COVID-19 vaccines reduce the risk of getting infected with the virus and spreading it to others and can prevent serious illness and death. COVID-19 vaccine efficacy against severe disease remains greater than 70 percent over time; however, it decreases by 21 percent between 1 month and 6 months after full vaccination. It is extremely important to vaccinate the lower income communities as they have been disproportionately affected by the pandemic. The webpage will provide resources for health centers to use in order to combat vaccine hesitancy and increase vaccination rates in these communities throughout New Jersey.

Method/Approach: Microsoft Word was used to create outlines of the web pages with all of the content and information needed. Elementor is the WordPress builder that NJPCA uses for their website. The COVID-19 vaccine webpage team met in January to create an outline of the entire website layout and content. Google Scholar, CDC, and FDA were used to compile information. Webinars regarding COVID-19 vaccine hesitancy and misinformation were used for reference as well as Centers meetings.

Outcomes/Results: Six grids were created for the website within the NJPCA Clearinghouse COVID-19 Vaccine web page. These six grids are Storage & Handling, Vaccine Facts, Vaccine Hesitancy & Misinformation, Vaccine Promotion, Frequently Asked Questions, COVID-19 Vaccine News. A booster flyer was created for the "Vaccine Promotion" grid. The flyer discusses the benefits, safety, and timeline of the booster vaccine for people that may be hesitant about getting a third dose. Another flyer titled "What to Expect When Getting the COVID-19 Vaccine" was added to the "Vaccine Promotion" grid. This flyer discusses the process of getting the first COVID-19 vaccine for people that may be hesitant to get it because they are worried about the process of getting it. A COVID-19 vaccine screening and consent form was made for the "Vaccine Information" grid. This will benefit healthcare providers because they will have a standardized COVID-19 screening and consent form rather than having to make their own.

Evaluation/Conclusion: Because the information on COVID-19 is constantly being updated, making sure that the website reflects the most current data and recommendations requires constant research and updates to the website. The anticipated launch date is the end of May 2022. Hopefully the information provided, which will be used by healthcare workers, will help convince people who are vaccine hesitant to get the COVID-19 vaccine.

Internship Abstract

Title: Ketamine therapy's efficacy in the treatment of major depressive disorder (MDD)

Name: Alexandra Wolinski

Preceptors: Kaylee White, MA: Clinical Site Manager

Agency: Princeton Medical Institute

Purpose: To investigate and analyze the effects of intramuscular ketamine in the treatment of major depressive disorder (MDD).

Significance: Major depressive disorder (MDD) is a major psychiatric condition that impairs many people's ability to function. While antidepressants have been shown to be beneficial in treating MDD, they have drawbacks, such as a delayed start of action and the fact that many individuals remain treatment-resistant. Ketamine, despite its origins as an anesthetic, has been discovered to have antidepressant properties at sub-anesthetic levels. In individuals with MDD, intramuscular ketamine infusions resulted in a significant improvement in clinical symptoms and the elimination of major depressive symptoms, including immediate suicidal thoughts.

Method/Approach: Used Google Scholar and PubMed, to investigate patients with treatment-resistant major depressive disorder who received intramuscular ketamine therapy. Eight articles were found that related to treating MDD with ketamine. Most articles focused on short-term effects, and a couple looked at 2-3 years. Several study findings were measured through a PHQ-9 scale in which the PHQ-9 has a range of possible scores from 0 to 27, with higher values suggesting higher levels of depression.

Outcomes/Results: In an open study including a 55-year-old male patient with treatment-resistant severe depression, the initial infusion resulted in a significant reduction in symptoms, which peaked on the second day after the infusion. A single dosage of ketamine has been linked to a quick reduction in depressive symptom intensity in individuals with treatment-resistant depression, according to several studies. Ketamine infusion generates a reported initial 'high,' increased perception, and dissociative experience in the majority of subjects, followed by a rise in mood and a reduction in or eradication of suicidal thoughts and depressive symptoms lasting 3–6 days. Subjects with depression demonstrated a substantial reduction in depressed symptoms after 72 hours of using ketamine, according to many studies, and their depression rating scale scores dropped by 14.

Evaluation/Conclusion: Overall, the patient's reports and scores show a removal of suicidal ideation and reduction in depressive symptoms. Patients also reported an increase in motivation, socialization and activity with mild to non-minimal depression severity. If patients have failed alternative therapies for treatment resistant depression, ketamine may be appropriate for treatment-resistant, severe major depressive disorder. Patients taking ketamine should be monitored by a psychiatrist who can assess if other therapies have been delivered correctly and monitor the trial's outcome.

Resources Linked

Internship Abstract

Title: Migraines in women Pre and Post Menopause

Name: Dove Youm

Preceptors: Dr. Bachmann, Alison Cabinian

Agency: Women's Health Institute at Robert Wood Johnson

Purpose: To research migraine headaches in women, particularly midlife and older women and analyze the medical causes, risk factors, and treatments.

