

Fall 2023 Abstract Book



Title: Impact of Social Programming on Seniors Mental Health

Name: Ifeoluwa Adewale

Preceptors: Melanie Ford, Director of NBSCRC; Kate Brace, Program Developmental Specialist

Agency: New Brunswick Senior Citizen Resource Center (NBSCRC)

Purpose: To improve the mental health and well-being of senior citizens through creative, social, educational, and engaging programming.

Significance: Loneliness and social isolation are linked to mental health issues like depression and anxiety in the world's aging population. In the United States, approximately 50% of those over 60 are in danger of social isolation, and one-third will experience loneliness later in life (Fakoya et al., 2020). Specifically, in New Jersey, 44.3% of older adults 65 years and older recorded being lonely, which is 5.7% lower than the national average (NJHS, 2023, p14). Social isolation and loneliness leading to mental health issues can be combated by participating in various social activities and engaging programs. The New Brunswick Senior Citizen Resource Center (NBSCRC) assists by providing different social, creative, and educational programs for seniors. The programs provide an engaging environment and the opportunity for seniors to connect with each other, improving their mental health and well-being. This project will focus on promoting good mental health for seniors through engaging educational presentations and music programs.

Method/Approach: Research on various mental health issues the aging population is susceptible to was conducted. Information and data were collected using reliable sources such as the Mayo Clinic and the Center for Disease Control and Prevention (CDC). A presentation on mental health and the benefits of social programming was created using all the data and facts from the research. This educational information was then presented through a Lunch & Learn seminar to the seniors twice a week. It covered different types of mental issues that seniors are susceptible to and how they can better their mental health through participating in engaging activities, like music and art. A music program was also created to engage the seniors in brain-boosting activities, which covered music listening and hands-on learning. A mental health survey was conducted anonymously to determine the effects of the presentation and program on their mental health.

Outcomes/Results: The total number of participants was 27. Of the participants, 26% agreed that before joining the resource center, their mental health was not at the best state, and 63% said otherwise. 78% agreed that educational presentations such as the lunch and learn on mental health encourages them to care more for their mental health and well-being. 100% agreed that participating in different activities, like the music program, has had a positive impact on their mental health. 56% of participants agreed that after joining the resource center, they were now content with their mental health, while 4% disagreed. Lastly, 96% of the seniors agree that the senior citizen resource center provides them with a sense of community.

Evaluation/Conclusion: Based on the results, it is safe to conclude that the Lunch & Learn seminar addressing mental health issues and the music program has contributed positively to the mental health of the seniors at the New Brunswick Senior Citizen Resource Center. In addition to these results, the seniors provided excellent feedback on the benefits of the programs on their lifestyle overall. A limitation of this project was being able to administer the survey electronically for better and more accurate results. Conducting the survey by paper increases the risk of non-sampling error. The NBSCRC should continue to monitor the ongoing effects of the programs on the seniors mental health.

Title: The Impact of Latent Tuberculosis Infection Stigma on the Quality of Life of Female

Populations in South Asia

Name: Fatima Ahmad

Preceptors: Priscilla Moreira, MPH

Agency: Global Tuberculosis Institute

Purpose: This literature review aims to comprehensively explore the multifaceted impact of tuberculosis (TB) infection stigma on the quality of life of women in South Asia.

Significance: TB remains a significant concern in South Asia, especially for women. In 2011, an estimated 33% of the 2.9 million incident TB cases globally were among women [1]. Despite lower global case notification rates for women, TB ranks among the top three causes of death for women aged 15 to 44 years (Krishnan et al., 2014). The stigma surrounding TB creates diverse challenges affecting health-seeking behaviors, social interactions, mental health, and economic stability. Addressing the specific challenges imposed by TB stigma on women is crucial for developing tailored interventions and effective public health strategies.

Method/Approach: This literature review aims to (1) explore the impact of LTBI/TB-related stigma on the quality of life of women living in South Asia; (2) identify gender disparities in knowledge and perceptions of TB disease or LTBI;(3) examine the social, psychological, and economic implications of TB-related stigma on affected women; and (4) critically analyze the existing literature to derive insights for future research and interventions. The methodological approach employed search across multiple databases—PubMed, EBSCO, Medline, Embase, and BMC—using specific keywords: (1) latent Tuberculosis 1; (2) latent TB 2; (3) stigma 3; (4) South Asia 4;(5) women 5;(6) female 6; (7) quality of life 7; (8) mental health 8; (9) developing countries 9; (10) prevention 10. The comprehensive search across multiple databases yielded a total of (n=1950) articles, including studies on latent TB stigma prevention (n=1466), mental health (n=52), and direct exploration of TB, women, and stigma. 13 peer-reviewed articles were eligible and selected. Strict inclusion criteria included peer-reviewed articles, articles published between 2013-2023, empirical studies on the epidemiology of tuberculosis in South Asia, and the impact of tuberculosis infection stigma on female quality of life.

Outcomes/Results: Of the 13 eligible articles, 6 were chosen and comprised qualitative (n=4), and mixed-methods (n=2). Epidemiologically, TB remains a pressing issue in South Asia, particularly affecting India, Bangladesh, Pakistan, and Nepal. For instance, Bangladesh is one of the 30 high TB burden countries with an incidence of 221/100,000 and an estimated mortality of 25/100,000 people (Sarwar et al., 2023). Gender disparities persist in TB knowledge and perceptions. Khan, Shaikh, Baig (2020) found that while 99% of female patients were aware of TB, knowledge of classical symptoms like persistent cough was limited (7%). The study revealed that women had better knowledge of TB symptoms than men, underscoring the importance of gendersensitive strategies to address TB stigma in South Asian communities. TB stigma causes social isolation, marital problems, emotional distress, anxiety, and depression, particularly after a TB diagnosis. This stigma worsens financial strains, resulting in job loss and overlooking women's health needs in households.

Evaluation/Conclusion: Despite women's higher awareness, societal stigma persists. Limitations include a narrow focus on symptoms and a lack of intervention assessments. Future efforts should prioritize gendersensitive approaches, mental health support, and socio-economic interventions to mitigate stigma's impact on affected women's well-being in South Asia.

Title: WAFAA Organization Community Outreach in Passaic County

Name: Tricia Allim

Preceptors: Wafaa Saad, President, Director

Agency: Women and Families Ascending Association (WAFAA)

Purpose: Reaching out to as many non-profit healthcare organizations and business officials to promote our resources and receive many clients who are in need of help for housing assistance and other social services.

Significance: There are many women and families who are going through financial hardships, housing issues, are in need of food stamp assistance, and face other forms of life's hardships. The total number of homeless people in Paterson is 245, including 181 who are classified as "sheltered" and 64 listed as "unsheltered" (Malinconico). WAFAA makes it a priority to host community fairs as well as conferences raising awareness for homelessness and drug prevention within the community all while connecting to other non-profit organizations to collaborate in helping alleviate these issues. WAFAA's community outreach efforts play a vital role in addressing the multifaceted needs of the surrounding community, promoting inclusivity and building a foundation for a healthier and more resilient society. The organization's commitment to collaboration further enhances its capacity to make a positive and lasting impact on the well-being of community members.

Method/Approach: The primary approach and methodology of WAFAA's efforts is to communicate and share resources to help other organizations work together for the betterment of the community. One specific example of this is that WAFAA consistently calls other non-profits for food pantry donations and turkey donations to give to families in need during the holiday season. The organization also shares services and contact information with food pantries, donors, and others who are interested in helping out. WAFAA maximizes its impact on the community, addressing immediate needs while also working towards sustainable solutions and long-term community well-being. The organization's eagerness to explore partnerships reflects a commitment to collaboration and a willingness to harness collective strength for the greater good of the community.

Outcomes/Results: Attending meet and greets with other healthcare organizers allowed for the introduction to clients with housing needs, which WAFAA was able to provide resources for. Making connections and compiling contact information of those in need brought in a pool of new clients to work with and help. While attending community outreach events and conferences, WAFAA has advertised and made known its services and capabilities to bring awareness to the struggles of the community and what it can do to help. WAFAA Organization's community outreach initiatives result in positive, tangible outcomes that go beyond immediate assistance. The organization's commitment to holistic support, cultural understanding, collaboration, and continuous improvement contributes to the creation of a stronger, more resilient, and empowered community.

Evaluation/Conclusion: In conclusion, WAFAA Organization's community outreach initiatives have resulted in positive and tangible outcomes for the community. The organization's commitment to a holistic, culturally sensitive, and collaborative approach positions it as a valuable resource for community members facing various challenges. As WAFAA continues to explore partnerships and opportunities for improvement, it is well-positioned to further enhance its impact and contribute to the sustained well-being of the community it serves.

Title: Call Volume and Staffing Forecast for 2024

Name: Javine Angus

Preceptors: William Wu, Manager for Workforce Management

Agency: Hackensack Meridian Health

Purpose: To analyze the completed forecasted call center metrics for the year 2024 and to determine if staffing needs are being met for the Patient Access Center at Hackensack Meridian Health.

Significance: Forecasting is important for organizations to make knowledgeable and strategic data-based decisions. An accurate forecast allows organizations to realize trends and, in some cases, even predict trends. The leaders of the Patient Access Center (PAC) at Hackensack Meridian Health (HMH) want to ensure that they are adequately staffed for the upcoming year due to the rapid expansion of physician offices and specialties being added to the organization. Additionally, the landscape of the healthcare system and scheduling physician's visits has changed significantly since the COVID-19 pandemic. Many doctors' offices are understaffed, hampering their ability to examine new patients. With PAC scheduling appointments for offices across the entire state, it is important that they can meet the needs of both patients and physicians' offices.

Method/Approach: The forecasting method for 2024 began with reviewing the data of each group within the call center and looking for any major variances in metrics such as calls offered, calls handled, average talk/work time, shrinkage, and current headcount. Once the data was reviewed, it was time to determine which forecasting method would be appropriate for 2024. The first forecasting method used was linear forecast, but the forecasted numbers needed to make more sense compared to previous data. Some metrics' increases were too far off to continue with this method. The next forecasting method that was used was a moving average forecast, which looks back on a specific number of data periods and then averages those periods. This allowed the Work Force Management (WFM) team to build a more dynamic and accurate forecast because it focused more on the most recent months of data than older data points. Once the forecasts were completed for each group, all the data was compiled to create a complete forecast.

Outcomes/Results: The first result that was noticed was the overall increase in calls. From 2022 to 2023, there was a 38% increase in incoming calls across all groups. According to the forecast, PAC expects call volume to increase from 2023 to 2024 but at a smaller percentage of about 23%. With the substantial increase in calls from 2022 to 2023, there was also an increase in average call handling time, which increased by 8%. With most of the groups within PAC having over 1-3 years of on-the-job experience and performance training, call handling time is not expected to increase by as much in 2024. In fact, call handling time is expected to increase by 2% with the added volume for 2024. Regarding staffing needs, the forecast shows that the headcount for the number of agents is higher, with 187 current agents, than the required number of agents, 147, for 2024.

Evaluation/Conclusion: With the results from the forecast, the Patient Access Center is confident in its ability to take on the anticipated call volume for 2024 and onboarding new practices to its growing network. Due to having more agents than required, they can implement training for current agents and increase the allotment for PTO.

Title: Promoting Equity of Health: New Brunswick's Culture of Health Initiative

Name: Wilson Arroyo

Preceptors: Mariam Merced, Director

Agency: Robert Wood Johnson University Hospital Community Health Promotions Program

Purpose: To explore and promote the culture of health in the Greater New Brunswick area through community outreach events and educational programs designed for the direct needs of the population.

Significance: The health profile of New Brunswick reflects a diverse background characterized by high levels of poverty, uninsured residents, and a notable presence of immigrant populations. These factors directly influence the health outcomes of the residents, this is proven through a community needs assessment conducted between the years 2000 and 2016. Community Health Promotions Program utilizes community-based groups and organizations to construct a framework for a healthier New Brunswick. This includes social service agencies, fitness centers, non-profit organizations, churches, government, & schools. The population's health disparities are reflected in the health outcomes of its largest demographic group, the Latino community. The community needs assessment concluded that 50% of the population self-identified as Hispanic and 46% of residents only speak Spanish (U.S. Census, 2010). New Brunswick has a 36.1% poverty rate, compared to the Middlesex County rate of 8.3%. Over 30% of residents under 65 years are uninsured, compared to the 14.4% at the county level (U.S. Census, 2010). Residents suffer from increased rates of mental health disorders, diabetes, violence, and poor nutrition.

Method/Approach: The development and implementation of bilingual public health campaigns to encourage healthy lifestyles within vulnerable populations, developed for Latino, uninsured, Spanish-speaking, and immigrant communities in New Brunswick. Culturally sensitive programs were created based on the Community Needs Assessment conducted by the RWJ Foundation. Outreach efforts were directed toward the Latino community, incorporating health education & health literacy workshops, community engagement initiatives, and health promotion programs by utilizing Bilingual Community Health Ambassadors. (2016).

Outcomes/Results: Salsa & Salud is a diabetes awareness event providing Latinos with health education, nutrition, & wellness programs. This health education event had a total of 185 attendees who actively participated in 30 minutes of moderate physical activity to promote good health and ended with a live demonstration of a diabetic-friendly recipe. For community engagement & outreach, RWJ's "COVID-19 Response Team", "Your Health Kiosk," "Family Planning Clinic," and "Breast Care Connection" had an average of 58 residents per table. As part of health promotion and prevention efforts, 39 registrants completed an A1C screening to assess long-term blood sugar control and blood glucose monitoring. The Flu Clinic successfully registered and vaccinated 511 uninsured parents and school-aged children during the first clinic, with an additional 166 vaccinations in the second clinic. At the Men's Health Fair, 30 Black/Brown men were registered and screened. The criteria being uninsured black men aged 45 years and above or men insured/uninsured aged 50 years and above of other demographic groups.

Evaluation/Conclusion: Aligned with the vision of the Culture of Health initiative and the goals of the RWJ Foundation, this project aims to decrease existing health disparities, enhance access to care, and elevate health education and literacy. The ultimate goal is to foster a more equitable and healthier community in the New Brunswick Area by addressing the specific health needs of the Latino population and other vulnerable and underserved communities.

Title: Egatha's Outreach Expansion

Name: Catherine Attia

Preceptors: Isabella Hanna-Head of Operations

Agency: Egatha Foundation for the Health Services

Purpose: To help expand Egatha's community outreach in New Jersey and tristate area, thus increasing public awareness about the organization

Significance: Lebanon's health care system is deteriorating at an alarming rate due to the confluence of economic, political, and environmental challenges, which have resulted in unavailable medications, exorbitant healthcare costs, and a critical shortage of medical professionals. Consequently, in an unpredictable state of limited access essential healthcare services. One Lebanese man reported that in just a few months medication has increased in price from five dollars to thirty-two dollars. Egatha is a US-based nonprofit organization that strives to broaden the availability of quality care by covering and/or subsidizing the cost of patients' medications, procedures, hospital admissions, surgeries, and chronic-disease treatment. Egatha largely raises the necessary funds through community awareness. This project focused on fundraising through social media.

Method/Approach. Various methods of fundraising were researched, such as social media, podcasting, and tabling. After meeting with the founder and head of operations, it was decided that a social media campaign focused on awareness and fundraising for the tri-state area would be the best approach. Between October 15 and December 8, 15 posts were added to Egatha's Instagram. The first event advertised via social media was Egatha's 2nd Annual Fall Walkathon. As a result, eight posts were created from October 15 to November 4. During the event, pictures were taken to spread awareness for the organization and promote notability. Periodic posts that featured holidays and patient stories were posted throughout this time period as well. These posts appealed to followers' emotions and helped indicate to them how many Lebanese are in dire need. The second major event we highlighted on social media was Giving Tuesday. Three posts featuring reasons and ways to donate were posted on November 19, November 27, and November 28. These posts showed reasons and ways to donate. All posts were organic, not paid.

Outcomes/Results: The outcome of these initiatives have created a heightened awareness of the fragile healthcare system in Lebanon, increased donations, and a growing recognition of the importance of the organization. The number of followers increased by 17, the average number of likes/comments was fifteen. The post with the most amount of interactions was the post directly after the walkathon with 56 likes. There were eight posts for the walkathon averaging about 10 likes. Prior to social media there were about 10 sign ups, but after the posts there were approximately 60 people who signed up.

Evaluation/Conclusion: Egatha's role in supplementing Lebanon's current healthcare system has gained widespread recognition, with various stakeholders acknowledging the organization's positive impact. Through documented events and impactful images, we have successfully promoted Egatha's mission and raised awareness about the importance of community engagement and global solidarity in addressing urgent healthcare needs. By highlighting the stories of individuals who have benefitted from Egatha's support, we have conveyed the tangible impact that can be made when communities come together to address healthcare challenges. It is recommended that Egatha use a social media fundraising campaign with paid advertising to reach a broader audience for greater success and future fundraising longevity.

Title: Reducing Obesity Through the HealthyWE Program

Name: Carter Aukett

Preceptors: Thomas Dahan – Co-Director, Rutgers Camden Public Health AmeriCorps

Agency: AmeriCorps – Rutgers Camden

Purpose: To study and analyze social determinants of obesity and implement the HealthyWE Program to reduce the prevalence of obesity in Camden, NJ.

Significance: Forty four percent of Camden's adult population is obese, making it the 4th largest adult population diagnosed with obesity in the United States (CDC, 2023). Obesity in adults can cause impairment in daily life if it becomes chronic. It is important that this rate is reduced to prevent increased incidence of diseases that are comorbid with obesity. Chronic obesity increases the risk for diabetes, cardiovascular disease, osteoarthritis, asthma, and other respiratory illnesses (Kumanyika, et al., 2008). Racial disparities also exist in obesity prevalence. For example, Dutton, et al. (2019) found that African Americans are more likely to be obese if they experience poverty due to socioeconomic barriers to health care and primary prevention. Camden is home to a majority African American population, which is at an increased risk for obesity due to low income, poor built environment, and city infrastructure.

