Summer 2021 Abstract Book

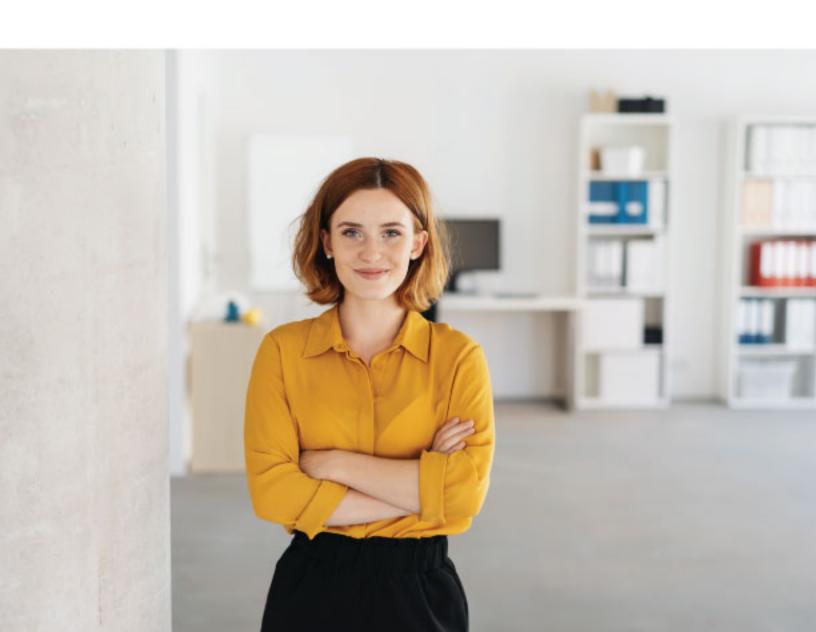Edward J. Bloustein School of Planning and Public Policy

Traditional Internships

[Capstone Projects](#)

Title: Rutgers Wellness Living-Learning Community Curriculum

Name: Ayah Abdelkhalek

Preceptors: Francesca Maresca - PhD, CHES, Interim Assistant Vice Chancellor for Health and Wellness and Director, Health Outreach, Promotion & Education

Agency: Rutgers H.O.P.E

Purpose: To promote health and wellness and create a curriculum for the Rutgers Wellness Living-Learning Community (LLC).

Significance: According to the National Alliance on Mental Illness (NAMI), about 73% of students living with a mental health condition experienced a mental health crisis on campus, yet 32.2% reported that their college did not know about their situation. At Rutgers New Brunswick, over 57% of surveyed students have suffered or are experiencing a mental illness, which is double the national rates of college mental illnesses according to the World Health Organization (WHO). Rutgers H.O.P.E actively combats this problem by providing students with tools to advocate for personal and community wellness and facilitate interactive outreach workshops on issues that directly impact students' lives. Rutgers University as a unit should give more effort and prioritization towards students' health and wellbeing. This project will emphasize and create a curriculum that will teach LLC students how to manage wellness; physically, socially, emotionally, and mentally. While also providing access to peer health educators and collaboration on wellness activities and resources. This curriculum will address college students' mental health concerns and hopefully improve the health and wellness of Rutgers students.

Method/Approach: Using researched health curriculums and Dr. Maresca's educational LLC outline, the curriculum incorporates self-health awareness and reflection, Rutgers (health and wellness) resource information sessions, and student community activities. Responsibilities are researching other university health LLCs, formulating three health assessments that will be given to students (beginning, middle, and end of the Fall 2021 semester), and planning student activities. There will be daily reviewing and updating the curriculum based on new opportunities for students to have access to, preceptor's preferred weekly schedule/ activities, and current literature review knowledge of other universities' health LLC events and successful structures.

Outcomes/Results: The final product of this project is the creation of a four month outlined curriculum that will prioritize health and physical activities, community bonding, and promotion of student success through learning and utilizing Rutgers resources. Including three health assessments for students to reflect and evaluate their physical, mental, and reproductive wellness. This curriculum will contribute to the bigger picture of the LLC initiatives of promoting and advocating health and wellness for all students.

Evaluation/Conclusion: The purpose of this project is to create a well-rounded curriculum that integrates health and wellness, self-health awareness, events that will promote educational and fitness success, inclusivity, and Rutgers as an environment that supports the wellbeing and success of students. The curriculum will be assessed and measured for success by the students of the Health LLC through their three checkpoint health assessments and feedback forms that will be given among students and staff of the LLC. The project will be looked at monthly (towards the end of each month) by LLC supervisors. It will evaluate success assessments and feedback forms for needed adjustments to the curriculum.

Title: Developing a Best Practices Guide for Zoom Security

Name: Funmilayo Ademoji

Preceptors: Namasha Schelling, Operations Manager

Agency: Day One NY

Purpose: To design Zoom policies that will serve to ensure privacy and security during webinars and meetings.

Significance: Zoom has, by far, become the communications platform that organizations rely on the most for maintaining operations in a remote work setting. Before the coronavirus pandemic, Zoom had 10 million daily users. By April, it claimed to have 300 million meeting participants daily (Meineck, 2020). Zoom has become a trusted application to use for collaboration amongst employees working in-person and remotely. Reports of users experiencing a series of Zoom bombings, which are cyberattacks in which an uninvited individual or group seizes control of a Zoom meeting to share inappropriate, racists, offensive things, have surfaced (Read, 2020). The Zoom cyberattacks made it urgent for companies to administer rules and regulations to carry out for the protection and safety of their clients and employees during Zoom meetings.

Method/Approach: The steps to formulating a Zoom Security Best Practices Guide included researching and analyzing effective ways to use Zoom. Other acts included creating a list of host controls, and meeting participant etiquette and protocols to follow. Four department leaders were contacted about Zoom usage and areas of improvement. Feedback about user experiences with Zoom safety and reliability were collected and documented. Lastly, a draft of a tutorial for securing Zoom meetings was submitted to the team for evaluation and editing.

Outcomes/Results: The A-Team will be promoting a Cybersecurity Policy and Zoom Best Practices Guide to enhance operations and technical support within Day One. The best practices guide outlines etiquette and plans to ensure employees understand how to respond to security incidents. Based on the feedback received from the four departments, a step-by-step tutorial for how to secure Zoom meetings and webinars was designed, following services the departments found beneficial or harmful to security. The guide explains expectations for hosts and participants, directions for using the security panel, and protocols to follow in case of a Zoom bombing.

Evaluation/Conclusion: The goal is for the guidelines to strengthen Zoom security by confirming that employees complied and maintained acceptable internet use and electronic communication to prevent unwanted guests from invading meetings. Perspective plans include collecting feedback from the department leaders about their experience and comfortability with Zoom following the distribution of the best practices policies for Zoom security.

Title:	Trenton Telehealth Hub
Name:	Sheni Adewale
Preceptors:	Chinemenma Amonu, Founder
Agency:	Mama's Maternity Home

Purpose: To research the issue of maternal healthcare and bridge the gap between mothers and doctors in Trenton, New Jersey in order to make proper maternal care more easily accessible.

Significance: About 15% of women in the United States do not receive proper prenatal care (CDC, 2016). As a result, the United States has one of the highest rates of infant mortality amongst developed countries. In Trenton, NJ, the issue of receiving proper maternal care has disproportionately affected some women more than others. Women of color in this area have expressed greater difficulty getting appointments with OB/GYNs and other doctors for their maternal care. Mama's Maternity Home has made it their mission to equip mothers of color with tools that will foster them and their children by creating a space for them to receive administrative and peer support. Through this project, we will be able to create a direct line between mothers and doctors in the Trenton area. This will help increase the amount of women in Trenton receiving proper prenatal care.

Method/Approach: Research was conducted to collect data on the significance of improper maternal health care in the United States in comparison to New Jersey and specifically Trenton, New Jersey. This data was used to measure the severity of the problem in Trenton, NJ. The proposed solution to this problem is to create a Telehealth Hub to make it easier for mothers to get appointments with local OB GYN's. The objectives and goals for this project were then outlined. The initial steps to create the Telehealth Hub were also outlined and initiated. Child-based communities and organizations were contacted to locate interested mothers and OB/GYN offices were contacted to locate interested OB/GYNs.

Outcomes/Results: It was found that less than 77% of women in the US initiate prenatal care in the first trimester of pregnancy. Comparatively, this rate is 72% in the whole of New Jersey, 63% in Mercer County of New Jersey, and less than 50% specifically in Trenton, New Jersey. It was also found that 57.8% of mothers in Trenton reported receiving adequate prenatal care, meaning care beginning within the first trimester including over nine visits throughout the course of a 36 week or more pregnancy. During the initial steps of the creation of the Telehealth Hub, 11 child-based communities/ organizations were contacted as well as three OB/GYN offices to create a list of interested groups.

Evaluation/Conclusion: According to the researched data, mothers in Trenton, New Jersey are disproportionately less likely to receive proper prenatal care in comparison to the national, state, and county averages. A part of this problem is due to lack of access to OB/GYNs thus the initiative to create a Telehealth Hub. Out of the 11 communities/ organizations and three OB/GYNs contacted, eight communities/organizations and three OB/GYNs showed interest in the project. Data is incomplete as more time is needed to measure the effectiveness of the project.

Title: Dialysis Patient Care, Quality, and Improvement Assessment

Name: Faiza Ahmed, Health Administration Major Student Intern

Preceptors: Tatiane Brady, RN, BSN, Home/THRIVE Dialysis Program Clinical Coordinator

Agency: Trinitas Regional Medical Center, Orthopedics & Renal Department, Elizabeth, NJ

Purpose: To analyze and assess patients currently on Dialysis care and patients who are on pre-dialysis care and treatment as well.

Significance: Throughout the importance of dialysis, this unfortunate situation arises as the kidney is failing through the human body. In this case, every year there are 79,000 patients who need a healthy kidney and they are to wait on a kidney transplant list, and without that healthy kidney they can receive dialysis treatments or the other alternative is death. There are a wide range of patients who still are without a healthy kidney day by day, because only 21,000 patients are able to receive a healthy kidney. Currently worldwide, there are two million patients worldwide affected by CKD (Chronic Kidney Disease), and there are currently 750,000 patients in the United States affected by it. Within the human body, the hemoglobin levels are closely monitored because of the close interaction between the hemoglobin levels and the kidney function. If the hemoglobin levels are lower than 11.0, it indicates something is wrong within the human body, then there has to be a shot of alpha epoetin to be administered to the patient, which can assist with the kidney function and the hemoglobin levels which goes hand-in-hand (MayoClinic).

Method/Approach: Patients were seen bi-weekly, monthly, and weekly to get their blood work done. If the bloodwork came out to have any abnormalities or to be on the lower end, then the patient needed to have retacrit shot (alpha epoetin) administered intramuscularly. If bloodwork proved to be indicated on the lower end for the iron levels, then the patient needs to be administered with an IV iron outlet. Within a week to two weeks of the ferralet (iron) IV administration, the bloodwork is conducted so that way the iron levels can be checked once again. The data of this administration was conducted that a total of nine patients were on Peritoneal dialysis which is conducted at home via a machine which the patient is trained with. A total of 36 patients were within the pre-dialysis stage within the THRIVE program. These patients ranged from the ages of 25 years young to 93 years old.

Outcomes/Results:
Of the total cohort of 45 patients under these two programs (THRIVE and Peritoneal dialysis), zero patients had a sign of infection (0%). Of those patients, within the THRIVE program patients, four patients were actively listed on the national kidney transplant list (11%). Within those patients, two patients are over the age of 75 and are no longer eligible for the kidney transplant list due to their age and the risk it would entail to conduct the surgery (5%).

Evaluation/Conclusion:
From the total cohort of patients, 25% were at stage five of kidney disease, 33.3% were on stage 3B of kidney disease, and 41.6% were on stage four of kidney disease. Long term goals to evaluate the risk of advancing kidney disease is (a) patients following up with bloodwork, (b) following a strict low phosphorus diet and (c) staying active and healthy on the kidney transplant list.

Title: Impact of Farmers Markets in Urban Settings

Name: Kayla Albertson

Preceptors: Direct Supervisor: Emilio Panasci, Executive Director

Agency: Urban Agriculture Cooperative

Purpose: To provide communities in Newark with access to affordable, locally grown, healthy food through the establishment of farm markets and community education, in order to address the disparities low-income communities in Newark are facing, and work to fight food insecurity within the city.

Significance: Farmers markets are an essential way to increase food accessibility in underserved and low income areas, as well as maintain a locally empowering economy. Over the past year and a half, due to the COVID-19 pandemic, food insecurity, especially in urban communities, has intensified, leaving greater need for food that is accessible and affordable to local communities. Newark is no exception, with over 2,000 of its residents living over a mile from the nearest supermarket and available fresh fruits and vegetables, according to Rutgers University-Newark(Rojas, 2018). These food deserts in Newark only heighten the health disparities between low and high income residents, but with the implementation of more farmers markets, we can combat these disparities and provide access to fresh, local, fruits and vegetables.

Method/Approach: Urban Agriculture Cooperative(UAC) has created an online farmers market, The Cooperative Market, in partnership with RWJBarnabas Health, and in collaboration with local farmers and makers. The mission of the Cooperative Market is to emphasize food sovereignty and empowerment in agriculture by prioritizing products supplied by Newark based producers, and family farms with an ongoing commitment to urban food access in Newark. This online market has helped make food more accessible to the community through multiple order pick up locations throughout the city of Newark, and has been a great resource for keeping farmers markets present in the community even throughout the COVID-19 pandemic. UAC, through its partnership with RWJBarnabas Health's Farm to Families program, provides about 20 healthy food donation boxes weekly to families in need. In addition, UAC attends a weekly farmers market in Downtown Newark, where produce and locally made products are available for purchase.

Outcomes/Results: Through the Cooperative Market, Farm to Families Program, and Newark Downtown District in person farmers market, Urban Agriculture Cooperative has created more opportunities for the local community of Newark to access locally grown produce and products. The first in-person farmers market of the season in mid-June brought in 37 transactions from people purchasing products from our stand. The most recent market had a total of 50 transactions, which shows that the market is bringing more people in to purchase fruits and vegetables. The Cooperative Market saw an increase of 29 new customers since the end of May, has collected about $1000 in a combination of WIC, SFMNP, and SNAP benefits, and has added 24 local suppliers to the market.

Evaluation/Conclusion: The increase in Newarkers purchasing from Urban Agriculture Cooperative at the in person farmers markets as well as on The Cooperative Market shows that Newark residents are taking advantage of the increase in accessibility of local products. The longer these programs go on, the more likely it is to be able to see the positive effect UAC has on the local community in addressing health disparities and decreasing the number of residents who live without access to healthy foods.

Title: Impacts of the 2017 Tax Cuts and Jobs Act on New Jersey.

Name: Nazmin Ali

Preceptors: Michael Lahr, Director, Rutgers Economic Advisory Service.

Agency: Rutgers, Economic Advisory Service

Purpose: To determine which socioeconomic groups of people in New Jersey were affected by the State and Local Tax cap and rate changes.

Significance: According to Insider NJ, "New Jersey's middle-class families pay more in taxes as a percent of their income compared to the state's wealthiest residents" (Insidernj.com) due to State and Local Tax deductions. Practically each of the (96%) of the advantages of SALT cap nullification would go to the top quintile (giving a normal tax break of $2,640); 57% would help the main one percent (a cut of $33,100), and 25 percent would help the top 0.1 percent (for a normal tax reduction of almost $145,000). The excess four percent of the advantage of eliminating the cap would go to the middle class (for example center 60%), for a normal yearly tax break of somewhat less than $27 (Brookings.edu).

Method/Approach: The data of different income levels with tax rates from the years 2017 and 2018 were collected from the Internal Revenue Service website to find out the result. The Internal Revenue Service is the nation's tax collection agency that administers the Internal Revenue Code enacted by Congress. Hence, the IRS website was used to find the correct data and information about tax returns in New Jersey. It was useful as there was a downloadable excel sheet with all the numbers. Then the numbers of returns, salaries, and taxes for New Jersey were obtained to make a table to compare between different income levels and taxes paid by the individuals. Other scholarly articles were obtained to gather information on SALT deduction.

Outcomes/Results: According to the IRS report, people who have a higher salary tend to pay more in taxes, and people who have a low income pay less in taxes. However, because of State and Local Tax (SALT) deductions, people with a high income do not pay as much taxes compared to people with low income. "A tax deduction is a provision that reduces taxable income. A standard deduction is a single deduction at a fixed amount. Itemized deductions are popular among higher-income taxpayers who often have significant deductible expenses, such as state/local taxes paid, mortgage interest, and charitable contributions" (Taxfoundation,com). The SALT deduction in New Jersey capped it at $10,000 per year, therefore, the wealthier people benefited from it and it affected the middle-class families.

Evaluation: According to the IRS report from 2017, 42 percent of New Jersey taxpayers itemized their deductions due to having high property values and they benefited from SALT deductions. Therefore, people with a lower income have to pay more in taxes. According to the Tax Policy Center, 95% of taxpayers with an adjusted gross pay (AGI) $500,000 or more itemize; individuals with an AGI somewhere in the range of $30,000 and $50,000 the offer tightens down to 20 percent, and with an AGI under $30,000, it is only 7 percent. Moreover, many low-income families rent rather than owning a property, hence, they do not get the opportunity to deduct taxes. Therefore, it is clear that the SALT deduction has helped the wealthy people in the country.

Title: Implementation of Personal Hygiene and Water Sanitation in Rural Sierra Leone

Name: Nowsheen Ali

Preceptors: Uzma Bawany, Abdulai Swaray

Agency: Thaakat Foundation

Purpose: To assess intervention methods to reduce the spread of infectious disease in rural villages in Sierra Leone with the implementation of proper water sanitation and personal hygiene practices.

Significance: Studies show that 49% of participating households in Sierra Leone have unimproved water sanitation efforts. This directly affects the health of residents of villages in the country by putting people at risk of consuming contaminated water and contracting waterborne disease. Lack of proper sanitation also affects proper practices in personal hygiene. Practices such as handwashing have only seen about a 9.7% improvement rate and lead to greater risks of contracting foodborne and waterborne diseases like typhoid, cholera, and diarrheal diseases.

Method/Approach: Implementing programs by working alongside Thaakat Foundation, which has provided rural areas of Sierra Leone with education, health and medical services for years. Working alongside an organization that has years of experience and knowledge of the people they serve along with Sierra Leonean workers is the most effective way to implement hygiene programs in Sierra Leone. With the help of Thaakat Foundation we can develop hygiene programs that cater to specific populations in rural Sierra Leone and determine water sanitation needs in specific areas.

Outcomes/Results: The desired outcome of these programs would be to mandate hand washing in students of schoolhouses before eating and after using the restroom. Mandating handwashing in children will have to be supervised by teachers to encourage positive personal hygiene habits. Another desired outcome would be to implement programs for women and mothers of villages who lead their household and set examples in their homes. This would be done with the help of health center leaders and nurses, who the women know and trust, in village health centers. The overall desired result of this implementation would be to do a follow-up after a year and then two years and see if there were any significant decreases in the rates of waterborne and foodborne diseases.

Evaluation/Conclusion: We can lead to the conclusion that water sanitation and personal hygiene habits play a significant role in the health outcomes of the rural residents of Sierra Leone. If there is any significant change in rates of diseases like typhoid and diarrhea, which run rampant in rural areas, it can be concluded that the need for water sanitation and hygiene education is a pressing matter in Sierra Leone.

Title: COVID-19 Long Haulers

Name: Vanessa Amankwah

Preceptors: Courtney Tilton: Internship Coordinator

Agency: Saint Peter's University Hospital

Purpose: To use social media COVID-19 "long-hauler" support groups to analyze common long-hauler symptoms, issues they have experienced as a result of navigating the health system, and peer-to-peer support found within these groups.

Significance: The FDA has cautioned that, because test findings aren't always correct, symptoms should be considered when making a diagnosis. Experts have discovered that some patients can suffer symptoms of coronavirus (COVID-19) for weeks or even months after contracting the virus, according to the ever-evolving narrative of coronavirus (COVID-19). Approximately 80% of those who have COVID-19 have a moderate response, which usually goes away in approximately two weeks. According to one study, around 10% of those infected with COVID-19 would have long-term symptoms one, two, or even three months after infection. This category, dubbed "long-haulers" by others, includes those who have had both moderate and severe episodes.

Method/Approach: This project identified long-haulers' collaborative histories in Facebook, Reddit, and other social media posts, and used these channels to examine the common symptoms, experiences with the healthcare system, and the lexicon these groups developed on their own. Also analyzed was the academic studies of long-haulers. Post COVID-19 effects were compared among this population and identified crowd-sourced advice on how to deal with skeptical doctors and other obstacles within the healthcare system.

Outcomes/Results: Nearly 100 COVID-19 long-haul support groups were located on Reddit and Facebook - Survivor Corps, which has over 166,000 members, being one of the largest. Long-haulers claim to benefit from support groups and organizations that help them advocate for improved treatment.

Evaluation/Conclusion: Recently, the long-hauler problem has gotten more attention in the media, and some physicians are starting to see the light, treating patients as "suspected COVID-19." Survivor Corps, an early Facebook community, has grown to over 100,000 members. Long Haul COVID Fighters, for example, are divided into two "rounds" based on how lengthy participants had been symptomatic. For COVID researchers, these support groups might provide a lot of information on a virus that is still being understood (Insider, 2021). While medical professionals agree that support is vital, they also caution against depending too much on peer-to-peer advice. COVID long-haulers should ideally utilize talks in support groups as a springboard for discussions with their doctors.

Title: Skilled Elderly Care Succeeding the COVID-19 Pandemic

Name: Sophia Atienza

Preceptors: Jackie Scacco, Nursing Secretary and Kristan Johnson, STNA

Agency: Legacy Health Services, Pleasant Lake Villa

Purpose: Gain knowledge and specialized skills in order to care for the high-risk, elderly population following the COVID-19 pandemic as a State Tested Nurse Aide.

Significance: On March 11, 2020, the World Health Organization (WHO), declared COVID-19 a global pandemic. This announcement was made due to the alarming levels of spread, severity, and the peoples' inaction (Tedros Adhanom Ghebreyesus, director general of WHO, 2020). The CDC, also later found that older adults who have underlying medical conditions are at the highest risk of experiencing more severe complications from COVID-19 (CDC, 2020). This evidence indicates that Long-Term Care facilities, post-pandemic, are in great need of healthcare workers. At Legacy Health Services, Pleasant Lake Villa, skilled nursing and long term care is provided to over 200 residents, where strict COVID-19 policies are in place in order to protect and improve the quality of life for the vulnerable, elderly population.

Method/Approach: Based on the COVID-19 pandemic guidelines set forth by the Center for Disease Control and Prevention (CDC) and in compliance with Ohio state mandates, the nursing staff created protocols at Pleasant Lake Villa Assisted Care Living Center in order to continue delivering care to residents. When new residents arrived at the facility, they were placed on a 14-day transmission period. When entering these residents' rooms, mandatory personal protective equipment included N-95 face masks, face shields, surgical gloves and gowns to cover clothing. Additionally, residents who were at extreme risk of contracting COVID-19 were transferred to a specialized unit within the facility. These transfers were based on residents' underlying medical conditions as well as age. All staff working on this unit were required to wear full personal protective equipment at all times. Staff members were tested for COVID twice weekly and the residents were tested once. Both residents and staff were also offered the COVID-19 vaccine monthly, which was given within the facility.

Outcomes/Results: Through the time period beginning at the end of June until mid-August, there was only one positive COVID-19 and 0 deaths from COVID complications were reported. This individual, a staff member, was told to quarantine according to CDC guidelines and told not to return to work until the 14-day transmission period was over. No further cases among staff members or residents were reported succeeding the positive result. Quality care was still able to be provided with the use of the personal protective equipment. Daily needs of the residents were still able to be successfully met.

Evaluation/Conclusion: The COVID-19 protocols put in place within the Pleasant Lake Villa yielded a positive result. Within the highly vulnerable community of residents at the facility, there were no contractions of COVID, therefore the protocols were imperative. The use of personal protective equipment significantly aided in the ability to continue helping the residents with daily activities of life. The transmission periods put in place also created a successful way to care for the high-risk, elderly population.

Title: Pursuing Affordable Quality Treatment Initiatives

Name: Nora Badawy

Preceptors: Sandra Rojas, Office Manager

Agency: The Rheumatology Center of New Jersey - Somerville NJ (RCNJ)

Purpose: To employ value-based treatment care for the patients of the Rheumatology Center of New Jersey (RCNJ) by collaborating with pharmaceutical companies, prior authorization and patients throughout the months of June and August of 2021.

Significance: There is an increasingly wide disconnect between healthcare providers and administrators in terms of approaches to operating a healthcare institution or practice. Despite the shared incentive to ensure that safe, valuable care is delivered to patients, the shortfall between the communication of departments has yielded towards the neglect of optimizing value-based treatment. Through the use of strategic planning the institution can identify internal themes, strengths, weaknesses, and opportunities that alter the company's prospects. In addition, such strategic planning is significant to the viability of the organization as it considers measures of quantity. Feedback measures have indicated that the gap in communication between administrators and departments has ultimately affected patient timing by almost two hours, the ability to treat volumes of patients in an appropriate manner due to issues with prior authorization/ insurance has affected the delivery of quality treatments by two weeks.