Significance: Over 36 million people in the United States have migraines and around half to two thirds of adults around the world from ages 18-65 suffer from migraines. This chronic disorder is three times more prevalent in women than in men. Although the most affected group of women that suffer from migraines are pregnant women, this condition becomes an issue for midlife women that are going through menopause. The Women's Health Institute is addressing this issue by collaborating with other organizations including the North American Menopausal Society and the NJ Ob/Gyn Society with a review abstract that shares the negative impacts that migraines have on a huge population of women to take a step closer to finding a solution.

Method/Approach: Using Google Scholar, PubMed, National Center of Biotechnology Information (NCBI), and other health-related sources, around 30 articles for this topic were identified. Ten articles reported on the difference of migraine prevalence between men and women, 7 articles focused on the peak ages of migraine susceptibility, and 10 articles talked about the risk factors. There were over 10 articles that listed migraine treatments, including holistic treatments.

Outcomes/Results: Using the gathered data, the information was categorized into segments that cover information about migraines in women. Three case studies involving the prevalence of migraines stated that women are more likely to develop migraines than men. There were 7 sources that also claimed the same. Along with that, 7 sources covered the topic of the peak ages of migraine prevalence in women. One of the studies found that women in the premenopausal group had the highest prevalence as well as women who had hysterectomies. The second case study concluded that the highest prevalence in women was during their 20s and 30s, with a slightly less high prevalence of migraines in their 40s. Three articles have stated that the most common reports of migraine triggers after stress are menses. Six sources mentioned that there are alternative treatments that should be used over Hormone Replacement Therapy. Holistic treatments included botox, acupuncture, yoga, chiropractics, and massage, acupuncture being mentioned the most.

Evaluation/Conclusion: Many references revealed that this is a common problem that afflicts 25% of women at one point in their lives. It was not difficult to find different treatments used overall, but there aren't specific migraine treatments that are guaranteed to work on every single person because of the different types of migraines. There should be more research done on the biological effects that migraines have on women as well as more research on the exact cause of migraines in women because of the uncertainty. With this information, the Women's Health Institute can collaborate with other women's health organizations to create a collection of articles on their website.

Internship Abstract

Title: Reducing Health Disparities in Homeless Communities with Meals, Hygiene Services and Care Packages

Name: Amber Yuill

Preceptors: Kelsey Lynch, Co-Founder of Archangel Raphaels Mission

Agency: Archangel Raphael's Mission

Purpose: To assess the needs of the homeless community in Middlesex County and provide care packages to alleviate health discrepancies.

Significance: Families and individuals of lower socioeconomic class typically do not have enough money to afford the current cost of living in New Jersey, which is \$2,000 on average a month. This often leaves families having to choose between bills that provide the most basic of necessities such as shelter, food, and clothing. According to the U.S census, there are approximately 59,132 individuals living below the poverty line in Middlesex County, while there is an estimated population of about 620 homeless individuals. Archangel Raphael's Mission (ARM) ensures that no basic necessity is overlooked for those who are in need. According to the Community Need Index, New Brunswick is ranked at a 4.2-5.0 which means a lot of community needs such as healthcare and basic necessities are unmet. Disadvantaged people can always turn to ARM for necessities such as food, clothing, toilets, and showers. Not only does ARM fulfill some of life's basic necessities for those in need, but it also provides a healthy socialization opportunity. Distributing the necessities increases the overall wellbeing of this population and increases the extent of preventative care.

Method/Approach: Archangel Raphael's Mission partners with the United Methodist Church in New Brunswick on George Street where hot meals are distributed to those in need, seven days a week. A portion of the ARM team portions and seals food in the kitchen, while the other members distribute food, water, utensils, snacks. Clothing and other hygiene services are also provided occasionally. Approximately 60-70 meals are distributed each day at this location, while a portion of these meals are transported to government funded temporary living in New Brunswick. A supplemental portion of this project includes contacting local clubs and organizations through Rutgers University, and larger organizations for donations and materials to create hygiene packages including essentials like undergarments, dental care items, and feminine hygiene products. Flyers were also created and advertised on social media to bring awareness to homelessness, ARM, and ways to donate and volunteer.

Outcomes/Results: As of mid April 2022 approximately 6,300 meals and 200 care items have been distributed to those that come to the dinner service. The service continuously serves about 60 people a day. Most of the people served are frequent diners while occasionally there are newcomers. Every Saturday, haircuts are also offered. Raising awareness by handing out flyers has also increased our number ARM's interns and volunteers

Evaluation/Conclusion: The essential services provided by ARM reduce mortality rates and increase preventative care access in homeless communities. The dinner service also provides support to those using the supplemental nutrition assistance program through the government. At the start of each month, our visits are less frequent. As the month goes on ARM gets more and more visitors. It is hypothesized that the dinner service provides additional support when funds allocated from the government are running low and third-party help is needed.