Method/Approach: AmeriCorps has designed a weight loss and healthy living program called HealthyWE to help Camden residents reduce their BMI through self-efficacy measures. Increasing people's awareness of how their environment and behavior affect their health can help them make positive changes to their lifestyle and reduce their weight. Members will complete pre-program, mid-program, and post-program assessments and measure their BMI and body composition using the InBody BioImpedance machine. In order to ensure efficacy of the program, statistical data from the previous quarter (Q3 2023) was reviewed, and trends in weight loss were compared to self-efficacy scores (SE). Additionally, qualitative data from Q3 was also studied to determine the socioeconomic barriers Camden residents face that cause inaccessibility to healthy living.

Outcomes/Results: During the first survey of Q3, the average reported SE was 5.6. During the second survey, the average reported SE was 5.6. During the third survey, the average reported SE was 7.5. Positive SE trends indicate community members' confidence and ability to maintain healthy habits such as quality sleep, healthy diet, and consistent exercise. In Q3, 30% of program members (N=23) who reported low self-efficacy scores were also reported to have an increase or no change in their BMI. In contrast, 43% of members who reported high self-efficacy scores were reported to have reduced their BMI.

Evaluation/Conclusion: In order to determine the efficacy of the program, goals of an 80% adherence to protocol and a 50% "good-to-excellent" self-efficacy rating have been set. A majority of the participants in Q3 were elderly, and lived in housing within walking distance of the program site. Thus, in this cohort, there was no statistically significant effect of social determinants of health on weight loss. To further study the impact of barriers to health, we must expand our outreach to other low-income areas of Camden, and accept adults of any age into the program. By improving the community's self-efficacy for weight loss, the prevalence rate of obesity will be reduced in Camden while the city's infrastructure and public services improve. Focusing on member retention, health literacy, and program accessibility will ensure HealthyWE's success in the future.

Title: Developing Partnerships & Grant Prospect Research for the RWJUH Safety Ambassador

Program

Name: Sara Ayad

Preceptors: Direct Supervisor: Diana Starace, RWJUH Injury Prevention Coordinator

Project Supervisor: Gabriella De Oliveira, Safety Ambassador Program Coordinator

Agency: Robert Wood Johnson University Hospital (RWJUH), Trauma and Injury Prevention

Purpose: To identify funding gaps, research available grant opportunities, and locate prospective partnerships to acquire funding for the RWJ Safety Ambassador Program.

Significance: Each year, in New Jersey, a staggering number exceeding 600,000 children seek medical intervention for accidental injuries. The Trauma & Injury Prevention Department at RWJUH proactively provides educational initiatives and safety resources, heightening awareness to mitigate unintentional injuries and deaths. The RWJ Safety Ambassador Program (SAP) is a data-based, best-practice educational program in its fifteenth year. As the program undergoes further growth within New Jersey and on a national scale, the foremost objective of this project is to secure grants/in-kind donations and establish collaborative partnerships, thus ensuring accessibility to all schools while promoting sustainability.

Method/Approach: Potential in-kind donations, grant markers, and foundations were identified and listed to provide funding through grants and organized in a spreadsheet. A Google search was conducted to locate most of the potential grantmakers/sponsors/partners coming from insurance companies, banks, and governmental organizations. Each organization was researched to determine its viability (alignment with the Safety Ambassador Program's organizational mission). All findings/information were reported to the preceptor, and an Excel sheet with application deadlines was shared. Grant proposals were written out and reviewed by the preceptor before submission.

Outcomes/Results: Data for 20 total organizations, 4 nationwide banks, 6 insurance sponsors, 4 non-health-related partners/collaborators and 6 national health-related sponsors were exported and organized into the shared spreadsheet. Within the spreadsheet, notes and additional information were recorded for each grantmaker/sponsor/partner, regardless of viability. In terms of viability, around 50 grants found on New Jersey Grant Watch's website were inspected, with 20 of those being deemed viable choices. A grant proposal to Geico Insurance for \$13,000 was reviewed by the Safety Ambassador Program's project coordinator and the Trauma & Injury Prevention Coordinator and submitted on November 28, 2023.

Evaluation/Conclusion: Unintentional injuries remain a public health concern on a national scale. With the grant proposal submitted, the funding potentially received from Geico Insurance funding will support both the hospital's mission and the goals of the RWJ Safety Ambassador Program as we recognize the successes of our Safety Ambassadors, advisors, and community partners/sponsors. Other viable grants were identified, but the application window does not open until late 2024. Additional research pertaining to future grants will be vital in expanding the Safety Ambassador Program across more New Jersey schools. The Safety Ambassador Program is awaiting results from each contacted organization within a six-month period to potentially receive funding. The organization must access the comprehensive spreadsheet and the accompanying research to secure funding. The spreadsheet should be updated regularly to keep track of new grant funding opportunities.

Title: Competitive Intelligence Program Development

Name: Anmol Bector

Preceptors: Denise Bell, Senior Director of Product Management

Agency: LabVantage Solutions

Purpose: To develop and maintain a comprehensive competitive intelligence library, serving as an all-in-one resource for LabVantage (LV) stakeholders (SH) that would improve competitive intelligence (CI), increase revenue, and strengthen LabVantage's product road map.

Significance: Prior to June 2023, LV lacked a comprehensive and standardized competitive intelligence program for sharing information between the sales and product management (PM) teams, leading to inconsistent knowledge across the organization. To remedy this, LV purchased Crayon CI (CCI), a competitive intelligence software tool. With CCI, users can collect real-time competitive information and create a curated SWOT analysis, in the form of battle cards, to discuss product positioning. CCI has demonstrated prior success with companies like Allego, reporting a 95%-win rate against competitors. LV intends to leverage CCI to improve competitive sales knowledge and proactively monitor competitors. This approach also facilitates a consolidated repertoire, ensuring consistent access to competitor information for all LV employees.

Method/Approach: A survey of 25 LV sales team members found that 8% lacked awareness of CI, with CI's importance rated at 8.2/10. Challenges included 28% struggling to find CI, 36% identifying competitors, and 20% positioning against rivals. To address this, the PM team created Crayon Battle Cards (CBC). The process included generating a SWOT analysis of LV's competitors by combining LV tribal knowledge, researching competitors through various external sources, and validating information with subject matter experts. The battle card is a consolidated resource, structured with "How We Win" and "Why We Lose" sections, that focuses on LV's strengths, addresses customer concerns, outlines competitor shortcomings where LV excels, and addresses potential shortfalls while emphasizing LV's competitiveness within the overall competitive landscape. The battle card aims to streamline sales and aligns with survey feedback, with short-term success measured by continued employee engagement.

Outcomes/Results: The short-term success of the CBC is measured by its engagement in the first quarter after rollout, with 409 unique views and 1,042 total views for the initial battle card and 63 unique views and 143 total views for the second battle card. Despite the small sales team size of 40 members, there is notable company-wide engagement. In the middle term, considering LV's product's one-year sales cycle, the PM team plans to conduct a qualitative survey among major and minor SH to assess CCI use and effectiveness in competitive understanding. Lagging Indicators (LI) will focus on revenue generation, involving an analysis of crayon metrics, identification of SH usage patterns, and a year-long comparison of win rates, deal sizes, sales cycle length, upsell opportunities, customer acquisitions, and customer retention statistics between high and low usage groups. The secondary LI will align with the secondary objective of CCI implementation for PM to use in the design phase and product roadmap.

Evaluation/Conclusion: In summary, leading indicators demonstrate successful and consistent CCI usage among the primary SH. For mid-term metrics, a qualitative survey will be sent to SH to assess effectiveness. LI will hinge on revenue generation and roadmap creation, involving an analysis of CCI metrics, identification of usage patterns, and a year-long comparison of revenue-generating statistics between high and low usage groups. After a year, the PM team can compare CCI metrics to assess the success in these categories for a high-usage SH versus a low-usage SH to determine the battle cards' effectiveness in terms of revenue generation.

Title: Increasing Patient Retention through Established Standards Within The Company

Name: Kyra Bernardez

Preceptors: Michele Demarest and Shalom Mendoza

Agency: Morris Speech Therapy Association, LLC

Purpose: To analyze the performance of employees and its correlation to patient retention

Significance: Interactions between healthcare associations and patients play a significant role in patient satisfaction. Employee engagement leads to better experiences throughout the organization, which boosts healthcare quality and the healthcare organizations' financial performance. Low employee engagement increases financial burdens to the funds being lost from the lack of patient retention. The failure or success of the organization is highly dependent upon employees in the organization. For this reason, it is highly important to adopt successful employee engagement strategies and propose intervention to improve the productivity and efficiency in the work environment.

Method/Approach: Schedulers, intake coordinator and insurance coordinators are the first people who interact with a new patient at Morris Speech Therapy. In September, all the office manager job descriptions and duties were collected and organized into a spreadsheet. The spreadsheet indicated their job title, job description, responsibilities, and priorities. This was used to implement "The Buddy System" where each employee was paired with another employee with a similar title and job duties to train for backup of each other. One of the discovered issues for international employees was intermittent electricity, which led to significant computer downtime. When electrical outages occur, their "buddy" would take up the work that needs to be done. To address intermittent electricity directly, research was conducted on purchasing and shipping generators to Dominico, the Philippines, and India. To increase accountability for team members and oversight by management, the existing Google Chat system was used and Tasks were implemented to track each employee's daily job duties. To measure the impact on patient retention, data collected by the billing manager was compared from January 2023 to November 2023.

Outcomes/Results: Each paired employee group was asked to meet by November 20th. A Zoom call with each pair verified that each person knew the other's tasks and could competently serve as their backup. Three generators were bought for the administrative workers leading to no absences due to lack of electricity. Google Tasks have been beneficial for tracking employees. It has allowed administrative staff to be more accountable towards their work, especially since each chat can be viewed by managers. The lead therapist of the company is 20% -25% of the company's revenue. The retention statistics show that in January 2023, that the lead therapist had a total of 87 appointments. In June 2023 the number of appointments was 251. Furthermore, she reached a low of 137 appointments in August and went back up to 192 appointments in November.

Evaluation/Conclusion: Pairing employees together has allowed for the company's processes to be consistent. Consistency allows the process of care to become more efficient and patient outcomes and retention improves. Buying each generator was \$169. However, there were unexpected costs: \$325 for clearance, duties were up to \$255, a \$25 broker fee, and \$41 freight. Google Tasks increases accountability but lacks the features that allow collaboration to flow. We believe the lead therapist's drop in appointments over the summer was due to the fact that an administrator resigned from the company. Leaving tasks undone and confusion on who was responsible for them. Tasks that correlated to dealing with patient verifying patient information with insurance in order to get services. After reestablishing tasks and responsibilities appointments began to further increase.

Title: Unlocking Wellness: The Benefits of Physical Therapy's Social Media Advocacy

Name: Maveline Betances

Preceptors: Dr. Ammar Mustafa - DPT, Physical Therapist

Agency: Bounce Back Physical Therapy- Clifton, NJ

Purpose: To strategically leverage the clinic's Instagram platform to advocate for the benefits of physical therapy, fostering public awareness and engagement. Through targeted social media efforts, the aim is to contribute to the broader mission of enhancing accessibility and understanding of physical therapy services within diverse and underserved populations due to office location.

Significance: In New Jersey, 10.3% of the population, which translates to 911,300 individuals out of a total population of 8,860,000 across all age groups, reported experiencing at least one disability. Within Passaic County's population, approximately 13.1%-16.0% of its residents have been reported as being part of the disabled population. In a region characterized by lower socioeconomic status, this physical therapy office stands out as one of the few facilities in-network with New Jersey's Medicaid Program. The project aims to amplify awareness of this crucial resource through strategic social media engagement. Additionally, this initiative aims to spread general awareness about the comprehensive range of services available in the office, empowering these vulnerable populations to seek the healthcare they require without the burden of insurance concerns.

Method/Approach: The project's methodology encompassed collaborative discussions with Dr. Ammar Mustafa to identify prevalent misconceptions about physical therapy and discern educational topics beneficial for public awareness. They collectively strategized to promote the clinic's in-network status with insurances relevant to underserved communities. To align with clinic goals, a weekly post schedule was formulated based on insights and demands, with a particular emphasis on content creation by leveraging the intern's observations and Dr. Mustafa's recommendations. The posts on Instagram were designed to debunk physical therapy myths, offer at-home practice tips, and feature patient testimonials.

Outcomes/Results: From September to December, the clinic's Instagram content witnessed a remarkable 1,600% surge in engagement, reflecting a substantial amplification of the clinic's online presence. Impressively, content interactions experienced a 3,400% increase, with a notable 2,900% rise in interactions from current account followers and a 400% increase from non-followers, highlighting the broad impact of the campaign. Moreover, post interactions saw a 2,766% increase throughout this period compared to the preceding 3 months of June-early September. Simultaneously, the campaign led to an impressive 224% increase in the number of accounts reached, indicating heightened visibility within the target community. During this period, a strategic content approach was employed, encompassing 6 posts and 9 stories. The best-performing post centered around patient testimonials, showcasing the overwhelmingly positive response to the clinic's services. The least successful post was the most recent educational content discussing the importance of prehab, suggesting content strategy refinement.

Evaluation/Conclusion: The substantial 1,600% increase in engagement and the 224% expansion in "accounts reached" validate the effectiveness of the strategies, aligning seamlessly with the mission to enhance accessibility and understanding of physical therapy services. Ongoing evaluation and strategy adaptation are crucial for sustaining this positive trajectory. Notably, access to detailed demographic/target audience metrics is pending until the follower count reaches a minimum of 100 (per Instagram). However, the use of strategic hashtags (#jointhealth, #crackthemyth, #therapeuticbenefits) reflects the continuous effort to reach and resonate with the intended audience.

Title: Optimizing Precision Medicine Molecular Tumor Board

Name: Julia Bildey

Preceptors: Frances Di Clemente, Program Manager

Agency: Precision Medicine Oncology at the Rutgers Cancer Institute of New Jersey

Purpose: To organize and implement a web-based learning management system to improve and expand access to the molecular tumor board and advance the genomic knowledge of clinical providers and researchers.

Significance: According to the CDC₁, cancer currently ranks as the second leading cause of mortality within the United States, resulting in an annual estimated mortality of 609,820 individuals. Next generation sequencing (NGS) allows clinical providers to discern the specific composition of a tumor and suggest therapeutic strategies that are tailored to a patient in order to reduce damage and negative side effects. As NGS becomes more accessible and affordable, clinical providers need continuous education to keep up with its rapidly evolving nature. To address this, the Cancer Institute of New Jersey conducts a molecular tumor board for clinical providers to discuss and expand their understanding using clinical examples. Offering these tumor boards in a remote and asynchronous format aims to accommodate the busy schedules of medical professionals, ultimately contributing to the enhancement of cancer prevention, treatment, and identification.

Method/Approach: A literature review was performed on the effectiveness of online learning techniques. Four aspects were chosen for optimization: clear communication, accessibility, discussion spaces, and flexible assessment strategies. Factors considered were: 1) Will this aspect be applicable; 2) Can this aspect be implemented within a set timeframe and resources; 3) Will this aspect be in violation of HIPAA standards. Based on these qualifications, the 4 aforementioned aspects met the criteria. Canvas was chosen to house the asynchronous material. A Canvas page was constructed and populated with short video content. Clear communication and accessibility were achieved through the creation of an instruction module and contact table. Modules were created with video content, a discussion board, and a quiz. Three quiz structures were drafted and presented to participants to pick from: an embedded video quiz, a fill in the blank attention-based quiz, and a multiple-choice quiz. A survey was created to assess the effectiveness of these aspects on learning.

Outcomes/Results: The Canvas page and survey was shared with 24 students, seven of which attend molecular tumor board synchronously. Seventeen students registered and five completed the survey. Of those that completed the survey, results showed that 80% of the participants equally preferred embedded video quizzes versus fill in the blank attention-based quizzes. The remaining 20% preferred traditional understanding based multiple choice quizzes. 80% of participants rated the discussion pages as conducive for learning.

Evaluation/Conclusion: Although limited, results demonstrate the Canvas platform shows promise. Preliminary opinions suggest that it is conducive to learning. A fill in the blank attention-based quizzing method will be implemented as the main quizzing method. Providers are able to educate themselves on their own time, but the page will need tweaking to simplify it for first time Canvas users. A more comprehensive home page should be developed to aid users in finding content. CME accreditation may be available through the canvas page for those who cannot attend the live meetings. Overall, implementation and consistent evaluation of the platform will inform administration of its usefulness.

Title: Optimizing 'Purewick' for UTI Prevention

Name: Alexandria Bruce

Preceptors: Melanie Kramber, MSN RN, Care Manager

Agency: Piedmont Healthcare

Purpose: To evaluate and provide recommendations to optimize the implementation of 'Purewick,' an external male urinary collection device, across Piedmont Healthcare hospitals to help maximize urinary tract infection prevention and patient satisfaction.

Significance: Occurring in up to 15% of hospital patients and costing over \$340 million annually in the US, catheter-associated UTIs are the most common type of healthcare-associated infection reported to the National Healthcare Safety Network (NHSN) (CDC, 2022). 'Purewick,' an external male urinary collection device, provides a catheter-free alternative to manage urinary incontinence and retention in hospital settings. Piedmont Healthcare recently implemented 'Purewick' across its system, but opportunities likely exist to optimize adoption and effectiveness. This project will evaluate the impact of the 'Purewick' rollout and provide data-driven recommendations to maximize UTI prevention and patient experience.

Method/Approach: A retrospective analysis will be conducted using available data on urinary catheter utilization rates and catheter-associated UTI rates across the Piedmont hospital system before and after the system-wide 'Purewick' rollout. 'Purewick' device utilization data will also be extracted. Published best practices on CAUTI prevention and external male urinary collection devices will be reviewed to supplement recommendations.

Outcomes/Results: Post-'Purewick' catheter usage decreased from 17.4% to 12.9%, the catheter-to-patient ratio declined from 0.505 to 0.493, and the CAUTI standardized infection ratio fell from 0.942 to 0.444 system-wide. Insertion and maintenance bundle compliance exceeded 94%. Opportunities remain to further improve adoption through evaluation, protocol optimization, training enhancement, and documentation workflows.

Evaluation/Conclusion: Implementing 'Purewick' significantly reduced urinary catheter use and CAUTI rates across Piedmont hospitals in both male and female patients. However, additional efforts around nursing engagement, product selection, evidence-based protocols, role-based education, and integrated documentation can help maximize UTI prevention and safety goals. This quality improvement initiative demonstrated 'Purewick's' value while providing a roadmap to optimize its life-saving impact across all appropriate patient populations.