Method/Approach: Patient surveys were conducted through the patient portal, rating the patience experience with the provider, asking for their wait time upon their visit, their follow up wait, and whether they felt the wait time to receive authorization for their treatment appropriate. From the organizations' perspective, each department was tasked to complete a survey identifying what their level of satisfaction was in terms of being able to complete their daily objectives in a timely manner. They were also asked whether they felt their workload was appropriate, and whether or not they felt that the aid of other departments can enhance the overall performance and delivery of service

Outcomes/Results: The surveys indicated a general theme in poor time management performance, and communication. Each provider signaled the need to space out their appointments between 8AM and 4:30 PM. They also expressed the need to maintain continuous communication with the office staff in terms of scheduling at most 4 new patients a day and limiting the overall amount of patients that must be seen to 36 patients a day. From a patience perspective, 80% of new patience felt like the 2 month wait time was not appropriate for a new patient appointment. However, existing patients felt as if their wait times for appointment were for the most part appropriate, as well as the span in which their approval for treatments done by prior authorization, was completed accordingly.

Evaluation/Conclusion: In reviewing patient quantity, providers at the RCNJ have decided to halt the acceptance of new patients to focus on quality enhancement measures. With that, the office staff was informed on how to schedule patients based on their procedures and follow-up windows, in order to optimize the delivery of care. The reduction in patients has also allowed a decrease in wait times for existing patients. In addition, departments were able to swiftly coordinate patient care with insurance companies without being overwhelmed by the volumes of patients that needed approval for their services.

Title: Clinician Metrics: Influence on a Health Organization's Profits

Name: Christina O. Boateng

Preceptors: Direct Supervisor: Pam Sunlitis, Vice President Human Resources

Agency: Array Behavioral Care

Purpose: To compose a report on all the organization's clinicians concerning various metrics including salary and reason of termination, with the goal being to scale up and continue to achieve the organization's mission of transforming access to quality, timely behavioral health care as well as to allow the organization to better align the profit margin between customers and cost.

Significance: Research explains that profitability (when a company's total income exceeds that of its total expenses) helps businesses to understand whether they are operating effectively or if they are experiencing significant losses (Hofstrand, 2006). Organizations generate profit so that they can cover various expenses ranging from employee wages, rent and equipment expenses, etc.; there is a great risk that a business could fail if money is not being sufficiently generated (Hofstrand, 2006). Another important consideration is how an organization uses its data metrics to consider other factors such as engagement of employees, compensation trends, compliance, etc. Particularly in healthcare settings, physician engagement and satisfaction play a vital role in achieving success. A variety of consequences can ensue if physicians are not engaged such as poor turnover rates which ultimately lead to financial burdens for healthcare organizations (Underdahl et al., 2017). Other areas that can be affected by lack of physician engagement include a threat to patient safety, disruption of the continuity of patient care, and once again, a threat to an institution's profitability (Underdahl et al., 2017). Overall, in understanding these important factors, improved decision-making allows for more efficiency and ultimately allows for organizational growth.

Method/Approach: To compose the report, there was the use of both Microsoft Excel as well as the organization's Human Resource Information System (HRIS). While using the HRIS software over the course of a week, there was an opportunity to access relevant information on both the clinical and administrative staff. From there, data metrics that had been previously established in the software were transferred to an Excel spreadsheet for each of the 334 active clinicians who provide services on behalf of the organization. To allow for meaningful use of the findings, there were specific metrics analyzed to be used for improvement considerations. For example, the reason for employment termination (voluntary or involuntary) revealed a need to address the organization's turnover rates.

Outcomes/Results: The organization's Human Resource department manages metric information related to people analytics and is putting together information for a quarterly reporting presentation for the Board of Directors to examine the health of the organization. In addition, the collected data is going to be used to derive additional turnover metrics for the organization. All in all, the process of retaining and growing the organization's assets is an ongoing process and will continue to be observed over time.

Evaluation/Conclusion: Information was provided for inclusion within the organization's financial metrics to establish more meaningful decision-making to support the organization's overall business venture of increasing profitability and expanding delivery of timely, quality behavioral health care. The success of the project was measured by the improvement of the organization's turnover rates which in turn would reduce turnover costs, thus encouraging profit growth, and improved resource allocation.

Title: Phone Stay Interview Summary

Name: Ursula Botchway

Preceptor: Candice Pietrzak- Talent Management & Development Manager

Agency: Parker

Purpose: To improve employee engagement and retention by learning why employees choose to work at Parker.

Significance: Parker is a not-for-profit organization with a mission "to discover ways to make aging manageable, relatable, and enriching for all of society" and a vision to "make aging part of life". A big key to this mission is the employees who take care of the elders. Without them, Parker would not be what it is today. The employees' play a vital role in ensuring that the residents' needs are met. While ensuring the needs of residents are met, it is important to connect with employees to ensure that they are having a positive experience employed at Parker and addressing any concerns they may be having. The Stay Interview helps gain insight on the current state of a new employee and understand any possible concerns or issues they may be dealing with so they could be properly addressed. Parker wants to ensure employee needs are met properly as well as maintaining a high employee retention so they have enough caregivers to take care of the residents.

Method/Approach: Twenty-five current Parker employees have been interviewed. The employees all work in different locations, as there are facilities located in Monroe, Landing Lane and River Road. Some employees that were interviewed also work in the corporate office. The employees were asked a series of 11 questions, some which asked about their onboarding experience here at Parker, others about their personal experience at Parker when they come to work and if there is anything they would like to change about their position. After the interview, the answers were recorded on a spreadsheet that was shared with my preceptor. From there, we send out summary emails to the employer's supervisor to give them a quick glimpse of what was discussed during the call and if there are any concerns that need to be addressed.

Outcomes/Results: From the results of the 25 stay interviews conducted, the majority of responses were positive. Three questions involved rating their experiences when it comes to training, understanding their responsibilities, and the response they get when asking a supervisor a question. The rating chart went from one to five, one being poor and five being excellent. The average rate of understanding their responsibilities and when asking a supervisor a question were 4.33 and 4.46, falling in the very good average. However, when asked about rating their training, the average rate was a 3.38, falling to a good average.

Evaluation/Conclusion: While most employees have had positive experiences when it comes to understanding their responsibilities and their relationship with their supervisors, there could be some improvements with training. While evaluating the trends by location, the issue with improvement is not location specific. Overall the training process can be improved throughout the whole organization. Training is a key part in increasing employee satisfaction and retention so this data can be helpful with creating new training programs to help better cater to the needs of the employees so they understand their roles and responsibilities at Parker.

Title: Raising Awareness Towards the National Marrow Donor Program

Name: Autumn Byfield

Preceptors: Lauren Hero, Senior Community Engagement Specialist

Agency: The Icla Da Silva Foundation, Inc. A Recruitment Center for Be the Match

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Purpose: To promote the need to diversify the National Marrow Registry in underrepresented communities and create a new data visualization geared toward individuals under between ages 18 and 44.

Significance: Every year, patients suffering from blood related cancers turn to the National Marrow Donor Program when they are unable to match within their family. However, the chances of a patient matching with an unrelated donor through the national registry is between 29% and 79% (Be the Match, 2021). This gap in the chances of a patient matching is largely due to the need to register more individuals from underrepresented minority groups. According to Johansen, K. A., et al., lack of awareness of the National Marrow Donor Program and that donating actually saves lives are huge contributing factors to the low percentage of minority groups registering (Johansen, 2008). The Icla Da Silva Foundation, Inc. works to combat this statistic each year by holding campaigns and fundraising events in diverse communities. With the COVID-19 pandemic significantly hindering the foundation's in-person registration events, there is a need to find new places that will hold these events as restrictions begin to lift. A data visualization that caters towards creating a social media connection with a younger population will prove to be useful in raising awareness earlier.

Method/Approach: Event organizers within diverse communities were contacted via email and phone calls with the request to swab potential donors during the event. At the events, QR codes were used to link individuals to the online registration questionnaire and track the amount of people who swabbed. The results from the online registration forms were recorded onto Be the Match's Full Year Recruitment Report (FY21) and compared with all of the events found by other community engagement specialists. Due to lack of high attendance and a misunderstanding of the organization, certain events resulted in a lower amount of swabs. To combat this problem, a new data visualization was drafted using information from the Be the Match website and statistics.

Outcomes/Results: A total of 15 events were attended from June 5, 2021 to July 31, 2021 under Senior Community Engagement Specialist, Lauren Hero. Out of those 15 events, 187 registration forms were completed and 139 swabs were collected. When reached out to confirm the desire to be a part of the registry, only 55% of participants confirmed. The data visualization will be approved for usage in the Fall in hopes for a younger population to become more aware of the organization.

Evaluation/Conclusion: The lack of approval to participate in certain events could be attributed to the continuation of COVID-19 restrictions within certain businesses. Also, without proof of a high attendance record for new events, acquiring the funding to become a nonprofit vendor became challenging. The most successful events were the ones that already had other charities tied to them. If the organization could find better ways to dispel misinformation about marrow donation within minority populations, more committed potential donors would be possible. The new data visual, which includes a link to the foundation's social media account, could become a more efficient way to provide information faster.

Title: Increase Fill Rate Percentages for Hudson County Cardiology Practice

Name: Rachel Cebula

Preceptors: Bryan Knode; MBA Regional Director of Operations

Agency: RWJBH Medical Group

Purpose: To analyze the current patient scheduling methods at Hudson County Cardiology and implement a new fill rate audit to the practice managers to improve current methods.

Significance: Fill rate methods and utilizations are not widely known and adopted by many managers in the healthcare industry. This results in low efficiency for different practices. Fill Rate can be loosely defined as a performance indicator that measures the level of efficiency and units. The ideal fill rate percentage for any company is 80-85%. The Hudson County Cardiology Practice based out of Jersey City has a current fill rate percentage of only 23%. This is extremely low, compared to other practices that have at least a 60-80% fill rate. Long term effects of a low fill rate result in the loss of overall productivity, long wait-times, stressed staff and patients, and low efficiency. The ideal fill rate schedule for healthcare practices begins with booking patients at an 8am slot through 4pm, and each patient is seen for 15 to 30 minutes based on their condition with the practice.

Method/Approach: A charter was completed along with a DMAIC analysis of the site. Both a current state and future state map were created to analyze the current schedule. The current state revealed that the practice has 2 physicians, 3 total exam rooms, 1 MA check in, and 1 MA check out. All patients are seen for 15 minutes. Questions that were asked to better understand the current schedule were as follows: "Do they schedule every slot?" "Do they botch any slots?" "Do they leave slots open?"
Established patients are to be seen for 15 minutes, while new patients are seen for 30 minutes. Data was collected on the practice and each physician's weekly schedule was analyzed. The data was then validated through RWJ Cerner Data System and relayed back to the practice manager. Fill rate percentages were collected by each provider for the AM and PM sessions.

Outcomes/Results: It was revealed that the practice does not see any patients until 11:45am. RWJ Cerner Data System was accounting for an 8am-4pm session, but Hudson County Cardiology does not fill the morning sessions every day. This was an error that was corrected. All patients are seen for 15 minutes. The two physicians, Dr. Gadhvi and Dr. Grandhi, both see the majority of their patients in the afternoon session from 12pm-4pm, as each doctor rotates between the hospital and HCC. Dr. Gadhvi has the highest fill rate percentage only on Wednesday mornings, at 54%. The lowest percentages were found to be on Mondays and Tuesdays at 17%. His afternoon sessions had the highest percentage on Tuesdays at 66%, and lowest on Wednesdays at 26%. Dr. Grandhi has the highest fill rate percentage on Monday mornings at 64% and the lowest at 21%. The afternoon sessions had the highest percentage on Wednesdays at 49% and the lowest fill rate percentage on Friday at 23%.

Evaluation/Conclusion: After analyzing the current state schedule for Hudson County Cardiology, the team has listed essential tasks that must be completed moving forward. The practice has improved its communication on the new scheduling template and organizing patients into established or new categories. Weekly meetings are held to track progress and book 3-4 more patients during the PM sessions for both doctors. Ongoing progress is still being made and necessary changes will be implemented.

Title:	Opioid Use Trends in Spinal Surgery Patients Following Multimodal Pain Management
Name:	Erin Collett
Preceptors:	Kyala Pascual, Joint Care Coordinator
Agency:	Robert Wood Johnson University Hospital

Purpose: To evaluate opioid use in male and female spinal surgery patients before and after a new multimodal pain management model is implemented into patient care.

Significance: Currently, in the United States, opioid use is a significant problem that has ultimately led to it becoming a serious public health issue. While there are many ways for a person to access and become addicted to opioids, it is common for patients to receive opioids following surgery. Studies have shown that patients who receive opioids after short-stay surgeries have a 44% risk of becoming addicted to opioids long-term (Hah et al., 2017). Data analysis will indicate if multimodal pain management models limit opioid use in postoperative spinal surgery patients.

Method/Approach: A spreadsheet of spinal surgery patients from August 2020 to October 2020 and their information was a primary data resource. Spreadsheets recorded patient age, pre- and postoperative medications prescribed, pain levels, therapy sessions, total opioid dosage, and the order set used. The same data was recorded for spinal surgery patients from December 2020 to February 2021, after the spine department implemented the new multimodal pain management model. A morphine milligram equivalent (MME) calculator converted male and female opioid use to MMEs from both data sets from the data collected.

Outcomes/Results: In the pre-order set sample size cohort (n=61), there were 32 males (52%) and 29 females (48%). In the post-order set sample size cohort (n=53), there were 21 males (40%) and 32 females (60%). Data charts compared average female age, MMEs, pain scores, and therapy sessions on days 1, 2, and 3. In the pre-order set, female patients had an average age of 68, average MMEs of 166.79, average pain score of 2.39, and average therapy sessions on days 1, 2, 3, of 1.76, 1.57, and 1.55, respectively. Females in the post-order set had an average age of 61, average MMEs of 158.75, average pain score of 2.48, and average therapy session days 1, 2, and 3 of 2.15, 1.83, and 1.75, respectively. In the male pre-order set, the average age was 65, average MMEs were 165.56, average pain score of 2.46, and average therapy sessions day 1, 2, and 3, or 1.85, 1.25, and 1.17, respectively. In the male post-order set, the average age was 58, the average MMEs were 167.50, the average pain score was 2.25, and the average therapy sessions on days 1, 2, and 3 were 1.94, 1.33 1.67, respectively.

Evaluation/Conclusion: When evaluating the female pre- and post- order set patients, average age decreased, average MME decreased, average pain scores increased, and average therapy sessions increased. In the male pre- and post-order patients, average age decreased, average MMEs increased, average pain scores decreased, and average therapy sessions increased. When comparing female to male post-order set patients, females had lower MME averages, higher pain scores, and more average therapy sessions than males. Staff compliance and further multimodal pain management model usage should be implemented to a) decrease opioid usage across all patients and b) increase non pharmaceutical pain management methods. The spine department will use ongoing monitoring of multimodal pain management compliance and opioid use to observe staff and patient trends in opioid use.

Title: Plant-Based Diet Assessment on Heart Disease

Name: Puja Contractor

Preceptors: Direct Supervisor: Dave Gemmill, Senior Director in Health Solutions Advisory

Agency: FTI Consulting

Purpose: To analyze the rates of heart disease in vegetarians versus those with a diet that includes meat and propose healthier lifestyle changes to reduce rates of heart disease.

Significance: Diets play a large role in overall health and disease. With heart disease being the number one cause of death in the United States for over 80 years, the findings of this assessment will show how leading a plant-based diet would greatly reduce these rates (CDC, 2005). One study published in the British Medical Journal found that vegetarians had a 22% lower risk of heart disease but a higher risk for stroke (Tong 2019). However, the risk for stroke may not be associated with lifestyle choices or due to lower amounts of B12. This evidence shows that having a plant based diet would help to reduce the risk of heart disease and lower rates of blood pressure, diabetes, and cholesterol. FTI Consulting works as a third party to provide analyses to help clients make decisions and better improve their organization. Often clients want to improve certain aspects of their organization, need a third party perspective, or new ideas on how to solve an issue, and this is where FTI comes in and provides various consulting services.

Method/Approach: The study was conducted from 1987 to 2016 and utilized data from a community-based cohort of middle-aged adults that are at risk for Atherosclerosis, which is a buildup of plaque in the arteries. Study participants had four classified diets including overall plant based diet, pro vegetarian diet, healthy plant based diet, and less healthy plant based diet. The study had included four indexes with a point system that allows for a higher intake of animal food to receive lower scores. The years 1987 to 2016 showed a great length of time had passed to fully understand the effects of diet on heart disease.

Outcomes/Results: The results of the study found that participants with higher index scores in overall plant-based diet index or pro vegetarian diet had a 16%, 31% to 32%, and 18% to 25% lower risk of cardiovascular disease, cardiovascular disease mortality, and all-cause mortality after adjusting for important confounders. Diets that were higher in plant foods and lower in animal foods were also found to have a lower risk of cardiovascular morbidity and mortality in a general population.

Evaluation/Conclusion: This study showed diets with lower amounts of animal foods and higher quantities of plant foods resulted in a lower risk of cardiovascular morbidity and mortality in a general population. My internship focused on various client projects as well as an intern project and training. This study focused on conditions clients can face that impact various aspects of a hospital, one of these aspects being readmission rates. Understanding various patient conditions that have high hospital readmission rates is important in understanding the industry and needs of the client. I chose this topic because I have focused on high readmission rates for part of my internship. I chose this study because it focuses on those at risk for heart disease and is a long period of time which allows the researchers to see the long term effects diet can have on heart disease. This study was also published by a reputable source, the Journal of the American Heart Association.

Title: Standardization Recommendations for Supply Order Management

Name: Keirstin Conyers

Preceptors: Preceptor: Julie Lawson, MS, Executive Director, Ambulatory Care
                   Project Supervisor: Victoria Joseph, MPA, Project Manager

Agency: Robert Wood Johnson Medical School, Ambulatory Care Services

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Purpose: To improve supply order management by recommending a standard process that will save time and money, reduce footsteps, and stress in a healthcare environment.

Significance: With the Covid-19 pandemic being ongoing, managing the demand for supplies needs to be complemented with effective strategies to manage the supply of resources needed to help care for patients. The increase in demand for tests and staff has resulted in shortages of masks and other protective equipment (Bohmer et al., 2020). Family Medicine at Monument Square does not have an adequate supply order management process to track the control and distribution of supplies. Developing a standard supply ordering process will help reduce waste, ensure supply availability, and increase overall quality of care for patients.

Method/Approach: To standardize the management of supplies and processes, a modified Lean Six Sigma approach was utilized. This methodology will help to improve inventory control and the overall flow of operations in Family Medicine. A meeting was held with the Lead MSA, Sandra Hood,to assess the current state of the supply closets and ordering system. Then, a meeting was held with the Chief Nursing Officer, Minnette Markusrodden, to discuss the ideal state. These stakeholder meetings led to the standardization recommendations for the future state of supply order management and storage.
- **Current State**- Establishes a baseline that is used to determine changes that will improve effectiveness and productivity. The supply closets at Family Medicine are disorganized, there is over ordering, and poor inventory control.
- **Ideal State**- Utopia, perfection, no waste, no worries, no limitations. A Pyxis machine will be set in place that will help improve nurse access to supplies, more efficient medication billing and inventory management, and potential reduction in errors. Also, hiring an inventory team to account for the ordering and management of supplies.
- **Future State**- What can be accomplished realistically. A set standard process that Healthcare staff can follow and adhere to on a daily basis. A "Just In Time" ordering template will be used to keep track of the quantity of supplies as well as an indicate when supplies should be ordered.

Outcomes/Results: If there was an unlimited budget, the Pyxis machine would be the best choice. However, the budget does not allow for this. Healthcare Staff will have standardized training that will teach them how to properly order, store, and dispose of expired supplies. Designated staff members will be in charge each week of tracking the supplies in an Excel spreadsheet. As the weeks go by, management will be able to assess the supplies that are ordered the most and should be made a priority. This process will help reduce waste and improve patient care.

Evaluation/Conclusion: Project Manager will pilot this standard process this year at Family Medicine with Clinical Staff. Clinical Staff will be asked their thoughts on the new process and changes will be made accordingly. Central Operations Staff will implement this process throughout the entire medical group once the process is finalized.

Title: Direct Support Professional Performance Assessment

Name: Cianni Cushion

Preceptors: Project Supervisor: Ivan Lopez

Agency: Bancroft Education Program

Purpose: To deliver high quality care and services to individuals with physical, intellectual and developmental disabilities. Providing care and helping individuals with daily life skills and activities, maintaining a healthy lifestyle and increasing independence for the betterment of their lifestyle.

Significance: It is extremely important to understand those who suffer from disabilities. Knowledge is power and education goes a long way in this industry. The more that the people acknowledge, know and understand, the better things will get for these individuals. It is unfortunate that things like discrimination is so common amongst these people. They are not only often mistreated but they are misunderstood and discriminated against daily because of their uniqueness. Although New Jersey is overall good at accommodating and prioritizing the quality of life and wellness for these individuals, they are only one of the few states that are known for this kind of work. Meanwhile, other states do not prioritize this population as much which is again, unfortunate for them because the reality is that they do not have much of a voice. As an advocate for autistic and disabled individuals, I very much understand the importance behind being the voice for these individuals. The first step to success with this is promoting and spreading awareness. There clearly needs to be a different approach that needs to be taken with this matter.

Method/Approach: There is an entire team that was developed and put in place to support these individuals and Bancroft as a whole. This team consists of DSP's (Direct Support Professionals), ABA's, BCBA's, behavioral analysts, case workers/managers, teachers, subs, different therapists, program managers, nurses, healthcare/social workers, HR, etc. This team works together to improve the quality of care offered at Bancroft. It is imperative that everyone included in this team is on the same page at all times. In this business, consistency is key! There are specialists who help with things like diagnosis, data and behavioral plans, necessary medications, etc. Another main objective with this project is to get these individuals to the highest level of independence as possible, if possible.

Outcomes/Results: This project utilizes different techniques i.e., social media and promotional awareness events to enhance the knowledge and information necessary for working with persons with physical, intellectual and developmental disabilities. We see that social media is an extremely effective and necessary tool used to spread awareness on the importance of the disabled and more specifically autistic population. Although this project serves many different purposes, a primary goal behind it is to enhance the organization as well as possibly working on developing other effective organizations such as Bancroft and its educational/adult program.

Evaluation/Conclusion: During this project, towards the end of each event, there will be surveys provided as well as time for honest feedback from the audience to obtain a better understanding of what things are effective as well as what things are ineffective. There is always room for improvement. With that being said, we are always open to suggestions. Again, our main goal is to promote and deliver high quality care and services to our disabled/autistic community.

Title: Utilizing Social Media to Combat Domestic Violence and Sexual Assault

Name: Leah Emmerich

Preceptors: Patricia Cannella

Agency: The Stephanie Nicole Parze Foundation

Purpose: To study, analyze, and educate others on the effects of domestic violence and sexual assault on men, women, and children in the United States.

Significance: It is estimated that in the United States alone, 10 million people a year are affected by domestic violence, and around 40% of women and 20% of men have been victims of sexual assault in their lifetime (Huecker et al. 2021 and Kuadli 2021). Both domestic violence and sexual assault are deeply personal issues, and due to a lack of education on these topics in our schools, these crimes continue to be perpetrated, and victims do not know where to turn, or sometimes, that they are a victim of a crime at all. The Stephanie Nicole Parze Foundation seeks to combat this issue by providing support for those who have been abused, as well as creating educational content for their social media pages, encouraging the public to know the signs of an unhealthy relationship, and where to turn if they find themselves in this situation. Creating infographics for the foundation's Instagram page, as well as educational content for their TikTok account helps the foundation spread awareness of what domestic violence and sexual assault are, and what to do if someone is in need of help.

Method/Approach: In order to educate others on the effects of domestic violence and sexual assault the facts had to be studied and analyzed. Websites such as safehorizon.org, rainn.org, ncadv.org, and thehotline.org, and organizations such as National Center on Domestic and Sexual Violence were utilized a great deal. Their research was easily broken down into tidbits that could be easily relayed in an infographic format. Creating infographics is one of the most effective ways to spread awareness and information on social media. They are easily accessible and shareable by the public.

Outcomes/Results: With the creation of content, the beginning of a recognizable brand with format, background, and font was set into motion. Infographics of this recognizable brand with interactive implications or short, meaningful quotes yield the best results. The Instagram post "Healthy Relationship Bingo" which detailed the "green flags" of a healthy relationship yielded 46 likes, 11 shares, and nine saves. At the time, it performed better than 85% of recent posts. Another post, detailing a statistic about sexual assault, yielded 45 likes, and 35 shares. In contrast, posts that are very involved do not capture the attention of followers and other users. TikToks yielded great results, and when posted on the foundation's Facebook, increased interaction from 100 to 1000 interactions per post. These videos have become the top performing posts since the inception of the foundation's Facebook page.

Evaluation/Conclusion: The project will have been successfully completed if there is a substantial growth in following, as well as a growth in post interaction. An increase in Instagram engagement will indicate that the information displayed in the infographics is being seen, understood, and shared by a wide variety of people. The more people, especially young people, know about the signs of abuse, the more likely they are to seek help and other resources. Seeing as though helping those in need of the correct resources is the goal of the foundation, this increase in engagement will be auspicious to reaching said goal.

Internship Abstract

Title: Significance of Creating a Safe Learning Culture from Incident Reports

Name: Precious Erhunmwuosere

Preceptors: Jack Lameira, Health and Safety Manager

Agency: Public Service Enterprise Group Incorporated - Newark, NJ

Purpose: To create a culture in the workforce where safety is a priority to every employee

Significance: The rate of nonfatal occupational injuries and illness in 2019 among employees who work in private companies was 2.8 cases per 100 full-time workers (U.S Bureau of Labor Statistics, 2020). In PSE&G Customer Operations, the groups of people who are vulnerable to occupational injuries are meter readers and field collectors. Currently, the rate of incidents/accidents in PSE&G Customer Operations is gradually increasing compared to last year. In 2020 Customer Operations had an OSHA free year. However, Customer Operation is still on the path to have a great safety year. The health and safety team in PSE&G Customer Operations has different methods to improve the safety culture due to incidents and MVC accidents among the meter readers and field collectors. Some of these methods are bundle training, driving demonstrations based on the 2021 accidents that were occurring, Level 1 Report analysis, and the continued COVID-19 protocol which include Job Hazard Analysis (JHA), attestation, etc. All these methods will reduce and prevent the occurrence of incidents/accidents among employees.