Internship Abstract

Title: Health Literacy Assessment of Resource Forms During Pre-Admission to Discharge

Name: Yamaris Zurita

Preceptors: Ayana Hamilton, MA, MSW, Chronic Illness Management Program - Programmatic Lead
Project Supervisor: Lauren Galifi, RD, Certified Diabetes Care & Education Specialist

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

Purpose: To evaluate the readability of resource forms provided for patients and their families during pre-admission to discharge for the Chronic Illness Management Program (CIMP).

Significance: According to the National Library of Medicine, approximately 9 out of 10 adults experience difficulties with health literacy. Hispanic adults exhibit the lowest level of health literacy, with Black/African-American adults following. Low health literacy is extremely prevalent among the elderly, minorities, and low-income families. Low health literacy can lead to limitations with access to proper healthcare and education for making well-informed decisions. Children's Specialized Hospital aims for their literature to be accessible to a wide audience. This project studied the resources for participants with diabetes in comparison to their parents/caretakers during pre-admission, inpatient stay, and discharge.

Method/Approach: Researched common tools used to measure literacy levels of written documentation. Since the average age range of the children enrolled in the program are from ages 13-19, the hospital aims to utilize a 3rd to 6th grade reading level for any resources concerning patient/parent education. Next, patient and parent/caretaker resource documents were gathered from the hospital database. The documents evaluated for pre-admission were the CIMP FAQ Sheet, CIMP Program Description, and the CIMP website. For inpatient documents, the diabetes education resources utilized are from the Association of Diabetes Care & Education Specialists (ADCES) and pharmaceutical company Eli Lilly and Company (known as Lilly) along with individualized handouts created by the diabetes educator for certain patients and their families depending on their needs. For the discharge documents, the Discharge Health Care Plan was reviewed.

Outcomes/Results: The Flesch-Kincaid Readability Test tool was used to determine readability level of documentation suitable for the public. Score levels range from 9.1 to 16.1 grade levels, which is best suitable for high school education and college. The CIMP FAQ Sheet scored at a 9.5 grade level, CIMP Program Description scored at a 14.5 grade level, and the CIMP website scored at a 16.1 grade level. The diabetes educational resources from ADCES and Lilly which, in an assessment conducted by the University of California, Berkeley, received a superior suitability assessment of materials (SAM) rating. This rating means that their materials are suitable for their targeted audience. The Discharge Health Care Plan scored at a 9.1 grade level score. As for the individualized handouts, they are mainly images with short sentences that are reinforced with verbal descriptions.

Evaluation/Conclusion: The Flesch-Kincaid Readability Test tool is a great resource to utilize to get an idea of how readable documents are, but they do not measure comprehension since it focuses on sentence length, number of words and syllables, and complex words. Given that most of the information is spoken to the patient and their families with the opportunity to ask questions, the documents that received a more complex score were determined to be fairly easy to comprehend based on previous conversations during sessions with parents/caretakers.

Internship Abstract

Capstone Projects

Internship Abstract

Title: Maternal Mortality and Disparities Among Women in the United States

Name: Michele Caporaso

Purpose: To analyze maternal mortality occurrence among women in the United States and its disparities and propose interventions to reduce this occurrence.

Significance: According to the CDC, in 2020, 861 women were identified as having died of maternal causes in the United States, compared with 754 in 2019. Researchers estimate that 60% of pregnancy-related deaths are preventable. The rate of maternal mortality in the United States continues to rise, and as a result, various health disparities occur. MacDorman, et al. (2021) found that the maternal mortality rate for non-Hispanic Black women was 3.55 times that for non-Hispanic White women as well as Non-Hispanic Black maternal mortality rates from obstetric embolism and obstetric hemorrhage being 2.3 to 2.6 times those for non-Hispanic White women. This evidence indicates clear maternal mortality racial disparities and the need to emphasize the importance of researchers and practitioners coming together to strengthen evidence-informed policies and practices that can help improve maternal health determinants and outcomes nationwide.

Method/Approach: There has been an array of extensive research conducted regarding the occurrence of maternal mortality throughout the United States. This research was sought in order to assess the occurrence of maternal mortality throughout the United States. Key components and phrases used to gather this information include, maternal mortality occurrence, health disparities within maternal mortality in the United States, prevention of maternal mortality and improving maternal mortality. This research was found using journals, articles, and peer reviewed articles obtained through the Rutgers Libraries and PubMed. Statistical data was also collected through the CDC.