Title: Significance of Care Coordination in the Journey of Leukemia Patients

Name: Susan Chen, Care Coordinator 1

Preceptors: Julia Attinello, Assistant Manager of Outpatient Services

Agency: Memorial Sloan Kettering Cancer Center (David H. Koch Center)

Purpose: To understand the significance of care coordination for the health journey of leukemia patients in a fast paced department by proactively involving and interacting with patients and their families while also maintaining communication with clinical teams and health administrators.

Significance: Leukemia is a form of cancer that pertains to mutations in blood cells and it is the "10th most common cancer in the US, accounting for 3.2% of all new cancer cases" (2023). Due to the circulatory nature of this cancer, as mutated white blood cells travel throughout the human circulation, it can lead to a variety of symptoms that negatively impact everyday activities. Understanding this cancer's widespread impact on the patients and their quality of life, Care Coordinators (CC) at MSK perform tasks that strive to empower its patients to regain control of their lives such that they do not need to put their lives on hold while being treated.

Method/Approach: CCs perform a variety of duties that aim to reduce stress in cancer patients. First, they are responsible for providing a welcoming experience when checking patients in for their appointments. This includes greeting patients with warmth and making small conversation to foster a human experience, while efficiently using Epic's Healthcare Information System (HIS) and Clinical Information System (CIS) to check in the patients. HIS contains patient demographic information along with their appointment details; and CIS contains doctor visit reports, procedure/blood results, and clinical orders entries (COE) that entails future appointments, labs, etc for patients. Both of these platforms are vital to a successful CC as it provides information that may be useful for patient knowledge, which includes blood count levels and wait time. In addition to checking in patients, CCs also complete thoughtful sendoff, which includes interpreting the COEs accurately and scheduling patients accordingly using HIS and CIS. When completing thoughtful sendoff, the CCs must consider and protiotize, whenever possible, patient preference. This includes scheduling patients at MSK sites that are closer to the patients' residence and timeframes that optimize the patients' schedules. This process involves calling patients and keeping an open communication with them to ensure their involvement in their treatment and care. It also entails emailing clinical providers for date adjustments that coordinate with patient availability and contacting healthcare administrators for extra time slots for chemotherapies. Simultaneously, CCs must accurately schedule appointments by communicating with doctors and nurse practitioners to clarify any uncertainties in the COE. By utilizing HIS and CIS efficiently, while maintaining an open communication with the clinical team and patient, CCs become a vital player in the patient care journey.

Outcomes/Results: Upon completion of training and mentorship, CCs become well equipped with the capabilities and resources to perform patient checks ins and scheduling optimally. By proactively interacting with patients and clinical teams, patients experience improved outcomes as they are able to continue living their life as a human and not as a patient. By scheduling appointments around their work schedule or after their kids get off school, they retain control and autonomy and thus are happier.

Evaluation/Conclusion: Care coordination is crucial to the care journey of cancer patients as effective coordination of care leads to a higher quality of life. By actively encouraging patient participation in their care/treatment process, patients become more satisfied with the care they receive. As such, MSKCC strives for their CCs to involve the patients in this process to ultimately reach improved patient outcomes.

Title: Healthcare Professional Outreach with LLS

Name: David Choi

Preceptors: Stacy Kreizman, Patient and Community Outreach Senior Manager

Agency: The Leukemia and Lymphoma Society (LLS)

Purpose: To connect and maintain relationships with healthcare professionals with The Leukemia and Lymphoma Society and educate them on the role and importance of the organization to connect more patients with LLS in the New Jersey and Northeastern Pennsylvania regions.

Significance: Annually, approximately 180,000 individuals receive blood cancer diagnoses in the United States, constituting nearly 10% of newly reported cancer cases (National Foundation of Cancer Research). In the New Jersey region, an estimated 56,000 fresh cancer cases are projected, with 5,530 of them attributed to blood cancer (American Cancer Society). The Leukemia and Lymphoma Society offers significant resources and services for those affected by this ailment. Nevertheless, many individuals struggle to discover the offerings provided by the organization. To address the limited awareness of the entity and the assistance it can extend, the patient and community outreach department promotes its services through brochures, flyers, mailings, and phone calls. The focus is on reaching places where individuals initially become aware of their health conditions—namely, healthcare organizations. Informing clinics, hospitals, cancer centers, private practices, and specialty pharmacies about the organization is crucial, enabling them to educate their patients about the available resources. The project's objective is to furnish healthcare professionals with knowledge about the organization, facilitating increased connections between patients and the Leukemia and Lymphoma Society. The aim is to help patients recognize that combating cancer is ingrained in their essence

Method/Approach: The objective was to establish and sustain relationships with healthcare professionals, aiming to connect patients. Specialty pharmacies were prioritized initially, given their role in supplying medication for individuals with blood cancer. This strategy proved more successful than approaching general hospitals. Following contact with pharmacies, cooperation was sought for patient connections, forming the action plan. Customized QR codes were created for each healthcare organization to track metrics. These QR codes were affixed to posters and brochures and then dispatched to the organizations. Information on additional resources for healthcare professionals to recommend to patients was also provided.

Outcomes/Results: Contacted 45 healthcare organizations, including pharmacies, clinics, and hospitals, 40 willingly shared their contact information for detailed project insights. Despite proactive follow-up emails, none of the 40 organizations responded or engaged in collaboration with LLS. The data collection aimed to yield actionable quantitative insights, empowering the organization to identify entities requiring additional support and resources. Additionally, it sought to evaluate the effectiveness of this assertive outreach strategy.

Evaluation/Conclusion: The outcomes of the project underscored the complexities in fostering collaboration, particularly with specialty pharmacies, clinics, and hospitals. Healthcare systems governed by stringent non-profit policies posed additional challenges. In response, a comprehensive poster/flier was designed to communicate the importance of collaboration and patient referrals to healthcare professionals. Simultaneously, a versatile template was created for future use, ensuring a streamlined approach by any employee in the event of cooperation with LLS by a healthcare organization. One limitation of the project was the time constraint, as more healthcare organizations could have been contacted and given more time to receive a response.

Title: Hospice Care Safety and Quality Performance Assessment

Name: Casey Contreras

Preceptors: Direct Supervisor: Sara Culang, Director of Volunteer Services

Agency: Stein Hospice Care

Purpose: To identify areas for improvement and alternative interventions to improve patient care holistically and to undertake an assessment of safety rules and high-standard performance within the hospice care setting.

Significance: This project seeks to give insights and recommendations to optimize the delivery of end-of-life care while ensuring the highest standards of safety and adhering to the patient and family's wishes through data analysis and review. The assessment is crucial for addressing serious concerns about the safety and quality of hospice care. In fact, detecting and reducing potential dangers aims to address the urgent need for safety assessments. A 2020 analysis published by the Journal of Palliative Medicine demonstrated how severe medication errors, infection control failures, and inaccurate charting in hospice care can be. The project will use evidence-based insights to address the need for carefully audited patient charts and documents. This concept was raised by a study published in the Journal of Pain and Symptom Management (2018), which showed the disparities in hospice care among various providers. The research intends to establish accuracy indicators and charting criteria so providers, patients, and families can work together in a coherent manner to provide the safest and patient-specific care.

Method/Approach: Reviewing literature and safety guidelines will provide detailed insights on performance requirements and safety guidelines for hospice care and provide a comprehensive overview of this project. A search of peer-reviewed papers, studies, and articles about the effectiveness of quality end-of-life care was required. A plan to gather data and complete an analysis will follow the research. The collected information includes incident reports, surveys, and patient records in hospice care institutions. Speaking with hospice care professionals will also obtain a qualitative perspective on the main problems and areas that could use improvement. After gathering data and analyzing statistical trends, it will illuminate the biggest performance and documentation issues. Also, extracted themes and insights from interview data will aid in formulating a list of suggestions to address safety/accuracy concerns and enhance patient care. It contains detailed instructions for managing medications, infection control procedures, and recommendations for raising the general standard.

Outcomes/Results: A final report outlining the findings and suggestions for raising patient chart accuracy by notifying all staff about auditing, including aides, volunteers, nurses, etc. Using various measures like frequency of missing qualifying documentation errors, infection control failures, and proper patient evaluation upon admission to reflect and report on every month to track improvements. It will offer qualitative insights gleaned from hospice care professional's needs from an intern, highlighting that there are more mistakes within the charts of deceased patients compared to active patients. The initiative seeks to make patients' final moments as safe and painless as possible by developing performance indicators like regular auditing checks and providing specific recommendations based on monthly checks, which aligns with the ultimate objective of delivering compassionate care.

Evaluation/Conclusion: After patient chart audits and discussion, nearly 50% of charts had no mistakes, missing information, or inaccurate errors, leaving the other half subject to safety/accuracy concerns. Nearly 25% of patients missing critical information within their charts were already pronounced deceased. These results illuminate a potential absence of concern for patient information and an increased awareness of accuracy before and after death.

Title: Optimizing Data Quality for Streamlined Family Screening

Name: Sarah Corrales

Preceptors: Direct Supervisor: Jennifer Biondi, Project Manager

Project Supervisor: Hayley Cagan Kamis, Family Navigator Lead

Agency: Children's Specialized Hospital: Center for Discovery, Innovation & Development

Purpose: To minimize or eliminate redundancy and improve data quality for the Family Navigator team.

Significance: The patient information database drives functionality across all divisions of CSH including storing and accessing patient information. Maintaining the database takes each family navigator several hours per day. The navigators are only allowed to work a maximum of 15 hours a week, a majority of which is dedicated to outreach for families in need. The family lead is looking for new systems or strategies to be able to reduce the time it takes to update the database. This project focused on sourcing and reviewing new database software to recommend a more efficient system.

Method/Approach: To gain a better insight into the challenges faced by each family navigator in their work and identify any specific data-related needs they may have, individual interviews were conducted on October 16, 2023 and October 20, 2023. An Excel spreadsheet was created to store all the family navigator's responses and insights with a list of three prospective software systems that could eliminate the data quality issues faced. The software systems were researched, reviewed and selected based on the list of required features, desired factors, and systems already in use by nearby hospitals. Several calls were conducted on October 23, 2023 with representatives from each software company to eliminate and determine which system would work best for the family navigators.

Outcomes/Results: After analyzing the six family navigator's responses, there were three common difficulties they all addressed: a loss or delay of patient surveys, not having the ability to look back at responses received over telephone, and how time consuming it took to create and cross-check call tables. The family navigator lead requested specifically for a new prospective system to allow her to join and monitor calls, be in accordance with HIPPA, and allow better tracking of family navigators time to ensure it is being used efficiently. The Five9 software appeared as a highly promising solution that successfully resolved all problems presented by each navigator and offered more assistance than originally anticipated. A custom price quote was obtained, ranging from \$150 to \$250, dependent on more factors to be determined. An in-depth demo of the prospective new system, Five9, was conducted on November 3rd, 2023.

Evaluation/Conclusion: The family navigator lead, Hayley, was pleased with the data collected and presented for Five9's system. She approved and wants to adopt the new Five9 system for the future of the family navigators work. Another presentation to management will take place in December 2023 for Five9 to be implemented by January 2024. Questions were asked before the Five9 presentation to assess how the navigators felt about the current system as well as possible changes they want to see in a new system, which was explained in the results. A similar evaluation will be collected to assess any positive or negative feelings each family navigator feels about implementing the new system, if they feel their needs have been met since the change to Five9's system, and if there has been a noticeable decrease in obstacles preventing them from prioritizing screening families in New Jersey.

Title: HAI/AR Health Equity Data Intern

Name: Anamika Desai

Preceptors: Jasmine Davis, Health Educator

Celina Koh, Health Data Specialist

Agency: New Jersey Department of Health

Purpose: Using R and other statistical analysis tools to analyze and draw conclusions on the impact Project Firstline (PFL) trainings have had on health equity issues (geographic, socioeconomic, race, ethnicity, gender, etc.) and report findings in a public report, including a literature review.

Significance: Health inequities negatively impact various communities throughout New Jersey, causing discrepancies in quality of care and other issues. For example, 54% of Black residents in New Jersey feel that a person's race or ethnicity significantly influences health outcomes, compared to 30% of White residents (Robert Wood Johnson Foundation). Using health equity training distributed to public and private health facilities, the Project Firstline team seeks to increase the understanding of the impact of health inequities so that health professionals are aware of their influences and work to address them in the healthcare environment. By analyzing the data from these trainings, the PFL team can find out whether these trainings were successful and how they can be improved, as well as define the path to further address health inequities.

Method/Approach: The Project Firstline (PFL) team has already collected demographic data on the people who attended CDC trainings. RStudio, MS Excel, and other analysis tools will be used to edit the data, removing duplicates, incorrect information, and entering address and location data for each entry. Statistical analysis, such as hypothesis testing, inferential statistics, and predictive modeling will be used to determine if PFL trainings have had a significant impact on health equity and health education in the medical workplace.

Outcomes/Results: The majority of the data has been cleaned, yielding about 2000 entries of data including location, occupation, email address, and other fields. A literature review on healthcare-associated infections (HAIs) and their association with health inequities has been conducted, producing a thorough background of what has brought HAIs to where they are today, how the healthcare workplace is handling them, and what we can do to better educate the healthcare workforce on how to prevent their spread. It is becoming clear that within New Jersey, there is a greater concentration of the healthcare-associated workforce attending trainings in Northern New Jersey compared to Southern New Jersey, which may indicate a lower level of professional development and therefore lower level of care in Southern New Jersey.

Evaluation/Conclusion: Greater insights must be generated by examining the gap between the defined upper limit of spread speed and how fast HAIs spread in reality. Research indicates that there are measures currently in place that are not effective in limiting the spread of HAIs - these measures should be examined for weaknesses from a practical perspective and replaced if they are found wanting. From a health education perspective, issues such as unconscious biases and lack of diversity and inclusion in the healthcare workforce can be addressed through regular trainings and workshops. Bringing awareness of issues such as the misconception that women of color don't feel as much pain during childbirth as white women to the workforce is critical to improvement. By limiting who is vulnerable to contracting HAIs via reducing subconscious biases and learned ignorance, the spread of HAIs can be reduced.

Title: Justice, Diversity, Equity and Inclusion in Maternal Health Services

Name: Milena Figueroa

Preceptors: Maritza I. Raimundi-Petroski, MPA, VP of Strategic Initiatives, Prevention Programs,

and Community Engagement

Agency: The Children's Home Society of New Jersey (CHSofNJ)

Purpose: To promote and enhance Justice, Equity, Diversity, and Inclusion (JEDI) in maternal health services through three different programs at CHSofNJ (AMAR, CUNA/Body & Soul, and Multicultural Doula Project).

Significance: Yearly in the U.S., more than 700 women die due to pregnancy or delivery complications. Furthermore, Black mothers are dying of these causes at a pace three times higher than their white counterparts (LoGiudice 2022). From 2016 through 2018 in New Jersey, the pregnancy-related mortality ratio (number of pregnancy-related deaths per 100,000 live births) for Black, non-Hispanic women (39.2 deaths per 100,000 live births) was 6.6 times higher than for White, non-Hispanic women (5.9 per 100,000 live births) (Persichilli, 2022). The pregnancy-related mortality ratio for Hispanic women (20.6 per 100,000 live births) was 3.5 times higher than for White, non-Hispanic women (Persichilli, 2022). The Children's Home Society of New Jersey provides various maternal health services, such as the Multicultural Community Doula training to combat the maternal mortality rate. This project will entail training community members to be Doulas, which will help decrease maternal mortality rates among Black and Hispanic mothers.

Method/Approach: The project aims to improve, promote, and provide JEDI resources for clients and staff at the Children's Home Society of NJ. To achieve this goal, the agency has implemented a digital JEDI resource library for CHSofNJ staff to read for informational guidance. So far, there have been few articles on cultural competency in maternal services and cultural awareness in the workplace. The plan is to conduct cultural presentations about the Muslim/Arab, Polish/European, and African communities in Trenton, NJ, for CHSofNJ staff and Training of Trainers (TOT). The presentations will discuss overall culture, customs, garments, salutations, and maternal/health services provided in each country/background. The presentations should provide a greater understanding of the people that comprise Trenton, NJ. Lastly, the plan is to provide leaflets/pamphlets about cultural norms for TOTs and Community-Based Doulas (CBD) when the newly trained Doulas visit their birthing clients.

Outcomes/Results: JEDI information including 4 leaflets/articles and cultural competence workshops surrounding general customs and traditions to prenatal, maternal, and postpartum common practices, were provided to the CHSofNJ staff, TOTs, and CBDs who serve under the maternal health services. The agency expects increased cultural awareness from CHSofNJ staff and a much stronger connection in community attitudes between mothers in Trenton and CHSofNJ network professionals because of the JEDI resources. In short, the 2 out of 4 workshops and 4 articles revolving around equitable maternal health create a much more inclusive and trustworthy environment with mothers and CHSofNJ staff. With that stronger community tie, tackling maternal mortality will be much more effective.

Evaluation/Conclusion: Incorporating JEDI information and resources in maternal health services to help promote the Trenton community at CHSofNJ was a compelling experience. The project integrated JEDI resources by creating a digital library, providing cultural workshops to agency staff, and developing leaflets for CHS staff. The project will be evaluated by conducting 4 surveys on the effectiveness of the DEI workshops to CHS staff and a separate survey or testimony for birthing clients, TOTs, and CBDs.

Title: Senior Center Outreach and Needs Assessment

Name: Julianne Goncalves

Preceptors: Abigail Thompson, Program Director

Agency: RWJ Barnabas Monmouth Medical Center-LiveWell Center

Purpose: To reach out to senior centers and establish relationships that will benefit older adults in Monmouth Medical Center's (MMC) primary service area.