Method/Approach: The health and safety team trained Customer Operations employees in the field, office and centralized locations on different hazards. These hazards can lead to incidents/accidents when they are unidentifiable by employees in both field and office. Some of these training included Smith System Keys for driving, Slips, Trips, and Falls, hazard communication, poison Ivy identification, dog bite prevention, insect awareness, instruction on how to use Personal Protective Equipment (PPE), and many more. The safety team put together a driving demonstration on intersection driver safety to show how to maneuver through an intersection, who has the right of way, and how to back up safely when parking. Another method was the Level 1 Report which allowed the safety team and supervisors to find the root causes of incidents and avoid future occurrences. Field contacts were done daily by supervisors, safety coordinators, and interns to reinforce the importance of safety procedures and ensure every employee in the field was doing well and had their complete PPE.

Outcomes/Results: Whenever the field employees go through each safety training and driving demonstration with safety coordinators and interns, it enables them to understand the significance of safety in their job responsibilities. It also enables them to know how to use PPE and Situational Awareness, utilize three points of contact to avoid trips, slips, and falls, identify hazards, and use the Smith System Keys when driving, The safety team expects 100% of all field employees to identify hazards and utilize the information from the training and driving demonstrations to avoid such hazards.

Evaluation/Conclusion: The safety team makes sure all Customer Operations employees are trained and understand the training by asking a series of questions at the end of each training session. The safety team tries its best to ensure all Customer Operations employees are safe and return home the same way they came in. The safety team also provides opportunities for any employee to be retrained if necessary. Training is a fundamental piece of the safety culture. Training provides employees the knowledge to properly do their job and instills skills that prevents employees from incurring incidents and injuries
https://www.bls.gov/iif/

Title: Increasing Prior-authorization Approvals by Implementing Recent Guidelines

Name: Timinit Eyob

Preceptors: Sripradha Madhavan, Head of the Prior-Auth Dept

Agency: Atlantic Spine Center

Purpose: To increase medical treatment pre-authorization by ensuring CPT coding and insurance guidelines are applied correctly.

Significance: Prior authorization (PA) is a process that requires a physician to get health plan approval before a health insurer will cover certain treatments, surgeries, or drugs. Procedural coding (CPT) is important for proper submission of claims and provider reimbursement from insurances. Diagnostic coding (ICD) is also critical for demographic assessments and studies of disease prevalence, treatment outcomes and accountability-based reimbursement systems. This is a vital process in the perceptual functioning of any hospital or medical office is medical billing. Understanding physician reimbursement is critically important to the sustained health of any physician's practice. Sandipan and Anita, et al (2018) explains how reimbursement involves more than just what you get paid; it is a long, and often convoluted, process that starts when a patient first contacts your office. Medical billing and coding are considered the backbone of the healthcare revenue cycle that ensures that the healthcare providers are timely compensated for the medical and clinical services they provide to patients

Method/Approach: CPT and ICD codes were updated annually, and it is important for any facility to be updated on these changes. Payer stipulated guidelines for medical necessity determine approval of services and a sound knowledge of these guidelines was essential for precertification. This process improvement would increase the efficiency of the pre-certification department. The precertification dept handles surgeries and injections for Spine related procedures, Procedure and Diagnostic codes were sent out to insurance companies with the necessary medical records to obtain authorization for the procedure that the patient needs. In managed care, PA functions as both a cost-control device and a patient-safety strategy. Medical policy guidelines outline the standard of care and ensure that unnecessary procedures and testing were not prescribed. Compiling the codes and guidelines of different payers for the same procedures would create a reference document for the current users and future trainees of the precertification department.

Outcomes/Results: The outcome consisted of making a comprehensive list of codes and treatment guidelines used in this specialty - in an accessible and easy to understand format compiled in one place, Insurance often denies coverage of services when proper guidelines are not followed. By comparing the medical treatment guidelines across payers, the precertification department had a very clear picture of the pre-requisites for an injection or surgery before requesting prior authorization. This helped in provider education and documentation improvement and ensure a smooth prior authorization process.

Evaluation/Conclusion: Patient satisfaction is an important and commonly used indicator for measuring the quality in health care. Patient satisfaction affects clinical outcomes, patient retention and medical malpractice claims. Timely prior- authorization of medical services provides reassurance to the patients that their medical procedure costs would be covered and are meeting the standards of care for their condition. Prior- authorization also ensures that providers are reimbursed fairly and in a timely manner for their services.

Title: Marketing Assessment to Increase Patient Retainment

Name: Amanda Fernandez

Preceptors: Dr. Ilaxi Rana, Head Physician and Owner of Garden State Eye and Vision

Agency: Garden State Eye and Vision - Parsippany, NJ

Purpose: To analyze the number of patients returning to the office and create an effective marketing plan to maintain patient satisfaction.

Significance: Garden State Eye and Vision is a private Optometry office that provides quality eye care through performing comprehensive eye exams, diagnosing and treating diseases such as glaucoma and cataracts along with pre-and post-operative care for cataracts, glaucoma, and Lasik surgery. In light of the pandemic, many of the office's most critical patients, a largely elderly population, have not returned for their routine exams which raise their risk of blurred vision, undetected eye diseases, and irreversible eye damage (Holland, 2020). Additionally, the reduction of patients has created a major burden on private Optometry offices nationwide. The Health Policy Institute conducted a survey showing, "Three out of four doctors of optometry have personally taken a reduction in income to protect their practice"(2020, p.2). In turn, creating methods to incentivize patients to return for their routine exams and introducing new patients to the office will give financial security to the office while maintaining patient health.

Method/Approach: Reviews of the office's schedule from last year compared to this year were conducted and patient re-occurrence was recorded to provide insight on those who have not returned to the office for routine exams. When patients created appointments, they were prompted to provide how they heard of the office and/or why they decided to make an appointment. Calls and emails were made to patients who have not returned to the office to remind them to make appointments for the future. To analyze the difference in appointments made between 2020 and 2021, a table was created to observe the number of patients seen between June and July from each year respectively. From the appointments made in June and July 2021, another table was created to depict why each patient made an appointment based on the answers received from those who participated in the questionnaire when scheduling their exam. Conjointly, strategies to market the office were brainstormed amongst the staff to bring in new patients and connect with a broader population.

Outcomes/Results: From the beginning of June to August, patient recurrence has increased by 10% weekly. Marketing strategies such as creating pamphlets indicating the purpose and procedures done by the office were designed. Also, contact lens promotional goody bags using the company's logo and contact information were given to first-time lens wearers, and emails and calls were sent to previous clientele to remind them to schedule their next appointment. Resulting from these newly developed outreach efforts, there has been an increase in new patients with an average of three new patients making appointments every week.

Evaluation/Conclusion: Success in these newly implemented marketing tactics will be measured through the documented increase of returning patients in addition to new clientele. This data should be collected on an ongoing monthly basis to ensure the strategies being used are relating to the population it is intended for. In the future, expanding online marketing strategies will be a critical component to reaching a broader clientele.

Title: Communicable Disease Plan & Strategy

Name: Marina Garcia

Preceptors: Elena Morgan, Camp Director

Agency: Girl Scouts of Northern New Jersey: Camp Rickabear

Purpose: To create a Communicable Disease Plan for a children's summer camp containing all the preventative strategies and policies in place in order to prevent the spread of Covid-19 or any other communicable diseases.

Significance: The Covid-19 virus has killed over 604,000 people in the United States since the first case that was found in March of 2020. Measures such as quarantining, social distancing, hand washing, mask-usage were put in place nationally in order to reduce the number of cases. A retrospective national surveillance study found a significant decrease in cases of influenza, enterovirus, and all-cause pneumonia during the COVID-19 pandemic. Wearing masks, hand hygiene, and social distancing may contribute not only to the prevention of COVID-19 but also to the decline of other respiratory infectious diseases (Chiu, N.-C et al, 2020).

Method/Approach: Using guidelines set forth by the Center for Disease Control and Prevention, NJ Department of Health, and the NJ Youth Camp Safety and COVID-19 Standards, a communicable disease plan was able to be created using all the requirements to operate by the state while also providing a safe camp environment for both campers and staff. The goal was to provide the same loving and accepting camp to the community while incorporating safe Covid-19 informational meetings, practicing social distancing and using masks. The new policies put in place by the Girl Scouts of Northern NJ created a shared responsibility for the staff but also the campers' families as both must work together to achieve a Covid-19 free experience. The policies and procedures according to guidance from local, state, and federal health officials were actively followed and updated as deemed necessary. Extra masks were placed in first aid kits carried by all camp counselors along with a bottle of sanitizing spray to carry at all times.

Outcomes/Results: As of August 2nd, one Covid-19 case occurred. The Kinnelon Board of Health was contacted along with the Youth Camp Safety Project immediately. The camper who tested positive along with all the campers in her unit are not able to return to camp until August 8th with a negative test result. All staff that came into contact with the camper and have not been vaccinated must quarantine for ten days as well and return to camp with a negative test result. All staff who have been vaccinated do not need to quarantine but their symptoms will be checked by the nurse regularly. Campers who tested positive will not be returning to camp for the rest of the summer which was decided by the parents.

Evaluation/Conclusion: Although the best of our abilities to control not having any Covid-19 cases in camp were used, it is challenging as there are different kids every week who are constantly making contact with people outside of camp everyday. Fast action was taken on the camp's part in detecting the sick camper and controlling the situation. No other camper or staff has tested positive and for the majority have been able to return to work to camp if vaccinated and no symptoms of Covid-19 are shown. Better communicable-disease-prevention strategies have been put in place such as canceling camp days during rainy days to prevent the crowding of campers and staff inside buildings. Units have been designated outside activities all throughout camp to maintain as much social distancing as possible. All campers and staff are more regularly sanitizing their hands throughout their day at camp.

Title: Robert Wood Johnson University Hospital Safety Ambassador Program

Name: Sthefany Garcia

Preceptors: Allison Mosier - Safety Ambassador Program Coordinator

Agency: Robert Wood Johnson University Hospital

Purpose: To create tools of communication needed to support RWJ's Hospital Violence Intervention Project (HVIP) operations and raise awareness among staff in the hospital.

Significance: According to Centers for Disease Control and Prevention (CDC), annually there are more than 1.6 million nonfatal injuries caused by community violence that require treatment in emergency departments. RWJ created a program called, HVIP, which aids patients from the age of 18-40, who are victims of community violence such as gunshot wound, stabbing, or assault. Individuals that are exposed to violence are more prone to experience a broad range of physical and mental health problems. The prevention of community violence is an important matter because it is prevalent within our communities. Moreover, the disparity of the rate of community violence mainly vary by geographic location, race, and ethnicity. Non-Hispanic blacks and Hispanics are four times more susceptible to be involved in community violence than any other race. As a result, RWJ's HVIP focused on individuals who reside in the counties of Middlesex, Union, and Somerset. HVIP offers case management and advocacy services provided by violence interventions specialist (VIS).

Method/Approach: The HVIP program was formed four months ago, as a result, the goal of this project was to improve communication and raise awareness amongst violence intervention specialists (VIS), HVIP staff, RWJ staff, and clients. Firstly, an infographic was designed to raise awareness amongst the nursing units of the purpose of HVIP and their staff. The infographic included the mission and vision statement, eligibility criteria, services provided, and the violence intervention specialists (VIS) and the licensed social worker (LSW) headshots. Furthermore, a large number of clients are non-English speakers. As a result, a language line card was created which states the language the patient prefers to communicate. Lastly, there was an intense psychological research performed to create wellness texts. The wellness texts were created for the VIS to send when clients need to be motivated through a delicate time.

Outcomes/Results: The infographic provided details and eligibility of the program; thus, the nurses are informed if a patient meets the HVIP criteria. Additionally, the infographic included headshots of the VIS and licensed social worker, therefore the nurses are aware of who to contact in case of a potential client. Furthermore, a language line card was designed to break the language barrier between the clients and nurses/doctors. Non-English-speaking clients request translators through the language line card, as a result they understand their medical diagnosis. Moreover, the wellness texts aided the VIS to motivate their patients through difficult times.

Evaluation/Conclusion: Currently, the impact of the communication tools created can't be measured. Nonetheless, the tools have raised awareness of HVIP in the nursing units. Even further, the language line card has improved communication between non-English speaking clients and nurses/doctors. Lastly, the wellness texts fortified the communication between VIS and their clients. Over the next months, the effectiveness of the infographic will be measured by the number of times nurses reach out to VIS in regards of a potential client.

Title: Reaching Scheduled Appointments at Capacity Post COVID-19

Name: Isabella Getman

Preceptors: Danielle Duffy, Office Coordinator

Agency: Twin Boro Physical Therapy - North Brunswick

Purpose: To increase patients scheduled appointments by 85% per week, ultimately increasing the patient arrival rate to reach the maximum volume of patients seen in the facility.

Significance: The patient arrival rates were low due to COVID-19 and with that followed prescriptions and authorizations not fully being scheduled out and losing visits. Each week, patients were scheduled, but many cancellations occurred due to panic with the virus as well as no shows for miscommunication about appointments times. Last June, the cancellation/no-show rate was at 92%, and overall discharged over 50 cases. The office goals were unable to be met due to the reduction in patient volume. As the office begins to open up, the patient volume begins increasing rapidly and appointment slots become limited. Each week there are approximately 20 initial evaluation appointments scheduled. All patients must fully schedule out for their duration prescribed and authorized in order to continuously meet our weekly arrival rate goal.

Method/Approach: Each day, the patients' not scheduled report of the current week is run in order to gather the information on all patients who need to be contacted to schedule. An increase of patient outreach is implemented, which involves: calling, texting, and/or emailing, to make them aware of their schedule. For patients on hold with authorizations pending, additional phone calls are placed to insurance companies and nurse case managers in order to help speed up the process to get the patient back on the schedule and coming to physical therapy. On Mondays and Tuesdays to begin the week, all the patients' schedules of remaining appointments are to be printed, therefore their awareness increases regarding their appointments. On top of text reminders that are sent out the day before to all active patients, phone calls are placed to those who have a higher rate of no shows or cancellations. This will help increase communication pathways and reduce forgotten appointments.

Outcomes/Results: With 273 active patients currently in the office, we should be scheduling 680 appointments a week within the facility. (273 x 2.5, which is patients seen per hour). The week of July 19th, our office had a 73% arrival rate. After running the report, many of the cancellation reasons were due to a prior conflict or were forgotten. The week of July 26th was aimed towards utilizing our methods of contact in order to help our arrival rate increase to 85%. Patients who were reminded of their appointments in the beginning of the week, had a higher arrival percentage than those who were not. After the first week of August, we hit 85%, which was our goal by utilizing our new methods.

Evaluation/Conclusion: Without continuous open communication with our active patients regarding their appointments, increased no show/cancellation rates within that week's schedule of appointments. Introducing these new methods of communication, patients are less likely to forget/miss their appointments. During the summer, patients are more likely to cancel due to people's personal lives as well as older patients transitioning back to the office for work post COVID-19. By reminding patients frequently, they are more inclined to plan around physical therapy appointments or have more time to reschedule their appointments if there are conflicts. Patient's appreciated the reminders throughout the week and to be scheduled in advance to help them balance their health as well as their personal wellbeing.

Title: Physician Specialist Strategy

Name: Raul Guzman, Student

Preceptors: Direct Supervisor: Annie Steelman, FACHE, Senior Vice President, System Strategy
                     Project Supervisor: Lindsay Kamerman, Senior Analyst, System Strategy

Agency: RWJBarnabas Health

Purpose: To identify gaps in the RWJBH service area that lacks/needs specialty physicians/practices.

Significance: RWJBH is an 11-hospital academic health system with a comprehensive ambulatory and physician network spanning eight counties in New Jersey. Access to care is a strategic priority of the health system, which requires aligning with the correct number and mix of physicians and ensuring that patients access those physicians on time. RWJBH is a relatively new organization resulting from a 2016 merger between the Robert Wood Johnson Health System and Barnabas Health. Hospital mergers and acquisitions (M&As) are increasing at a rapid rate. M&As have become critical means through which hospitals can provide their communities with high-quality, convenient, and cost-effective care. Over the past several years, RWJBH has integrated physician practices from the two legacy systems into a single medical group. In February 2021, RWJBH and Rutgers signed an agreement that integrated the university's Robert Wood Johnson Medical School clinical operations in New Brunswick with RWJBarnabas Health medical group practices. The entities together represent one of the largest integrated health systems in the country. The medical group asked the system strategy team to help them assess their current physician network and identify geographies and specialties where gaps exist. It was a significant undertaking as the eight counties RWJBH serves to include rural, suburban, and urban communities with significantly different populations and ways by which they may access care.

Method/Approach: Data was gathered to assess RWJBH's current physician network, including an inventory of all aligned physicians by specialty and location. Zip codes in the eight-county service area were then assigned a rural, suburban, or urban designation based on demographic intelligence. For each zip code designation, a convenience radius was assigned based on reasonable patient travel times. Geocoding and mapping software was used to display each convenience radii on a map, and the RWJBH physician practices were overlaid to create a visual planning tool. The data was then exported to Microsoft Excel to support the maps from a quantitative perspective. This process was repeated for the top 30 physician specialties, from adult primary care to medical and surgical subspecialists.

Outcomes/Results: This study is unlike any that the team has conducted to date. The supporting data for the geocoding and mapping software required a significant amount of scrubbing. As a result, extra time was allowed to build the new framework to ensure all team members were on board, including those from the medical group. However, the finished product will allow the medical group to recruit additional physicians and fill gaps in coverage, well worth the time spent. Due to increasing competition and confidentiality, the data must remain hidden at this time, but there were significant strides made in finding gaps in the service area.

Evaluation/Conclusion: The system strategy team partners with stakeholders across the health system to understand its market and opportunities from a quantitative and qualitative perspective. This project represented both complex and timely analysis that will aid with the recruitment of physicians over the next several years for the health system to provide patients with access to care in convenient locations.

Title: Marking and Effective Training for New Patient Flow Assessment

Name: Katherine Halicki

Preceptors: Dr. Anatoly Bensianoff, Practice Owner and Andriana V, Office Manager

Agency: Magic Smile Dental- Linden, NJ

Purpose: To promote dental care services to the community in Linden, NJ on social media platforms and create training for effective patient communication.

Significance: During the coronavirus pandemic, dental offices lost a lot of patients due to the lockdown. "The outbreak of coronavirus disease 2019 (COVID-19) effectively shut down approximately 198,000 active dentists and dental specialists in the USA," (2020). Once dental offices were allowed to reopen to perform all dental procedures it became difficult to fill schedules and effectively communicate about the importance of patient's oral care. Magic Smile Dental focused on getting patients back in for their routine cleanings. As a Junior Office Manager position, projects will include enhancing marketing and the training program for effective patient communication. The projects will use different strategies to increase new patient flow in the dental office.

Method/Approach: Multiple marketing strategies were created to advertise in-office promotions to acquire an increase in the number of new patients coming into the office as well as a new administrative guideline booklet was created to help train the front receptionist position to access stronger patient communication. Social media platforms were enhanced to professional business accounts to advertise in office promotions and new front receptionist guidelines were created to enhance the importance of patient communication and getting patients in for the oral care they need. Promotional projects were created to advertise and bring patients in for limited exams, routine cleaning, or specific treatment like Invisalign treatment. Promotions included a $99 new patients special for routine cleanings, a brand new electric toothbrush if a patient leaves a Google review, and an Invisalign day which includes $700 off Invisalign treatment. Digital posters were created to post on multiple platforms daily as well as emails were sent to all existing patients. The statistics of the number of new patients from month to month was accessed to determine if the new marketing strategies and administrative guidelines were effective.

Outcomes/Results: During the period of the internship, the number of new patients had an increase due to the effectiveness of the marketing and promotional advertisements. From the month of June to July the number of new patients increased from 80 new patients to 99 new patients. The new administrative guidelines for the front receptionist position trained the position to enhance patient communication. Enhancing patient communication has shown more patients signing up for treatment and coming back in the next week or two to finish their treatment completely. With more patients signing up for treatment, revenue has gone up and the office has met their monthly income goal.

Evaluation/Conclusion: An increase of 19 new patients was executed in only one period. The statistics of new patients coming in will be evaluated from month to month to ensure the marketing strategies being used are effective. The effectiveness of the new administrative guidelines for the front receptionist position will be evaluated with the Google reviews asked of patients to enter in a raffle for the electric toothbrush. The projects should be relooked at if new patient statistics are decreasing and negative Google reviews are being written about staff and patient communication.

Title: The Original Graduate Medical Education Organizational Chart

Name: Alexus Hawkins

Preceptors: Lisa Laphan-Morad, Vice President Education & Research

Agency: Cooper Hospital

Purpose: To model an organizational chart which represents Cooper Hospital's GME research infrastructure, and how it connects to the senior leadership team and the CEO.

Significance: Every organizational chart should provide clarity and a clear picture of the structure that hospital operations require and depend on to be successful (Lee, 2019). In hospital settings, grants, drug devices and other scholar research activities are applied for from different companies either through sponsors, the government (local, state, or federal) or foundations. In return, these trials are held at Cooper's site to test the drug, device or intervention, or collect data. These companies, the Food and Drug Administration, or the Office of Population Affairs, audit the organizational chart to understand how the structure within their group works internally and if Cooper Hospital is worth partnering with as part of the application process.

Method/Approach: A detailed email was sent out to the entire GME and research institute leadership teams describing the model being created, asking for their cooperation in providing every staff member in their department to be placed on the chart. Once all staff members were delivered, the process of generating the organizational chart was efficient through a software company known as Pingboard. The chart starts off with the Chief Physician Executive at the top and branches out to the team that works under him.

Outcomes/Results: Over a period of two days, 42 of Cooper Hospital's entire GME and research institute staff's name, phone number, email, position, and photo were retrieved and distributed into the chart. The final outcome of the chart consisted of a diagram that visually conveys Cooper's GME and research institute departments internal structure by detailing the roles, responsibilities, and relationships between individuals under Lisa Laphan. She is represented as the main chain of command, and each one of her staff who reports to her along with their personal team who reports to them.

Evaluation/Conclusion: The GME and research institute organizational chart is the first version of its kind to be developed. at Cooper Hospital for this specific department. This will be used for years to come for obtaining various grants that will help subsidize various research projects. Along with serving Cooper's mission statement "*To serve, to heal, to educate*" this organizational chart will produce other charts just as similar throughout the hospital to serve to protect the patient by assigning increasing decision-making authority on the basis of training.

Title: Healthy Families: Campaign to Promote Healthy Nutritional Practices and Physical Activity to Families in Middlesex County

Name: Naomi Hiraldo

Preceptors: Direct Supervisor: Christina Armstrong, Site Director
Project Supervisor: Marissa Vargas, Volunteer & Community Partnership Coordinator

Agency: Greenway Family Success Center

Purpose: To educate families in Middlesex County on healthy nutritional practices and regular physical activity.

Significance: The COVID-19 pandemic has aggravated economic hardship and food insecurity. Maintaining a healthy lifestyle has become even more difficult, with recreational activities being suspended and school being offered in a hybrid or remote format. Children might not have access to school breakfasts and lunches and parents may have to rely on cheaper, processed foods to feed their families. Food insecurity is a serious issue that can lead to disordered eating, hunger, and the consumption of unhealthy foods. Throughout the pandemic, the agency has created programming related to nutrition as well as a series of programs that highlight different types of physical activity. This social media campaign was developed to further educate the community we serve and to refer them to local food pantries.

Method/Approach: This project is being conducted on the social media platforms, Facebook and Instagram. Over the course of 4 weeks, 3 posts per week are uploaded to Greenway Family Success Center's social media accounts during the social media campaign. Every week, different topics are presented, encouraging families to exercise and cook healthy recipes together. This information is presented on colorful flyers with vocabulary that the general public can understand. Specific topics covered include nutrition recommendations, health conditions related to poor nutrition, statistics regarding nutrition in the United States and New Jersey, and a jump rope exercise challenge for the month of August. Additionally, information is provided targeting families experiencing food insecurity, directing them to local food pantries.

Outcomes/Results: There were 12 posts made for this social media campaign. Although engagement on the posts ranged between 1 to 7 likes, viewer count has increased. The first post had a total 55 views, whereas the last post had 120 views. Therefore, engagement with campaign posts is on par with average engagement for the Center's social media pages. Our goal was to educate our followers and the community we serve on the importance of nutrition and exercise, citing accurate and peer-reviewed sources.

Evaluation/Conclusion: An appropriate way to measure the success of this project would be through focus groups. Focus groups can include community members, such as the Parent Advisory Council, who can provide feedback on our social media campaign. Also, pre- and post-tests can help determine which topics are important to our audience and if we executed our delivery successfully. Center members include parents who are busy with work and familial responsibilities, therefore this must be taken into account when assembling a focus group and/or creating pre- and post-tests. A year should be enough time to measure the success of this project to allow ample time for parents to participate in providing feedback.

Title: Social Media as a Preventative Measure Against IPV in Young Adults

Name: Caitlin Ibale

Preceptors: Alexandra Boscolo, Communications and Development Coordinator

Agency: Day One, New York City, NY

Purpose: To increase social media presence and interaction among the target demographic (young people ages 16-25) in order to educate and share resources to stop domestic and intimate partner violence.