Outcomes/Results: Following an in-depth review of about 8 key articles and studies pertaining to maternal mortality and disparities research found that despite efforts to decrease maternal mortality, it has not improved in the United States and appears to be increasing. Much of the research conducted also found a serious racial and ethnic disparity in maternal outcomes of pregnancy. A literature review looked at the 2016–2017 vital statistics mortality data with cause-of-death literals added. The study confirmed maternal deaths, the 2016–2017 maternal mortality rate for non-Hispanic Black women was 3.55 times that for non-Hispanic White women. The confirmed late maternal mortality rate for non-Hispanic Black women was 3.52 times that for non-Hispanic White women. There also was significant research found to link the severity of disparity with the quality of hospital care. It was found that 75% of black deliveries in the United States occurred in ¼ of hospitals compared to 18% of whites delivered in those same hospitals.

Evaluation/Conclusion: The research found throughout these studies can help bring awareness to this issue and develop methods to reduce the amount of maternal mortality that occurs throughout the country. It can be extremely helpful to improve the reporting of maternal mortality occurrence as many studies have shown that a majority of vital statistics on maternal deaths are identified by the pregnancy checkbox alone, which has been proven to be unreliable in multiple studies. It would be beneficial to redevelop the reporting system of maternal mortality throughout the United States to get more accurate statistics overall. There can also be methods to address health care disparities as a whole. These include but are not limited to, policy interventions that focus on the social determinants of health targeting education and early childhood, urban planning and community development, housing, income enhancements and supplements, and employment. The ultimate goal of this research is to address why this racial disparity is occurring with maternal health care and to come up with a solution to reduce it.

Internship Abstract

Title: Assessment of Traumatic Brain Injuries in Young Student-Athletes

Name: Nicole Gomes

Purpose: To study and analyze the effects of traumatic brain injury in children and teens in sports and define what resources are available for students' optimal recovery.

Significance: About 65% of all sports and recreation-related injuries treated in emergency departments from 2001 to 2009 occurred in people younger than 19 years old. Traumatic brain injuries as a whole are a contributing factor to a third of all injury-related deaths and disabilities in the United States. Among children under the age of 15 years, pediatric TBIs have accounted for nearly 1,500 deaths, almost 18,000 hospitalizations, and more than 640,000 emergency department visits in 2013 in the United States. The public health burden of brain injury is disproportionately high in children, especially teens and it is for this reason that we must bring more awareness to the topic.

Method/Approach: To further study this topic, different scholarly articles and books about the evaluation of prevention of traumatic brain injuries in these sensitive age groups due to sports injuries. The goal is to bring awareness in ways to prevent TBIs and protect our student-athletes from head trauma and help them get back to school during recovery. The databases used to prepare information on this topic came from the Rutgers University Libraries Database and Google Scholar. To get an overall sense of traumatic brain injuries on students, the search terms used in these databases were: traumatic brain injuries in students and traumatic brain injuries and children. To further support the research, searches for overall statistics on traumatic brain injuries were used such as: traumatic brain injuries in the United States and TBIs and treatments.

Outcomes/Results: Mental health issues may arise due to the setbacks that traumatic brain injuries cause; these issues must also be resolved along with other obvious therapies but they are often overlooked because they are not so apparent. Cognitive and somatic symptoms are some of the more obvious symptoms that arise with TBIs. Some of these symptoms are post-traumatic migraines, memory issues, trouble concentrating, etc. All of these symptoms can be diagnosed with various tools, proper diagnosis is very important early in the injury which can be followed with therapies to accelerate recovery. CT scans and MRIs can be used right after an injury to determine the severity, while also using the Glasgow Coma scale. Pursuing and not delaying treatment can be highly beneficial for a speedy recovery; these treatments and therapies can include but are not limited to cognitive therapy, vestibular therapy and vocational therapy.

Evaluation/Conclusion: Focusing on diagnosing issues that arise from traumatic brain injuries can be key to a speedy recovery. There are currently programs and therapies in place for young student-athletes who suffer a traumatic brain injury. These programs and therapies can speed up recovery and make returning back to school easier. Two major limitations to research are the fact that even mild traumatic brain injuries may not show up in diagnostic imaging which then make it difficult for the student to be properly diagnosed. Another limitation is the fact that doctors and medical researchers cannot fully study the brain and see how severe some injuries are unless it's post-mortem. Spreading awareness can help the parents or caregivers of students who suffer from traumatic brain injuries to seek help and proper treatment so recovery can be as fast as possible. Providing more protection for student athletes such as better helmets or longer recovery periods in between concussions can prove to be very effective.

Internship Abstract

Title: Diabetes Management in Adults

Name: Brigitte Jimenez

Purpose: The review examined the effects of computer-associated diabetes self-management interventions on cardiovascular risk factors, patients' health status, and adults experiencing type-2 diabetes quality of life.