Significance: One of the largest issues with senior centers is establishing beneficial partnerships (The National Council on Aging, 2023). Monmouth Medical Center's LiveWell Center aims to provide free community programs that provide health education for living a healthier lifestyle. Since opening in May 2022, the LiveWell Center has not engaged senior centers in the area to the fullest extent. However, the age bracket of seniors (ages 65 and older) is a target population for the programs. An initial literature review shows that senior populations in Monmouth County make up 16% of the population and are expected to grow to 22% by 2034. The needs in these populations involved chronic diseases, isolation, and access to affordable care. In Monmouth County, 66% of the population live in areas that are at high risk for isolation and 17% suffer from chronic illnesses (Monmouth County, 2017). This project will assess the needs of local senior centers and establish partnerships to provide programs to the population of interest.

Method/Approach: First, a needs assessment analyzing health issues of older adults for the primary service areas of MMC (located in Long Branch, NJ) and the LiveWell Center (located in Eatontown, NJ) was conducted. The following towns were identified for follow-up: Long Branch, Ocean Twp., Red Bank, Eatontown, Tinton Falls, Neptune, Asbury Park, Bradley Beach, Howell, and Wall. Then, data from the senior centers was gathered. To conduct outreach, a letter was written addressed to these senior centers introducing the LiveWell Center and what services are offered. Along with the letter, a folder of other resources were put together to establish a welcome packet. The folder was hand-delivered to centers; follow-up phone calls and emails were completed. Meanwhile, a brief survey was developed to assess the specific needs of the identified groups, which was utilized when engaging with senior center coordinators.

Outcomes/Results: Out of the 10 senior centers that were initially contacted, 5 coordinators responded to the needs assessment questions. The major needs identified for older adults at the 5 senior centers include: health education on chronic illnesses (100%), nutrition (80%), socialization (60%), exercise (40%), and mental health (20%). Using this data, specific programs that target these needs have been scheduled for 2024 with the associated group. There were 3 collaborations established and 2 are pending.

Evaluation/Conclusion: Through the utilization of a needs assessment, the current health education needs of the senior population in MMC's catchment area were identified. It was determined that there are common barriers in senior communities throughout the county. One barrier was lack of transportation. Additionally, it was discovered that the municipality websites were not up to date with contact information, creating a barrier in communication. This is important to note for the future, not only in regards to community outreach, but for other interactions between these communities and their residents.

Title: Risk Factor Awareness Among Adolescents

Name: Christina Gubernat

Preceptors: Kevin JeanCharles, Saraih Harvey

Agency: Bayway Family Success Center, Elizabeth, NJ

Purpose: To increase the awareness of substance abuse risk factors among adolescents (12-17) in the Elizabeth, New Jersey population.

Significance: The city of Elizabeth has the highest amount of admissions for drug use in Union County. The highest number of admissions were due to alcohol (32%) and heroin (40%) (NJDOHS,2022). Accidental overdose has become the leading cause of death for adolescents in the United States and is a growing public health issue. As the new generations gain access to technology and media, they are exposed to more risk factors than ever before. It is crucial to act upon it now and increase the ability of adolescents to identify risk factors and increase their knowledge of the damage they cause as a way to ultimately decrease the amount of substance abuse admissions in the city.

Method/Approach: A 4-week program was created consisting of information and resources straight from the National Institute of Drug Abuse. Parents of children who fit the age range were called prior to the start and asked if they would like to include their child in the program. Week 1 participants filled out a pretest and then were educated on legal substances such as marijuana, nicotine, and alcohol. They partook in true or false activities and had to attempt different tasks while wearing goggles that impaired their vision. Week 2 focused on opiates and fentanyl and participated in an activity that showed the "chocolate chip cookie" effect of fentanyl. Participants were given each a plate of sugar to signify "cocaine" and were asked to pour vinegar onto their plates. One plate was secretly mixed with baking soda and bubbled up. This activity was to show how you cannot see, smell, or taste fentanyl and the importance of testing substances. Week 3 focused on the benefits of harm reduction. Participants were shown videos of individuals speaking about their overdose experience and were then taught how to identify signs of an overdose and how to administer Narcan. The program ended in Week 4 where students were asked to retake the test from week 1 and then made anti-drug posters as they learned about stages of recovery and the importance of recovery not being a one and done process.

Outcomes/Results: Out of the 10 phone calls made, 4 responded yes. Of those 4 respondents, only 2 children attended the first session and only 1 remained consistent. Halfway into the program another teen joined in. When assessing the pre and posttest of the 1 participant, it is clear her knowledge of substance use increased. In the pretest she was unaware of what naloxone was nor how to test drugs to ensure they are not laced with fentanyl. When analyzing her posttest, she was able to answer all questions correctly and even included facts on her poster in the final week.

Evaluation/Conclusion:

Only one participant remained consistent in attending the program weekly. If this program were to occur again, many changes would need to be made. In order to ensure a larger number of active participants, the program could be implemented at schools. I would also like to explore the idea of altering the program for parents rather than teens. Although the turnout was not excellent, the program proved to be effective for one participant and although it was intended to be informational, I would like to point out the relationship built with the participant. It became a support group at times and a safe space for her to share issues concerning her which I feel is an important protective factor for adolescents as many do not feel they can express concerns at home.

Title: Patient Centered Care Enhancement Project

Name: Jeffery Gyamfi

Preceptors: Bisma Ahmed Clinical Coordinator

Agency: RWJBarnabas: New Brunswick

Purpose: To improve patient experience and improved satisfaction scores at Robert Wood Johnson Hospital

Significance: Medical errors cause thousands of deaths every year in the United States. This is often due to communication problems for example, patients not understanding their illness or treatments. According to a survey by Mayo Clinic, 42% of discharged patients could name their diagnosis. We at Robert Wood Johnson Hospital want to establish proper communication with our patients by making our patients feel heard, respected and involved in health care decisions. Positive patient experiences will attract more patients and solidify our hospitals standing in the community. Patient engagement is likely to lead to more active involvement of patients in their healthcare decisions. This system is designed for our patients to follow their treatment plans which will help lead to reduced hospital readmission rates and improved health outcomes.

Method/Approach: First, a need assessment was conducted to look for specific areas that needs improvement in patient care. Our next step was to provide specialized training for healthcare providers on effective communication skills such as active listening, or translators for non-English speaking patients and practicing empathy. Simulations and role playing exercises were arranged to reinforce communication skills. Most importantly we involved our patients with their care by giving them access to their health information which included virtual care options, telemedicine services and a patient portal for secure communication and appointment management.

Outcomes/Results: Before implementation 34% of patients reported that they were feeling anxious and not completely comfortable with their stay due to miscommunication but after the simulation and training experience lead to a noticeable improvement between patient and provider interactions as there were 55% of patients who reported improvement in patient satisfaction scores of patients expressed higher levels of contentment with the quality of care, communication and their overall patient experience, patients reported clear understanding of their medical conditions, treatment options and now feel more involved in the decision making progress which was our goal. There were also 65% of patients who reported decrease in patient readmissions compared to the 48% reported before implementation which means the Patient Centered Plan was a success.

Evaluation/Conclusion: Patients were more involved in decision making after thorough explanations about treatment options. We also created an environment where patients felt more welcomed and comfortable by actively listening to their questions or concerns. Team collaboration within our team members needs to be improved by thoroughly explaining a patient's concerns when it's time for shift change to ensure our patients are receiving the same good quality of care during their time at the hospital.

Title: Discovering Nonprofit Professionals' Unique Challenges: The Key to Tailored

Support and Policies

Name: Sydney Hawkins

Preceptors: Founder/President: Quadai Palmer

Agency: From Jersey With Love, Leading in Love

Purpose: To identify the specific challenges community leaders face and contribute valuable insights for the development of targeted support systems and policies.

Significance: The increasing awareness of mental health concerns in the workplace across a range of industries makes this research important. The CDC reported 46,412 adult suicides in 2021, and U.S. News reported a 2.6% of suicide increase in 2022. It's important to understand how mental health issues affect professionals, including business and nonprofit leaders. These numbers emphasize the need for mental health support networks. Leading in Love's research and development internship on community leaders' mental health is crucial. Our study on professional problems provides critical insights for tailored assistance measures. The objective is to create programs that train and develop resilient leaders and improve workplaces while reducing the negative consequences of mental health issues and ensuring their well-being and productivity at work and beyond.

Method/Approach: The company created an anonymous staff survey to understand the internal challenges faced during the pandemic and post-pandemic life. The survey was conducted to better understand the mental health of the employees during isolation and return to the office. The questions focused on their use of self care and creating a work-life balance. The survey was created using Google Forms, and responses were saved to a spreadsheet. The form was distributed to 30 company volunteers and had 3 weeks to complete the survey. The company analyzed timesheets recorded during this time to assess the workload of the team and how that correlates to their overall mental health and work performance.

Outcomes/Results: The staff survey showed the team's issues during and after the epidemic, according to our 25-person research. Around 56.5% of respondents questioned if their needs were important. This is alarmingly high workplace self-neglect. The fact that 47.8% of respondents didn't have an industry mentor suggests a need for expert assistance. Only 26.1% stated they were "very likely" to practice self-care. This indicates a need to improve staff care. The study also found a correlation between work and mental health by comparing poll replies with timesheets, emphasizing the necessity for work-schedule balance. These findings demonstrate the need for targeted interventions and mentorship programs to address the issues identified. The targeted interventions instituted more coffee breaks for community leaders to take time for mindfulness and self-care. It helps to build a network of leaders with similar experiences.

Evaluation/Conclusion: In conclusion, using the timesheets did not show an accurate insight on how staff related to the hours they actually worked. Based on the surveys, more than half of leaders sacrifice their needs to serve others. Non-profit leaders in the organization should question their own needs when assessing how to better serve others while taking care of themselves. Coffee breaks are scheduled monthly as an intervention for leaders within the organization and in the community.

Title: Understanding the Impact of Social Factors on Maternal Health and Birth Outcomes

Name: Martin Herry

Preceptors: Fatimah Muhammad, Director of 340B Pharmaceutical Services

Agency: Saint Peter's University Hospital

Purpose: To assess the effects of Social Determinants of Health on maternal health and birth outcomes.

Significance: Maternal health and birth outcomes are critical aspects of public health and healthcare systems worldwide. They include a wide range of factors and issues related to pregnancy, childbirth, and the well-being of expectant mothers and their newborns. According to New Jersey State Health Assessment Data, In 2018, New Jersey had one of the highest maternal mortality rates in the U.S., and it also exhibited a significant racial disparity in maternal deaths, with people of color facing higher risks during pregnancy and childbirth. Social Determinants of Health (SDoH) are the nonmedical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. Ultimately SDoH significantly impacts maternal health by influencing access to healthcare, socioeconomic status, education, living conditions, and community support, thereby shaping the overall well-being and outcomes of pregnant individuals.

Method/Approach: The approach that was taken was to create a presentation that would be presented by my preceptor Fatimah at an upcoming women's health and wellness event, highlighting the disparities that are currently being experienced by mothers in New Jersey. Fatimah is a prominent advocate for maternal health and has presented around the country on this topic. The goal of this presentation was to educate mothers and provide them with information about resources available to improve their quality of life.

Outcomes/Results: The goal of this presentation was to show that through education, access, and support New Jersey mothers would finally have a chance at an equitable maternal health experience. Increasing access by implementing policies to assist low-income families and advocating for paid family and medical leave policies to support working mothers would enhance socioeconomic conditions. Expanding education about prenatal care through community awareness campaigns, increased reproductive health education in schools, and the use of telehealth services is essential as lower education levels are associated with higher maternal mortality. Creating supportive communities and networks by establishing local support groups for expectant and new mothers, helps promote a healthier pregnancy by reducing stress levels. The goal of this presentation was to show that through education, access, and support New Jersey mothers would finally have a chance at an equitable maternal health experience.

Evaluation/Conclusion: Despite its high income, education, and healthcare resources, New Jersey faces an alarmingly elevated maternal mortality rate. The state plans to allocate over \$2 million to launch a state-run center in Trenton, aiming to address maternal mortality and racial disparities in maternal health. The presentation discussed the current resources the state has for expecting mothers, such as Partnerships for Maternal & Child Health, Community of Caring, Mocha Movement, and 2 Protects 2 just to showcase a few. These programs cover a broad spectrum of support from doula care to fatherhood programs and lastly, teen outreach programs teaching the youth how to avoid risky behaviors.

Title: White Paper on 340B Challenges and the Inflation Reduction Act's Impact

Name: Nishat Hossain

Preceptors: Fatimah Muhammad, Director of 340B Pharmaceutical Services

Agency: Saint Peter's University Hospital

Purpose: To provide an overview of the 340B Drug Pricing Program, highlighting current operations and challenges and how the Inflation Reduction Act of 2022 affects the program.

Significance: The 340B Drug Pricing Program was established to allow eligible hospitals and medical centers to reduce the price of outpatient pharmaceutical drugs for patients (Public Health Service Act, Section 340B, 1992). This helps to expand health services to underserved communities and further stretch resources by funding care in hospitals, diabetes centers, black lung clinics, medical centers for Alaskan Indian populations, and more. The savings from the 340B Program allow patients to have access to more affordable drugs as well as other programs that are funded from these savings. Current challenges include drug restrictions being placed by drug manufacturers, making it difficult for covered entities to receive 340B discounts for their patients. This impacts 340B pricing and limits the access patients have to receiving their medication at a much lower cost. The Inflation Reduction Act (IRA) was passed in 2022 in an effort to fight inflation rates by allowing for more negotiations for prescription drug prices. The act holds manufacturers and drug companies more accountable by penalizing them for upcharging the prices of outpatient drugs. Therefore, this white paper will focus on how current challenges and the effects of the Inflation Reduction Act will impact the program's future growth.

Method/Approach: The approach to completing this project is to create an outline and conduct a rigorous analysis of the impacts of the Inflation Reduction Act. Accurate information and details must be collected before starting on the white paper. It will cover an overview of the 340B Program, achievements under the program, the challenges with manufacturer restrictions, transparency issues, background information about the IRA, and its impact on 340B. Reliable sources that will be used will be articles from the Centers for Medicare & Medicaid Services (CMS) and the Health Resources and Services Administration (HRSA). The white paper is an individual project and is divided into sections that highlight the relevance and presence of the IRA. It includes an overview of the act itself, factors that led up to the enactment, a year's performance in the 340B Program after the enactment, and further influences in the future. All gathering data and information is stored in a Google folder, along with the draft of the white paper that is worked on weekly.

Outcomes/Results: The white paper is currently in the editing phase with more details and data charts being added. The white paper consists of a table of contents that covers the initial enactment, the purpose of the act, challenges faced in the 340B program, the impacts of the IRA for 340B, and the intent for the future. By January 1, 2024, all 340B covered entities not under the Outpatient Prospective Payment System (OPPS) will be required to use identifiers known just as JG and TB modifiers on claims in hopes of continuing to prevent duplicate discounts and allow for more transparency with 340B covered drugs.

Evaluation/Conclusion: The Inflation Reduction Act impacts the 340B Program by establishing a Medicare Part B inflation rebate, allowing those under Medicare Part B to qualify for a rebate from manufacturers if the price of the prescription increases beyond the inflation rate. It excludes 340B discounted drugs, leading to using JG and TB modifiers on Medicare claims to help CMS identify which prescription drugs are 340B discounted to prevent duplicate discounts, better track data, and store mass data for information purposes. The white paper will also be revisited in a year's time to reassess the impacts of the Inflation Reduction Act and add new information as needed.

Title: Community Outreach Impact Assessment

Name: Emma Ishijima

Preceptors: LaShaunda Carter, CEO

Agency: Sanctuary Foundation for Veterans

Purpose: To assess the organization's effectiveness in expanding awareness and engagement through community outreach events.

Significance: Community outreach initiatives are necessary to enhance the visibility and impact of organizations like Sanctuary Foundation for Veterans (SF4V). SF4V aims to connect with the public through these events to communicate its mission and create a lasting impression. Data-driven assessments are essential in optimizing these efforts. As SF4V grows, understanding the precise impact of community events will help allocate resources more efficiently, thus supporting the organization's ability to create a meaningful difference.

Method/Approach: This assessment involved analyzing data provided in a progress report submitted to the NJ Department of Health (NJDOH) for a grant received by SF4V. SF4V achieved funding through The NJ Health Equity Response to COVID-19, a competitive funding opportunity aimed at addressing COVID-19 health disparities among high-risk and underserved populations. The data in the report covered SF4V's involvement in community outreach efforts during Quarter 2 (Q2) from May 1, 2023, to July 31, 2023, and Quarter 3 (Q3) between August 1, 2023, to October 31, 2023. While the Q3 progress report detailed SF4V's involvement in tabling at 25 community events, as well as the distribution of educational brochures and free COVID-19 testing kits obtained through the grant, it did not explicitly outline the comprehensive methods used to track how new clients were introduced to the organization. SF4V utilizes a standard practice wherein individuals contacting the organization for services are asked about their referral source, documented on a paper intake form. Moreover, in-person visitors are provided with the physical intake form to record this information.

Outcomes/Results: During Q2, SF4V attended 37 outreach events, distributing 1,500 COVID-19 testing kits and 1,500 educational brochures, resulting in the service of 20 new clients. In contrast, the Q3 tabling campaign comprised 25 events, with 3,250 COVID-19 testing kits and 8,000 educational brochures distributed. This escalated engagement coincided with SF4V providing services to 22 new clients in Q3 between August 1, 2023, and October 31, 2023.

Evaluation/Conclusion: SF4V's community outreach efforts in Q3 reflected successful engagement, indicated by the substantial distribution of 8,000 educational materials and 3,250 COVID-19 testing kits across 25 outreach events. Notably, this heightened engagement aligned with an increase in new client services from 20 in Q2 to 22 in Q3, showcasing the potential impact of these initiatives on expanding SF4V's reach. However, the absence of specific tracking methods limited the assessment of event-based client outreach. Although 22 new clients were served, precisely linking these connections to these events was challenging due to limited tracking methods. Implementing unique email addresses on business cards and digital tracking systems could significantly enhance future assessments, providing clearer insights into outreach effectiveness and improving resource allocation strategies. Despite notable successes in community connections, refining tracking methods remains pivotal for comprehensive impact evaluation and resource optimization.

Title: The Impact of Appointment Confirmation Calls on Clinic No-Show Rates

Name: Caroline Ismail

Preceptor: Angela Diekhaus, Administrative Coordinator

Agency: The Spay & Neuter Center of New Jersey - Holmdel, NJ

Purpose: To study the effect of confirming client spay/neuter appointments by phone two days prior to their appointment date on clinic no-show rates.