Significance: 1n the United States, 11% of students who were dating experienced physical or sexual dating violence. Among those who have experienced rape or other forms of intimate partner violence such as stalking or physical violence, 22.4% of female survivors and 15.0% of male survivors reported that they experienced this type of abuse for the first time between the ages of 11 and 17 years. An additional 47.1% of female survivors and 38.6% of male survivors report that they experienced intimate partner violence for the first time between the ages of 18 and 24 years (Niolon et al., 2017). Day One aims to educate and prevent domestic and dating violence, especially among young people (ages 16-25) who are often the most vulnerable to unhealthy relationships. By interacting with the target audience via social media presence (Facebook, Twitter and Instagram), Day One aims to promote healthy relationship habits and share resources available for young people going through intimate partner violence.

Method/Approach: Day One utilized a variety of social media platforms including Facebook, Twitter, Instagram and TikTok to engage with their audience worldwide. Different platforms were used to showcase different aspects of domestic violence prevention. Facebook was used mainly to share news articles related to IPV/DV awareness and survivor stories. Twitter and Instagram were meant to generate interaction with younger audiences through a less formal approach- sharing content such as TikTok videos and infographics highlighting abuse prevention and education. Daily posts on all accounts ensured activity and audience engagement (sharing, reposts, comments or likes) remained consistent.

Outcomes/Results: Outcomes were measured by analytics provided by Facebook and Later.com. Over the course of six months, Instagram following and interaction generally improved with the addition of 106 new followers at a 3.78% growth rate. Of these followers, roughly 47.9% were 25-34 years old. The next most active group were those 35-44 years of age (24.93% of the audience), followed by 18-24 years olds making up only 13.39% of the audience. Recent posts were among the most successful to date, with over 1,000 interactions within the first week of posting. Facebook interaction suffered slightly within the last month, with post engagements, post reach and page views down 57% compared to the previous month.

Evaluation/Conclusion: Though performance suffered slightly towards the end of this period, Day One succeeded in continuing to build and interact with its audience. Youth-centered content such as reposted TikTok videos and aesthetically pleasing infographics generated a significant increase in audience interaction, especially on Instagram. Despite increased follower engagement, improvement is still needed to reach younger audiences, as they are Day One's target demographic. As Day One grows and continues to provide resources and education for those going through DV or IPV, this project must be revisited in order to ensure that a social media presence is effective in conveying their message.

Title: Call for Education in West Africa (focus on rural Sierra Leone)

Name: Oluchukwu L. Ibe

Preceptors: Uzma Bawany (Founder), Abdulai Swaray

Agency: Thaakat Foundation

Purpose: To assess the high demand for education in rural African communities, like Sierra Leone, and propose several education interventions that can aid in the overall increase of major exam successes.

Significance: Studies have shown that the fail rate of the nationwide WASSCE exam in African countries is at a steady increase. In West Africa, the number of students that fail the nationwide WAEC or WASSCE examination (West African Senior School Certificate Examination) increases by an increment of about 5% after each year. A report by *PunchNG Newspapers* mentioned how since 2019, about 80-83% of students who take the exam usually fail. That percentage is much too high, and it's mainly due to the lack of support for the students. Addressing this issue is the first step, but the hope is to design effective interventions that can impart a real change on the student's learning abilities as well as their exam performance.

Method/Approach: Through working closely with student representatives (through group discussions in Sierra Leone who are getting ready to undergo rigorous studies for their upcoming WASSCE, and comparatively studying the statistics displayed in scholarly articles, journals, and other informative sources, this report will aim to compile reasonable measures that can be taken to help the growing fail rate of exam takers.

Outcomes/Results: Current results still suggest an incremental increase in failure rates, however, results are still pending…This year's WASSCE will occur from Monday, August 16th to Friday, October 8th, 2021. The true test of the proposed interventions will be the statistics of the exam's passes/fails, and the close watch of the select student(s)' exam scores. A pass or a decent score is all that can be strived for currently, as the different approaches to educational support are enforced and tested.

Evaluation/Conclusion: So far, there are several factors that come into play when determining why the West African students are failing (no government help, misinformed lecturers, poor reading habits, lack of proper tools and materials, avoidable and unavoidable distractions, etc.), some without immediate remedies, but the research and efforts will continue. It is understood that these things can't be changed overnight, they take time.

Title: To Improve Services in Supply Management

Name: Michell Izaguirre

Preceptors: Victoria Joseph, MPA, PMP, CHES (Project Manager)

Agency: Rutgers Robert Wood Johnson Medical School: Ambulatory Care Services

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Purpose: To standardize and improve services in Supply Management. Family Medicine at Robert Wood Johnson has lacked efficiency and control in the Supply Management Department.

Significance: The significance is to make a recommendation that is not only cost effective but ensures quality of care. A system that can be used long term to manage and save time. To improve patient safety and the distribution of medical supplies by reviewing and disposing expired supplies. Healthcare organizations that do not have the proper techniques for inventory management, can increase mistakes, which can lead to over ordering of supplies and cost the organization lots of money in the long run. "In hospitals, operational failures— missing information, supplies, or equipment necessary to complete one's work tasks—can erode staff efficiency and contribute to staff burnout and medical errors. This can also have an impact on the quality of patient care. (Perm J. et al., 2014).

Method/Approach: To standardize the management of supplies and improve processes, a Lean Six Sigma methodology was used for this project. A modified Lean Sigma tool can help reduce waste and improve the supply management workflow of medical supplies in Family Medicine. This process improvement tool helped analyze the current, ideal, and future state.
- **Current state:** Supply rooms were disorganized, over ordering of supplies, no control of inventory.
- **Ideal state:** Ideas were shared with the team to improve the control of supplies. Recommendations included an electronic system such as Pyxis to help organize and update supplies. More staff was hired for the management of supplies.
- **Future state:** Due to budget limitations the realistic goal was to create a standardized ordering sheet which included a "just in time" ordering of supplies, a standard supply closet design, and designated dates for ordering.

The staff can now have a better understanding of what comes in and out of the storage rooms, and better tracking of each supply that is being distributed which reduce mistakes and over ordering of medical supplies.

Outcomes/Results: Once the project was approved by the project manager, the process was piloted into Supply Management to reduce waste and improve services. Other departments in the medical group can benefit from this implementation. Staff was able to focus on other important things that would help improve services between staff and patients.

Evaluation/Conclusion: Once the project is implemented by the project manager, nursing officer and other leaders of the department, the system should standardize the management of supplies throughout the medical group. This will help staff with time management and prevent medical mistakes, improve the quality of patient care and save the organization money long term.

Title: An Evaluation of Best Practices for Distributing Social Benefit Surveys in Saint Peter's Family Health Center

Name: Danielle M. Jean-Bart

Preceptors: Patricia Richards, Director of Value-Based Initiatives

Agency: Saint Peter's University Hospital

Purpose: To identify the ideal location in Saint Peter's Family Health Center to administer surveys that would connect patients to benefit programs and cash assistance.

Significance: This study's primary emphasis is on individuals and families currently having or qualifying for Medicaid/Managed Medicaid health insurance. "Another barrier to understanding the effects of social factors on health is the difficulty of obtaining information across multiple sectors" (Braveman & Gottlieb, 2014). This program will help inform patients of their eligibility to receive these benefits and provide resources and support to complete the application process. Saint Peter's Healthcare System in New Brunswick, NJ, has partnered with Benefit Kitchen to adapt their screening platform and implement a 12-week program to collect and track benefit eligibility for patients seen at the Saint Peter's Healthcare System Adult Family Health Center.

Method/Approach: This study was conducted by visiting the health facility periodically to perform surveys. Surveys were approximately 15-20 minutes in duration. Site assessments observed patient flow in the hallway outside the Resource Services department, and engaged patients as they would leave their appointments. Screenings identified additional government benefits that the patients may be eligible for. It was decided collaborating with the Advisors would be a natural fit.

Outcomes/Results: During the site visit, there was meager patient traffic through Resource Services (less than 20 people per day). Approximately 85% of patients spoken to indicated they did not have time to take a survey right now. Language barriers and time constraints were identified as key obstacles to collecting and completing patient surveys. Motivation to take a voluntary survey was low. These factors, and the low success related to Saint Peter's contracting a call center with bilingual call representatives and hiring a bilingual consultant to conduct telephonic and in-person screenings.

Evaluation/Conclusion: Because of issues on-site, it was determined by the program director that the table in the main hallway of the Family Health Center was not an effective location to distribute the survey to patients. It was confirmed that due to the lack of patient participants, a new strategy will be needed. It is essential to find a method that will yield a greater number of survey respondents. The larger the data sample that can be collected, the more beneficial and accurate the results will be to improving operations and services for patients based on their feedback. Utilizing the call center, hiring bilingual staff, and implementing online screenings with text and email accessibility, the project will be more likely to succeed.

Title: Projection for Future Cancer Institute of New Jersey

Name: Nicole Kenny

Preceptors: Kyle Coble, Project Manager, Perioperative Services
Dustin Connelly, Director, Perioperative Services

Agency: Robert Wood Johnson University Hospital

Purpose: To analyze various data and utilize it to project volume and utilization five years forward when the Cancer Institute of New Jersey will be open.

Significance: Robert Wood Johnson University Hospital continues to grow every year. If the current growth rate continues, the operating room will be incapable of accommodating the influx of volume in its pre-existing location. Rutgers Medical School is seeking their own space to operate, because they foresee needing their own space and want to accommodate themselves without straining the main operating room at RWJUH. Gauging the need for the development of a new facility, and how many operating rooms will need to be put in place, this is a necessary step to prepare for the anticipated increase in operative cases. Analyzing the current statistics, as a means to prognosticate eventual spatial needs, is key to ensuring that the organization can continue to provide the highest quality of care to its community.

Method/Approach: A 2021 year to date summary of raw data including volume (9860 cases), surgery duration (1,413,660 minutes) and turnaround time (148,329 minutes) per service, plus much more, was used to project the year's total volume, and then the volume out to 2025, using a growth factor (5%). Finding the average duration per the various services and multiplying that by the volume revealed the number of minutes used to operate on patients. To figure the total number of minutes available for cases, the amount of working days and hours in a year was used. The average turnaround time used throughout January through June was summed, then doubled, to determine a constant turnaround time amount. The utilization percentage is discovered by combining the total minutes used (a) and turnaround time (b) and dividing it by the number of total minutes available (c). This calculation (a+b/c) is used to single out all options including all operating room services, solely the services and surgeons that will be available at the upcoming Cancer Institute, and the main operating room minus the Cancer Institute services and surgeons.

Outcomes/Results: From the data analyzed and calculated, by 2025 utilization will be in a higher range of the goal (88%). There were options for how many operating rooms to place inside the approaching Cancer Institute, and those percentages differ substantially from each other. If CINJ were to have nine operating rooms, the utilization would only be at 53%, however, if there are only six operating rooms, the utilization would be much more worthwhile at 79%. The only change in variables for this calculation was the number of minutes available, which was altered by the amount of possible operating rooms.

Evaluation/Conclusion: Utilization across the various services will be rising significantly (88%), and when split up between facilities, is still on track for success. The main operating room will be receiving more volume than the newer CINJ, although the new facility will grow in volume as the years pass. Six operating rooms will be more justifiable compared to nine operating rooms. The results assisted in determining the future blueprint of the facility. To obtain results even more accurately, at the end of the year the same process can be repeated.

Title: The difference in training procedure and policy for accessioning department

Name: Rabiatu Kodua

Preceptors: Viktoriya Lavereneva: Manager of Operations

Agency: Accureference Medical Laboratory

Purpose: To reduce errors during the processing of specimens and implement a new strategy to increase the effectiveness of the training of specimen processors.

Significance: Sample processing errors can result in delayed patient diagnosis and treatment. Data analysis revealed that Accureference received and processed many dispatched specimens daily. 4.5 errors per 1000 dispatched samples were found in historical data. These samples were returned due to processing errors such as mislabeling, incorrect test entry, incorrect location, unjustified delay, and treating STAT samples as routine samples. Consequently, the choice to begin a quality improvement project to reduce mistakes in the specimen processing department by 30% in six weeks.

Method/Approach: We determined departments' workflows by drawing out the organization's workflows. While the most significant error causes were training and policy compliance, the organization's remaining issues included lack of disciplinary action, work schedules, and supervision. Processing errors were tracked using PDSA cycles (Plan, Do, Study, Act). By assigning mentors to each unskilled staff member in the receiving department's data entering department and teaching them to use the errors they discovered to learn from their mistakes, the proposed intervention aims to help unskilled staff members improve their data entry skills. The primary variable was the number of samples retrieved from the laboratory sections by the processing and receiving departments. Training and feedback that is linked to the sharing and learning of errors, as well as the workflow, is key to a satisfying staff experience.

Outcomes/Results: The project showed a downward trend in errors, with six points in the 14-day post-implementation period; the error reduction was .5 percent lower than the threshold measurement. During this period, 28 errors were found (0.4 percent of the total), while after the intervention, only 14 errors were discovered (0.2 percent of the total). The trend in error occurrence began to drop as this new strategy was implemented.

Evaluation/Conclusion: Staff members were instrumental in making the project happen by identifying the mistakes and giving participants a chance to help resolve them. By doing this, we were able to meet our goal of getting better. Employee workflow monitoring and evaluation is a critical aspect in ensuring compliance with quality assurance procedures. Laboratory service quality, as well as patient safety and efficiency, are goals we have set.

Title: Quality Assurance Modules Promoting Workforce Development in
Public Health Laboratories

Name: Reni Kratky

Preceptors: Mentor: Tiffany Frez, MPH, Program Support Specialist
Project Supervisor: Susan Mikorski, M.Ed., MT(ASCP)SM, Laboratory
Outreach Coordinator

Agency: New Jersey Public Health and Environmental Laboratories (NJ PHEL)

Purpose: To develop and administer the Quality Assurance modules and evaluate the data to support workforce development at the New Jersey Public Health and Environmental Laboratories.

Significance: According to the Centers for Disease Control and Prevention (CDC), "Laboratory Quality Assurance (QA) encompasses a range of activities that enable laboratories to achieve and maintain high levels of accuracy and proficiency despite changes in test methods and the volume of specimens tested." The New Jersey Training Needs Assessment Survey (NJ TNA) was administered in 2020 to measure participant perceived need of specific objectives. Overall, 80% of respondents identified a need for training. Approximately 60% specified a need for full training and 61% to 80% indicated a need for a refresher course. The series of modules will help to address the gap in Quality Assurance knowledge and skills, and to ensure a standardized baseline of training. The "purpose of quality assurance is to give relevant, reliable, [and] timely test results which [are] interpreted correctly," (MT Rahman, 2011).

Method/Approach: In collaboration with subject matter experts (SMEs), PowerPoint presentations were drafted for each of the 14 Quality Assurance (QA) modules. Corresponding pre-tests and post-tests were developed in Microsoft Forms. The QA modules were copy edited for spelling and grammar, style and format. In post-production, audio narration was added to each presentation, which was then converted to video. Utilizing Final Cut Pro video editing software, the presentations were scored with curated background music. Workflow was explored using Microsoft Office 365 applications and YouTube to distribute the multimedia learning experience.

Outcomes/Results: Proficiency in the use of platforms, software and applications was achieved. Transformation of the biosafety and risk assessment module from technical content to multimedia presentation was carried out. A creative post-production approach was emulated to enable an immersive experience. Feedback from SMEs was obtained in support of the creative direction. The need for a Learning Management System for the administration of the modules was a key finding.

Evaluation/Conclusion: Implementation of a Learning Management System would promote efficient delivery. Comparison of the pre-test and post-test scores will indicate whether each module is an effective learning tool. Semi-annual and annual competencies will be used to measure improvement. The number and quality of NCEs (non-conforming events) reported to the QA officer can be used as a measure of improvement, compared monthly and yearly. Pending in-house evaluation, the QA module series could be shared with partners in public health, laboratories, academia, and others. Additional series of modules covering Basic Molecular Methods, Sequencing, and Bioinformatics are slated for development.

Title: Research Intern

Name: Larmour, Katie

Preceptors: Hussain, Sabiha, MD, Associate Professor of Medicine, Division of Pulmonary and Critical Care

Agency: Pulmonary and Critical Care Division, RWJMS - New Brunswick, NJ

Purpose: To analyze the variety and severity of symptoms of patients who are suffering from the long term effects of COVID-19.

Significance: In the past year, COVID-19 has killed over 600,000 people in the United States, with approximately 33.5 million confirmed positive cases. Specifically in New Jersey, there were over one million positive cases, and about 26,000 deaths attributed to the virus (CDC, 2021). The Post-COVID Recovery Program is a clinic that focuses on individuals who tested positive for COVID-19, and are now experiencing long-lasting symptoms such as cognitive delays, rheumatological issues, and other pulmonary issues. This multidisciplinary clinic includes a variety of health professionals such as physicians, nurses, pharmacists, social workers, physical therapists, and nutritionists. Subjects of the study are monitored in various aspects of their lives including their sleep, diet and nutrition, to see if any of these have an effect on their long-lasting symptoms. The clinic takes blood work and other screenings are available to help identify any other unknown issues. This research will highlight potential underlying factors and similarities that patients have and how this is contributing to their symptoms. It could also highlight the social determinants of health and how this has an impact on the severity of COVID-19 symptoms a patient is susceptible to.

Method/Approach: A 2-year follow-up study completed by a multidisciplinary team observed patients who have suffered from long-term symptoms of COVID-19. Tests were taken on each subject including blood work, and other necessary tests such as chest X-rays, CT scans, breathing tests, and where applicable, sleep tests. Data was then collected for each patient and placed into a database. Patients are required to have follow-up appointments 3, 6, 9, and 12 months after their initial appointment to discuss symptoms and any changes. Weekly meetings between research interns and internship preceptor took place to discuss the abstract of this post-COVID study.

Outcomes/Results: After 2-9 months follow up, 85 post-COVID patients ages 21-74 were referred to Neurology for a positive neurocognitive screening. Most were females (68%), and the racial breakdown was White (60%), Hispanic (18%), Black (8%), and Asian (4%). Of the 85 patients, 52 underwent neurocognitive screening, with 23 abnormal and 29 normal neuro scans. Their symptoms included memory loss, headaches, brain fog, new confusion, and numbness. 35% of the abnormal neuro screen patients had abnormal MRI findings, and two of the 28 patients with abnormal MRIs were hospitalized and required oxygen at home.

Evaluation/Conclusion: The neurocognitive impacts COVID-19 has affected the lives of 62% of our patients. This study has revealed that whilst some patients do not suffer from neurocognitive consequences, there was a significant number of patients in our program with abnormal MRI findings. Further studies will be needed to better understand and define the consequences of COVID-19.

Title: Assistance Application Check System

Name: Olivia Lord

Preceptors: Maya Crauderueff, President and Founder

Agency: Maya's Hope Foundation

Purpose: To create an application check system in order to improve the efficiency of the interviews conducted for assistance applicants

Significance: Disadvantaged children in the Philippines often do not have adequate access to health care. 16.6% of the Philippines lives under the poverty line and 64% of Filipino households face food insecurity (Lenahan, 2020). Those living in extreme poverty cannot afford basic essentials like milk and diapers. UNICEF reports that "Apart from high rates of stunting and neonatal deaths, low routine immunization coverage and lack of access to clean water and sanitation facilities also threaten children's survival and development in the Philippines (UNICEF). Maya's Hope works to help these disadvantaged and special-needs children by providing basic needs, lab work, surgeries, and more. To qualify for this help, applicants must fill out an application and be interviewed by the committee. Creating a system that will help ensure applications are correct and accurate will improve the interview process, increase productivity, and help more children in the long-run.

Method/Approach: An application check system was needed as the committee reported that interviews take longer and are harder to follow when the application is inaccurate and changes must be repeatedly made during the interview. The application was initially looked over, and any discrepancies, missing information, questionable/inaccurate data was noted. A preliminary interview was conducted with applicants to address these notes. After further information was gathered, applicants were sent a link to edit their application with all the necessary corrections. After this was completed, the rest of the committee was added to the chat with the final version of the application, so the interview could begin with accurate information.

Outcomes/Results: Application checks are effective in quickly eliminating applicants that don't qualify (e.g. dishonest or financially capable). This decreases wasted time on an interview. The interviews flow more cohesively and take less time when the committee members have a clear picture of an applicant's situation. An accurately filled out application is also necessary to compare renewal applications between months. Application checks allow the final interviews to go faster which allows more applicants to get an interview.

Evaluation/Conclusion: Training another team member on how to complete application checks is a form of evaluation as it will show the longevity of the system and if it will be effective in the long-term. As more team members begin conducting application checks, the process can become more streamlined and improved upon.

Title: Providing an Efficient and Productive Environment for Staff and Patients in a New Private Practice

Name: Louise Montesano

Preceptors: Dr. Iza Boesler

Agency: Fresh Fit Consulting LLC

Purpose: To contribute to continuous improvement, efficiency, safety and growth in a new practice that offers sleep and fatigue management, internal health and bioneuro-feedback services.

Significance: The Center for Disease Control and Prevention states that in New Jersey 37.1% of adults reported sleeping less than seven hours in a twenty four hour period. Not getting enough sleep is associated with an increased risk of chronic disease and conditions such as; diabetes, cardiovascular disease, stroke, obesity and depression, *Centers for Disease Control and Prevention,* 2017. Sufficient sleep is essential for a healthy lifestyle. Patient care, compliance and treatment is the highest priority at FFC Med and by providing a professional and functional work environment it can accommodate proper treatment. The practice is motivated towards understanding the needs of the patients and how to fulfill individual needs.

Method/Approach: In order to improve patient experience and efficiency, the head physician at the practice was consulted to enhance patient compliance, engagement and ways to improve office productivity. Based on areas of inefficiency that were determined, testing logs and daily schedules were created. These logs ensured a smooth flow of operations and provided the staff and physician information which allowed for proper treatment and satisfactory care to the patients. Lastly, a QR scan code was created and displayed giving patients an opportunity to rate their experience.

Outcomes/Results: Through the duration of this internship positive changes were noted from the staff as well as patients. Through the QR scan code method the office was able to receive feedback which included praise from patients who stated Dr. Boesler treated them with compassion, consistency and professionalism. Improvements made within the staff from direction of the Physician were modified as necessary and proved to be a great success at increasing the productivity and workflow.

Evaluation/Conclusion: This project has highlighted the importance of staff involvement and flexibility in order to provide patients with a positive experience. Taking into consideration the needs of the patients and provider is the key to succeeding. It takes team effort, understanding and communication to guarantee that a new business will be prosperous and operative. With increasing volume, Fresh Fit Consulting was able to establish an effective workflow to allow for continuous growth and improvement.

Title: Improving Water Park Safety at Runaway Rapids Waterpark

Name: Samantha Murray

Preceptors: Joseph Mendez, Director of Operations

Agency: Runaway Rapids Waterpark

Purpose: To analyze aspects of Runaway Rapids Waterpark which need improvement and implement the changes necessary to provide a risk-free environment for guests and staff of the facility.

Significance: The fourth most popular recreational activity in the United States of America is swimming. The CDC estimates 36% of Americans between the ages of 7 and 17 years old and 15% of American adults swim an average of six times a year. (CDC, 2021) Yet, more than half of the pools and spas in the United States fall within violation of local environmental health ordinances. In a 2008 study conducted by the CDC, one in eight routine pool inspections conducted in the United States found serious violations which threaten the health and safety of the public. This often results in immediate closure of the facility. (CDC, 2021) This evidence indicates a gap between swimming, a fun recreational activity enjoyed by most Americans, and maintaining a risk-free environment for guests and employees in a Waterpark environment. Evaluating and understanding how to operate a Waterpark will address this gap, improving the comprehensive experience for park guests.

Method: Collaboratively operated with trained and certified pool operator and park supervisor Joseph Mendez. Unanimously preserved an excellent environment and maintained guest satisfaction, specifically when considering water quality and safety standards. Weekly meetings were conducted to review various aspects within the facility which needed to be updated. The recommendations compiled were submitted and assessed conjointly by Joseph Mendez and the owner of Runaway Rapids Waterpark William Gehlhaus. After further examination, specific suggestions were approved to be resolved consequently revamping the environment and equipment which raised guest gratification.

Outcomes: The research yielded information which promoted the safety and stay for guests of Runaway Rapids Waterpark. Park rules and safety regulations were enforced, guests were presented with the proper safety information, and the environment was maintained having managed multiple attractions amongst the park. The water chemistry of each pool was read and tested daily. Periodically measuring the water quality of each pool provided balanced water chemistry for park guests. Fundamentally, the progress executed enhanced the overall experience for guests of Runaway Rapids while above all it advertised business for the historic local waterpark.

Evaluation: The research conducted suggested potential upgrades to Runaway Rapids Waterpark. The proposed improvements were used to enhance the comprehensive environment, subsequently encouraging success for the business. The expectation is to remove the unfortunate stigma associated with injury and illness in the waterpark setting. The park can continue to flourish in the future by testing the water chemistry of each pool and spa more frequently. This may assist in the prevention of sudden closure of the facility.

Title: Improving Education of Holistic Medicine Through Social Media and In-Person Events.

Name: Caroline O'Boyle

Preceptors: Deb Peterson, CEO

Agency: The Wellness Gala

Purpose: To advance education on holistic health and wellness for adults through research and professional guidance.