Significance: The risk of diabetes-associated complications can be reduced by using structured patient education programs. For instance, face-to-face group education is the current measure for self-management to manage type 2 diabetes conditions (Soderlund, 2018). Nevertheless, there is poor education attendance for people with diabetes. There is a likelihood of digital approaches or interventions increasing self-management access to training and improving results if their implementation is effectively done (Taggart et al., 2018).

Methods/Approach: A search for electronic databases for conference proceedings or trials from inception until November 2011. Relevant trials were searched from Medline, Cochrane Library, PsycINFO, Embase, CINAHL, and the Web of Science (Whitemore et al., 2019). The randomized, controlled clinical trials entailed a patient sample aged ≥ 18 years and experiencing type 2 diabetes mellitus (Gucciardi et al., 2019). The criteria for intervention inclusion were that they had to interact with users to produce targeted content that was structured to increase one or more self-management diabetes domains via advice, feedback, rewards, reinforcement, goal setting, patient decision support, or reminders (Habibzadeh et al., 2017). Reference lists from salient published studies were screened, and their authors were contacted to orient them to provide further information when needed.

Results/Outcomes: About 8,715 unique abstracts were yielded from database searches, and about 94 articles were examined for their eligibility. Only 16 varying studies comprising 3,578 research participants met the requirements for being included and were chosen for the study (Purnell et al., 2016). The 4 studies that searched for a change in understanding and knowledge for the cognitive outcomes showed positive impacts of the interventions on knowledge. Change in self-efficacy was evident in 2 studies, and all indicated positive implications of the programs.

On the risk factors for cardiovascular, all of the studies used indicated HbA1c; as a results measure and 11 other studies offered adequate data to be used in a meta-analysis (Chatterjee et al., 2017). The pooled results showed a slight variation between 95% CI -0.37 to -0.05% of comparison groups and intervention, favoring the intervention group (Graham et al., 2017). The impacts of the use of the programs on physical activity were observed to be mixed. There is clear evidence that computer-based self-management programs show limited benefits on glycemic control by glycemic. However, a more significant impact was demonstrated by an analysis from the subgroup on mobile phone-based programs (Habibzadeh et al., 2017). The outcomes did not show blood pressure, depression, weight, and serum lipids improvement. The results also show no evidence of significant long-term impacts due to self-management interventions for diabetes type-2 in adults.

Evaluation/Conclusion: Self-management approaches that are computer-based in managing diabetes among adults indicate few benefits in their control by glycemic. The use of these interventions in managing type 2 diabetes has an insignificant beneficial impact on glucose control in the blood, which was more significant in the mobile phone-based subgroup. (Chrvala et al., 2016). Consequently, there was a lack of facts on how the program benefits cognitive, biological, emotional, and behavioral outcomes.

Internship Abstract

Title: The Mental Health Crisis and The Need for Interventions in the Era of COVID-19

Name: Kelly Mendoza

Purpose: To use literature and raise awareness about the mental health decline amongst frontline healthcare workers at the height of the pandemic in the United States and recognize the importance of making mental health resources accessible. This capstone project will also seek to acknowledge the significant role of healthcare leaders in improving the workplace environment.

Significance: Many of the pressures stemmed from the unpredictability of the COVID-19 virus, the collapse of healthcare organizations (HCOs) with the overwhelming volume of sick patients, and insufficient personal protective equipment (PPE). The psychological, emotional, and physical stress front-line workers continue to experience two years on should be reviewed to further reduce stress for nurses, doctors, and workers alike. The pandemic has placed doubt on FHCWs and their futures as health professionals. This public health emergency has led to 60 percent of healthcare workers dealing with some form of mental health problem due to their involvement on the frontlines, with approximately 30 percent doubting their future as health professionals (Wan, 2021). By 2033, there will be a significant healthcare worker shortage of over 120,000 physicians and an increased demand to hire nurses, further demanding an immediate response to this problem (American Hospital Association This public health emergency has also highlighted the importance of having solid leaders in the workplace who should have the skillset to mitigate the pandemic.

Method/Approach: Google Scholar, PubMed, and Academic Search Premiere were the databases used to conduct this capstone project. The following key terms would help with the selection process of helpful articles: the United States, COVID-19/pandemic, frontline healthcare workers, interventions, and hospital leadership. To further support the research, separate searches with similar terms were used, searching "Italy" and "China" instead of the United States to compare the different approaches to handling this public health emergency. When informative articles were found during the initial searches, looking at the reference list was also helpful if more data was required. Finding articles that addressed mental health during previous pandemics would highlight the progress and improvements needed to eliminate this issue.