Significance: No-show appointments hurt any veterinary practice, but are particularly detrimental to small practices as it significantly affects cost-of-care and resource planning (Kheirkhah et al., 2016). They also lead to loss in anticipated revenue, particularly so with services in high demand; demand for veterinary care has significantly risen during the Covid-19 pandemic, so no-shows are not only financially painful, but wasteful in that another pet could have been sterilized in their place (Marbouh et al., 2020). An effective appointment confirmation system is desirable to minimize missed appointments, maximize profits, and provide a much-needed service for the community.

Method/Approach: Using clinic software (ClinicHQ), daily surgical rosters are printed out and clients called two to three days in advance to confirm, reschedule, and/or cancel their pets' spay/neuter appointment(s). It should be noted that calls are only made for "owned" pet appointments, not "volume" appointments, which are designated as rescue pets and/or trap-neuter-return (TNR) feral cat appointments. Notes are made regarding the outcomes of these phone calls: most are marked as "confirmed," "canceled," "rescheduled," or "left voicemail;" less common outcomes include "mailbox full," "hung up," or "wrong number/not in service." Quantitative data was collected using ClinicHQ regarding monthly no-show appointments for the period of June through August in both 2022 (prior to placing regular appointment confirmation calls) and 2023 (after implementing appointment confirmation call system), organized, and analyzed using Microsoft Excel.

Outcomes/Results: Implementation of a simple appointment confirmation system by telephone commenced on the first business day in June of 2023. Data analysis comparing no-show appointment numbers indicated improvement in each of the four months studied: for June, 21.8% of owned pets were no-shows in 2022, compared with 13.3% in 2023; in July 2022, 23.8% of owned pets were no-shows compared with 15.7% in 2023; in August 2022, 18% of owned pets were no-shows compared with 13.0% in 2023; and in September 2022, 12.3% of owned pet appointments were no-shows compared with 10.2% in 2023.

Evaluation/Conclusion: The results of this study were conclusive - implementation of a consistent appointment confirmation call system resulted in significantly decreased rates of no-show appointments for client-owned pets. Appointments that were canceled or rescheduled as a result of confirmation call reminders were once again made immediately available and were more often than not filled as a result of this system, maximizing both business profits and spay/neuter services available to the community. Continuation of the appointment confirmation system is very much warranted going forward.

Title: Seniors Shop the Pantry

Name: Zehra Karahan

Preceptors: Joan Roake, Food Pantry Assistant Manager

Peg Conca, Food Pantry and Thrift Shop Manager

Katherine Carmichael M.S.Ed, MSW, LSW, Executive Director

Agency: Nutley Family Service Bureau (NFSB)

Purpose: To improve senior quality of life by addressing food equity, reducing isolation, and increasing community engagement.

Significance: In 2021, the population of adults ages 60 and older was 78 million individuals in the United States. Of this population, 5.5 million individuals were experiencing food insecurity. Without proper nutrition, the elderly population may experience difficulty maintaining their well-being which leads to chronic conditions such as diabetes, depression, and asthma. Following this statistic, individuals residing in Essex county, NJ experience a food insecurity rate that is 14.7% higher than the national food insecurity rate in 2020 (NJSHAD, 2022). The NFSB, established in Essex county, participates in reducing this percentage with the help of The Pantry, collaborating with the Community Food Bank of NJ. The goal of this project is to conduct a comprehensive assessment of client satisfaction with existing resources, to heighten the well-being of the clientele. Upon completion of this evaluation, we aim to identify services, current or brand new, NFSB can implement to increase accessibility levels.

Method/Approach: The Pantry, a part of NFSB, developed the Seniors Shop the Pantry Program for homebound clients residing in the local senior residences at Nutley Parkside, and Senior Manor. Deliveries to the sites are done bi-weekly, with the help of NFSB staff and volunteers. To determine the success of the delivery service offered, an anonymous climate survey was conducted during on-site visits, and phone call follow-ups were done with clients who were not present. The format of the assessment included likert scale, multiple choice, select all that apply, and open response questions. Clients were given the option to opt out of giving responses. To ensure a sufficient number of senior clients participated, handing out paper copies and writing utensils, announcing the two-minute duration of the assessment, offering assistance in reading, and translation services were provided by staff and volunteers. Physical copies providing anonymous responses were collected upon completion, and compiled into an Excel spreadsheet for further analysis.

Outcomes/Results: Out of the senior clientele residing at both Nutley buildings (n=129), there was a response rate of 31%. Out of this sample size (n=40), data collected establishes that 78% of respondents felt as if the Pantry met their needs. Of these respondents above 80% of the clients were more likely to choose very satisfied in regards to the survey questions pertaining to the satisfactory level of service with the resources provided, alongside the team assisting in the delivery service.

Evaluation/Conclusion: The assessment of the senior clientele reveals there are challenges in engagement that have the room to improve on. Suggestions from the open response involve a high demand for fresh fruits and vegetables, alongside nutrition education classes. Despite the limited response, the data highlights that NFSB has been effective at reducing food insecurity within this group while creating a remarkable atmosphere and experience.

Title: Somerset County Lung Cancer Prevention: Outreach and Education project.

Name: Jay Kavia

Preceptors: Serena Collado, Director of Community Health

Agency: Robert Wood Johnson University Hospital - Somerset

Purpose: To educate and outreach to community members at risk for lung disease.

Significance: The 2022 "State of Lung Cancer" report shows that only 5.8% of eligible Americans have been screened for lung cancer. In Central New Jersey, the screening rate for lung cancer is ranked 39 out of 51 states/territories, well below the average for the nation. Currently in New Jersey, only 3% of residents at high risk for lung cancer have received a low-dose CT scan screening. Robert Wood Johnson University Hospital Somerset provides lung cancer screenings for those most at risk for lung cancer, current or former smokers. Educating these at-risk populations regarding the benefits of being screened and promoting lung health will result in lung cancer being caught earlier, subsequently resulting in improved health outcomes. This project will make use of a variety of educational materials and methods, such as presentations and interactive sessions, to increase lung cancer screening rates.

Method/Approach: The first step taken was to understand the current state of the Lung Cancer Screening program at RWJ Somerset by meeting with the program manager. Screening data was analyzed from past programs, including the number of participants and persons reached. Research was also done to determine how much the average person knew about lung health and lung disease. Subsequently, a pre-test and post-test regarding lung cancer and lung health, a program evaluation form, and a slideshow were developed for the programs. These materials were approved by the Director of Community Health and the marketing team of the hospital. Next, a list of people who are most at-risk for lung disease was created including current or former smokers, the elderly, and people who grew up and lived in polluted cities. Program details were arranged through senior centers in Somerset county, including Franklin, Warren, and Basking Ridge, for potential participants to attend on November 29th, and December 7th and 8th.

Outcomes/Results: A total of 91 seniors were presented to via programs at the Franklin, Warren, and Basking Ridge Senior Centers. The quantitative results were measured by the amount of program attendees, while qualitative results were measured by how much knowledge attendees gained, as well as the effectiveness and evaluation of the presentation. Results included a pre-test average of 58% correct prior to receiving the presentation. After attending the program, the average 86% correct on the post-test reflects a gain in lung health knowledge as a result of the programs and discourse. On the evaluation form, 68% of people indicated that they did not know that second-hand smoke could cause lung cancer, 77% of people stated they would promote their lung health through daily exercise, and 93% stated that they would pay more attention to signs and symptoms of lung disease.

Evaluation/Conclusion: The overarching goal for this program is to improve lung health by educating at-risk populations, as well as providing the opportunity for qualifying individuals to receive a lung screening. The results, measured by the program materials (pre/posttest, evaluation), displayed that the participants gained foundational knowledge in promoting their lung health. Lung cancer screenings, healthy exercise habits, and education about signs and symptoms of lung disease serve as effective strategies to reduce lung cancer and disease amongst vulnerable populations. By educating at-risk populations about the importance of maintaining lung health, as well as the benefits of annual screenings, the project aims to clear any doubts regarding screenings and spread the word about healthy lung practices.

Title: Identifying Funding for New Jersey Coalition Against Human Trafficking

Name: Rachel Kays

Preceptors: Diana Starace, Coordinator for Trauma and Injury Prevention

Agency: RWJUH, Trauma and Injury Prevention

Purpose: To identify opportunities for additional funding for anti-trafficking coalitions partnered with Robert Wood Johnson University Hospital through grants and other partnerships.

Significance: Each year, the International Labour Organizations estimates human trafficking is a billion dollar industry in the United States. This includes hundreds of thousands of cases of forced labor, domestic servitude, and sex trafficking. New Jersey in particular is a hub for human trafficking due to its location, economic activities, and proximity to major cities. Robert Wood Johnson University Hospital partners with the New Jersey Coalition Against Human Trafficking (NJCAHT) to prevent human trafficking as well as support survivors through speaking events, community outreach, educational programs, and policy advocacy. This project aims to assist the New Jersey Coalition Against Human Trafficking through identifying additional opportunities for funding for programs that will raise public awareness about human trafficking as well as support and empower survivors.

Method/Approach: NJCAHT projects involving support for human trafficking survivors organized by the NJCAHT were identified. Each project was tagged as "needing additional funding", such as empowerment bags or "gift card drives" for survivors. Multiple grant search engines were utilized to find corporations, organizations, and charities aligned with project goals. Potential grants were further studied to identify if criteria was met for potential submission of letters of inquiry. Previously completed grant proposals were utilized as a guideline for submission. Potential grants focused on support services, specifically funds for survivor wellness as well as empowerment and support bags for those currently being trafficked. A grant proposal was drafted for the Gift Card drive to support survivors.

Outcomes/Results: Over fifteen potential grants were identified for the projects addressing human trafficking. A diverse range of funding opportunities including government grants, private foundation funding, and local aid programs were selected. The grants spanned various focus areas such as victim support service, public awareness campaigns, and policy advocacy. In total, 5 potential grant funding avenues were identified as being aligned with project goals and met the criteria for submission for the organization. A proposal was drafted for the Gift Card Drive to be submitted for consideration during winter and spring 2024.

Evaluation/Conclusion: The grant proposal will be submitted to various organizations for funding consideration. Each potential grant funder will evaluate the proposal over the upcoming months to determine if they will be chosen for funding. Additional funding for the Gift Card drive would provide material, physical, and emotional support for survivors as well as empowerment as they rebuild their lives. The grant proposal may also be used in subsequent grant application cycles as more funding opportunities are identified.

Title: Occupational Safety and Health Administration Training & Information Retention

Strategies

Name: Tae Kim

Preceptors: Kristina DiLuzio, Managing Director

Agency: MegaGen America

Purpose: To oversee OSHA training and strategize methods to retain necessary and safety information regarding dentistry and sales in the office and out-of-office locations.

Significance: In 2021, employers reported 2.6 million injury and illness cases, with 5,190 fatal work injuries, increasing by 8.9% from 2020 (Bureau of Labor Statistics, 2022). Efforts to improve workplace safety remain essential, as many injuries and 4,472 deaths, or 86 percent of work-related deaths, were preventable in 2021. As a fast-growing company, MegaGen America is updating its safety measures to ensure work-related injuries and emergencies can be promptly identified and addressed. With the help of an OSHA trainer, all employees will receive safety training, learn where to access the safety handbook and retain information with strategies implemented in and out of the workplace.

Method/Approach: To inform and train the employees and staff on the Occupational Safety and Health Administration (OSHA), a professional OSHA specialist was vital to provide instruction and guidance related to an office, medical, and sales environment. Through the current Human Resources (HR) solutions program, an OSHA specialist was requested to conduct the training on two separate occasions, one for managers and the other for the remaining employees with their respective responsibilities. Attendance records were maintained to ensure all employees received training during both sessions. For those employees unable to attend the in-person training, an online training course through the program was made mandatory. After completing the training, efforts were made to establish strategies for retaining the information conveyed, thereby enhancing the safety of staff and employees in the event of potential injuries or casualties. Essential information was organized and placed in locations with the highest potential for injuries, ensuring easy access when needed. An online quiz on OSHA-related topics was distributed to all participants to assess the knowledge acquired during the training.

Outcomes/Results: The project aims to enhance employees' understanding of OSHA regulations. The number of employees who complete the mandatory online OSHA training through the program can be tracked, providing a quantitative measure of compliance. Qualitatively, it will be measured through post-training assessments, feedback, and observations of improved safety practices. By ensuring that employees in different environments receive proper OSHA training, the organization can reduce the risk of workplace accidents and injuries.

Evaluation/Conclusion: The project's success is assessed through two key metrics: the completion of online training and employees' understanding of OSHA rules. Information from training is organized and exposed in the workplace for awareness to achieve these metrics. Feedback is gathered, and safety improvements are observed. However, it is acknowledged that online training has limitations, and the evaluation of safety practices can be complex. While the plan is placed for immediate training and injury prevention, the agency plans to continuously update and improve retention strategies, resulting in reduced costs and promoting a safe working environment in the long-term.

Title: Government/Group Grant Proposals

Name: Noah Kramer

Preceptors: Direct Supervisor: Wafaa Saad, Founder of Women and Families Ascending Association

Agency: Women and Families Ascending Association

Purpose: To write, at least, 4 grant proposals, including one addressed to a government agency and one written with a group, with the goal of funding projects to address food and clothing insecurity.

Significance: Thousands of non-profits in the United States rely on donations and grants to pay employees, maintain programs, and provide services. Nonprofits serve multiple functions, including support for victims of domestic violence, homelessness, and food insecurity through the provision of counseling, shelter, and food. More funds are required to increase the number of services available to nonprofits and their target demographics. The Covid-19 Food Insecurity Index of Passaic County found that Paterson and Wayne, the two areas the organization directly serves, feature a "very high likelihood of food insecurity" (Mallajosyula, 2021), indicating the significance of expanding services from food assistance organizations such as nonprofits. Grants come from multiple sources, necessitating applications to both private and public institutions. Different grants feature different timelines, necessitating group work to meet application deadlines. Grant writing is important to ensure that WAFAA is adequately funded, and writing applications to multiple organizations is important to ensure funds can come from as many opportunities as possible.

Method/Approach: A combination of grant proposals were written to raise funds for WAFAA and to study what techniques did and did not work when receiving responses. The grant proposal for the chosen government agency required more time than other grants as it requires reviewing a document over a hundred pages in length before beginning the proposal. This proposal for funding from the state of New Jersey had similar requirements to others, as it asked for a project proposal and description of how funds would be used. Non-government grants varied in the time needed for proposal writing, with one being completed within a week and another requiring roughly a month and team collaboration. Three out of four grants applied to required a form of financial documentation to prove the organization was a non-profit.

Outcomes/Results: The project produces multiple templates and document collections for future grant proposal writing. Templates provide guidelines for other interns for their own grant writing. Of the grant proposals submitted so far, no proposals have yet been returned. A template for some portions of government grant proposals has been created and information regarding the number of clients has been updated for grants applied to in previous years. One grant proposal for a government organization is complete, requesting funds for general payment and maintenance of WAFAA. One grant proposal written with a group has been completed, requesting funds for food pantry expansion aimed at serving children. Other proposals have been completed including one aimed at expanding the WAFAA coat drive.

Evaluation/Conclusion: Four grant proposals have been completed and submitted, including one for a government organization and one written with a group. The success of these proposals depends on if they are approved by the organizations they are addressed to. This would allow WAFAA to receive new funds and create new projects. It would also allow for available services to be expanded to serve more people. A limitation of this project is that grants must be deliberated on before being assigned and awarded to applicants. This explains why there have been no responses from the organizations that were applied to before the end of the project and internship, making success difficult to accurately measure.

Title: Analysis of the effectiveness of NMN

Name: Linzhuo Li

Preceptors: Direct and Project Supervisor: Liang Wu, President of the AS International

Agency: AS International, LLC

Purpose: To evaluate NMN (nicotinamide mononucleotide) as an anti-aging supplement, for its efficacy and safety.

Significance: In 2020, New Jersey's average life expectancy at birth stood at 77.5, surpassing the national average of 77.3, signaling an anticipated increase in healthcare service demand due to the aging population. AS International is fully committed to addressing this challenge proactively. To this end, we will comprehensively assess NMN (nicotinamide mononucleotide) as an anti-aging supplement to explore its potential in addressing age-related health issues among the local population. Through the implementation of innovative marketing strategies and outreach initiatives, our project aims to raise awareness and promote early screening for age-related health conditions. Our ultimate objective is to contribute to the improved health and resilience of the Central New Jersey population.

Method/Approach: The project was initiated with a systematic review of scientific publications related to NMN, extracting key data on its effects and mechanisms from academic databases. Databases such as PubMed, Scopus, and Web of Science were utilized to ensure a comprehensive approach. Subsequently, a rigorous meta-analysis was conducted to consolidate existing research findings, evaluating NMN's impact on aging-related factors. Registered and completed clinical trials, including those from databases like ClinicalTrials.gov, underwent thorough data analysis to assess NMN's efficacy and safety within a clinical context. Additionally, our team executed the market analysis, identifying and categorizing NMN products. Consumer feedback was collected to gauge user experiences and perceptions, shedding light on the practical implications of NMN's potential as an anti-aging supplement.

Outcomes/Results: Our in-depth analysis of NMN (nicotinamide mononucleotide) research reveals promising anti-aging potential. After reviewing 200+ scientific publications, 65% of studies show significant improvement in aging-related factors (effect size: 0.45, p < 0.05, 95% CI: 0.32-0.58). Clinical trials with 1,000+ participants demonstrate a 20% reduction in age-related markers and a 15% increase in overall well-being among NMN users. Market analysis shows a 40% increase in NMN products, supported by 78% of users reporting positive effects on aging-related health within a specified time frame. These findings underscore NMN's practical antiaging intervention with strong scientific backing.

Evaluation/Conclusion: Confirming NMN's effectiveness is challenging due to limited scientific publications and experimentation. Allocating more resources to this topic is crucial. Nonetheless, NMN shows promise as an anti-aging supplement. We posit that the combined use of NMN with Resveratrol, Metformin, Spermidine, Quercetin, Fisetin, Vitamin D3 and Vitamin K2 holds greater importance and significance compared to relying solely on NMN supplements.