Significance: Holistic medicine is a form of healing that considers the body as a whole, which includes the mind, body, and spirit. Holistic healing is essentially a combination of traditional medicine and alternative therapy, creating a whole body approach to healthcare. It focuses on the understanding that the physical, mental, and spiritual aspects of oneself all affect overall health, and being unwell in one of these categories can affect the others (Ross, 2009). In addition to traditional medicine, holistic practitioners may recommend evidence based alternative therapies like massage therapy, acupuncture, meditation, etc. They also may recommend clinically proven therapies such as diet and exercise changes or counseling (Ross, 2009). The U.S. healthcare system is one that many citizens are dissatisfied with, and the quality of and access to care has negatively impacted many. In the medical setting, patients present physical symptoms and physicians focus exclusively on the physical diagnosis. But incorporating holistic practices and ideologies will improve the quality of care by assessing all aspects of the patient's healthcare needs.

Method/Approach: The approach began by improving engagement on social media, specifically Instagram. This included finding people interested in holistic health and following other content creators in the field. Polls were posted on the Instagram page that asked what modalities the followers would like to learn about. From there, a quiz was created and posted for the followers to take on the story feature of Instagram, based on what topics had the most votes. For the next event, a pamphlet was created and handed out featuring all the modalities and wellness information that the followers voted for. After the event, an infographic was posted with the same information for the followers who do not attend the events. Later in the week, the same quiz was posted that the followers took before being given the educational material. This was to track how much the followers learned. The quiz contained 15 questions.

Outcomes/Results: There was a big improvement after the followers took the second quiz with a slight increase in the number of people who took it by eight people. The average score for the first quiz was 43 percent and the average for the second quiz was 92 percent.

Evaluation/Conclusion: The results of this method were successful. It was important to see what the followers wanted to know more about so that they would engage with the quizzes and other polls. It was also beneficial to find people that are interested in holistic health because it improved the engagement on the posts and increased the number of guests at events. A limitation to this method was that there was no way to assure that the same exact people would be taking the quiz both times.

Title: Food and Wellness Network

Name: Dominick Panzini

Preceptors: Amanda Johnson - Program Supervisor

Agency: Turning Points for Children

Purpose: To examine holistic individual health while improving the communities: medicinal, lifestyle, and behavioral choices that may affect an individual's health on diabetes.

Significance: Diabetes is something that affects more than 30 million Americans. If not managed properly, diabetes can have serious lasting impacts on a person's health. Diabetes is ranked as the 7th leading cause of death in the United States, so it is essential that people watch and maintain their health. This internship will focus on the health and well-being of individuals in the Philadelphia community by encouraging daily healthy habits through social media platforms. This can range from eating healthy to performing healthy exercises daily, as well as maintaining that lifestyle in the midst of a pandemic. Along with social media posts, my efforts will also contribute to making flyers and posters explaining ways in which to prevent and treat diabetes while still trying to recover from Covid-19.

Method/Approach: Each day, new and informative posts ways in which diabetes can be prevented on the organization's social media page. For example, many posts included methods to help lose weight and maintain control of it. Other posts include following a healthy diet and creating a healthy meal plan in order to reduce the amount of calories an individual eats in a day. Along with that, my posts include encouraging individuals to eat a variety of foods which include whole grains, fruits, and vegetables. Getting regular exercise daily and encouraging people not to smoke are also involved in my posts. Finally, have collaborated with Amanda to create flyers that would go out to the Philadelphia community to spread awareness for diabetes.

Outcomes/Results: Feedback on my posts from people viewing them and commenting on how great of a cause this is. Since this is an offsite internship, it is difficult to actually calculate the amount of actual viewers that see my posts. In annual surveys, an estimated 11.4% of adults in Philadelphia had diabetes in 2017, an increase of more than 50% from 2002. A different survey in 2018 estimated that 14% had diabetes. The increase in diabetes has been driven by an increase in obesity and parallels national trends. The end goal is to decrease trends in obesity exponentially despite recent statistics.

Evaluation/Conclusion: FAWN continues to research new ways in which to improve the health of the community as well as advertise the message of maintaining a healthy lifestyle. As the community continues to repair itself despite the impact COVID-19 has left, it is important for the Philadelphia community to maintain their health and well-being. The statistics determined after one year will determine if the rate in diabetes cases has decreased due to the efforts of improving the community's health.

Title: Refine and Modify Hospital's Engagement Strategies

Name: Divya Patel

Preceptors: Brooke Tippens, Director of Community Affairs

Agency: University Hospital, Newark NJ

Purpose: To improve and diversify the hospital's community engagement strategies in a post-COVID environment by reviewing old processes and tools for engagement, making improvements on those processes, and creating new tools where needed on different social media platforms.

Significance: Communities of color are at higher risk of health and economic problems due to COVID-19. They have higher percentages of people with underlying health issues that make them more prone to health and financial problems than whites. Early data from this pandemic has shown that people of color are more at a disadvantage than white people. In areas all over the USA, Black people made up almost 25% to 50% of the positive COVID tests. (Samantha Artiga et al. 2020) Due to the current pandemic, community engagement has decreased severely due to COVID-19 restrictions so there needs to be different strategies that can be used to engage more people into the hospital as they move into a new Post-COVID environment. This hospital works with communities from North Jersey to help promote healthier lifestyles and underlying health conditions such as diabetes, obesity, high blood pressure, and vaccine hesitancy. This department at the hospital engages the community to come to health related events where they can get screening for different illnesses and get important supplies they need to stay healthy. It is important that the hospital continues to update their engagement strategies to try and help as many people as possible in the North Jersey area. This project will use different marketing and engagement strategies to increase community engagement at the hospital.

Method/Approach: This project is being conducted by redesigning templates for different health and hospital events, updating a mailing list, newsletter, and a redesigned website that would allow for easy access to information about health events that are helping the community. The creation of engaging in person and virtual events with data collection and evaluation of events. The collaboration on the transition of a new department, Volunteer Services, to the team.

Outcomes/Results: The results are part of a larger scope of helping the community. The small projects that have been completed are all part community engagement and are necessary for the core work of this department. The website will also have a calendar available where visitors can see when screenings are or when the next Facebook live informational meeting is. It will also be color-coded to help people that want to volunteer, what events are open for sign up. Hopefully, the end outcome is that people are satisfied with the flyers they receive, are able to navigate the website properly, and like the newsletters that are being set out.

Evaluation/Conclusion: To evaluate the use of the new engagement tools, a satisfaction survey and process evaluation will be used to measure the success of the project. The satisfaction survey would be used for the website and possibly be a pop-up on the site as a way to survey people randomly. The process evaluation will be used for the mailing lists, templates, and newsletter to see if people are satisfied with how information is being sent and used at the hospital. Depending on the surveys' outcome, use that time to make new suggestions that might fix issues people did not like or further improve aspects created to make them better for hospital and visitor use.

Title: Preparing for the Next Pandemic

Name: Nikita Patel

Preceptors: Direct Supervisor: Sharon Criscione, MSN, RN

Agency: Stein Hospice at the Wilf Campus for Senior Living

Purpose: To analyze and discuss the impacts of COVID-19 on Stein Hospice and develop an emergency preparedness plan for the next pandemic.

Significance: Since the start of the COVID-19 pandemic, there have been over 180 million cases of Coronavirus reported globally. Of those cases, about 4 million people have died due to the pandemic. In the United States, there have been 34 million cases and 620,000 deaths (Worldometer, 2021). In addition, this pandemic affected the geriatric community the most and led nursing homes and other facilities to become hotspots for contracting the virus. This evidence indicates a need for better research, preparation, and education to prepare healthcare workers for success when the next pandemic takes place. Since most nursing home populations include elderly or high-risk individuals with underlying diseases, it is essential for facilities like Stein Hospice to have the adequate resources to care for their patients. Consequently, Stein Hospice will develop an emergency preparedness plan so that their facility will be better equipped for the next pandemic.

Method/Approach: Data and information were gathered from all of Stein Hospice's affiliated healthcare facilities concerning COVID-19. The information was assessed for flaws that could be improved for the next pandemic. Relevant research supported an updated plan that should yield better results in detection and containment of an outbreak. An educational presentation was implemented during staff meetings to help workers recognize the flaws and aim to utilize those strategies to be prepared for the next outbreak.

Outcomes/Results: The healthcare professionals working with Stein Hospice were equipped to handle day-to-day changes regarding a patient's health. In the wake of COVID-19 they were not knowledgeable on the skills to recognize and contain an outbreak. In fact, they were faced with major shortages of basic personal protective equipment and other medical supplies. Research indicates that the need for PPE puts workers and patients at risk of contracting and spreading the virus. To continue, lack of testing and an effective reporting system made it difficult to properly track incidence and prevalence of COVID-19. The educational intervention for Stein Hospice nurses helps the team decide what PPE is necessary for the next emergency. In addition, strategies for effective reporting and communication within the staff members were determined and will be utilized from here on out.

Evaluation/Conclusion: : The Center for Disease and Control's Public Health Emergency Preparedness and Response Capabilities Planning Model provides a solid framework to build a preparedness plan. The three stages include assessing the current state, determining strategies and activities, and developing plans. Since the launch of CDC's Public Health Emergency Preparedness and Response Capabilities Planning Model, state, local, tribal, and territorial communities have been able to plan, operationalize, and evaluate their ability to prepare for, respond to, and recover from public health emergencies. This model should serve as a vital framework for Stein Hospice as their community strives to improve their emergency preparedness plan as well.

Title: Reinventing a Facility for the Future (During COVID)

Name: Cindy A. Penafiel

Preceptors: Estefanny Penafiel Regional Director of Admissions

Agency: Atlas Healthcare

Purpose: To promote diversity, equity, and equality as factors that affect patients' susceptibility to COVID-19 in order to better COVID-19 guidelines in nursing homes for all demographics.

Significance: These last two years have been nothing short of challenging. The situations that came with the pandemic made the world have to adapt to stay ahead of the virus. Nursing homes were especially at a higher risk as patients in these facilities not only had a higher chance of contracting COVID-19 but also passing away from it. As stated by the CDC the reason nursing homes account for increased risk is due to the communal nature of nursing homes and the populations of those who reside in them, seniors older than 65 with medical conditions (Center for Disease Control and Prevention [CDC], 2020). Not only is physical health at risk, but mental health was also waning. Through data, COVID-19 disproportionately affects the Black and Hispanic populations living in nursing homes. Nursing homes with a higher resident rate of Blacks and Hispanics not only had an increased risk of death and cases as well (Chidabaram & Nueman, 2020). New policies and regulations are in place. From what we now know, preparedness, resources, guidelines, and community are factors that contribute to counteracting the effects of COVID-19.

Method/Approach: The first step to complete my project is to look into nursing homes where more guidelines were followed and see which patients were more at risk based on the following demographics income, race, and ethnicity. I would compare vaccination rates, COVID-19 cases, and deaths in the facilities and compare them to the national average. Along with the statistical review, informational background from the research collected would show the significance of the project. Review of data and studies helps recognize that diversity, equity, and equality play a role in medical risk in populations.

Outcomes/Results: The project aims to outline guidelines for safety against COVID-19 in the facilities. It showed that the nursing home with a population with a White majority had less staff vaccination rates but more resident vaccination rates compared to the nursing home with an increase in Black and Hispanic patients. Resulting in more resident deaths in the lower-income areas. This means gearing guidelines towards the population in these specific areas in order to better help them understand and trust the leadership in these facilities. It can be seen that mistrust in leadership and science can lead to a decrease in vaccination rates. Meaning education and communication are important and this shows that an increase in diversity, equity, and equality in facilities can lead to changes (increase in vaccination rates among patients/staff and decrease in deaths and case rates).

Evaluation/Conclusion: Guidelines are not one hundred percent preventable; it is a way to stay ahead of the virus. COVID-19 showed people the stark reality of what not being prepared leads to and who was most affected. This can lead to seeing which areas are also in need of more aid. One limitation is nursing homes are need-based and do not always collect data on race and ethnicity on their own. Another issue is that patients come and go regularly, which can complicate data. In regards to improvement, comparing nursing homes from different counties could also show a contrast in inequality.

Title: Educating the Public on Integrative and Holistic Modalities.

Name: Matthew Peterson

Preceptors: Deb Peterson, CEO

Agency: The Wellness Gala

Purpose: To increase the amount of people that sign up for The Wellness Gala's premium content that exposes members to everything health and wellness.

Significance: One of the main goals of The Wellness Gala is to bring more awareness to integrative and alternative medicine. According to the National Institutes of Health (2021), integrative medicine is a safe and effective way to combine standard medical practices with Complementary and Alternative medicine in an effort to appeal to patient preferences when dealing with mental, physical, and spiritual aspects of health. The Wellness Gala's premium content aims to expose members to a variety of holistic modalities. This includes tips from experts, live classes, articles and podcasts, meditations, and access to a directory of practitioners with discounted prices. The premium content educates members and allows them to physically participate so that they can experience the benefits first hand. It is important that people sign up for the content because the organization cannot host large gala events.

Method/Approach: The first step of this method is to analyze the engagement of each post on the social media platforms to get an understanding of which posts perform the best. The analytics tools on Instagram and Facebook helped narrow down which posts brought the most people to The Wellness Gala website. This ultimately determined which posts have been successful in leading people to sign up for the premium content. These posts were selected for reposting and updated accordingly while certain posts were distributed as ads via Facebook (five total). The goal was to find which content had worked in the past and republish it in July in means to create more website traffic and result in more premium content sign ups.

Outcomes/Results: In June of 2021, there were only six new subscribers to The Wellness Gala premium content. The next month after reposting the updated content and running ads, our monthly subscribers more than doubled with 14 new members. Additionally, five ads that were part of July's advertising lead to an average of 53 website visits per ad which was 26 more per ad than the previous 5 ad-campaign.

Evaluation/Conclusion: Redistributing the best content and running ads successfully lead more people to the website and sign up for premium content. It is important that the premium content is being viewed because it showcases everything health, beauty, and wellness that would have been found at a typical Wellness Gala event before the pandemic. A limitation involved with this method is that it is difficult to pinpoint exactly which posts caused a member to sign up.

Title: Improving Social Media Strategy Through use of Insights on Facebook and Instagram

Name: Eleni Petro

Preceptors: Verinda Sood

Agency: The Office of Assemblyman Sterley Stanley

Purpose: To improve the Assemblyman's social media presence on Instagram and Facebook by using insights and engagement information from social media posts to identify interesting posts from community members.

Significance: Social media is a tool used by many politicians use to connect and engage with the constituents in their districts, as well as keep their communities up to date on the various pieces of legislation that they are currently working on trying to get passed. Social media is also a way that politicians can be more transparent with their constituents by being more authentic and honest through social media posts (Tran, Bar-Tur, 2020). Through the expansion of the Assemblyman's social media presence across Instagram and Facebook can help the Assemblyman connect with the constituents of the townships and boroughs in New Jersey's 18th District. Also by using insight and post engagement tools on Instagram and Twitter we can see what kind of posts his followers are interacting and engaging with most. Improving his social media presence can also help the assemblyman in the future when elections come around.

Method/Approach: The social media platforms of Facebook and Instagram were selected because they are the two current most popular social media platforms that the US population uses. Since being elected to the New Jersey State Assembly as a representative for the 18th district, the Assemblyman did not have a very large presence on social media, or use it very much before the recent election. By using the analytic tools that Facebook and Instagram provide their users with we will be able to identify what posts community members find most interesting. These analytic tools will also tell us what kind of posts receive the most engagement.

Outcomes/Results: Throughout the course of the summer the frequency of posts on both Instagram and Facebook greatly increased. On Instagram the number of followers of the Assemblyman's account increased to 177 followers since the frequency of posts has increased. The average number of likes that the Assemblyman's posts received on Instagram was 14.5 likes per post, since the increase in post frequency has occurred. Before the increase in frequency of posts occurred, the average number of likes on Instagram was 12.5 likes per post. On Facebook the number of followers of the Assemblyman's page had increased to 680 followers. In the period of time from when the Assemblyman was sworn in in January to before the frequency of posts was increased the Assemblyman's posts on Facebook received an average of 11.3 likes per post. The number of likes per Facebook post increased to 12.8 after the increase in frequency of posting occurred.

Evaluation/Conclusion: After the increase in post frequency, the average number of likes increased on both Facebook and Instagram. By increasing the frequency of social media posts engagement on the Assemblyman's social media profiles also increased. The frequency of social media posts that has been established will continue throughout the duration of the Assemblyman's time in the New Jersey State Assembly.

Title: Nutritional Performance Indicators

Name: Desiree Pirozzi

Preceptors: Gina Stravic, Executive Director

Agency: Raritan Valley YMCA -East Brunswick, NJ

Purpose: To assess nutritional competency of children in kindergarten up to the fifth grade and promote curriculum to increase the knowledge about positive nutritional habits.

Significance: Each year, more children and adolescents are being diagnosed as clinically obese in the United States than ever before. Childhood obesity has continually reached epidemic levels. Between the years 2017 to 2018, 14.4 million children and adolescents were considered obese (CDC, 2021). When a child is considered obese, they increase their likelihood to experience comorbidity conditions such as hypertension, diabetes, and cardiovascular disease. In a study done, it was found that higher household education was linked to a decrease in the prevalence of childhood obesity (CDC, 2021). This evidence indicates a gap in the comprehension of healthy nutritional habits during childhood. Evidence-based interventions committed to address these gaps will improve the understanding of healthy eating and decrease childhood obesity.

Method/Approach: A series of pre and post-tests were given to students based on the nutritional lesson being presented to children in kindergarten to fifth grade to assess the effectiveness of the material. The nutritional categories were taught throughout the 8-week duration of the internship. Lesson plans about the importance of drinking water, choosing healthy snacks, incorporating fruits and vegetables, and reading food labels were created based on the educational level of the children. The lessons consisted of PowerPoints, videos, and discussions gathered from resources like CATCH, the Centers for Disease Control and Prevention (CDC), and the U.S. Department of Agriculture (USDA) to make the lesson as interactive as possible. Finally, post-tests were completed based on the lessons learned to perceive the level of understanding the children displayed.

Outcomes/Results: Positive results were exhibited by most participants (N=20). A total of eight lesson plans consisting of material on healthy nutritional habits with 5 pre and post-test questions were given. In all, the program generated a 100% success rate. Notably, improvements were shown going from 58% to 100% in knowing why it is healthier and how to choose healthier fruits and vegetables to incorporate throughout the day rather than junk food options and choosing water over any kind of sugary drink.

Evaluation/Conclusion: The results show a positive correlation between the lesson plans created and scores on post-tests. This data shows the effectiveness and need to have nutrition-based lessons for kindergarteners up to those in the fifth grade. When looking at the contrast of the pre and post-test results, it clearly supports the success of the lesson plans presented. However, limitations were faced such as the children losing interest in the lesson quickly, emotional and learning hindrances, and a large ratio of children compared to one instructor. These limitations were overcome with the help of Ms. Stravic, executive director, Ms. Dempsey, camp director, and Ms. Preeti, childcare director who provided tips to make lessons more effective. While this project was successful in educating children on nutrition, other lessons in different settings should take place to see if similar results would occur.

Title: Project Management Execution Intern

Name: Shafali Pradhan

Preceptors: Benjamin Boyden (Senior Project Manager, Supervisor)

Agency: Quest Diagnostics - Secaucus, New Jersey

Purpose: To create project documentation, analyze metrics and audits, and develop a repository for Lessons Learned reports, aimed at improving project efficiency for team members in the IT department of the company.

Significance: Laboratory testing and services will always be a necessary component in the medical field. The Quest Diagnostic team of scientists, experts, physicians, and more work together to upkeep the company as the world's leading provider of disease information services. This makes the company appealing to partners and customers as they "service one in three American adults and half of the physicians and hospitals in the country" (Questdiagnostics.com). Having Project Managers spearhead endeavors for the company is crucial because they create documents that ensure projects are conducted in a structured manner, completed within the timeline, fall into budget, and that all steps are in scope. Ensuring that Project Managers have an intuitive platform to store their documentation and learn from past records is an essential part of making sure that knowledge is easily accessible.

Method/Approach: For each section of the internship, different methods/approaches were used. To develop the Lessons Learned Repository, a group of volunteer Project Managers were gathered to draft and implement ideas. SharePoint was chosen as the platform to proceed with, and as time progressed Lessons Learned documents were uploaded and multiple filters were created. Analyzing metrics and audits took place by shadowing my manager multiple times a week, gaining proficiency, and eventually performing the metrics and audits myself. Creation of a project charter document for one of the Top 20 critical projects in the IT department, meant researching past project charters and building a template based off those documents. As the project team meetings progressed, and one-on-one meetings were held with the project core team for pertinent information, the project charter came to completion. For all aspects of the projects, there was a vast amount of communication that had to occur between teams and managers.

Outcomes/Results: Two deliverables were produced at the end of this internship. The SharePoint page for the Lessons Learned repository is now operative on the company's Project Management Office SharePoint site. It is available for all employees to view and use, with a demonstration video on the page for easy navigation. After finishing edits were made with the current manager for the project, the project charter was completed.

Evaluation/Conclusion: A final presentation was made highlighting vital aspects and outcomes of the internship. All segments gained positive feedback from all members of whom it was presented to, the Project Management Office and IT Leadership. A foundation has been established for the SharePoint that was created and with the Phase II document made with the help of the team, there is much room for additions. The project charter will be handed off to the succeeding execution Project Manager for the project.

Title: Business Grant Program for At-Risk Transgender Individuals in Pakistan

Name: Sadaf Rafi

Preceptors: Irfan Rajput, Director of International Programmes and Policy

Agency: Muslim Charity Helping the Needy

Purpose: To provide business grants, casework, and individualized support to at-risk transgender individuals in Pakistan looking to set up their own small businesses such as food carts, cosmetic services, and more.

Significance: Transgender individuals in Pakistan face societal exclusion and historical discrimination that has led to higher rates of poverty, homelessness, health issues, and more, as is illuminated by many different reports by organizations such as the Human Rights Watch. In the aftermath of Covid-19, transgender individuals' economic marginalization has been exacerbated, as many are left with no income and no means to meet basic living expenses. Muslim Charity Helping the Needy works to economically empower vulnerable transgender individuals by providing small business grants to applicants. This project will allow economically marginalized transgender individuals to become small business-owners and establish a stable income for themselves.

Method/Approach: This project was faced with Covid-19 related obstacles that have hindered its progression. If not for governmental roadblocks put in place as protective measures against Covid-19 transmission, business grants would be rewarded to the program participants in incremental amounts to promote a slow and sustainable business growth. The progress of each small business would be monitored by Muslim Charity representatives as well as representatives from the partnering organization of Gender Interactive Alliance (GIA) to ensure proper attention and support is given to address any challenges that are preventing the success of the small business. Existing obstacles to growth would have been addressed before the grants were rewarded - for example, any medical or student debt of program participants would be paid off by Muslim Charity, any participant suffering symptoms of AIDS or other common diseases within the transgender community would be connected to treatment and medication, and more. Once each small business reaches the stage in which the profits overcome the expenses, the role of Muslim Charity and GIA would minimize in order for the business owners to become self-sufficient.

Outcomes/Results: In the absence of Covid-19 related roadblocks, the outcomes of this project would have been that marginalized transgender individuals in Pakistan would receive the funding to cover start-up costs for their own small businesses. With guidance and resources offered by Muslim Charity and GIA, they would be able to grow their small business to the point of self-sufficiency. This would allow previously dependent and financially struggling transgender individuals to become self-sufficient and economically empowered. This end result would combat increasing rates of poverty among the transgender population in Pakistan, especially in the face of Covid-19.

Evaluation/Conclusion: If the program participants are able to use their own income from their small businesses to meet living expenses, as opposed to using money donated by nonprofits and NGOs, then this would be an indicator of success in increasing economic empowerment and self-sufficiency among the participants. Other potential measures of evaluation could have included internal process evaluations, surveys taken by program participants, and more. The input of participants would help measure the effectivity of the project in increasing the economic capacity of the transgender population in Pakistan.

Title: Direct Support Professional Performance Assessment

Name: Alana Rice

Preceptors: Project Supervisor: Shaniqua Massengill

Agency: Bancroft Neuro-Health

Purpose: To give care to people with physical and or intellectual/developmental disabilities by helping with daily activities, supporting their integration into the community, aiding in increasing their levels of independence, and bringing awareness to their circumstance.

Significance: The unfortunate reality for people living with disabilities is that they face a significantly disproportionate amount of discrimination and adversity because of their differences from others**.** People fear what they do not understand, and people with physical and intellectual disabilities often feel misunderstood. There are few states that genuinely attempt to accommodate the needs of those with disabilities in order to enhance their quality of life. Autism NJ states the prevalence of autism in the country staining New Jersey has the largest rate of Autism standing at 1 in 34 and the nationwide standing at 1 in 54. Awareness is a key role in these stats. There is a need to address specific approaches that can be used all across the US, in order to prove they are just as capable of living long fulfilling lives just as a person without any disabilities.

Method/Approach: Bancroft Neuro-Health provides vital human and health care services and programs for those who need them. Bancroft utilizes a large group of people all working together to optimize function across environments and communities for people with disabilities. Specific practices and steps that are taken daily to make people around the globe more aware are having career and job fairs as well as informational classes and sessions. People were offered the opportunity to tour our campus to get a feel for how adequate life can be for people with disabilities. The website also used social media to display a great amount of information people may have not known before.

Outcomes/Results: This project uses different marketing strategies such as social media campaigns and awareness events to increase the education of kids and adults with developmental disabilities. In an attempt to reach a broader audience as well as states with lower rates, social media pages were used as a platform to enlighten on autism and developmental disability awareness. This project aids to a bigger goal of having places like Bancroft Neuro-Health all across the globe. This project was committed to making sure people with disabilities get the help they need, all while people who don't face these challenges learn how to give the help needed to combat these difficult situations.