Outcomes/Results: Most of the articles included were centered around mental health (10), while (4) pertained to healthcare leadership and (6) discussed interventions. Supplementary data was also used to demonstrate the progress made from previous pandemics, as well as offer different perspectives on the COVID-19 responses made by other countries. (5) articles briefly mentioned previous public health emergencies, (5) on China and (4) on Italy's approach on addressing FHCW's mental health. The mental health studies were consistent on the sources of stress that included: spreading the virus to family members (85.9%), PPE shortages (62.9%), insufficient training (53.9%) and the mental health stigma within the workplace, which led to FHCWs experiencing PTSD, anxiety, and depression (O'Neal, Heisler, Mishori, Haar, 2021). Between 52.7%- 87.8% of the participants from one study that took place during New York's surge of infections early on in the pandemic, "endorsed moral distress" (Norman et al, 2021).

Evaluation/Conclusion: The studies have acknowledged that the pandemic will leave mental health sequelae for years to come, while also accepting that more research is required for future public health emergencies. Healthcare workers are amongst the most resilient workforce, but the pandemic has threatened their well-being. Future research should help strengthen the healthcare systems that COVID-19 collapsed.

Internship Abstract

Title: Assessment on deferring gay men from donating blood

Name: Keith Miller

Purpose: To determine whether deferring gay men from donating blood actually reduces the prevalence of HIV transmitted through blood transfusions.

Significance: The United States is currently facing the worst blood shortage it has seen in over a decade forcing hospitals across the nation to make impossibly difficult decisions on who is to receive donations and who must wait each day. Older adults, which make up a majority of the nation's donor pool, are donating less as increasing age or health impairments prevent them from doing so. Additionally, there has been over a 62% drop in high school/college donations putting further strain on the blood supply. Men who have sex with men (MSM) are currently deferred for three months from their last sexual contact which significantly limits their ability to donate and strengthens the social stigma around their sexuality. Removing this restriction and treating all donors based on personal risk factors does not pose an adverse threat to the safety of donated blood and will help relieve the pressure healthcare is currently facing.

Method/Approach: Four of the major blood collection organizations (BCO) participated in a four-year study by submitting data to the Transfusion Transmissible Infections Monitoring System (TTIMS), a congregated data set to monitor diseases in the nation's blood supply, following the removal of the lifetime deferral on MSM in 2015. There have since been multiple studies looking at infections rates in the blood supply and how they compare to other countries that have already taken measures to allow MSM to donate. This is a multifaceted issue as there is also the interpersonal side of donating blood. To determine what new pre-screening questionnaires should look like BCOs in the United States and Canada selected participants to give their thoughts on the potentially new questions that would aim to gauge personal risk levels while excluding questions of sexual orientation.

Outcomes/Results: In the studies evaluated there was no significant change in the level of transfusion transmissible diseases, particularly HIV. Analysis of the TTIMS concluded that HIV levels in donated blood were 2.5 parts per hundred thousand (pht) pre-2015 change and 2.9 pht at the end of the initial four-year study which is not a statistically significant change. A similar study conducted in Australia found that HIV incidence in their blood supply did not significantly change before and after revised guidelines regarding MSM were implemented as there was an incidence ratio of .81 pre to post revisions.

Evaluation/Conclusion: Based on the data provided MSM should be allowed to donate blood provided they do not already engage in high-risk behaviors outlined by the FDA. Blood supplies should continue to be scrutinized for any marked increase in HIV incidence but there is currently not enough evidence to keep imposing restrictions on MSM who want to donate as hospitals need everyone they can get.

Internship Abstract

Title: New Brunswick Poverty Youth Education

Name: Facundo Saiegh

Purpose: To assess barriers in New Brunswick, New Jersey, and develop an educational plan for the youth community.

Significance: According to the United States Census, 11 million children live in families who are poor. That is a million child increase compared to 2019 (AECF, 2020). This is critical when COVID struck as it brought more stress to the family and children. Children need to be able to go outside and be involved in physical activities. Education will allow children to live healthier and more positive lives for now and in the future. Physical activities can help children in poverty to stay on the right path to success and with their longevity of health. It's essential that children are aware of physical activities and the benefits of doing them. According to an NCBI article "stressors may lead to disease. This is particularly the case if the person has few psychosocial resources and poor coping skills" (Sneiderman, 2005).

Method/Approach: According to the United States Census, 34.1% of New Brunswick lives under the poverty line. 22.1% of the New Brunswick population is below the age of 18. Tackling the issue is to have a program in place in New Brunswick, New Jersey for children's physical education. Educating will be done by having an app in place that will give daily recommendations to 100 people between the ages of 13 to 18. The app will allow teens to add research for the research team. The data will allow the research team to get more accurate and up-to-date data on the adolescents.