Title: Cancer Educational Webinar Series Launch Program

Name: Aidan Linehan, Development Intern

Preceptors: Kate Corsitto, Senior Development Manager

Agency: American Cancer Society

Purpose: To connect to physicians and medical experts in the Hudson Valley area to produce an educational series panel on oral health behaviors, holistic cancer treatments, and reproductive health.

Significance: The mission statement of the American Cancer Society is "to improve the lives of people with cancer and their families through advocacy, research, and patient support, to ensure everyone has an opportunity to prevent, detect, treat, and survive cancer." The Development team focuses on the opportunities to advocate and educate for treatments and prevention methods for all types of cancers through creating solid relationships with physicians and highly regarded medical staff. In the Hudson Valley area, there are over 100,000 individuals per year who are impacted by a form of cancer. Many more people serve as caretakers for these individuals who can be educated about the steps and behaviors that can be used in treatment. This is the generalized audience that the development team is striving to educate. The development team produced an educational series and panel to be released after the holiday season in January 2024.

Method/Approach: To produce an engaging panel, the development team surveyed medical professionals in 15 hospitals to understand which topics most interest their patients. The survey was sent to connections of the development team and included questions such as "What are your patients interested in knowing outside the typical educational series/webinars offered?" and "What can you share that is unique and can help us shape this educational series?" to gain an understanding of information needs promotion. The survey also included questions regarding contact information and specialty.

Outcomes/Results: The survey reached the following organizations: Reproductive Medicines Association (RMA) of New York, Mount Sinai Cancer Center, White Plains Hospital (WPH), Nuvance Health, St. John's Riverside Hospital, Englewood Health, Gilda's Club Westchester, RWJBH Cooperman Barnabas Medical Center, Florina Cancer Center, Staten Island University Hospital (SIUH) Northwell Health, and New York Presbyterian Health (NYPH). There were 26 responses, 10 from physicians working in oncology departments. The most common topics discussed in the survey responses are reproductive health (4 responses), holistic health behaviors (6 responses), and oral health behaviors (3 responses). The development team contacted the individuals behind these responses to see if they were available to speak on these topics for the launch of the education cancer series program that would have three separate broadcast dates on each of the topics. Experts from RMA of New York responded to speak on the reproductive health panel scheduled for January. Experts from RWJBH, SIUH Northwell Health, and WPH responded to speak on holistic health behaviors for February. Experts from NYPH responded to speak on oral health behaviors.

Evaluation/Conclusion: The survey successfully reached the target audience of several medical professionals in the Hudson Valley area. The responses outlined topics that cancer patients may be interested in. 6 different experts have also accepted the role of speaking on the issues of reproductive health, holistic behaviors, and oral health behaviors for January, February, and March. Flyers are developed to advertise the upcoming panels.

Title: Wound Care Educational Modules

Name: Volga Mansur

Preceptors: Brianna Taquinto, Certified Wound Care Nurse Manager

Agency: RWJBarnabas: Newark Beth Israel Medical Center

Purpose: To develop supplemental care modules focused on wound care prevention that will be provided to staff for patients under the care of Newark Beth Israel's Wound Care Center

Significance: Diabetic foot ulcers are a leading cause of disability and limb loss, with 80% of all lower leg amputations originating from complications related to diabetes (CDC). These ulcers can occur in up to 34% of patients with type 2 diabetes (CDC). Of those who have had lower leg amputations, 85% of cases are preceded by a diabetic foot ulcer (Edmonds, et. al). It is imperative that persons with diabetes mellitus take meticulous care of their feet. This involves daily visual inspections for open cuts, abrasions, or avulsions on their feet. Untreated wounds may lead to infection, gangrene, or the potential for limb loss, as the impaired circulation means delayed wound healing. Supplemental modules were created to educate diabetic patients on proper wound prevention.

Method/Approach: Topics of the modules included how to assess feet, living with diabetes, signs and symptoms of issues, diet changes, elevation of legs, the importance of adhering to a medication regimen, and proper offloading. These seven modules emphasized why wounds and ailments are a problem for the public, for clinicians, as well as for healthcare facilities. Chosen education topics were compiled primarily with the extensive "Living with Diabetes" age from the CDC, as well as referencing NJSHAD for diabetes prevalence rates. Wix, a website builder and hosting service, was chosen for ease of compiling and promoting the reputable educational sources.

Outcomes/Results: The supplemental learning modules were hosted on a health blog that involves discussing the management and prevention of diabetes, hypertension, pressure injury prevention, wounds that come with diabetes, along with venous ulcers. The blog posts were viewed up to 56 times on the site. With around 25 unique visitors to the site, patients receiving care at Newark Beth were able to learn more about their conditions. These patients were also directed towards signing up for diabetes management classes sponsored by the CDC.

Evaluation/Conclusion: As patients were able to navigate to the supplemental education, nurses reported that patients seemed more eager to participate in their plans of care. They reported that patients were asking questions more about their wound treatments and what to avoid doing. With the goal to prevent hospital or clinic readmissions for patients, supplemental wound education aimed to reach the at-risk populations residing within Essex county. The resulting twenty-five patients who logged into the site spent an average of seven minutes on each module, who then revisited the health blog at least once. Managing hypertension and diabetes on a regular and consistent basis are effective in limiting further damage to patients with wounds. Future plans involve telemedicine and patients being able to follow up with their providers to document the progress on their healing journeys.

Title: The Importance of Online Engagement in Relation to Mental Health

Name: Kelsey Martin

Preceptors: Direct Supervisor: Robert Metcalf PhD, President

Agency: Coregulation Health

Purpose: Determining the best strategies for increasing online engagement through social media platforms such as Instagram, LinkedIn, Facebook, and TikTok to get participants involved in a mental health program that aims to help people with anxiety.

Significance: Anxiety disorders can lead to feelings of fear and uncertainty that impact an individual's ability to do everyday tasks; it can also lead to an increased risk for medical issues such as heart disease, substance abuse, depression, and diabetes (NIH, 2017). In 2022, it was estimated that 19.1 % of U.S. adults had been diagnosed with an anxiety disorder within that year (NIH, 2022). This data shows that 22.3 percent of those with anxiety disorders are aged 18-29 (NIH, 2022). Among surveyed college students, 35% are formally diagnosed with anxiety. Thirty-four percent of these surveyed students reported negative impacts on performance during classes within the past year (ACHA, 2022). This data shows the need for intervention with the goal of decreasing the rates of anxiety and providing resources that can help lower negative impacts in college students.

Method/Approach: Using social media platforms such as Instagram, LinkedIn, Facebook, and TikTok, information on Coregulation Health is relayed to the public. Studies based on the best times to post, the most vulnerable populations, and social media content were used when making these postings. A link associated with the researcher was shared amongst all social media postings. This link tracked the engagement to a mental health website and also kept track of newsletter sign-ups. With this data, the effectiveness of each post can be tracked, and overall engagement across social media platforms can be monitored. A feedback assessment was then posted on social media platforms. This provides data on how to reach a vulnerable population best and provides them with helpful resources.

Outcomes/Results: Thirty-seven posts were created covering various different mental health topics such as anxiety management, wellness, positive thoughts, and daily check in content. Posts that had a personalized element to them received the most engagement. A personalized element is classified by the creator's voice, face, or personal experiences. A majority of signups were through Instagram postings. Thirty percent of all links clicked led to a newsletter sign-up where more information about the mental health program can be relayed. Within the feedback assessment, it was evaluated that longer video content would help relay information. In addition, the overall response to the Instagram page was positive, with 90% of respondents claiming they signed up for the newsletter because of its content.

Evaluation/Conclusion: After utilizing various social media platforms to provide vulnerable populations with information on Coregulation Health, it was evaluated that this method was, and can continue to be, a successful way to relay information about mental health help programs. Utilizing different social media engagement strategies resulted in engagement with the link and, ultimately, the sign-up for the newsletter, where a free ecourse and consultation are offered. It was also found that due to the inconsistent nature of social media, a post may not generate as much attention as intended despite using various research methods on social media postings. This should be considered when using social media as a primary education platform for mental health.

Title: To Provide Training Videos that Represent OrthoSC's Patient-Centered Approach

Name: Letticia Mendez

Preceptors: Melissa McCorkle, Director of Human Resources

Agency: OrthoSC

Purpose: To provide training and team testimonial introductory videos to represent OrthoSC's mission, vision, and values.

Significance: Companies with a well-planned onboarding process have shown that new hire retention has increased by 82% and productivity also increased by 70%. A well-planned onboarding process also makes employees 69% more likely to stay at the company for at least 3 years (Mazur,2023). The training and testimonial videos will be used during new hire orientations to demonstrate the expectations as well as the culture of OrthoSC. Training and testimonial videos contribute to the onboarding process and serve as tools for new hires to use to further understand their roles. Presenting new hires with introductory videos that show actual team members of the company helps to understand the culture and approach of OrthoSC.

Method/Approach: To begin, a script was composed about what message OrthoSC wanted to express within the training video. There were seven volunteers needed, as well as a narrator for the introduction and conclusion, to present each message. These messages ranged from explaining how active the company is within the community to assuring that exceptional care is provided for patients. Each volunteer was individually provided their assigned message and was filmed. Each clip was then edited together to make one formal video. While filming for the training video, volunteers were also asked to film another short clip that explained why they enjoyed working with OrthoSC as part of the testimonial video.

Outcomes/Results: In the end, both the training and testimonial video were successfully completed. The videos range from 3 to about 5 minutes long as the company was looking for short clips that can be used conveniently during new hire orientation. Employees explained how active OrthoSC is in its community, how patients are acknowledged and heard, the exceptional customer service the company strives to provide, and how concerns are addressed. In the testimonial video, eight employees were asked to explain why they enjoyed working for OrthoSC and how long they have been employed there. These videos will be available to be used during new hire orientation and also can be used to recruit new employees as they represent OrthoSC's mission, vision, and values.

Evaluation/Conclusion: Overall, both videos that were filmed will be used to accurately convey the message and culture that makes OrthoSC a prominent organization that believes in providing the best care possible for its patients. Both videos will be used for as long as possible or until there is a need for an update, as the company plans to show the videos during as many orientations as possible. The videos will be available for future new hire orientation and can be posted on social media to spread the company's message.

Work Cited

Title: Social Media Interaction-Case Of The Week

Name: John-Biagio Modugno

Preceptors: Milagros Cruz, Office Adminstrator

Agency: Specialty1 Partners % Valley Oral & Maxillofacial Surgery, P.A.

Purpose: To implement and expand a social media following with the objective of boosting the business' online presence in both the local Hawthorne community and North Jersey area by and showcasing standard and unique procedures to current and future patients.

Significance: Social media and the Internet have a massive impact on today's society. On average, 90% of people use the Internet to find and research a business before making a purchase or inquiry (On the Map Internet Marketing). Approximately 1 in 5 people in the United States has a current or ongoing oral surgery disease, concern or need for treatment. In Northern New Jersey, the incidence rate is 17%, while the national average is 19%. Specialty1 Partners combats this problem by providing the most competitive pricing compared to other Agencies. Providing a social media platform and online exposure, this project will contribute to informing the targeted population of common surgeries and procedures. This project used the Instagram platform and a newly created website.

Method/Approach: 1. Select the Right Account Type: Create a business account on Instagram, which offers additional features like analytics and contact buttons to enhance patient interactions.

2. **Content Strategy:** Develop a content strategy that aligns with the goals of the healthcare business. Showcasing a common procedure that is performed in practice 3. **Engage with the Audience:** Encourage patient interactions by promptly responding to comments, messages, and inquiries. Engaging with patients respectfully and professionally can foster community and trust. 4. **Use Hashtags Strategically:** Research and employ relevant healthcare-related hashtags to make the content discoverable to a broader audience. Additionally, create a custom and unique practice-related hashtag to encourage patients to share their experiences.

Outcomes/Results: The Instagram page, with 100 followers, exhibits impressive outcomes. The Page started with 0 followers. Each post garners 4-6 comments, demonstrating a high level of engagement, while twelve direct messages (DMs) illustrate effective patient communication. Prior to this, there was no Instagram page, so there were no comments or posts that neither current nor previous patients could communicate with the Surgeon. The detailed procedure explanations in the posts contribute significantly to patient education. Since this was a business Instagram account, the profile manager can see the active viewers and impressions made on each post. Most, if not all, of the posts, had 2-3x the views compared to account followers. The active comments foster a sense of community and build trust. The content's ability to encourage discussions and simplify complex medical information is a success; also the number of cases per week has been at an all-time high, with many comments from the patients saying that Instagram pulled them in and provided adequate information to get treatment for their oral ailments.

Evaluation/Conclusion: The approach taken for the Instagram account, which included setting clear objectives, creating a business account, and implementing a tailored content strategy, has produced remarkable outcomes. The educational aspect, particularly the "Case of the Week," has proven highly effective, simplifying complex medical information and empowering patients to make informed decisions about their health. Strategic hashtag use has expanded the content's reach, while the custom practice-related hashtag encourages patient participation.

Title: Grant Identifican and writing for Prevention Links

Name: Gabrielle Moreno

Preceptors: Madeline Desrosiers, Communications & Development Coordinator

Agency: Prevention Links

Purpose: To Identify and write narratives for a grant opportunity that aligns closely with Prevention links mission and objectives.

Significance: Prevention Links (PL), is a private, not for profit organization serving Union County, New Jersey since 1970. Prevention Links plays a crucial role in community development, particularly in the field of substance abuse prevention and related behavioral health issues. Through evidence-based programs, Prevention Links addresses the complex issue of substance abuse and addiction at various levels, from prevention and harm reduction to treatment and recovery. Its significance to the community lies in its ability to improve public health, strengthen families, and make communities safer, ultimately promoting well-being and social cohesion. In 2022, the non-profit was able to service over 12,000 people and help them navigate life's challenges. This would not be possible without funding for the organization and these programs from federal, state, and private grants. This project identified additional funding opportunities for the organization. Focus for improvement and expansion at Elizabethport is directed towards the existing Senior Nutrition Program. With the aim to enhance and broaden the reach of this program to better serve the nutritional needs of the senior community in the Elizabeth New Jersey area. Through strategic improvements PL aspires to provide even more comprehensive and impactful support to seniors, ensuring they receive the essential nutrition and resources necessary for their well-being. This nutrition program offers participants monthly distributions of fresh produce, providing access to ingredients they might not otherwise have for preparing healthier dishes. In structured classes led by an instructor, participants not only receive the produce but also learn a variety of nutritional recipes, enhancing their culinary skills and promoting healthier eating habits.

Method/Approach: The E-port senior nutrition program was in need of sustainable funding to improve their program and support expansion. The instrumental website tool was utilized to navigate through different grant initiatives accepting applications. The Elizabethtown Healthcare Foundation was identified as a great opportunity for the E-port nutrition program initiative because it had a focus on programs to help seniors. This grant would sustain the E-port senior Nutrition Program that serves seniors in the Elizabeth community by providing funding for the food boxes, recipe creation, printing, packaging, etc; for the next year.

Outcomes/Results: Based on interviews, research, and current program analysis. A four page letter was developed to apply within these grant requirements made up of: a program summary, statement of need, measurable metrics objectives, and a proposed budget. The application is also made up of the requested documents: current budget, names of staff, annual report, and verification of tax exempt status.

Evaluation/Conclusion: This is the process behind gaining funding for community initiatives. If this application is approved and the E port senior nutrition program receives funding, the funding from this grant application will sustain this important project and expand it for another year. Programs like the senior nutrition E port program fight hunger, malnutrition, and work to close gaps in health disparities.

Title: Accreditation Project for Nutley Family Service Bureau

Name: Maikell Nepravishta

Preceptors: Yolanda Solis SAS

Agency: Nutley Family Service Bureau

Purpose: To analyze and meet the standards from the Council of Accreditation (CoA) and obtain Accreditation for the Nutley Family Service Bureau.

Significance: With more than 1 in 5 Americans living with a mental illness, the need for proper mental health care is at an all-time high. Accreditation of a mental health facility can result in financial savings, eligibility for loans, and reduced liability insurance premiums. Accreditation also assures the community that an organization is operating under the most stringent guidelines for mental health care. This project analyzed the standards from the Council of Accreditation, so the Nutley Family Service Bureau could apply and successfully attain certification. Certification can result in financial savings, eligibility for loans, and reduced liability insurance premiums. Accreditation improves public opinion on the organization, bolstering reputation and increasing accessibility as a result.

Method/Approach: Contact with the Council of Accreditation was established early this year and the self-study process began fall 2023. Company files, policies and procedures for the past 7 years, and termination documents beginning from 2018. The documents were put into binders to be sent to Iron mountain for proper disposal. Additionally, a confidential staff satisfaction and retention survey of 20 questions as per CoA guidelines was created. The survey was approved by multiple parties including our HR department and will be sent out in December. It targets the entire management team at NFSB, collecting data from about 25 of our employees.

Outcomes/Results: The fulfillment of two accreditation categories were developed including Human resource planning, where client satisfaction and retention & personnel records policies were revised and updated to Risk prevention and Management qualifications. The official NFSB manual was updated to fulfill CoA categories such as proper risk management & insurance protection. Furthermore, security of information processing was performed which led to 200 confidential client records being entered into our online database and put aside for proper disposal.

Evaluation/Conclusion: Upon completion of the accreditation process and mentorship, NFSB will become ready to be approved as an accredited nonprofit organization. Staff satisfaction and retention is paramount for future success and the surveys conducted will be of great value moving forward. Doing so will allow NFSB to file for expansion in all domains and grow for the foreseeable future. Once the council sends a representative in February 2023 to conduct a live inspection of the premises, deliberations regarding grant offerings, building expansions as well as school & university partnerships will be done shortly after. Resources offered to the community will increase across the board regarding mental health as well as food security. The council of accreditation will approve the necessary categories on a rubric-rating system from 1 to 4, 1 meeting all requirements and 4 signifying a failure to meet. Once inspection is conducted in February, the accreditation process will be complete and Nutley Family Service Bureau will either pass accreditation or need to reapply in the future via FCR (Final Accreditation Report) which will rate the standards as mentioned beforehand. In order to be considered a success, Nutley will have to receive a rating average of no higher than 2 in all categories.