Evaluation/Conclusion: The project will conduct surveys at the end of events and campaigns to see if the audience was engaged and if points were valid. It will give the audience the option to explain what could have been better or done differently. It is also welcome to any open reviews in general outside of any survey provided. This project aims to meet every aspect of awareness as well as maintain the wellbeing of people with disabilities and will be looked at for improvement and expansion in order to keep the message alive. Ultimately this can be considered a pillar for what dedication to health and equality looks like for this organization. It strives to make sure any individual with a disability is taken care of and that acknowledgement for their needs are made.

Title: Measuring compliance with Nursing Documentation and reviewing implementation of pre-criteria form

Name: Kaela Richardson

Preceptors: Director of Nursing: Aileene Portalatin
Direct Supervisor: Leslie Stevens, Senior Director of Business Development
Project Supervisor: Martha Estrellado

Agency: Infusion Care Experts, Inc.

Significance: High-quality nursing documentation is critical for providing patient care. Nursing documentation is essential for setting ground rules and fostering an environment where there is clear communication. Proper documentation can help ensure compliance with HIPAA regulations as well as other state and federal laws. Compliance with clinical documentation allows registered nurses to exchange accurate patient care information with other healthcare professionals. To avoid medical errors and ensure patient safety, documentation must be completed at the highest standard (Akhu-Zaheya et al., 2017).

Method/Approach: A pre-criteria form was implemented at the beginning of 2021 following a year of poor documentation compliance and numerous failed visits. Nursing documentation data was collected for the first two quarters of the fiscal year. The nursing documentation observed midline and PICC line services. Once the raw data was collected, it was exported into a spreadsheet and analyzed. For Q1, a total of 75 nursing documentation was collected and analyzed. Then, for Q2, the following fiscal quarter, a total of 49 nursing documentation was collected and analyzed.

Outcomes/Results: The QA reports only reflect documentation for successful requests and procedures. Based on further findings and backlogging, the patient pre-criteria form saved the facility six potential failed visits for Q1 and four potential failed visits for Q2. The pre-criteria also improved operations for the facility as they realized patient trends and who was not a candidate. This method has proven to highlight cost-saving opportunities as failed visits in which a patient is not a candidate for bedside insertion are billed to the contracted facility. As a result of the patient pre-criteria form, Infusion Care Experts were able to identify patients who were not candidates and collaborated with the patient's medical team at the contracted facility.

Evaluation/Conclusion: After reviewing the use of the pre-criteria form, Infusion Care Experts would benefit from the continued application of this document. Implementing the patient pre-criteria form allowed the patient care coordinators at Infusion Care Experts to determine if the patient was a candidate for bedside insertions of PICCs, Midlines, or Peripheral IVs, or whether the requested insertion was appropriate for the intravenous therapy. As a mobile healthcare service firm, Infusion Care Experts heavily relies on collaboration with the nursing staff at their contracted facilities. Implementation of the patient pre-criteria form has directly impacted the process with improved efficiency.

Title: Mental Health Wellness Plan for College Students

Name: Brooke Riedy

Preceptors: Melanie Hay, Director of Sales Operations NY/NJ Market

Agency: Cigna Health and Life Ins. Co.

Purpose: To analyze the effects of mental health disorders on college students and create a comprehensive mental health wellness plan using the solutions Cigna currently offers while incorporating new mental health solutions Cigna should consider offering.

Significance: Nearly one in five U.S. adults live with a mental illness. Any mental illness (AMI) is defined as a mental, behavioral or emotional disorder. Young adults aged 18-25 had the highest prevalence of AMI at 29.4%, compared to adults aged 26-49 at 25.0% and aged 50+ at 14.1%. While the prevalence of AMI was most significant in young adults 18-25, this group was the least likely to receive mental health services (SAMHSA, 2020). There is a gap in mental health resources for college aged students and young adults. Leveraging new, more appealing solutions will help to close this gap and reduce the stigma of receiving help for mental health illnesses.

Method/Approach: Initial research began with studying the impact COVID-19 has had on the mental health of college students and why these students were not receiving the help that they needed. With a clear understanding of the mental health concerns, research began on the solutions currently offered by universities, Cigna, and competitors in the healthcare market. Information was gathered from a multitude of sources including the National Institute of Mental Health, internal Cigna websites, Linked In, and several university websites. Findings were analyzed and summarized into a written report to identify gaps in care.

Outcomes/Results: A comprehensive mental health wellness plan consisting of a wellness coach, lifestyle management plans and mobile apps was developed for universities to offer to their students. Mental health wellness coaches mirror the model of an academic advisor helping students cope with anxiety, depression, substance abuse and other mental health concerns. Students meet with their respective wellness coach at least twice a semester to destigmatize reaching out for help. Students are also guided through Lifestyle Management Plans, promoting overall healthy wellbeing. Downloadable mobile apps are offered for 24/7/365 care. Discrete, private and secure care mitigates the key barriers in seeking mental health help. Cigna's Total Behavioral Health Program saved approximately $227 per member per year in medical costs.

Evaluation/Conclusion: Pre and Post tests will be administered to students in order to evaluate the effectiveness of the comprehensive mental health wellness plan. Each student participating in the program will fill out a questionnaire regarding the status of their overall mental health before utilizing the resources in the comprehensive wellness plan. The post-test will ask the same questions and will be used to compare to the pre-test answers. Based on feedback and comparable answers, the effectiveness of the program will be evaluated.

Title: Colorectal Cancer Screening Recalls Missed During COVID-19 Pandemic

Name: Chrystina Rodriguez

Preceptors: Karina Albuja; Direct Supervisor and Office Manager for Ricardo Rodriguez MD/PA

Agency: Ricardo Rodriguez MD/PA

Purpose: To recall patients who were unable to complete their routine colon cancer surveillance screenings during COVID-19 pandemic and schedule them for their colonoscopy procedures or use the FIT (fecal immunochemical test) to determine if colonoscopy is needed

Significance: Colorectal cancer is the second most common cancer in the United States (Siegel, 2020). With increased screening and early detection with FIT tests and colonoscopies, colon cancer mortality rates decrease significantly. Black Americans and Hispanics are found to have the highest rates of colorectal cancer and have the highest mortality rates due to lack of health insurance, health education, lack of access to adequate health care, and language barriers. This shows how lack of education and access to information increases the risks of colorectal cancers. Recalling patients in these communities to screen during the pandemic is the goal to address these large gaps in colorectal cancer rates.

Method/Approach: A retrospective review by office staff was completed to assess colonoscopy screening rates for male and female patients aged 45-85 years within the COVID-19 pandemic. Data for 2,363 male and female patients were accounted for in a large excel spreadsheet, and of those, about 31% of patients needed their first colon cancer screenings to be done this year, or about 730 patients. Investigative protocol probed clinical notes, surgical procedure reports, pathology reports and addressed several types of results to determine if patients needed colon cancer screening colonoscopy by looking through their previous reports or their age to demonstrate if they had: 1) normal, 2) abnormal: (a) tubular adenomas (benign, potentially precancerous) (b) hyperplastic polyps (benign), villous adenoma (precancerous polyps) and 3) Invasive adenocarcinomas in their colon.

Outcomes/Results: Of the total amount of patients (n=2,363) only 141 or about 6% of patients had normal results on their colonoscopy reports, no polyps were found, which required little to no action to do for follow up other than to repeat a fecal immunochemical test to determine if there are traces of blood in their stool. 18 or less than 2% were found to have invasive adenocarcinomas in their previous pathology reports, and follow ups were requested of these patients according to their suggested time frame which was indicated in their surgical reports. These patients are on high alert to have scheduled colonoscopies and fecal immunochemical tests for prevention of recurrence. About 619 patients or 25% of patients had no previous history of colonoscopy screenings. As for the rest of this sample, most of the patient pool had colon polyps which were removed with a snare during the screening, and were found to be benign, around 60% .

Evaluation/Conclusion: Many patients were not able and had hesitations to complete their colon cancer screenings during the COVID-19 pandemic. However, scheduling and recalling these patients are critical to prevent colon cancer. More than half of the sample, about 60 % (n= 1,401) out of the entire cohort (n=2363) had a history of colon polyps which are known to spontaneously transform to adenocarcinomas. Recalling and scheduling appointments with letter correspondence reminding patients to do their colon cancer screenings will serve as effective strategies to improve chances of prevention of colon cancer.

Title: Family Academic Development

Name: Alberto Ruelas-Giron

Preceptors: Dr. Manuel Jimenez, Director of Developmental and Behavioral Pediatrics Education

Agency: Rutgers, Department of Pediatrics

Purpose: To help children and their families to be better prepared to start their academic career by promoting optimal development and health.

Significance: The Family Literacy Program (FLP) is designed to help Latinx dual language learners who will soon start Kindergarten. The FLP is part of a larger research program that seeks to collect and analyze data that can be used to address inequities in school readiness at the national/international level. Due to barriers, many of Latinx families may not participate in routines like shared reading, which can help succeed in school. These differences contribute to inequities in subsequent health and wellbeing. There are multiple factors but we are focusing on supporting language and literacy development. The program helps introduce children to important language and literacy skills in English and Spanish using health topics. This allows families to discover literacy promoting activities in their daily routines while adding new routines like shared reading that can help their children prepare for school.

Method/Approach: Pediatricians and educators referred children and their families to the program. Flyers were made on English and Spanish to promote the program in the community. The families interested reach out by phone or email and then a call is scheduled to enroll them. The sessions are held virtually via Zoom. Every week uses a health theme (e.g., nutrition, physical activity) and the session starts with a music video, the children introducing themselves and the letters of their name. Afterwards, parents and children are asked about health routines they are able to do during the week like   encouraging healthy meals. Children review words, letters and pronunciation. Once that is done, they are given a music video to make them move and parents are reminded that movement breaks can be a great way to keep kids engaged in learning. Finally, we go over the book of the day, emphasizing letters and words reviewed during the session. At the end of each session, the families are given a set of resources they can use to keep improving their children's development and health.

Outcomes/Results: There are 22 families enrolled in the program. The program is ongoing, however early data suggests the program has reached the intended audience and that there has been good participation. All the participating families identify as Latinx. 83% identify Spanish as their preferred language. Out of all the parents 41% completed high school, 27% have less than eight grade, 23% have an associates and 9% have a bachelor's degree. 78% have attended at least half of the FLP sessions to date. There will be a total of 32 sessions and each family attends one session per week for eight weeks.

Evaluation/Conclusion: The program promotes healthy development of children's brain and physical health to advance children's readiness for school and successful educational attainment. The habits, interactions and advice prepares them to start their academic career. It is ideal to teach children good habits and positive interactions from an early age so they can build on them throughout their life. The current pilot program will inform future research which will test the effectiveness of the program in promoting school readiness and health.

Title: Policy Presentation To Senator Vin Gopal In Order To Pass Bill: A Presentation Regarding The Asbestos Risk and Air Quality Conditions For Students

Name: Rishi Sane

Preceptors: Christy Bruno, Deputy Chief of Staff: Assembly

Agency: Legislative Offices of Senator Vin Gopal and Assembly Members Joann Downey and Eric Houghtaling

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Purpose: The purpose of this project is to address the air conditions and the asbestos that is present in many dorm buildings of universities that receive public funding.

Significance: There are many institutions that regularly expose students to hazards due to asbestos and air quality issues in their living quarters. Air quality is an issue of importance as " the risks to health may be greater due to exposure to air pollution indoors rather than outdoors" (Davis, 2019). The particular reason that dorms are of interest is because "living in a small place and sharing it with others exposes students to increased levels of unwanted airborne substances and common allergens" (Escamilla, 2013). With regards to asbestos "No amount of asbestos exposure is considered safe, and people should always take precaution to avoid inhaling toxic dust" (Asbestos.com, 2021) thus, the postemptive plans set in place are not satisfactory. .

Method/Approach: First, a review was conducted of existing legislatures in the state of New Jersey as well as other surrounding states. Next, legislation surrounding asbestos abatement as well as the qualification for safe conditions were examined. Federal legislature on asbestos was also examined as well as the legislature surrounding airflow. Legislature was then compared to recommended health literature. An estimation of airflow of the rooms as well as potential asbestos exposure was examined at the sample school if the room door was kept shut, as would be expected for security purposes by most students.

Outcomes/Results: It was determined that there was not an adequate air supply in the bathrooms in which there is a lot of moisture. The ventilation of the residential rooms was also determined to be unsatisfactory. Many universities have a system by which they excuse the presence of asbestos in residential areas saying they should not be disturbed and that any disturbances should be reported. The issue with this system is that this is not a precautionary system. This is unacceptable as students should not be at risk of exposure at all. There should also be a very clear effort made by the university to inform students of asbestos risk exposure during the sign up for dormitory buildings. For increased air flow, the windows can be modified to have vent systems installed. Students with pre-existing medical conditions should be placed in the newer housing units with full vent systems installed.

Evaluation/Conclusion: It was determined that both airflow and asbestos controls were not appropriate for safe living conditions for students residing in university housing as the measures taken are not preemptive but are instead damage control. Overall, there is change that needs to be made in order to keep students safe. Public funding can be withheld until the universities put forth appropriate plans to deal with the issues at hand.

Title: Creating Social Media Content on Child Injury Risk Areas for Union County Families

Name: Sabrina Santos

Preceptors: Corinna McElwain, CTRS

Agency: Safe Kids Union County Coalition, NJ

Purpose: To educate Union County families on various risk areas that lead to preventable childhood injuries through social media posts on the Safe Kids Union County Facebook page.

Significance: Preventable injuries are the leading cause of childhood mortality in the United States and globally (Safe Kids Worldwide, n.d.). In 2019, a total of 11,268 children ages <1 to 19 visited the emergency room for unintentional injuries in Union County, NJ (New Jersey State Health Assessment Data, 2021). The prevalence of unintentional childhood injuries leading to hospitalizations in Union County is concerning as these injuries can result in disability or, even worse, mortality. As a result, Safe Kids Union County utilizes its Facebook page to raise awareness on the most prevalent issues affecting the county: car safety, pedestrian safety, water safety, and sports safety. Since parents and caregivers play an important role in childhood injury prevention, creating social media posts for the Safe Kids Union County Facebook page can help to continue raising awareness and addressing gaps in knowledge for Union County families on child injury risks prevalent in this area.

Method/Approach: Safe Kids Worldwide provides coalitions within the United States and globally an editorial calendar that focuses on three injury risk areas to create social media posts around: road safety, home safety, and sports and play safety. The 2021 Safe Kids Worldwide Editorial Calendar was used to plan a minimum of three to four social media posts for each month from August to December for the Safe Kids Union County Facebook page. The social media post captions and attachments created were transferred into an Excel spreadsheet for review and approval by the internship preceptor to post on the Safe Kids Union County Facebook page.

Outcomes/Results: A total of 23 social media posts were created for the Safe Kids Union County Facebook page. The social media posts included 19 original captions and images created on Canva, a graphic design website, along with videos from organizations that raise awareness on injury risk areas with Safe Kids Worldwide. A popular TikTok trend that aims to address questions or misconceptions on any topic within 15 seconds inspired 4 original videos covering concussion safety, hydration safety, child passenger safety, and water safety. Using this popular TikTok trend allows Safe Kids Union County to educate families on safety issues in a short video while attracting more viewers to engage with the content, increasing the overall social media post engagement for the Facebook page.

Evaluation/Conclusion: From July to August, the Safe Kids Union County Facebook page reached 397 people in the community compared to 278 people in the previous period. The increase in reachability demonstrates the effectiveness of social media platforms, as it provides Safe Kids Union County greater access to community members than reaching them individually. Despite the increase in reachability, the Facebook page currently garners few likes, shares, and views. To improve the effectiveness of the Facebook page as an educational tool, Safe Kids Union County can create more engaging posts that incorporate safety tips through original images created on Canva, educational videos inspired by popular TikTok trends, and polls. These methods will result in more viewership and post engagement for the Facebook page while further educating Union County families on childhood injury risks and prevention.

Title: Social Media Campaign Influence

Name: Mar'kiyah Saunders

Preceptors: Plyshette Wiggins, Program Director

Agency: MDA Cancer Center at Cooper University Hospital

Purpose: To use social media campaigns to promote breast cancer screenings to increase responses to the SGMYH (Sister Give Me Your Hand) Breast Cancer Survey and promote breast cancer screening at MDA Cancer Center at Cooper University Hospital.

Significance: About 42,281 women die from breast cancer each year in the United States. In Camden County, the death rate among women decreased by 33% between 2000 and 2018 (CDC, 2021). The Camden County Cancer Screening Project at MDA Cancer Center at Cooper provided free breast cancer screening, awareness, and education outreach to help low-income residents find breast cancer in its early stages. Although screening rates in Camden city have gone up, the mortality rates for African American women with breast cancer were higher than other groups. The social media campaigns, surveys, and toolkits aimed to increase the number of women screened and survey results led to a better understanding of risk factors and barriers to breast cancer screening among African American women.

Method/Approach: Community partners were selected to increase recruitment of survey participants. Flyers were developed and/or modified to recruit African American women, 40 years of age and older to complete the SGMYH Survey. Each community partner was assigned a unique QR code. The QR code directed participants to a google form that collected participant's name, zip code, number and the best time/day to call. Once the QR code was scanned, the participant's name and contact information was exported to the Excel Spreadsheet to be called to complete the survey. The program coordinator and the intern called eligible respondents to complete the survey over the phone. The participants were sent a $20 Walmart gift card after the survey was complete.

Outcomes/Results: In June of 2021, there were 15 surveys completed. As of August 2021 there were over 50 surveys completed and more scheduled to be completed. Social media platforms such as Facebook, Instagram, Twitter, and LinkedIn were used to post breast cancer flyers between June and August. The intern created social media toolkits for each community partner (three AKA sororities and a community-based organization). In each social media toolkit, there were eight flyers with captions. Each group was in charge of posting messages (flyers with captions) for four weeks (two posts each week). The goal for these sororities was to recruit 35 African American women to complete the survey. Although the campaigns and social media posts were ongoing, the partnership with the sororities was more effective in recruiting participants than previously used methods in January 2021 to June 2021.

Evaluation/Conclusion: Social media posts and partnerships with AKA organizations and the community-based organization increased the number of survey participants by more than a half. Once all of the surveys are completed, this information will be used for research to give researchers a better understanding of barriers to breast cancer screening for African American women in the Camden County and Burlington County areas. Social media promotion and campaigns should be used moving forward to gain more participants. Partnerships with sororities or organizations will be helpful in recruiting more participants to complete the survey.

Title: Improving Emergency Department Wait Times and Crowding

Name: Anna Savtchouk

Preceptors: Latoya Stewart, Director of Clinical Operations

Agency: Robert Wood Johnson University Hospital - Somerset, New Jersey

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Purpose: To evaluate overcrowding and long waiting times in the Emergency Department (ED) and assess for a better system to improve patient experience

Significance: Increased Emergency Department (ED) use has caused crowding and overall intolerable conditions. According to research conducted in 2002 by Lewin Group, about 60 percent of hospitals across the United States were running "at" or "over" operating capacity. In 2010, it was found that only 48% of Emergency Departments in the U.S. had admitted patients into inpatient units within 6 hours (Sayah et al., 2014). Multiple cities across the U.S. have reported dramatic increase in ED wait times and ambulance diversions. Long ED waiting has shown to decrease both patient satisfaction and quality outcomes. Not only that, but such overcrowding and "bypass" or "diversions" from the ED can cause serious delays in critical patient care and lead to patient death (Wilson, Siegel & Williams, 2005).

Method/Approach: A system of documenting all admitted patients was created via spreadsheet. This log sheet included admission date, time, ED room number, patient name, sex, age, admitting physician name, diagnosis, bed assignment and the time the patient was booked to the floor and when the patient was on the unit. Over the course of 4 weeks, 25 patient wait times were recorded each day. The patient wait times were calculated by subtracting the time the patient was admitted from the time the patient was moved to the inpatient unit and was physically in the bed assignment. Another log sheet was created to calculate bed turnover rates. At the start of each shift, a bed huddle was held with each inpatient unit charge nurse and/or manager to get the discharge times. Unit clerks then reported back to the bed management office of when patients actually left and when housekeeping had finished cleaning the room.

Outcomes/Results: It was found that once a patient was admitted, it took an average of 2 hours to get a bed assignment due to required COVID-19 testing. After the bed assignment was made, it took an average of 3.5 hours for the patient to get to the bed. The delays were found to be due to an average bed turnover rate of 1.5 hours. At times, bed turnover rates were near 4 hours due to isolation cleaning which involves ultraviolet (UV) disinfection (Tru-D). Increased wait times in the ED and delays in patient transport were mainly due to the delays in bed turnover. The biggest delay in bed turnover was isolation cleaning, however, the bigger problem in slow bed turnover rates was found to be a lack of housekeeping staff which was an average of 2 people to clean about 35-50 beds over the course of an 8-hour shift.

Evaluation/Conclusion: Based on this study, the housekeeping staff shortage needed to be addressed with supervision. Possible solutions could be hiring more housekeeping staff or changing the discharge system to be more efficient. Delays in bed turnover were increasing the ED volume and leading to low patient satisfaction due to long wait times. Some limitations of this study were delays in communication between the units and bed management when patients were discharged because some units did not move patients out of the database in a timely manner.

Title: Intra-communication in medical facilities and physicians

Name: Fahad Sheikh

Preceptors: Raheel Siddiqui

Agency: Professional Counseling, Consulting, & Human Services LLC

Purpose: The develop and create a system that will serve as an interconnected means of communication between all healthcare facilities and individuals that are associated with any kinds of healthcare facilities.

Significance: Many patients and medical facilities encounter disadvantages and lack of quality in healthcare due the simple fact that facilities and physicians do not communicate with one another. This is the main reason the US healthcare system lacks in its quality worldwide. Statistics have shown, time after time, that the US is leading the entire world when it comes to lacking healthcare quality. Studies conducted by JAMA have shown that "nearly 30% of US healthcare spending is considered waste". (Shrank WH, Rogstad TL, Parekh N. Waste in the US HealthCare System: Estimated Costs and Potential for Savings. *JAMA.* 2019;322(15):1501–1509. doi:10.1001/jama.2019.13978). The number may seem nominal, but considering the total usage, the 30% can be nearly a few billion dollars. The importance of the communication would be that resources would stop from being wasted. Medical exams need not be repeated, pertinent medical history is available without any delays and providers are able to treat the patient without any delays. This could ultimately benefit the system with costs, and the patient from developing further illnesses.

Method/Approach: In order to move this method forward, our IT team works closely with physicians in private offices, and larger networks which refer patients to the outpatient settings. Physicians who are amongst the networks are currently able to get all medical records and diagnosis performed by physicians in hospital settings. This network is currently being expanded to be able to support a vast network of hospitals instead of just one. The solution is not to step on any networks toes, but rather relay to them the importance of sharing patient information that would benefit the patient. Due to medical wasting, patients tend to develop other illnesses, which are ultimately avoidable should the systems talk to one another.

Outcomes/Results: Outcomes during the initial implementation of the program proved effectiveness in communication between the patients and the providers. The patients being referred to our facility as an outpatient center were coming in with all pertinent history electronically "with" them. Physicians were able to move forward with their diagnosis and treatment of the patient without having to send or schedule patients for further testing. Not only did this speed up a patient's treatment plan, but rather allowed for the physician to clear the patient quicker than normally expected.

Evaluation/Conclusion: Should this program be rolled out completely, it allows for better communication in between the health networks and the physicians taking care of the patients. No repeated test and diagnosis will need to be made given the fact that results will be uploaded to a portal available to all physicians with the reporting physicians.

Title: Live Well Partner Engagement Project

Name: Sirin Siengsanaoh

Preceptors: Manuel Castañeda, Community Health Director

Agency: New Brunswick Tomorrow - New Brunswick, NJ

Purpose: To develop and implement a plan to collaborate with a non-health partner in order to engage more residents in the community.

Significance: The Live Well - Vivir Bien New Brunswick communications campaign works to increase public awareness of health through the promotion of resources and engagement with partners. Live Well has chosen to engage a non-health partner to encourage residents to seek out programming that promotes education towards healthy living. By collaborating with the New Brunswick Free Public Library, this would help expand outreach and allow for a sense of togetherness within the community as they seek a mutual overall goal of benefiting the community.

Method/Approach: The campaign and library will collaborate to host a mental health month that will align with Live Well's focus areas of health and wellness. The project was sectioned into three stages; planning, engagement and agreement to implement. During the planning stage, it was established that both Live Well and the library created content that focused on the youth. Next, youth-based health related activities were created based on the library's existing programming. Live Well has five different aspects of health and wellness resources that include Eat Well, Move Well, Feel Well, Be Well, and Be Safe that were incorporated into the weekly themes. Themes would represent mindfulness, self-awareness, and active living. The events will include meditation activities, story-time that features different wellness books about self-awareness, and exercises (example: "Just Dance" and Zumba). Content for social media was created in order to invite and encourage the library to participate in this community effort. During the engagement stage, each partner identified which resources would be utilized. Both partners distinguished potential participants from ages 6 to 18. Other community partners were also considered to increase the number of participants and the experience of the audience, whether these events would be hosted in person or virtually. Lastly, the library agreed to a collaboration proposal and the prospects of expanding their reach into health and wellness.

Outcomes/Results: Upon a meeting with the New Brunswick Free Public Library to propose the plan, the library has decided to move forward with the collaboration and agreed on all programming and events that will occur in October 2021.