Outcomes/Results: It's evident that children in more challenging areas also had a harder time during COVID. According to a scholarly article, stress can lead to "Chronically elevated blood pressure forces the heart to work harder, which leads to hypertrophy of the left ventricle ([Brownley et al. 2000](#)). Over time, the chronically elevated and rapidly shifting levels of blood pressure can lead to damaged arteries and plaque formation" (Schneiderman, 2005). The stress that these communities endure only got worse with COVID as an article states "The results of the survey showed that 61% of respondents had observed negative physical changes in their child since lockdown began in March 2020." (Theis, 2021). One of the main issues is the lack of education on how beneficial physical activity is for the body.

Evaluation/Conclusion: This concludes that if children are doing physical activity and learning about greater health then they will have a more positive life. Stated in a scholarly article, "Our findings suggest that higher amounts of vigorous, but not moderate, PA are associated with more positive interpretations of ambiguity and that even small amounts of PA seem to be sufficient to promote this more positive valence bias when compared to individuals conducting no vigorous PA at all." (Neta, 2021) Having an application to daily remind the participants, respondents can have a knowledge of physical activity and their own health. That being said, there needs to be more data collected in the region to determine if this has a lasting impact on children post COVID. If that is the case, then this program can be implemented in our troubled neighborhoods to help children cope with life after COVID.

Internship Abstract

Title: Assessment of Injuries/Deaths From Motor Vehicle Accidents Among Teens

Name: Alexa Shatilla

Purpose: To research one of the leading causes of deaths among teens, that being motor vehicle accidents, and propose ways that could help lower the occurrence in which teens are involved in fatal car accidents.

Significance: The CDC found that in the year 2019, nearly 7 teenagers a day were killed in the United States due to motor vehicle accidents. That totals nearly 2,400 teenagers that year alone. Teens ranging from ages 16 to 19 years old were found three times as likely to be in a fatal motor vehicle accident compared to drivers aged 20 and older. There are many factors that affect the statistics, including driver inexperience, nighttime driving, reckless driving, impaired driving, etc. This project will research and analyze these statistics in more detail, and propose ways to lower the number of teen, motorcycle related deaths.

Method/Approach: The research was gathered from scholarly, academic articles, and the recommended practices to reduce the number of car accidents and fatalities from such involving young/new drivers was concluded based off of the research's findings. In gathering the statistics needed to support the fact that injuries/deaths among teens from motor vehicle accidents is one of the most leading causes of death among that age group and the risk factors that increase the rates of injuries/deaths, the analysis portion of the paper is organized into four categories; driver inexperience, reckless driving, late night driving/driving on the weekends, and impaired driving. In this order, data was gathered to prove the effects that these risk factors have on car accident rates among teens, as well as the overall statistics stating the number of teens that, on average, are injured/killed in motor vehicle accidents.

Outcomes/Results: New and inexperienced drivers have poor judgment skills/more trouble maneuvering their cars during potential dangerous driving situations, are more likely to engage in reckless driving, are more likely to drive at night, resulting in a higher fatal crash rate, and are more exposed to impaired driving. The research found that young/new drivers may poorly anticipate dangerous driving conditions, therefore not recognizing when to slow down, driving recklessly (which includes speeding, texting and driving, etc.) or in a hurry will increase a young driver's risk of losing control of the steering wheel, teens aged 16 to 19 were nearly three times as likely to be in an accident that occurred at night when compared to adult drivers, and around 1/3 of high school students were exposed to or participated in impaired driving.

Evaluation/Conclusion: Car accidents and fatalities among new, young drivers can be attributed to many things, including driver inexperience, reckless driving, late night/weekend driving, and impaired driving. With the recommended techniques to help reduce such occurrences, the rates in which young/new drivers are getting into accidents, possibly leading to fatalities, will be reduced. To evaluate if the occurrences decreased, more time and research is needed. There was a lack of personal stories associated with this topic. There was an abundance of statistics, but not many personal anecdotes which would be beneficial in proving the statistics to be true as well as putting faces and names to the numbers that are seen. Modern technological advances in motor vehicles including electric cars, the installation of big screens/touch screens within them in replacement of buttons, among many other things should be considered for research as well, as they are distractions for the drivers.

Internship Abstract

Title: Analyzing the response to cybersecurity concerns in Public Health and the need for further investment in cybersecurity

Name: Kishan Sojan

Purpose: To research the effectiveness of cybersecurity efforts in healthcare during early COVID and to formulate recommendations on how to better move forward in the healthcare industry while grappling with cybersecurity concerns.

Significance: Cybersecurity is a sector of major importance in all industries across the world. It especially holds a consequential importance in healthcare due to the rise in telehealth/telemedicine and due to the attractiveness of the industry as a whole. Specifically, “world’s health data is often stored in old legacy technology, running on outdated operating software” (Hypponen, 2021). Due to the ability to exploit old software whose vulnerabilities are well known, “45 million individuals were affected by healthcare attacks” in 2021 compared to 34 million in 2020 (Landi, 2022). These attacks can then result in financial, emotional, personal and identity damage. Since this is an evolving field, it is important to understand what organizations have been doing to rectify this and what steps need to be taken to address the cyberattacks for the future.