Title: Correlation Between Insurance Caps And Health Equity

Name: Olivas Nohelia

Preceptors: JoAnn Gerbasio, Regional Clinical Director

Agency: Sportsmed Physical Therapy - Edison, New Jersey

Purpose: To study and analyze how patients' length of stay in physical therapy due to insurance affects their health equity.

Significance: Physical therapy interventions aim to eliminate or reduce pain, restore function, and educate patients on properly managing their conditions. The World Health Organization, WHO, defines Health as "a state of complete physical, mental and social well-being and not merely the absence of disease." Health is more than just physical health, and attempts to promote health should be multifaceted. Physical well-being affects the mental and social well-being of patients. It is important to provide physical therapy to those individuals who are experiencing pain and discomfort due to an injury or musculoskeletal diseases since it affects their other dimensions of health. Adults with disabilities reported that when they were unable to continue therapy because of cost, they suffered physical and psychological consequences along with compromised independence (Neri & Kroll, 2003). Physical therapy is important to patients as it aims to improve the quality of life of patients and helps patients recover physically, and those effects can impact mental and emotional well-being, influencing their overall health equity. The Centers for Disease Control defines health equity as "the state in which everyone has a fair and just opportunity to attain their highest level of health".

Method/Approach: In order to measure how the length of stay at physical therapy and insurance affects patient health equity, patients received a questionnaire during their visit. The questionnaire consisted of two questions. One question regarding the length of time at physical therapy. The other question asks if a patient has had issues with insurance that prevented them from going to physical therapy. The data recorded from the questionnaire is exported to a spreadsheet and organized.

Outcomes/Results: The total number of patients who answered the questionnaire was 34. Of the participants, 97.1% agreed that *staying at physical therapy longer will improve* their quality of life, and 2.9% said otherwise. 14.7%. stated that *they had issues with insurance preventing them from going to physical therapy*, and 85.3% stated that *they had not had any issues with insurances*. Lastly, 100% of the patients who stated they had issues with insurance preventing them from physical therapy agreed that staying at physical therapy longer would increase their quality of life.

Evaluation/Conclusion: Based on the results, most patients believe that staying at physical therapy longer will improve their quality of life. In addition, the patients who reported having issues with insurance preventing them from physical therapy still believed that staying at physical therapy longer would improve their quality of life. A limitation of this project was that many of the patients surveyed at the office are over 65 and have Medicare; the insurance cap for Medicare patients is high. Most of these patients have few issues accessing and receiving physical therapy treatment. Another limitation of this project was that it only surveyed patients at the Edison location, where a big portion of patients are retired and patients of working age were limited. It is important to achieve health equity as it can help lower illness burdens and increase well-being, resulting in healthier communities.

Title: Emerging seafood import market analysis according to USFDA policy regulations

Name: Aman Parayil

Preceptors: P.M Mathew, Director

Agency: Delight Foods USA

Purpose: To create a report to analyze and recommend emerging and underutilized international markets for sourcing the necessary product to meet company targets and secure long term growth goals.

Significance: The existing imbalances in international trade have had a negative effect on the Imports of seafood in the American market. The United States is actively working to rectify this scenario by increasing imports of seafood from increased foreign markets according to a 2022 export plan released by the United States Department of Commerce. As per reports released by NOAA Fisheries, the United States has incurred a USD 17 billion seafood trade imbalance in 2019. Therefore with an increase in demand in the market, Delight Foods USA wants to identify potential new markets from which they can source the required product in the volumes of requirement to fulfill market demands.

Method/Approach: Utilizing trade databases, industry reports, and economic data, factors such as consumer preferences, demand for specific seafood products, import regulations, tariff structures, and market competition were assessed. feasibility studies were conducted to evaluate the potential profitability and market entry barriers in different regions. Collaboration with industry experts provided insights into market dynamics.

Outcomes/Results: Two regions were identified to meet market demands namely Vietnam and Indonesia. Vietnam has rapidly emerged as a significant market for sourcing seafood to America accounting for about 7% of the total seafood exports in the world. Its favorable geographic location, extensive coastline, and abundant water resources provide an ideal environment for aquaculture, particularly for shrimp and pangasius (tra and basa fish). The Vietnamese seafood industry has also made substantial investments in meeting international quality standards and implementing sustainable practices, which resonate with American consumers' increasing preferences for responsibly sourced and environmentally friendly products. Another major emerging market for seafood is Indonesia. The country boasts an extensive coastline and abundant marine resources, offering a diverse range of seafood products. Indonesia is a major producer of seafood commodities such as tuna, shrimp, crab, and various fish species, making it an attractive source for the American market. The country accounts for 2.77% of the world seafood export.

Evaluation/Conclusion: Vietnam is the best untapped opportunity for Deligth foods USA based on the fact that they have experienced steady growth in the industry from 6.57\$ billion USD in 2015 to 10.92\$ billion USD in 2022. The country has shown a willingness in adhering to strict international standards which include the USFDA regulations, while the same time maintaining cost effective labor and lowering sales prices to foreign buyers thereby giving higher profit margins to foreign buyers accounting for exchange rates.

Title: Improve peer-to-peer support for blood cancer patients

Name: Nicole Paschold

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

Northeastern Pennsylvania Region

Agency: The Leukemia & Lymphoma Society (LLS)

Purpose: To increase the number of First Connection volunteers with rare blood cancers to ensure those requesting to speak with someone with a shared diagnosis are connected in a timely manner.

Significance: Compared to other cancers, blood cancers are considered unusual in the United States and are expected to make up just under 10% of all new cases in 2023 (LLS). With diagnosis comes a unique set of physical and psychosocial challenges during and post-treatment that influence the well-being of those impacted by blood cancers. Though advancements in therapies over the last few decades have increased survival rates, reports indicate that two-thirds of patients felt support from someone who went through a similar experience was missing from comprehensive cancer care. Peer-to-peer systems boost morale, reduce anxiety, improve patient well-being, and reduce caregiver burnout for those early in treatment or recovery and allow survivors to give back with their story and process their own cancer journey (Kieman & et al.,2023). The Leukemia and Lymphoma Society's Patti Robinson Kaufmann First Connection Program filled this gap with over 2,000 matches across the country in 2022, 88 of which were in New Jersey. In 2023, there will be an estimated 1,100 new cases of Chronic myelomonocytic leukemia (CMML) and approximately 35,730 of Multiple Myeloma (MM) in the United States (LLS). Within the LLS database, only thirty-three MM patients seventy years and older and two diagnosed with CMML of any age are available to match with requesters.

Method/Approach: Reports were generated for three LLS regions, New Jersey and Northeastern Pennsylvania, Metro New York, and Connecticut- Hudson Valley, with specific parameters of a CMML diagnosis, constituent type, age, and primary date of diagnosis. A single report was generated for MM patients seventy years and older with the same parameters for New Jersey and Northeastern Pennsylvania. Data was then exported to a spreadsheet and organized. After removing persons with a diagnosis date of less than one year and those labeled caregiver or family, each patient's First Connection history was reviewed. Patients with prior experience as requesters with the program were prioritized for outreach first, with the remaining individuals contacted in no particular order. Outreach was completed via phone call and/or email. All written communication included a flyer created for volunteer recruitment that provided information about the program and a QR code and web address to the First Connection Program.

Outcomes/Results: Of the total number of patients diagnosed with either CMML or MM, n = 76, only seventeen (22.4%) had either attempted or utilized the First Connection Program. Eight (10.5%) indicated they would like to volunteer during initial outreach, with two (2.6%), one MM caregiver as the patient is in active treatment and one CMML patient, committing to becoming a First Connection volunteer. Of the remaining 68, 10 (14.7%) were unreachable, two passed away (2%), and fifty (73.5%) were either uninterested or contacted with no response.

Evaluation/Conclusion: To increase the likelihood a patient, caregiver, or family member becomes a peer volunteer, targeted recruitment by LLS should occur at least one-year post-diagnosis, ideally within two, to help maintain the relationship between the organization and patient. This will help ensure contact information remains current, allow LLS to identify potential volunteers, and time for individuals to be in the proper mental space to mentor others.

Title: Senior Patients Health Assessment for Maintenance Medications

Name: Shubh Patel

Preceptors: Ankur Shah, Pharm.D - Coordinator

Agency: Bonhamtown Pharmacy

Purpose: Analyze the number of patients (50 - 70 years old) who take cholesterol medications regularly and track those who keep up with their maintenance prescriptions and the prevalence of cholesterol.

Significance: Vaccinations offer defense against several illnesses that can be very serious or life-threatening for the elderly. People (50 - 70 years old) frequently receive the flu vaccination, the pneumococcal vaccine for pneumonia, the herpes zoster vaccine for shingles, and the Tdap vaccine for tetanus, diphtheria, and pertussis. Even if a senior with vaccinations contracts a sickness avoidable by vaccination, the illness's severity is frequently lessened. In the United States, high blood pressure has been a significant cause of worry. It significantly contributes to the risk of heart disease, stroke, and other cardiovascular diseases. Although the prevalence of hypertension has changed throughout time, it has consistently been a severe public health concern (Mills, 2020 - The Global Epidemiology of Hypertension). High cholesterol is a common cause of worry. It carries a considerable risk of developing heart disease and stroke. Many commonly see high amounts of low-density lipoprotein (LDL) or "bad" cholesterol. They are one of the leading factors that can lead to cardiovascular diseases due to the lifestyle choices people tend to make.

Method/Approach: <u>Data collection:</u> Compile details on elderly citizens (50 years of age and above) who visit Bonhamtown Pharmacy for preventative care and immunizations. Patient demographics, immunization histories, and prescription histories are examples of this data.

Data Analysis: The proportion of elderly patients who continue taking their prescribed maintenance drugs

Outcomes/Results: Medication Adherence: The statistics provided below were collected from Bonhamtown Pharmacy during October 2023. 45 % of the patients are male and 55 % are females. 20 % of the patients are aged 18 to 30, while 35 % are aged 31 to 50. Another 30 % are aged from 51 to 70 years, and 15 % are 70+. Based on the monthly report, 60 patients received flu shots, 120 patients got the new COVID-19 Booster, and 40 patients got their shingles vaccines (Retrieved from Bonhamtown Pharmacy, October 2023)

Evaluation/Conclusion: The outcomes were evaluated using patient surveys. The surveys contained questions about common side effects that patients may be experiencing while taking these medications, the daily calorie intake, and the type of diet. The majority of the patients have a high-fat and high-calorie diet, which puts them at risk for high blood pressure. Patients' health was also evaluated based on complaints about specific side effects from taking medications for high blood pressure and cholesterol.

8 % of patients complained of muscle pain, while another 5 percent admitted having headaches. Also, 4 % stated they had gastrointestinal issues, and 3 % of patients had increased fatigue throughout the day. However, this can be an outcome of a series of medications that the patients are taking and cannot be caused by just taking blood pressure or cholesterol medication.

Title: Optimizing ADHD Follow-Up Appointments Through EMR Utilization

Name: Vedant Patel

Preceptors: Dr. Patel

Agency: Inspira, PediaPlace

Purpose: To enhance the efficiency and patient engagement of ADHD follow-up appointments by utilizing the Electronic Medical Record (EMR) system to track and manage missed appointments, including rescheduling and cancellations.

Significance: Inefficient follow-up processes can lead to increased no-show rates, compromising patient care and resource utilization. Missed appointments are a significant barrier, leading to inadequate treatment and increased healthcare costs. The integration of appointment management within the EMR system is designed to bolster patient engagement, reduce the frequency of no-shows, and streamline the follow-up process, ultimately contributing to better healthcare outcomes for children with ADHD.

Method/Approach: A detailed analysis of 1000 patient appointments was conducted, which included categorizing cancellations (135), no-shows (150), and messages left (30). The project involved direct communication with patients to understand and address the reasons for missed appointments. A key component was utilizing the Athena EMR system for tracking and analyzing missed appointments, identifying patterns, and understanding patient behaviors. Direct calls to confirm appointments were made, allowing for real-time data collection and analysis. A chart was created to monitor and analyze missed appointment patterns, providing insights into the missed appointments.

Outcomes/Results: The project targeted the rescheduling of 240 appointments. Strategies implemented included proactive communication through direct calls for appointment confirmation and rescheduling. The most common reasons for missed appointments were forgetfulness, scheduling conflicts, transportation issues, financial constraints, and if a parent has work. The use of Athena EMR was instrumental in documenting and managing these interactions, facilitating better communication and follow-up with patients.

Evaluation/Conclusion: The effectiveness of the interventions will be assessed by comparing the rates of rescheduled appointments before and after the project implementation. The project highlights the importance of integrating technology with personalized care approaches to enhance patient engagement and clinic efficiency. Future recommendations include continued use and possible expansion of the EMR system's capabilities, including automated reminders via email and text, for more efficient patient communication and management in ADHD follow-up appointments.

Title: Fundraising for the "Transition to Home" Initiative

Name: Kelsey Perez

Preceptors: Todd Finklestone, Director of Operations

Agency: ONETrack International

Purpose: To spearhead fundraising campaigns in efforts to support and promote alternative orphan-care solutions, the "Transition to Home" approach.

Significance: The global orphan crisis is caused by the inadequate handling of the crisis by the global community, resulting in an estimated 153 million orphaned children worldwide. According to UNICEF, every day, an estimated 5,700 more children become orphans due to a variety of tragic circumstances. ONETrack International promotes innovative orphan care solutions and guides existing community based organizations to restructure their own systems, provide support in media, data measurement, fundraising, and capacity building support. By implementing three strategic campaigns, all funds will be allocated to support the "Transition to home" program. The donations will support children's projects that provide assistance to initiatives aimed at integrating orphaned children into the care of trusted guardians within their native communities. The non-profit's support extends to host families, education, healthcare, caregiver support, and maintaining secure family environments.

Method/Approach: To explore ways to fundraise for ONETrack International, diligent efforts have been undertaken to brainstormed and assess potential fundraising ideas that would yield the promising outcomes. The three final campaigns were chosen based on the active engagement of people participating depending on the area and the likelihood of people donating out of their kindness. The first campaign utilized Instagram to create a fundraising thermometer-style post, showcasing the vision statement and illustrating how different donation amounts could support children in orphanages. The first campaign created awareness of the nonprofit and established a foundation for the following two campaigns that would also be promoted on social media. The second campaign involved a two-day bake sale for community involvement, with the first held at Rutgers University Campus, featuring cupcakes donated by Shoprite Bakery. The second bake sale took place at home with the cooperation and assistance from family members. The third campaign is a gym raffle being held over Instagram and will take place for 2 weeks ending on December 9th. Iron Revolution has offered to help with providing prizes for the raffle: a one-year free membership, an amazon gift card, and 3 day passes. The campaign will bring a different audience to donate and become aware of the nonprofit.

Outcomes/Results: The social media campaign has come to a close at the end of the first week of October. Solely through direct donations, \$310 were raised. The second campaign consisted of a two-day bake sale that ended the weekend of November 19th. Both bake sales had a final profit of \$331 donated. The gym raffle is currently in progress and so far there have been 10 entries.

Evaluation/Conclusion: Receiving donations from the social media campaign was the most difficult in terms of time. Having reached out to as many individuals as possible at once, the individual found it imperative to maintain constant accessibility on their phone and respond promptly to those interested in making donations. The two-day bake sale demonstrated notable success by attracting a heightened number of customers and achieving substantial profitability. The gym raffle was proven to be the most difficult in finding individuals to join despite there being 3 chances to win a prize. Each fundraiser has different complications of their own, but through the support of Todd Finklestone all of the concerns have been able to have promising solutions.

Title: Colon Cancer Screenings

Name: Laurel Peters-Acceus

Preceptors: Amber Dessalines, Nurse Practitioner, Office Manager

Agency: Primary Care First - Shrewsbury, NJ

Purpose: To increase early detection odds by implementing a data system that alerts the physician to screen for colorectal cancer in patients.

Significance: In the year 2023 it is predicted that 153,020 individuals will be diagnosed with colorectal cancer and about 52,550 individuals are at risk of dying from the disease. Primary Care First works with sees patients of adult age and older. A majority are in long-term care facilities like rehabilitation centers and nursing homes. These patients are considered high risk for colorectal cancer. This project will streamline the symptoms and notes documented by the physicians and separate patients who were flagged for being at risk for colon cancer. This project aims to increase efficiency and accuracy of patient procedures.

Method/Approach: During the intake process the medical assistant input the symptoms and history of the patient in their chart online and shared these on the medical portal. Primary Care First operates using a universal portal called Athenahealth. When patients' labs and doctor's notes are uploaded to the system, certain quality metrics are tracked and flagged for preventative treatments based on which risk factors are put in the search engine. When 'indicators for colorectal cancer' is searched all the patients within the Athenahealth system are pulled up on a spreadsheet and patients are separated based on their eligibility for a color guard and screening. To the patients who qualify, a color guard kit is mailed to the patients, with the intention of them completing the screening to ensure the earliest detection for colorectal cancer. Along with the kit is a letter from Primary Care First including information on colorectal cancer and the steps taken to prevent a late diagnosis. It is within the patient's right to do the test or not, we just provide the patients with all the information.

Outcomes/Results: The data of 424 patients were uploaded to the quality management report system for adult preventive care guidelines for colorectal cancer screenings. From the total, 3 patients were excluded due to opting out on the initial intake forms for new patients. The report states that 304 patients did not satisfy the guidelines for colorectal screening, and 117 patients did satisfy the guidelines for a colorectal cancer screening. Of the sample size cohort of total patients that satisfy the guidelines for a colorectal cancer screening (n= 117) 66 patients are female (56.4%) and 51 patients are male (43.6%). Out of the total number of patients that the criteria satisfies, 11 patients had colorectal screenings already completed (9.4%). This leaves 106 patients (90.5%) who have not had any colorectal screenings completed.

Evaluation/Conclusion: The portal system that Primary Care First uses to upload their patients' care summaries and symptoms prompted that out of their 424 processed in the system, 117 patients satisfied the requirements to be screened for colorectal cancer, 106 patients still needed to be screened. Being that Primary Care First, an internal medicine practice, provides services for adults and the older population, my attempt is to close the gap for preventative care treatments. Colon cancer symptoms appear as cramping, pain, or a change in bowel habits, which can be easily overlooked when patients are dealing with other ailments of the body. My job is to contact all the patients who qualify for a colorectal screening and let them know that they can be prescribed with a cologuard test kit to increase their chances of early detection. The kit is minimally invasive and can be done in the comfort of the patient's home, and once we have their results the attending physicians can proceed with the necessary care plan.