Evaluation/Conclusion: Live Well has identified that there are community partners that offer health and wellness resources that residents may not have knowledge of. This was a great step forward in initiating partnerships with organizations that do not fall into the Live Well focus areas. However, changes were made as obstacles arose during the planning stage. The programming was originally planned to include daily activities that participants could engage in for only one week, but it was determined that students are more active with their school activities during fall. The library then disclosed that they had completed September programming, causing the project to be considered for October. Additionally, the library's registration for kids and teen programming ranges from zero to ten participants and Live Well will utilize their contacts with student-based organizations to increase participant turnout. As October approaches, Live Well will continue to touch base with the library. Overall, this collaboration will serve as a model as Live Well continues to engage with more non-health partners.

Title: Review of Anemia Management Procedures in Bloodless Medicine Patients

Name: Aleen Takvorian

Preceptor: Dr. Margit Kaufman, Medical Director for Institute of Bloodless Medicine

Agency: Englewood Health

Purpose: To understand how retrospective studies are conducted within a hospital setting in order to improve patient blood management (PBM) in a bloodless medicine facility.

Significance: According to the WHO, anemia affects 24.8% of people globally with some of the highest risk individuals being women and preschool-aged children (2008). Anemia is caused by an iron deficiency and is detected by a low hemoglobin level which is associated with a misconception of not being a severe disease despite the increase in morbidity it poses if left untreated. In effort to effectively manage anemia and to reduce the risks posed by traditional forms of treatment such as blood transfusions, patient blood management (PBM) focuses on a patient-centered approach which utilizes IV iron and preoperative anemia management tactics to maximize clinical outcomes (Frietsch, Shander, Faraoni, & Hardy, 2019). By retrospectively reviewing patient data in relation to hemoglobin levels and corresponding clinical decisions, anemia can be better resolved by use of revised patient blood management protocols.

Method/Approach: A thorough literature review was conducted on both preoperative anemia management in oncological cases and the use of Hemopure- a bovine hemoglobin based alternative anemia treatment for bloodless medicine patients. This research was conducted while waiting for IRB approval and in conjunction with the attainment of a human subjects research certification. The categories for data abstraction were then established in order to organize information relevant to the hypotheses of the studies. Subsequently, data abstraction began but faced many revisions and thus the process was modified and restarted many times.

Outcomes/Results: Due to constant revisions, the two initiatives were left in progress. Study parameters were revised and data abstraction is being continued. Weekly meetings with the leading physicians on both studies showed the need for the work to be continued and the compiled data was handed off strategically.

Evaluation/Conclusion: Although the data analysis is still ongoing, the data which has been abstracted thus far is trending in a direction which warrants a more stringent anemia management protocol to be followed. Based on the evidence, various recommendations were made as to which categories needed more data. Extensive progress meetings and brainstorming sessions allowed for revisions to be made to the data collection categories allowing for a more organized and detail oriented infrastructure. This will allow for publication following a thorough continuation of data abstraction and subsequent analysis. By contributing to a multidisciplinary research team and deriving ethics compliance within project involvement, the ongoing research effort towards the two projects will lend itself to better anemia management and the overall mitigation of associated risks which blood transfusions present.

Title: Network Contracting Analyst

Name: Waleed Tariq

Preceptors: Shayla Gillis, Associate Director

Agency: UnitedHealth Group

Purpose: Expand the dental region and network amongst the nation allowing members to have coverage from the most basic dental checkups to any specialty procedure done.

Significance: UnitedHealthcare serves 4 million members nationwide. In that, we deal with 200,000 plus dentists across the board. Our role is to serve and expand the UnitedHealthcare Dental network across the nation, and allow members and patients to have access to PPO, Medicare, and Medicaid that can not only benefit UHC, but also benefit the provider through revenue growth, open filled chair time, benefits, etc. We make sure to extend access to reasonable, quality dental healthcare. It is also important that we are identifying, recruiting, contracting, and retaining a provider network (Dental) in geographic areas within established guidelines to meet network needs.

Method/Approach: The approach is to research in actuarial data what benefits can occur to the provider's office and what stake does UnitedHealthcare have in. Our primary role consists of me reaching out to Providers via call/email, setting up different fee schedules that they can consider and possibly come on board with any particular target they have in mind. We start with looking through our provider records, seeing what provider is currently participating in our coverage, and how we can add to it. If they are not participating, then let's bring them on. Process contains a conduction of studies of claims and revenue projected growth. We then reach out to Provider and lay the facts out them while giving them space to consider the agreement and come to a consensus.

Outcomes/Results: Currently, the project at hand is our Onward 2.0 Michigan Recruiting. The results are varied and currently still being worked on. Looking to get at least 30 initial recruits done by next Friday, August 6th. The project is being worked on by 10 different associates, each required to bring in 30 initial recruits by that deadline. The greater goal beyond the initial recruiting is to solidify contracts with at least 15 of the initial recruits and have the Michigan field recruiters notified, so they visit the sites. At the end, there should be 150 newly contracted Michigan provider locations in the UnitedHealthcare Dental Network.

Evaluation/Conclusion: The project is evaluated on a metric system. Each recruiter is responsible for their share in recruitment, bringing in at least 40% of the total recruitment tally by the deadline, 30 total initial recruits. The process is then evaluated through a Provider Contacting Tool with information that is fed via our recruitment software. The information is then verified per recruitment that is done by the recruiter. If the Contracting tool allows for the specific recruits to be verified, then it is a success and adds to the recruiter's end of the year metrics for bonus and raise. The only limitations are that you never know how well of a target you'll reach when going into a conversation with the Office Manager or Provider, and the only way to create any sort of improvement is by researching facts and knowledge about the practice prior to reaching out.

Title: Evaluating The Mental Health Effects of COVID-19 On Senior Populations and Proposed Interventions

Name: Alexis Thompson

Preceptors: Gina Stravic, Executive Director

Agency: **R**aritan Valley YMCA

Purpose: To conduct a literature review to determine the major effects that COVID-19 and the nationwide lockdown had on the mental health of the senior population and propose program intervention to address these concerns.

Significance: In January 2020, the first case of COVID-19 was detected in the United States. From then on, the number of cases began to rise rapidly, peaking in March 2020 and causing a nationwide lockdown. The everyday lives of people across the world changed completely. People confined themselves to their homes, had little to no interaction with family and friends, and could no longer attend religious services or crowded gatherings. The senior population seemed to be even more at risk of severe illness if they were to ever contract the virus, leading themselves and their families to be especially careful. Over 80% of COVID-19 deaths were found in people over the age of 65 (CDC, 2020). Therefore, many could only speak to their loved ones over the phone or through the cracked windows of their homes. This caused many to experience extreme feelings of loneliness and isolation.

Method/Approach: A literature review was conducted to determine the trends in seniors who dealt with a negative shift in their mental health due to the pandemic, and the long lasting effects of this occurrence. The first database searched was Google Scholar with the keywords "senior mental health and COVID-19". Five articles proved to be relevant. Following this, the PubMed database was searched using the same key words, and another five articles proved to be relevant. After reviewing each article and collecting the data, evaluations were able to be made.

Outcomes/Results: There was a common theme of heightened anxiety due to awareness of vulnerability present throughout each study. Due to loss of close friends and loved ones, and the attitude of many throughout the nation concerning the comparison of the loss of young versus old lives, many seniors began to feel disposable and worthless. Those who lived in assisted living facilities experienced heightened feelings of depression and isolation because there was a strict no visitors policy in place, and they were completely cut off from their families. Many also reported not feeling equipped with the right knowledge to allow them to stay in contact with their families and loved ones through the use of technology.

Evaluation/Conclusion: Many seniors would benefit from bi-monthly support groups where they can speak to other seniors about their experiences throughout lockdown and talk out their feelings. They could also participate in how-to courses touching on the use of certain technologies such as Zoom and Skype so that they can better keep in touch with loved ones.

Title:　　　　How to administratively run a Cancer Center in the state of New Jersey

Name:　　　　Tatiana Vega

Preceptors:　　John Valente MHA RTT

Agency:　　　John Theurer Cancer Center at Hackensack University Medical Center

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Purpose: To gain knowledge and understand the purpose of quality measurement reporting for the maintenance of specific accreditation to run a cancer center.

Significance: Cancer is a disease that has severely impacted all populations across the world, including their age, sex, race/ethnicity, and geographic location. In 2020, an estimated 1,806,590 new cases of cancer will be diagnosed in the United States and 606,520 people will die from the disease (Cancer Statistics). The most common types of cancers include Breast, Lung, Kidney, Bladder, Prostate, Colorectal, Melanoma, and Non-Hodgkin's lymphoma. John Theurer Cancer Center is ranked #1 in the state of New Jersey. They are highly respected in the industry for their comprehensive bone marrow and stem cell transplant program, robust clinical trial portfolio, and their expertise in the management of hematologic malignancies in adults and children. They also conduct minimally invasive surgery and advanced radiation oncology approaches, and value-based care to improve clinical outcomes and reduce cancer-care costs (About The Program). This project will showcase the processes of being accredited in order to administratively run a cancer center. With these accreditations practices are able to provide and improve high quality care for cancer patients.

Method/Approach: Some measurements included; pathology report confirming malignancy, staging documented within one month of first office visit, infertility risks discussed prior to chemotherapy with patients of reproductive age, action taken to address problems with emotional well-being by the second office visit, and documented plan for chemotherapy, including doses, route, and time intervals. The practice had to reach a certain benchmark based on the certification measurements of QOPI. Scores based upon participation lead to a three year certification with yearly maintenance rounds.

Outcomes/Results: Qualitative measurements allowed those to have an understanding of a deeper core value of certain topics. Being accredited by QOPI allowed a practice to understand where their goals were being met and where they were not, and provide the appropriate measures to meet the standards. Practices who are unable to meet the standards were given recommendations on how they could potentially meet these standards such as new policies and procedures and revise and resubmit their applications to be accredited.

Evaluation/Conclusion: In order to administratively run a cancer center you must be accredited by the American Society of Clinical Oncology, American College of Surgeons, American College of Radiation, and Foundation for the Accreditation of Cellular Therapy. Giving the attention to a specific accrediciton, the Quality Oncology Practice Initiative Certification Program also known as QOPI routinely evaluated an individual outpatient oncology practice's performance. The American Society of Clinical Oncology performed the Quality Oncology Practice Initiative while using quality measures to report oncology outcomes. Being accredited by QOPI is a practical approach for a facility to evaluate and improve their quality of care while maintaining a safe chemotherapy administration.

Title: Social Media Reach for the COVID-19 Hotline at The New Jersey Poison Center

Name: Torvianna Williams

Preceptors: Alicia Gambino, MA, MCHES, Director of Educational Services

Agency: New Jersey Poison Center

Purpose: To adequately assemble COVID-19 Hotline information by an infographic to encourage the usage of the hotline within the African American and Hispanic/Latino community in New Jersey.

Significance: Non-Hispanic Blacks and Hispanics are more susceptible to the adverse impacts of COVID-19. Non-Hispanic Blacks and Hispanics are 2.8x more likely than non-Hispanic whites to be hospitalized due to COVID-19 (CDC, 2021). The lack of education, resources, and income impacts these minorities' health outcomes. This project will aid in providing information that is recommended to protect oneself from Covid-19 and to contact the COVID-19 hotline to ask more questions about COVID-19 on the New Jersey Poison Control Facebook page.

Method/Approach: The research on COVID-19 was conducted on public databases such as the Centers for Disease Control and Prevention (CDC), World Health Organization (WHO), and on the New Jersey COVID-19 Information Hub. These resources provided information on safety tips for traveling, testing, vaccinating, and quarantining during COVID-19. This information was compiled into a comprehensive infographic and is going to be published on the New Jersey Poison Center Facebook page in both Spanish and English. The links to sources listed on the infographic will be posted for easy access and the feedback from the post (likes, comments, views, and shares) will be analyzed.

Outcomes/Results: The English infographic was posted on Facebook; as of August 5th the post received 3,335 impressions, 10 likes, 4 shares, 1 comment, and reached 3,230 individuals so far. The Spanish infographic was posted on Facebook; as of August 10th the post received 63 post impressions, 2 likes, 5 comments, and reached 63 individuals so far.

Evaluation/Conclusion: There will be continuous monitoring on the New Jersey Poison Center's Facebook post insights in addition to more resources posted on the Facebook page. The center's Facebook page will continue to post updates regarding COVID-19, vaccinations, and mask recommendations. The New Jersey Poison Center will continue to post health education for both English and Spanish speakers to progress the health literacy of the African American and Hispanic/ Latino community in New Jersey.

Title: Overview of the Top Five Cancers Affecting the Hispanic and Latino Community Middlesex County, NJ

Name: Athena Xipolias

Preceptors: Direct Supervisor: Rita Musanti, Assistant Director SCREEN NJ
Project Supervisor: Evelyn Fuertes, Community Cancer Control Specialist

Agency: Rutgers Cancer Institute New Jersey

Purpose: Educate and empower the Middlesex County Latino Community on the top five cancers affecting this group and discuss additional barriers, resources to care, risk factors and burden of disease.

Significance: Every year it is estimated that approximately 34,130 deaths will occur from prostate cancer (ACA, 2021), 44,130 deaths from breast cancer (Breast Cancer- Statistics, 2021), 4,290 women will die from cervical cancer (ACA, 2021), 131,880 deaths will occur from lung cancer (ACA, 2021) and about 52,980 deaths will occur with colorectal cancer (ACA, 2021). RCINJ aims to help lessen the incidence of cancer in NJ, with a focus in underserved communities. This project contributes to the solution by educating the Hispanic and Latino Community Health Workers through providing a robust training program in Spanish to lessen the language barrier and increase awareness of cancers that are preventable with screening.

Method/Approach: The method and approach of review was a quasi-experimental design completed by community members after being presented with a cancer education PowerPoint. The review consisted of three questions that followed along with the PowerPoint. The questions were then asked to people who attended the one session. The purpose was to have a pre- and post-survey to help further conclude and evaluate if people attending the session followed along with the information presented.

Outcomes/Results: Of the sample size cohort (n=11), participants were asked to complete a pre and post survey. Only nine people answered the pre and post survey questions out of the 11 attendees. Questions consisted of, (1,) What are the top 5 cancers in the Hispanic and Latino community? (2,) How can you reduce your risk of cancer? And (3,) What are additional cancers that Hispanics at higher risk may have? During the pretest 3 (37.5%) people answered incorrectly to question one and 5 (62.5%) people answered correctly. For question two, 1 (12.5%) person answered incorrectly while 7 (87.5%) people answered correctly. For question three, 2 (25%) people answered incorrectly while 6 (75%) people answered correctly. During the posttest there were (n=9) participants. For question one, 2 (22%) people answered incorrectly and 7 (78%) people answered correctly. For question two, 1 (11%) person answered incorrectly while 8 (89%) people answered correctly. For question three, 1(11%) person answered incorrectly while 8 (89%) people answered correctly.

Evaluation/Conclusion: More than half the participants (n=5) 62.5% during the pretest answered question one correctly and almost 100% answered question two and three correctly. During the post test results, participants answered over 75% of question one, two and three correctly. Some participants did not have access or understood the task. The purpose of the pre and posttest served as a powerful tool to (a) educate, empower and inform communities on high incidence rates of cancer and (b) improve community health outcomes and reduce mortality rates.

Capstone Projects

Title: Childhood Obesity Rate Assessment at National and International levels

Name: Jay Bloch

Purpose: To analyze childhood obesity rates in high-risk populations and develop policies for parents and schools aimed at promoting healthier meals and more physical activities for adolescents.

Significance: Each year, the rate of childhood obesity continuously increases within the United States. From 1978 to 2004, the prevalence of obesity amongst children in the United States more than tripled from a mere 5% to 18.5% (Anderson, et al. 2019). In 2016, Anderson et al. (2019) found that amongst the entire population, Hispanic and Black children held the highest rates of obesity at 26 and 22 percent. The evidence indicates a lack of access to a proper diet and exercise for minority populations. The creation of evidence-based policies will assist in lowering these rates, therefore promoting healthier lifestyles.

Method/Approach: A systematic review of published literature on childhood obesity prevalence, racial/ethnic disparities, environmental causes of obesity and consequences of childhood obesity has been conducted. The severity of childhood obesity and lack of potential solutions was assessed in order to create viable solutions to this issue.

Outcomes/Results: The causes of childhood obesity remained consistent throughout all literature that was reviewed. Physical activity, childhood environment and dietary factors consistently appeared amongst several different studies and articles as main causes for this epidemic. The prevalence of risk factors also varied significantly amongst various race/ethnic groups.

Evaluation/Conclusion: There is a lack of legislation that exists throughout the United States in order to combat this issue. Furthermore, children are not all being given the equal opportunity to engage in afterschool activities or to have access to highly nutritious, quality meals. In order to combat this issue, legislation needs to be introduced at a federal level to protect children at school. The implementation for community programs can also work to assist parents in providing free/low cost activities as well as gain access to more balanced meals.

Title: Lack of Diversity in Scrubs

Name: Lucinda Brandon

Purpose: To explore the lack of diversity in the healthcare workforce, bring more awareness to the lack of representation, and touch on the importance of having diversity in the healthcare community.

Significance: The healthcare field is a dangerously homogeneous field serving a diverse community. Diversity in healthcare is necessary for patients to be seen in a broader context including their socioeconomic realities, culture, gender, sexual orientation, etc. Implicit bias in the medical field leads to life threatening results. For example, minority women with labor. According to the CDC, African American, American Indian, and Alaska Native women are two to three times more likely to die from pregnancy-related causes than white women. It's necessary to identify and address implicit bias in healthcare to help improve patient-provider interactions, health communication, and health outcomes. Studies have shown that when people have cultural similarities with medical professionals they are more likely to comply with medical treatment and advice due to a sense of comfort. Diversity in scrubs will allow medical professionals to cater care specifically towards patients' lifestyle and comfort level for sustainable results.

Method/Approach: A literary review was conducted using Rutgers database and Google Scholar to gather information. From the Rutgers database four to five sources were picked from the following topics: promoting racial diversity in healthcare, cultural competence in healthcare, and understanding diversity in healthcare. Google Scholar was used to search "Lack of Diversity in Healthcare", and from there 5 articles were selected.

Outcomes/Results: In the U.S, there is a persistent lack of diversity among healthcare professionals. According to the Association of American Medical Colleges, 64% of physicians are male and 56% are white. Evidence shows that people of color have greater incidence and more severe cases of disease. The results from many studies show that most healthcare providers have a more positive attitude towards white patients compared to patients of color. As a result, interactions with patients of color are different from those who are white as well as the quality of care they receive. Since the late 1960s, there have been efforts to increase minority participation in medical school.

Evaluation/Conclusion: Minorities are vastly underrepresented in healthcare. Educational and psychological barriers have been a common trend among lack of diversity in healthcare. The urge to intensively educate and train professionals is common when it comes to fixing the issue. Educational programs and knowledge networks are key to improving diversity in scrubs.

Title: Vertical Farming in Jersey City

Name: Nathalie Chong

Purpose: To analyze the effects of food insecurity in communities of color such as Jersey City. With efforts to implement vertical farming in this urban community to promote access to healthy foods. The purpose of this paper is to educate the population on the benefits of vertical farming in communities of color.

Significance: The central point of the project is to create a realistic plan and proposal for implementing vertical gardens in urban communities that will be successful in easing the burdens of income inequality and oppression on individuals and families in the communities. This will begin with research about food insecurity and health risks in urban communities, especially in Jersey City. Another major task associated with this research will be the prior existence and success of other vertical gardens as well as the intricacies and inner workings of these gardens and how it relates to the intended locations such as Jersey City and other urban communities. This research, which will be documented through periodic work journals, will serve to reveal the need for healthier alternatives in these communities and provide a possible solution for these issues as well as issues associated with income inequality and poverty.

Method/Approach: In order to discuss the possible creation of vertical gardens in communities such as Jersey City, it is important to research health in food in that city. Many urban communities such as this one with a large population of people of color often struggle with poverty and food insecurity that leads to adverse health risks. Through in depth research and data collection, we can gain a better understanding of how these issues present themselves in Jersey City and what the community's needs are in regards to food and health. This would be followed by research on the effects these issues have on urban communities and their people. Furthermore, this project requires research surrounding vertical gardens, their purpose, and usage. In this research, the existence of other vertical gardens, their locations, and success is imperative in the discussion of the possible fate of a vertical garden in a community like Jersey City. All of this data collection will be explored throughout the work journals I will create.

Outcomes/Results: For a plethora of reasons, urban communities are significantly more vulnerable to poverty and food insecurity and both of these issues are intricately related. Low-income households will naturally struggle more to fit a sufficient amount of food into their budget, which can lead to serious food insecurity. Urban communities also receive vastly different resources than more affluent communities, which relates to what kind of food and stores are readily available. Without proper access to healthy food options, populations like that of Jersey City are vulnerable to a number of fatal health outcomes. In this research, vertical gardens are presented as a solution and a healthy alternative to some of these issues through the production of fresh food and produce, doubly bringing sustainability to the city.

Evaluation/Conclusion: The purpose of the implementation of vertical food gardens in urban communities is to provide healthy food alternatives and fresh produce to populations that are lacking the resources to properly feed the community. These gardens will tackle food insecurity among impoverished and low- income families to create healthier communities everywhere as opposed to just the affluent cities and towns.

Title:　　　　Buffering viruses' effects on society

Name:　　　　Cornett Eve Davies

Purpose: To review historical documentation of methods that are reliable, replicable, and effective in monitoring virus' trends; while gradually eliminating its cruel existence from society.

Significance: While it is true that the 1918 spread of influenza brought a great deal of attention to society, it is also vivid that its trend regarding high mortality rates has been persistent for quite a while. Globally, it has been estimated that 250, 000 -500, 000 people die from influenza annually (Luliano et al., 2018). Based on regions, there might be dramatic gaps in mortality differences. However, a life loss regardless of how little or small that number may be is still a safety concern. As a result, more focus has been drawn toward monitoring virus' sequence, reevaluating compounds that might aid in the reduction of mortality rates, and developing a better and tougher immune system, in terms of personal behavior.

Method: In retrospect of previous decades, patients' data collected by CDC, operated by the World Health Organization in 2005, as part of its comprehensive response to the influenza epidemic, along with other viruses. Scholarly databases: such as PubMed, Rutgers Libraries, and WHO were utilized to gain a full understanding of plans that were once implemented, and then compared them to those that are still used today. Researched articles from NIH also provided insightful details of viruses introduced within this paper.

Outcomes/Results: Within the human population, the influenza virus has been known to affect the respiratory system through its primary spread of droplet transmission; and it's often caused by both influenzas A and B viruses. WHO reported that its severity is greatly dependent on multiple factors, inclusive but not limited to: communities preexisting levels of immunity and strain virulence (2005). Compared with SARS -COV-2 likely contributed to a more substantial interruption in influenza transmission.

Evaluation/Conclusion: Diseases in general are complex to tackle, but our hope to one day eradicate them requires combined and coordinated effort at both individual and institutional level. With strategic execution of policies/plans, we can evaluate programs for the prevention and control of infectious diseases, Market PSA to help health care professionals; while also stimulating behaviors that warrant safety and facilitate disease control. All goals and objectives within this plan are obtainable and are likely to produce positive outcomes. However, that can only be obtained with less stiff neck behaviors and more adherences to federal and state laws.

Title: Optimizing Independence Among Traumatic Brain Injured Residents

Name: Sophie E George

Purpose: To clearly define and follow through with guidelines of what tasks brain injured residents can do independently, expediting time spent in residential living.

Significance: Annually 1.5 million Americans are hindered by long term disability from traumatic brain injury (TBI). Residential group homes provide comprehensive, around the clock care from paraprofessional staff, working to help those who have suffered from a variety of neurological conditions. Each TBI is unique, requiring individualized assistance in completing tasks and goals towards re-gained independence. Group home residents engage in sessions with professional therapists and neuropsychologists weekly. Teachings from therapies must be implemented and encouraged in daily life by paraprofessionals in order to create progress in TBI resident's independence.

Method/Approach: A systematic review of published literature on traumatic brain injury (TBI) prevalence, treatments/therapies, program funding, long term and daily management has been conducted. The lifelong rehabilitation of traumatic brain injury and lack of telling, effective solutions was assessed in order to create viable solutions to this issue.

Outcomes/Results: The causes and treatment of various traumatic brain injuries varied throughout each literary piece. Encouraging and evaluating independence levels for each individual is important for long term progress. Upkeep with therapeutic programs and instilling routine supports re-gained independence. Each person's rehabilitation journey is individualized depending on the state of their brain injury.

Evaluation/Conclusion: There is a lack of routine and aid for those recovering from traumatic brain injury. In addition, there is a lack of coordination between supervisors/therapists and paraprofessionals to implement individualized daily plans for group home residents. In order to combat this issue, there needs to be direct coordination and communication between licensed therapists and paraprofessional staff. The implementation for individualized daily plans work to aid group home residents to regain independence.

Title: Examining Racial Disparities in Healthcare in the United States

Name: Frank Hoegah

Purpose: To unveil the racial disparities in our healthcare system against people of color and examine how the Covid-19 pandemic has affected African Americans and Latino American health disproportionately.

Significance: America's healthcare system has an inordinate impact on people of color, which creates gaps in low quality of care, resulting in poor health outcomes among certain populations. People of color get sick at a younger age and pass away sooner than white people. So, addressing health disparities is progressively prime as our population becomes more diverse. Since the 1960s, there has been a gap between the mortality rate between whites versus blacks driven mainly by cardiovascular disease (Sultz & Young's, 2018, p. 67). African Americans have more hypertension, diabetes, obesity, premature heart failures and increased deaths from strokes which drive these disparities. For instance, looking at some of the data related to cardiovascular health, African Americans have more hypertension early onset, more premature hypertension, death from heart failure and premature mal Cori infarction. These are not driven much by biology but by the fact that the social determinants of health where people live, where they play, and where they work all affect these outcomes.