Method/Approach: For the cybersecurity programs implemented during the beginning of COVID-19, for the current recommendations, and for the outcomes of cybersecurity efforts today, sources utilized were from cybersecurity consulting organizations, US Department of Health & Human Services, and reputable associations such as the Association of American Medical Colleges, American Hospital Association, and four other similar organizations. The data used in this research were sourced from US federal agencies and other non-government organizations. The studies and articles found for this research were found via National Library of Medicine, and Google scholar along with databases such as IEEE Xplore, and Web of Science from the Rutgers Library databases system. Reports and cybersecurity analysis were found on IT/tech websites via Google.

Outcomes/Results: Top tips by the US government to build a more secure security infrastructure included creating a culture of security, having stronger firewalls, and controlling access to the network and protected health information. These have been relatively successful since an educated staff resulted in reduction in success rates for spear phishing and attempts at unauthorized device access. However, it was also found that “just 31% [of healthcare organizations reported using] encryption extensively” while 49% used encryption somewhat according to Sophos News. This in combination with an increasing rate of cyberattacks along with 32% of healthcare employees claiming “they never received cybersecurity training from their healthcare system” (Greevy, 2022) resulted in the highest rate of cyberattacks in 2021.

Evaluation/Conclusion: The most important thing is to have a response plan in place in case of a cyberattack. “A Ponemon survey determined that 47% of organizations have not assessed the readiness of their incident response teams” (Pearlson, et al., 2021). Having a plan can help reduce and contain a cyberattack. Furthermore, establishing a security team and lead along with a cybersecurity culture has shown to be effective at reducing cyberattacks and effective in terms of response to cyber-attacks. Finally, the biggest recommendation for healthcare organizations is to invest more capital and resources into the cybersecurity infrastructure of their organization as cyberattacks are becoming more and more popular and disruption to patient care can result in potential loss of life.

Internship Abstract

Title: Food Insecurity Health Study

Name: John Wakefield

Purpose: To study and analyze the state of food insecurity and its effects on the health of the homeless population of New Jersey.

Significance: Food Insecurity has a major impact on the health of a population by increasing a person's chances for negative health outcomes and health disparities. In 2020, Healthy People found that adults who were food insecure were at a higher risk for problems such as obesity and chronic diseases. Some factors that affect food insecurity are income and employment, and housing status. The risk of food insecurity increases as the funds to acquire food diminishes. This remains true when a person has to decide between eating for the day or paying for rent. The CDC reports that homeless individuals experience higher rates of health problems which can be from a lack of access to food. These factors help display the need to properly understand the underlying factors that cause food insecurity in the homeless as a means to improve health outcomes for this group.

Method/Approach: This paper utilized standards from the USDA Economic Research Service, and older standards that researchers such as Keenan follow to analyze food insecurity for different regions and populations. In order to properly establish a baseline for understanding food insecurity it was first observed on the international level. A comparison between multiple countries and their levels of food insecurity were analyzed. Part of the analysis process aimed to see what were the causes of food insecurity in their population and what they did to resolve it. Then, this approach was applied to the U.S. where the states and their levels were compared with New Jersey. The analysis of the states utilized the same analyzing techniques that were used in other countries. Finally, New Jersey was focused on and the extent of food insecurity for their homeless was observed. The process of observation looked at food insecurity for the homeless before and after the pandemic. This was done to see if food insecurity was still a problem for the homeless and if it was, then what were the causes for their food insecurity.

Outcomes/Results: This project aims to provide and display collective information that accurately describes the impact that food insecurity has on the homeless of New Jersey. Part of the scope of this paper aims to highlight how much of a problem food insecurity is, but also strives to explore the causes of it for this particular group. This includes clearly outlining what the key causes of food insecurity in New Jersey are and how those causes compare to other areas. The information can then be used to create better policies that address those issues. The point of comparing the key issues is that if another country has faced these issues in the past and overcome them, then the United States, and more so New Jersey can learn from them and attempt to adapt some of their methods.

Evaluation/Conclusion: The leading causes of food insecurity for the homeless in New Jersey were economic instability, access to food providing sources, and social practices. This compared with countries such as Japan and Norway where their causes for food insecurity were unemployment, mental health issues, and lack of food skills. In the United States, other states experienced food insecurity due to housing status, access to food, and food acquisition practices. This data will allow for the development of health policies that better aid in resolving New Jersey's food insecurity issues. Further analysis is advised as policies are created to make sure that efforts are effectively resolving each of the issues displayed in this paper and that they are not creating new ones.