Method/Approach: This project was carried out by diving deep into various existing sources that were obtained from Google Scholar, scholarly publications, books, reports, Rutgers Library database and interviews. The research gathered from these sources released valuable information or data on the initial differences in healthcare between groups that stem from broader inequalities that are closely linked with socio-economic and systematic disadvantage. An emphasis was placed on locating reports with data that showed the lens of health disparities that occurred across a broad range of dimensions. Gathering this data and information helps to improve our nation's overall health.

Outcomes/Results: In Cleveland, Ohio, where African American families experienced infant mortality at three times the rate of Caucasian babies, the city's three largest health systems worked together to ramp up its neighborhood outreach to establish community engagement to support those at most risk to experience the direct consequences of infant death and suboptimal birth outcomes (Bathija & Reynolds et al., 2019). They also advocate for legislation and policies that optimize women's health, improve birth outcomes and eliminate preventable infant mortality. With this, the area's infant mortality rate reduce from a 10.5 infant death per 1,000 births to 8.3 deaths in three years (Bathija & Reynolds et al., 2019).That decline in infant mortality rate was a great turnaround in their health care delivery system, because they were able to promote better health which enhanced the value of their industry.

Evaluation/Conclusion: Enacting a data driven initiative to ensure equal justice for all when it comes to our healthcare system, and collecting data is imperative to ensure preventive measures are ready and can be quickly implemented through institutional review boards in our healthcare system.

Title: Analysis of Obesity Linked Cardiovascular Disease Trends in the U.S.

Name: Katalina H. Hwangbo

Purpose: To analyze obesity trends as a comorbidity to cardiovascular diseases in the U.S. and propose preventative measures or treatment courses to address obesity in order to reduce overall cardiovascular disease rates.

Significance: Obesity trend projections for the future continue to rise with no sign of diminishment. With obesity and cardiovascular disease as the leading diseases in the United States, intervention is required to create significant reduction trends. Obesity is linked to cardiovascular disease as a comorbidity, and the increasing trends of the obesity pandemic is cause for concern. Obesity is a preventable, non-communicable disease, and by addressing obesity prevalence trends, it is possible to reduce overall cardiovascular disease in the United States. The obesity epidemic proved to be even more of an immediate public health problem as it has begun to affect the current generation of children and adolescents, indicating a possible future obesity epidemic among the younger generation.

Method/Approach: This paper uses literary resource analysis as the primary method of investigation. Resources are credible professional and grey sources from the Rutgers library database, Google Scholar, PubMed, World Health Organization (WHO), National Health and Nutrition Examination Surveys (NHANES), and Behavioral Risk Factor Surveillance System (BRFSS). Topics on or in relation to obesity and/or cardiovascular disease were utilized to analyze obesity prevalence trends, specifically in the United States. Analysis of obesity trends aim to investigate possible external deficiencies that contribute to ever-increasing obesity prevalence trends. This research aims to provide evidence-based prevention methods to reduce overall cardiovascular disease rates.

Outcomes/Results: Findings suggest that there are limiting barriers to healthcare preventing patients from receiving the care that they require. Psychological treatment can be expensive and time-consuming, discouraging patients, especially those of lower-income backgrounds. Lack of time, assets, and staff have also been reported to be a barrier for clinicians to be able to provide the extensive treatments that patients require. Lack of or poor insurance coverage is a prominent healthcare barrier. More than 1 in 5 children rely on Medicaid or state insurance, however, insurance plans do not cover the entirety of necessary treatments.

Evaluation/Conclusion: Government intervention of implementing efficient public policies to mitigate cardiovascular disease risk by addressing obesity as a chronic disease is a necessity. Short-term solutions to a chronic and ever-increasing obesity epidemic are not sustainable. The Netherlands took a national level health-care standard rooted from a patient-oriented perspective that incorporates prevention, intervention, and post-treatment. The Netherlands' national health-care standard acts as a possible model for United States healthcare to adopt. Additionally, incorporating Cognitive Behavioral Therapy (CBT) with Anti-Obesity Medications (AOM) is a radical intervention method to address rising obesity trends. Overall, there is a dire need for public health and government intervention to address lack of access, research, and resources necessary to reduce obesity for overall better cardiovascular health.

Title: Analyzing The Mental Health of West African Immigrants

Name: Victoria Isaiah

Purpose: To validate the mental health experiences of West African immigrants and propose programs to help this community overcome the problems it faces and the barriers that make doing so difficult.

Significance: From the early 1900s to the present day, West Africans have suffered from various traumatic events ranging from civil wars to religious conflicts. Millions of West Africans have lost their lives due to the violence and those who were fortunate enough to survive these traumatic events migrated to countries such as the United States in search of a 'better life. In 2001 over 850,000 West Africans lived in refugee camps. Those fortunate were able to seek asylum in countries such as the United States (2007). The majority of West African immigrants have become so accustomed to trauma that some accept it and the consequences that result from it as part of life. The exact percentage of West African immigrants that suffer from mental health issues such as depression, anxiety, PTSD, and more is unknown. This is because the stigma attached to mental health in the West African community deters them from seeking the necessary help needed to combat these issues. This research will help raise awareness and, subsequently, help remove the stigma that is attached to it, thus allowing those who suffer from various mental health issues to receive care.

Method/Approach: A literature review was conducted using the Rutgers database, PubMed, and Google Scholar to gather information. From the Rutgers database, two to three sources on each of the following topics were selected: mental health in West Africa, mental health in African Americans, mental health in Liberia, and Nigerian immigrant depression. Two articles were selected from PubMed and the term searched was "PTSD in Liberian and Sierra Leoneans". Google Scholar was then used to search the term "effects of racism on mental health" and one article was selected.

Outcomes/Results: Mental health is a topic that is not talked about in the West African community and limited research has been done on this particular population. In recent years, researchers have sought out to fill in these blanks by conducting studies and interviewing members of this community. The results from each study are very similar. Researchers discovered that despite their past trauma, participants are reluctant to seek help and lack knowledge on this topic. Over a span of 10-15 years, programs have begun to sprout, trying to raise awareness concerning this topic and change the narrative for good.

Evaluation/Conclusion: West Africans have been suffering silently for ages, their stressors range from past trauma, PTSD, immigration, lack of resources, language barriers, and much more. Existing organizations have made a positive impact on the community but more has to be done. Awareness has to be raised, care has to be made accessible, support has to be provided, and the stigma has to be removed.

Title: Combatting COVID-19 Inoculation Hesitancy: Best Practices to Achieve
Herd Immunity

Name: Alyssa Juntilla

Purpose: To explore inoculation hesitancy at large and propose a set of evidence-based recommendations for the United States to deploy to reduce the spread and impact of Coronavirus (COVID-19).

Significance: According to the most recent COVID-19 vaccination data released by the Centers for Disease Control and Prevention (CDC), 164.4 million people in the United States are fully vaccinated, or about 49.5% of the total population (2021, July 31). Despite the grave risk posed to individuals and communities, many people remain hesitant to get vaccinated. Still, infectious disease experts insist on herd immunity as the key tool for epidemic control. This Capstone project aims to develop a set of evidence-based recommendations for public health professionals in the United States to utilize to achieve herd immunity and mitigate the impact of public health crises.

Method/Approach: This Capstone leveraged literature as its primary means of research. Specifically, the research conducted a theoretical and empirical analysis of publications from CDC, World Health Organization (WHO), Rutgers University Libraries, and *PubMed.* All research was pertinent to COVID-19 inoculation within the United States but addressed different aspects of the topic (e.g., data tracking, theoretical scholarship, predictor variables).

Outcomes/Results: The research concludes, "Political ideology was by far the most consistent predictor of both willingness to be vaccinated and fear of the vaccine, followed by participant sex, education level, income, and race/ethnicity" (Killgore et al., 2021). Furthermore, the investigation uncovers "a lack of vaccine acceptance is associated with lack of trust in authorities and scientists, conspiratorial thinking, and a lack of concern about COVID-19" (Lindholt et al., 2021). Multiple studies also highlight concerns about "rushed vaccine development" that seem to reduce vaccine uptake.

Evaluation/Conclusion: The most significant limitation of the research is the volatile nature of the novel Coronavirus disease. Consequently, public health responses are struggling to adapt to the ever-changing nature of the virus and the subsequent implications on the willingness to get a federally approved vaccine(s) in the United States. Suggested next steps include conducting more research to fill in the gaps in the literature and continue developing strategies and incentives to reach herd immunity. Recent vaccine-related publications are encouraging but will ultimately require more time, research, and process evaluations during and after implementation (e.g., pre-testing, pilot tests) to assess quality and improvement.

Title: Meta-analysis on U.S. adult obesity rates

Name: Yongkeun Kwon

Purpose: To analyze U.S. adult obesity rates in high-risk population groups and propose multidisciplinary solutions ranging from an individual to national level.

Significance: Obesity plays a major role in nearly one in five deaths in the U.S. from heart disease, stroke, type 2 diabetes, high blood pressure, and certain cancers (Masters et al., 2013). Determining risk factors and impacts of the U.S. adult obesity epidemic using etiological theories and epidemiological data can help reverse its trend and improve overall health.

Method/Approach: A systematic review of peer-reviewed scholarly journals was performed for examining U.S. adult obesity rates from an individual level (physiological and mental health) and its influence on communal (racial/ethnic, gender, socioeconomic factors), institutional and societal level at large (lost productivity data) using etiological and epidemiological frameworks. Data samples are limited to U.S. nationals aged 20 years or older with no comparative analysis with those from foreign nations. Alternative solutions and limitations were also explored to provide a comprehensive overview using an interdisciplinary, quantitative method.

Outcomes/Results: Although the risk factors of U.S. adult obesity were consistent regardless of age, socioeconomic status, race, and geographic location, its health disparities varied. Over nutrition, physical inactivity, age, genetic predisposition, pre-existing health conditions, side effects from medication, and negative psychological health all have contributed and are associated with increase in U.S. adult obesity rates. By and large, adult obesity was most prevalent among middle-aged (between 40 to 59) Americans (CDC, 2020). According to the Behavioral Risk Factor Surveillance System (BRFSS) map, the prevalence of the U.S. adult obesity rate from 1985 to 2013 has disproportionately affected Southern states such as Texas, Louisiana, Mississippi, Arkansas, and Oklahoma (Ward et al., 2016). Furthermore, non-Hispanic, Black American adults were more likely to experience obesity than white American adults, showing how U.S. adult obesity rates differed depending on age, race, and geographic locations.

Evaluation/Conclusion: Solving adult obesity requires interdisciplinary efforts from individual to national levels as multiple risk factors and its health disparities add more complexities. Some faulty data or limitations were observed in the BRFSS map because adult participants filed self-reported surveys, which can skew the data to underreport their body weights. Proposed solutions range from changing current Westernized dietary patterns (i.e. substituting sugar with aspartame, reading nutrition label and avoiding trans-fat, regulating salt intake, increasing mealtime to at least 15 minutes or longer, etc.), exercising regularly, increasing access to psychologist and nutritionist, eliminating food swamp areas with local community gardens, changing food policy by removing antibiotic usage and DNA-damaging chemicals such as nitrates, and educating the public on the dangers of obesity. Implementations of these health policies are expected to increase access to more balanced and nutritious meals for U.S. adults.

Title: Black Women Are Dying: A Closer Look at Healthcare Disparities in Maternal Care

Name: Miller, Sahila

Purpose: To analyze and study the disparities in healthcare for African-American women specifically prenatal and postpartum care.

Significance: African American women have been dying at an alarming rate in comparison to other races. The CDC reports that pregnancy related mortality among African American women is 3.2 times higher than their White counterparts. Many of these deaths are unwarranted and could have been easily avoided. The NY times recently covered Serena William's postnatal incident where she was experiencing a pulmonary embolism but providers ignored her concerns until she persisted. Black women are not being heard no matter their social or educational status. These occurrences need to be recognized and addressed because these incidents are highly disproportionate. Deep rooted prejudice and bias are killing black women. Research has shown that providers have internalized biases towards black patients that may affect the service provided to patients. Policy changes and implementation will address some of the health inequities.

Method/Approach: This capstone takes an in-depth look at the aforementioned underlying prejudice and provides recommendations of programs that contribute to combating these issues. This was conducted by doing extensive research including peer reviewed journals and studies conducted by the CDC. Bills such as the Maternal Care Access and Reducing Emergencies (CARE) Act and the Preventing Maternal Deaths Act focus on addressing this public health issue. The studies and policies was reviewed and compared to determine if they had favorable outcomes. Qualitative data was the methodological approach used for this study.

Outcomes/Results: The research conducted uncovered 28 articles on this topic. Of these articles, 11 focused on the racial disparities in healthcare that are affecting black women. Data from the CDC shows that the rate of pregnancy-related death for black women is 43 out of 100,000 in comparison to 13 among white women. These deaths occurred in black women of different economic and educational backgrounds. VBAC calculator tools which use race and ethnicity as determining factors for safe vaginal delivery are regularly used by obstetricians. Research finds that removing those factors changes the score to more favorable results for black women from (43.9%) to (12.1%). The CDC states that 60% of pregnancy related deaths are preventable, most occurring within 42 days of childbirth.

Evaluation/Conclusion: Several organizations have developed programs to provide resources for black women and to allow their experiences to be shared. Leaders will need to expand on existing policies to focus on the needs of black women and support to be heard about concerns regarding their health. Expecting mothers should be made aware of advocacy groups such as Black Mamas Matter Alliance which was created by black healthcare professionals from various fields including obstetricians, social workers, nurses and psychologists. The next steps that should be taken would be to educate black women and providers and give them the tools needed to reduce pregnancy related mortality rates. This has to be recognized as not just a black woman's issue but as a nationwide public health crisis.

Title: A Meta-Analysis of the Complications in Healthcare Information Technology

Name: Pasquale Monaco

Purpose: To analyze the different difficulties healthcare systems face with Health Information Technology and provide solutions to help mitigate them.

Significance: As the United States' Healthcare System moves further into the digital age, information technology will play a crucial role in providing high quality patient care. Health Information Technology (HIT) assists in the delivery of accurate, timely and more accessible patient information which in turn supports shared decision making between healthcare providers. In addition, it allows the needs of the patient to be fully customizable and with the help of advanced knowledge providers will be better able to make informed decisions regarding not only a patient's health, but the public's health. Effective use of HIT significantly improves the quality of care that patients receive and strengthens a healthcare system's communication. Although the benefits of HIT are abundant there are just as many (if not more) challenges that we must first overcome if we are to achieve its full potential. "Using Digital Health Technology to Better Generate Evidence and Deliver Evidence-Based Care" is an article that highlights some of these challenges. In it the authors mention that "Data quality has been identified as one of the biggest issues with broad implementation of large data analytic programs among the 'five V's' of big data: volume, velocity, variety, veracity, and value" (Kruse, 2016, as cited in Sharma, 2018).

Method/Approach: The method of approach for this research assignment was to conduct a meta-analysis of the available literature regarding Health Information Technology (HIT). This information was used to analyze the inefficiencies current HIT systems experience. It showed commonalities among different systems that aided in the creation of a pros and cons list that was used to contrast the different systems. Once the systems were thoroughly compared and successful paradigms (effective system implications) were realized, recommendations for struggling or inefficient healthcare systems were created.

Outcomes/Results: The observed outcomes were the ways that current healthcare systems can improve their use of Health Information Technology. A list of steps/priorities that these systems should consider in order to help improve patient outcomes and overall system efficiency has been created. Meaningful HIT use has proven to be difficult for many healthcare systems. Furthermore, the research suggests that HT adoption is not associated with reduced healthcare spending nor improved health outcomes. However, these results may be restricted by the temporal limitations of the reviewed literature.

Evaluation/Conclusion: The conclusion was to be able to persuade the audience/healthcare systems looking to optimize their HIT performance on the viability of these recommendations. That being said, HIT is fairly new and rapidly evolving. As a result, several of the reviewed studies stress the need for additional research so that the benefits of HIT systems can be more pronounced. Finally, more recent data has indicated that the failure of HIT intervention may be strongly correlated to the involvement of major stakeholders, namely the patients.

Title: Impacts of COVID-19 on Child Obesity Rates in The United States

Name: Kimberly Moncayo

Purpose: To explore the effects of Coronavirus (COVID-19) restrictions on the rates of child obesity among high risk populations in the United States.

Significance: An increasing obesity epidemic in the United States, particularly among children, has collided with the current COVID-19 pandemic. Obesity now affects 1 in 5 children in the US (CDC, 2021). The impacts of COVID-19 on the rates of child obesity in the United States have only exacerbated the issue. In efforts to reduce/limit virus transmissions, lockdowns/stay-at-home orders were imposed, driving the closing of schools, playgrounds, and parks. This forced many children to remain indoors and inactive, increasing or worsening rates of obesity in children. Furthermore, economic hardship resulted in increased food insecurity for many families, often leaving parents with no other choice but to resort to affordable food options that are not always the healthiest.

Method/Approach: This Capstone will use literature as a primary method of research/analysis. Research from PubMed, Google Scholar, and the Rutgers library database is analyzed. Eighty-five articles on the association between COVID-19 and child obesity were found on PubMed. An empirical assessment of research skills is utilized to investigate the association between COVID-19 restrictions/implications and changes in child obesity rates, particularly in the US. This research ultimately aims to suggest evidence-based intervention methods to help alleviate the burden on the healthcare system.

Outcomes/Results: Findings suggest that COVID-19 implications for limiting virus transmission have significantly impacted child obesity rates, particularly among high-risk/high poverty populations. In a cross-sectional study conducted at The Children's Hospital of Philadelphia, the BMI of nearly 300,000 patients was measured from January 2019 to December 2020. Overall obesity prevalence increased from 13.7% to 15.4%, and that the increase was more pronounced among Hispanic patients, non-Hispanic Black, publicly insured, or lower-income (Jensen et al., 2021).

Evaluation/Conclusion: The most significant limitation of the research conducted is the uncertainties surrounding COVID-19 and how it may continue to wreak havoc on the already ongoing epidemic that is childhood obesity. The short-term changes associated with COVID-19 restrictions, including physical inactivity and sedentary behavior, may become permanently entrenched, leading to an increased risk of obesity and other related diseases in children. In addition, obesity is a recognized risk factor for severe COVID-19. Public health interventions are urgently called upon to promote physical activity and healthy eating habits to mitigate the adverse impacts of COVID-19.

Title: Reality Of The High Black Women Maternal Mortality Rate

Name: Linda Oppong

Purpose: To investigate the specific cause for the high maternal mortality rate amongst black women in the U.S.

Significance: Compared to other races, Black women are at higher risk for pregnancy complications. Nationally, from 2011 to 2015 the pregnancy-related mortality ratio among NH black women was over 3 times higher than among NH whites (CDC, 2019). This study will examine the multiple factors that contribute to their high rate of mortality. To help combat maternal mortality there are existing, proven safety and quality improvement initiatives that need greater uptake to meaningfully improve health care outcomes for Black women. Examples like historical reasons, access to care, socioeconomic status, incidence of preexisting conditions, medical racism all of which are social determinants of health in the United States.

Method/Approach: While there has been much research on Black women maternal mortality, few researchers have taken racial bias in pain assessment into consideration. Articles were analyzed from the CDC, NPR, PubMed and the AAMC. Black Americans are systematically undertreated for pain relative to white Americans. Specifically, an article from PNAS about pain assessment provided a possible specific cause for the high rate of maternal mortality amongst Black women. Out of 418 medical students and residents, 222 met the priority criteria (white, born in the United States, native English speakers). Of the 222, 63 were first year, 72 were second year, 59 were third year and 29 were residents. Participants read two mock medical cases about a black and a white patient and made pain ratings for each. They also completed the same measure of beliefs about biological differences in pain perception. Participants reported the amount of pain they would feel across 18 scenarios and were then randomly assigned to rate the pain of a gender-matched black or white target across the same scenarios.

Outcomes/Results: This study provides the first evidence that racial bias in pain perception is associated with racial bias in pain treatment recommendations. These false beliefs about biological differences between blacks and whites continue to shape the way medical officials perceive and treat black people; they are associated with racial disparities in pain assessment and treatment recommendations. On average, participants endorsed 11.55% (SD = 17.38) of the false beliefs. About 50% reported that at least one of the false belief items was possibly, probably, or definitely true. However, given this sample (medical students and residents), the percentages for false beliefs are surprisingly high. The use of a 2016 analysis in NYC of five years of data found that black, college-educated mothers who gave birth in local hospitals were more likely to suffer severe complications of pregnancy or childbirth than white women who never graduated from high school. In relation to socioeconomic factors affecting SMM, black women tend to still have high risk pregnancy.

Evaluation/Conclusion: These findings suggest that individuals with some medical training may use false beliefs about biological differences between black and white women for medical judgments, which may contribute to racial disparities in pain assessment and treatment.

Title: Non-Profit Organizations in Healthcare and Their Struggle to Maintain Staff and Operations Positive and Successful

Name: Nubia Rodriguez

Purpose: To identify the obstacles nonprofit healthcare organizations meet when demand is higher than supply, in this case, staff and the domino effect it has on a sound establishment when said staff gets overworked and is understaffed during high demand times. To acknowledge how the limited funds available to employment salary and benefits affect job satisfaction and commitment from employees. Also, to highlight the importance of maintaining a strong and reliable workforce without stretching it, or the funding, too thin.

Significance: A financially healthy nonprofit organization is more likely to weather financial difficulties and most importantly, fulfill its mission. Similarly, an organization with a committed and satisfied staff will produce better outcomes. Many non-profit organizations rely solely on grants which limits their funding available for growth and maintenance (Hung and Hager, 2018). Employees and leaders of smaller nonprofits are left to choose between helping the public and supporting their own needs. Nonprofit employees are already underpaid and there is some belief that the notion of "compensating differentials" plays a significant role in workers accepting a lower wage in satisfaction of "helping people" (Lieber, 2016). In the absence of adequate regulation, employees can be undercompensated which affects their overall financial stability and wellbeing.

Method/Approach: Nonprofits continue to make significant contributions to critical sectors, especially in trying times. A study provided surveys to employees of both for-profit and non-profit sectors in the European Union and sampled over 1,066 employee responses. Of those 1066 employees, 469 were non-profit and the remaining 597 worked in the for-profit sector. The study aimed to compare the working conditions from the for profit sector to the nonprofit sector and understand the effects it has on employees and job performance. As well as any intrinsic and extrinsic factors that may affect employees and how they rate their job satisfaction. Also, the role of a Human Resource Manager (HRM) aiming to properly staff the organization with capable bodies and provide the necessary training for optimal job development.

Outcomes/Results: The article found that there is limited and incomplete knowledge about the working conditions of many nonprofit organizations. Most negative findings were due to the lack of HR competencies in the nonprofit sector including low wages and scarcity of resources and the negative effect those elements have on job satisfaction, employment turnover, and stress. (Ariza-Montes and Lucia-Casademunt, 2016).

Evaluation/Conclusion: HR is an important element in both for profit and nonprofit sectors but also in efforts to support the organization and the team within. Non-profit organizations require a design of human resources policies for optimal performance, an emphasis on teamwork, and professional development which contributes to the overall effectiveness of the organization.

Title: Rapid Mortality Rate in Nursing Home Residence due to COVID-19

Name: Gloria Saltos

Purpose: To create intervention guidelines in Nursing Home Residence that struggled with the lack of quality care during COVID-19.

Significance: During COVID-19 many isolated institutions such as Nursing Home Residence lacked educational and resources of prevention guidelines to decrease the risk of the spread of COVID-19. The coronavirus disease had indicated several risk factors that impacted long-term residents, increasing mortality rates; these risk factors such as impaired cognitive and physical function. Two comorbidities were associated with mortality: diabetes and chronic disease. Fever, shortness of breath, tachycardia, and hypoxia were also associated with an increased risk of 30-day mortality. (Panagiotou OA, Kosar CM, White EM, et al., 2021). The COVID-19 burden has also disproportionately affected Black and Hispanic individuals, both in the overall population and in Nursing homes specifically. Based on this evidence we can conclude that these risk factors contributed to the increase of mortality rate in Nursing Home Residents. Also, there were no additional guidelines in controlling these risk factors during the pandemic.

Method/Approach: This project will be conducted by statistical review and informational background from peer-reviewed journal articles to help support the purpose of this researcher. Reviewing the literature will satisfy the objective of providing statistical databases and descriptive statistical analysis. Afterward, organize the research databases to include in the paper to demonstrate the statistical analysis of this research based on the rapid mortality rate in Nursing Homes Residences. The overall responsibility of this research is to create awareness in pre-preparing healthcare employees for global emergencies to prevent the risk of contracting any airborne disease while caring for a patient.

Outcomes/Results: The project aims to produce or improve the benefits and safety of millions of healthcare workers, specifically the home health aide workers during COVID-19, essentially risking their overall health by possibly contracting COVID-19. Pre-planning, by having enough resources to provide healthcare with the necessary tools for their role in the healthcare system. The guidelines created for Nursing Home Residence were to provide patients with the proper PPE equipment and keep social distance with their healthcare aid. By displaying signs and labels indicating where to stand, keeping them informed of the situation, and explaining the protocols to prevent the spread of the disease.

Evaluation/Conclusion: The implication of new policies or regulations to enforce does not establish quickly; nevertheless, creating awareness and demanding change will spark motivation into creating essential resources and planning for global emergencies. These guidelines can be relooked at in the future for other unpredictable airborne diseases, essentially preparing for any second wave of COVID-19. Planning educational resources will enable the fundamentals of decreasing the spread of disease by being ahead and preventing the spread of any airborne diseases. The measures of planning educational resources will prepare healthcare workers for any upcoming global pandemic or emergence.