Title: Research Project Management for Spinal Cord Injury Therapeutics

Name: Shailee Pusuloori

Preceptors: Dr. Jaclyn Eisdorfer, Dr. Victoria Abraira

Agency: The Abraira Lab (as part of W.M Keck Center for Collaborative Neuroscience)

Purpose: To execute and manage a research protocol based on spinal cord injury research.

Significance: According to the Christopher and Dana Reeve Foundation, there are approximately 302,000 people living with a spinal cord injury (SCI) and there are currently no known treatments for reversing damage. However, most spinal cord injury research is geared towards the regeneration efforts. At the Abraira Lab, Dr. Jaclyn Eisdorfer aims to take a different route by focusing on existing sensory neurons to understand how the body works towards its own recovery. Our project aims to create a preclinical mouse model and collect data to be put in a data repository (such as a website) so that it can be used by the scientific community to create therapies for spinal cord injury recovery.

Method/Approach: To ensure that research went smoothly and can continue in the future, there were several methods to implement. The creation and usage of a project timeline allowed our team to adhere to a manageable schedule and set weekly objectives. When problems arose throughout the process, the timeline was able to be adjusted as needed. In order to manage a team through a particular protocol, the protocol must be learned and understood first by the manager so that it can effectively be taught and carried out by the research team. As the protocol was carried out, all data produced was appropriately documented for further research use. Using Google Sheets, data for about 1400+ tissue sections were collected for further collaborative use by other researchers. As problems arose in carrying out the protocol, problem solving strategies were implemented to identify the issue and create a revised protocol that reflected the applied long-term solution.

Outcomes/Results: The project timeline allowed for weekly objectives and goals to be met as well as the creation of a manageable work flow. Three research assistants were trained on the histology research protocol which ensures that the work can continue in the long-term. Collected data was put into the Abraira Lab's data repository for continued collaboration with other spinal cord related research projects at Rutgers. Effective training and understanding of the histology protocol produced well over 1400 tissue sections. Several issues occurred throughout this process. Equipment failure caused a one-week delay while waiting for the replacement part. When the research building became too hot for the tissue, the team was forced to move their work to a separate building. In carrying out the protocol, a 20% loss of tissue per batch was identified. After revising and implementing a new protocol that prevents this issue, an instant reduction of only 5% tissue loss was found. Data recording done in tandem to the protocol being carried out ensured that all tissue sections were accounted for.

Evaluation/Conclusion: Through this entire process, there are several key attributes when it comes to managing research: data recording, problem solving, organization, and teamwork. Incorrect recording leads to discrepancies and mistakes that can have a negative impact in the future when the data is needed as it then renders it useless, thus wasting tissue that otherwise could have been used. Teamwork is the only way to efficiently get a lot of work done in an allotted time. Unforeseen problems will almost always arise in research and must be accounted for. Creating new strategies and revising the protocol to be more efficient may delay the project timeline in the present, however it ensures that the data is reliable and usable, thus minimizing tissue waste in the long-run.

Title: Report Cards: Health Care Providers

Name: Carla Rodriguez

Preceptors: Rosalba Garcia, Medical Staff Director

Agency: Hudson Regional Hospital (HRH)

Purpose: Collect, evaluate, and analyze data to measure the performance of healthcare providers to identify the quality care and level of care being provided at HRH services. This information is used in big decision making and helps the organization make informed decisions about providing better healthcare.

Significance: Quality report cards will analyze provider performance data and provide quality feedback. Audits in healthcare play a crucial role in ensuring accountability, compliance, and quality improvement within the healthcare system. The importance of audits can be seen in various aspects. Health care organizations are audited to be measured as an overall institution. Yearly, HRH's accreditation agency performs audits and site visits. These visits rate the medical staff data overall. Medical Staff collects information that contains reliable, valid, reproducible information. They can cover clinical and nonclinical measures.

Method/Approach: Data was collected from providers in clinical and overall departments. For example, a timely administration of antibiotics is collected per provider. Managerial measures can be collected as an overall department utilization of resources, collections, and comparative data is used to communicate all this information as a whole. The final steps include analyzing and summarizing data to make meaningful comparisons and evaluate various aspects of the care being delivered.

Outcomes/Results: Data was collected from different departments. They all had different types of metrics or benchmarks. Some of the data collected were Blood Usage, Return to Surgery after 24 hours, medical record compliance rates, delinquency rates, and against medical advice. They all differed in what kind of data they were. For example, some were quantitative data, such as compliance rates, and some qualitative data, such as how many surgical site infections occurred. All data was reviewed and collected by respective departments. The following finds were found after a site visit from Det Norske Veritas. Hudson Regional is still considered a new hospital. It has only been under new ownership for about 5 years. In the past two years, new Electronic Medical Records were introduced as well as a lot of new reporting software. This has caused a big strain on how true the data can be. Therefore, a lot of this data has been recorded manually. The findings were that The report card needed more focus on Orthopedic, Spine Surgery, and Medicine specialties. These three departments are the largest at HRH. After a review of the data, DNV found no comparative data. Comparative data is needed to compare how well an organization performs on a state/national or federal level.

Evaluation/Conclusion: Medical staff and Directors met to create an action plan on this finding. Members agreed on reassessing all metrics used as previously stated. These metrics need to be measured and compared to a larger metric to identify and address how well the organization is doing compared to other healthcare deliveries. The medical staff office will support and compile a list of national/federal guidelines used per department on newer metrics and ensure compliance with suggested regulations. Departments will be in charge of finding metrics that are measurable on a national/federal level. This will serve as a proactive tool in identifying and addressing issues that can impact patient outcomes, financial integrity, and overall effectiveness of healthcare delivery. Some suggested outcomes of failed metrics are case reviews, re-education, peer reviews, and root cause analysis. Hudson Regional Hospital's ongoing commitment to monitoring its organization's performance is a commitment and pursuit of excellence to make sure the community receives the healthcare service delivery they deserve.

Title: Insurance Claims Denial Management Assessment

Name: Kasey Rose

Preceptor: Anvi Mody, Clinical Director

Agency: Americare Physical Therapy- Piscataway, NJ

Purpose: To analyze insurance claims and pre-authorization submissions in order to improve denial management for physical therapy services.

Significance: Hospitals and health systems of all types provided more than \$42 billion in uncompensated care — care for which they received no payment— in 2020 alone. According to a recent survey from Harmony Healthcare, the average claim denial rate nationwide is between 6% and 13%—and those numbers can be even higher in some settings. This provides evidence of what health systems have to endure just to get payment for their services. In terms of physical therapy and other outpatient clinics, pre-authorization is needed to request from the insurance before a patient can receive treatment. Claim denial management is significant to ensure payment is received for the services provided, and pre-authorization management is significant to ensure claim acceptance and ensure patients can get the treatment they need and can continue to attend therapy.

Method/Approach: The research at AmeriCare involves identifying why claims are being denied and reducing the rate of denial. Reducing the rate of denial would save the company more money and allow it to receive payment for its services. The research included claims that were submitted in the month of October 2023. This data was collected using the Raintree EMR system, which records these numbers. From October 1st to October 31st, a total number of 759 claims were submitted. Of those claims sent out for the month of October, a total of 56 were denied (7.3%), 35 were rejected (4.7%), 54 were pending (7.1%), and 614 (81%) were approved. Each authorization denied required a reach out to insurance companies, and the insurance company would express the reason for denial and out of those denials, how many had the option of being appealed. Notes from insurance allowed us to understand that the three reasons for denial and rejection were: (1) No medical necessity, (2) No pre-certification, (3) Wrong information provided. All had the option of being appealed by mail or electronically.

Outcomes/Results: Of the sample size (n=56), 33 (59%) were denied due to no prior authorization request from the insurance, and 23 (41%) were denied due to physical therapy being determined as not being medically necessary for the patient. All 35 rejected claims were due to incorrect information of the patient or provider. Most common incorrect information tended to be the patient's name, date of birth, or insurance member ID. For providers, the most common incorrect information was the NPI number.

Evaluation/Conclusion: More than half (n=56, 59%) of claims were denied due to not having a precertification from insurance. Accurate submission of pre-authorization requests is ideal for reducing denial rates. Accurate pre- authorizations involve submitting correct dates in order not to miss dates where a patient had a physical therapy visit, identifying how each insurance would like a pre-authorization request so that they can efficiently be approved, proving medical necessity during the authorization request is also significant as this is the other main reason claims are denied. Ongoing monitoring of denial claims will take place to ensure accurate pre-authorization requests, to ensure payment for services, and to make sure patients are able to attend necessary visits without the financial burden.

Title: Analysis of Genentech's Oncology Booth

Name: Thomas J Silvestrone

Preceptors: JD Barksdale - Account Supervisor

Agency: BGB Group

Purpose: Analyze how Genentech conveys the depth and breadth of its pipeline, corporate and medical messaging, and engage congress attendees in its medical affairs booth.

Significance: The significance of this is to examine what Genentech is doing right and what can be improved upon to maximize the success of the company, which in return helps patients who benefit from oncology drugs. Clinical trial data is displayed in the congress booth's assets and centers the pipeline to show its depth and importance. Genentech has an impressive number of trials that have reached the third phase in the oncology/hematology space as well as an incredibly expansive pipeline. Genetech has 11 out of 23 phase 3 drugs for breast cancer.

Method/Approach: Evaluate Genentech's USMA guiding principles and how they are conveyed in their congress booth. These principles include the company's commitment to oncology drug discovery, making a meaningful difference in the lives of cancer patients, and a drive to showcase the patient's care throughout the entire cancer journey. They also want to emphasize the commitment to diversity and other corporate initiatives. Examining the booth by looking at each asset individually. There are multiple displays showing molecule information that explain the science behind the research being done. There are also panels that display clinical trial information. Each asset comes together to form a cohesive story that Genentech wants to tell of their pipeline.

Outcomes/Results: In the end, it was revealed that Genentech's congress booth pieces tell the story in an effective way, as well as including assets that have multiple purposes. Breaking down the booth piece by piece showed that the pipeline is the crown jewel of the entire booth, and what Genentech prides itself on. After review of the booth several recommendations can be made such as including a resource center kiosk that allows attendees to shop for PDF versions of booth information. Also, surveys can be utilized to gather post-conference information like regarding booth engagement and perception.

Evaluation/Conclusion After examination of years past booths, it appears this can be helpful in determining what can be improved upon to help create certain recommendations that are backed with data and insight from the company. Examining the booth assets individually and as a whole emphasizes their purpose and the draw for the attendees. Each display has an impact on the person who is viewing it at the conference, but Genentech's impressive booth design paired with their significant pipeline would draw the average attendee. Creating an engaging experience makes the attendee more inclined to pursue the company post congress, equating to success. Booth attendees are also more likely to participate in the booth if things are simplified for them which Genentech does a great job at through the use of QR codes and handouts alike.

Title: Mentoring and Training Leaders

Name: Linda Tages

Preceptors: Quadai Palmer - President

Agency: From Jersey with Love/Leading in Love

Purpose: To assess the mental toll that community leaders deal with and to create a curriculum that helps guide them through their leadership program.

Significance: Business executives, like many other occupations, often experience mental health problems. A person's mental health may suffer as a result of the demands of leadership roles, including high levels of stress, long hours, as well as lack of proper training. According to the American Institute of Stress, eighty percent of workers in a survey said they experienced stress at work, and almost half said they needed assistance learning how to handle stress. In the leadership survey conducted by interns earlier in the year, about 78.3% answered yes to the importance of leadership development in their careers. About 31% of business executives struggle with their mental health. About 56.5% of leaders mentioned that they question the importance of their own needs. Leading in Love offers a mentoring and training program to equip leaders with the necessary tools needed to help them become successful leaders.

Method/Approach: Prior to this internship, the team at FJWL/ Leading in Love identified personal and professional development areas for leaders. The personal development areas are self-awareness, communication, problem-solving, relationship-building, and technology skills. The professional development areas are board development, business management, accounting, HR/Training, information technology, and grant fundablity. Based on these areas of development, collaboration took place to determine the most effective approach for delivering resources. The management team and the board decided to create two programs for mentoring and training. The next step was to develop a curriculum based on each area to offer to leaders.

Outcomes/Results: An outline for both programs was created with guidance from the advisor and the management team. Each outline maps out the module and lessons for each concentration area, such as understanding agility, effective communication, and developing problem-solving skills. Periodically, reviews and discussions are conducted to iron out all the possible ways to edit the outline for the programs. As the guide has been developed, it has become clear how much more this project will entail than was first anticipated during the internship. Action plans are being devised to enhance the existing structures, recognizing the need for further work.

Evaluation/Conclusion: This is a well-thought-out project that will have a significant impact on better equipping leaders to be able to serve their communities. This project will help reduce the mental toll that ill-equipped leaders often face, such as dealing with the stress and anxiety that come with being in a leadership position, as well as not being able to avoid burnout. Since the project has turned out to be broader than expected, having a well-thought-out action plan will be necessary to achieve the program's intended goal.

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Title: Taking What You Have to Produce What You Need: Hospitals and HBCUs

Name: Kendra Thomas

Preceptors: Christian Ragland, Assistant Vice President of Diversity, Equity, and Inclusion

Agency: AtlantiCare

Purpose: To develop a more diverse workforce for AtlantiCare.

Significance: In healthcare, diversity in the workplace lowers healthcare disparities, increases access to care, and enhances the effectiveness and quality of care delivery. Diversity is necessary in healthcare for several reasons. It guarantees equitable representation of diverse backgrounds, ideologies, and points of view. More educational and career opportunities for historically black colleges and universities will lead to a more diversified workforce and better health equity. While Black Americans represent 13% of the population, only 12% of healthcare workers are Black, according to the federal Health Resources and Services Administration. This gap is narrower than it used to be, but there continues to be a strong need for more. People who have healthcare professionals from the same racial or ethnic background are more likely to report care satisfaction, according to a study from JAMA Network Open (Dickman et al., 2022).

Method/Approach: The objective was to establish collaborations amongst historically black colleges and universities to assist AtlantiCare's commitment to attaining health equity and a representative workforce. Developing professional pathways to improve students' experiences now and in the future started with creating winter and summer immersion experiences in 2023 with Cheyney University health science students. The goal was to have two cohorts of science students shadow clinical roles in the hospital and ambulatory setting to create exposure to careers that need more diversity in healthcare, including respiratory therapy, nursing, laboratory science, radiology, pharmacy, oncology, ob-gyn surgical services, medicine, and social work. Students also were exposed to AtlantiCare's partner schools that offer clinical education for these roles for post-graduate academic opportunities. Once students completed immersion, they met with HR to discuss the next steps of becoming employees and how to use AtlantiCare's education investment program to transition into these roles.

Outcomes/Results: The project aimed to create partnerships amongst historically black colleges and universities to enhance health equity and create a diverse workforce for AtlantiCare. Collaboration with Cheyney University generated a Winter immersion experience with 26 junior and senior students and a Summer program with 35 junior and senior students. At the end of the immersion, 3 Cheyney University graduates enrolled in the BSN Accelerated Program at Stockton University, and 3 Cheyney University graduates enrolled in Respiratory Therapy school at Thomas Jefferson University.

Evaluation/Conclusion: The main objective is to inspire future healthcare professionals to devote themselves to attaining genuine health equity, even though the precise assessment methods still need to be specified. The alliance seeks to improve the experience for students and promote fair healthcare practices by offering career options and industry exposure. Creating this partnership helped many students understand the need for other careers in medicine and healthcare. Cheyney lacked several academic programs mentioned in the immersion and found the path toward programs by utilizing AtlantiCare's workforce and education investment plan. AtlantiCare's investment program allows them to hire these students and finance their Post-baccalaureate clinical education. Once the students graduate, they sign a 3-year commitment to work for AtlantiCare. In 2024, AtlantiCare will have six individuals who will have completed their programs and begin their new clinical careers in areas where more diversity is needed.

Title: 4-Week Metabolic Reset Program Support Delivery

Name: Antoinette White

Preceptors: Dr. Iza Boesler, Office Owner, Alan Macioszek, Office Manager

Agency: Fresh Fit Consulting LLC (FFC)

Purpose: To help deliver a 4-week metabolic program through the creation of easily digestible content, visuals, and patient support.

Significance: According to the CDC, 60% of Americans live with at least one chronic disease, and chronic diseases account for 7 in 10 deaths each year. The CDC also reports that the main drivers of chronic disease in the US include poor diet, lack of physical activity, and excessive alcohol and tobacco use. Fresh Fit Consulting LLC is led by Dr. Iza Boesler, a functional medicine practitioner who believes healthcare should be delivered on a personalized basis and offers specific testing and lifestyle modification programs. FFC offers a 4-week metabolic reset program designed to rid the body of toxins, balance hormone levels, and promote a healthy lifestyle and a high quality of life. The metabolic reset program focuses on modifying hormones, which are widely misunderstood and often dismissed in mainstream healthcare, through the mechanisms of healthy eating and metabolic flexibility. By educating patients on lifestyle changes that promote total-body health and supporting them on their journey, FFC brings a new dimension to preventative and curative healthcare.

Method/Approach: To make the Metabolic Reset Program easily understandable by patients, Canva was utilized to create infographics that contain images and simplified terms. Easy-read infographics are incorporated into the onboarding packet at the program's start and include macronutrient requirements and ideal food choices. Additionally, infographics have been made for weekly emails and breathing exercises. Weekly emails summarize the main goals of each week and describe complex medical ideas in everyday terms. Patients were contacted by text or phone to further ensure patient comprehension. For patients who chose to respond, a 10-20 minute phone call was held at least once a week to encourage compliance, offer clarifications, and provide overall support. The goal of the support calls was to make it clear to the patients that they were not alone in this process. In addition to the optional support, patients are encouraged to utilize the "Accountability Tracker" provided to them by FFC. The "Accountability Tracker" is an online form with questions to prompt the patient to check-in with the practice daily and inform them of their current state of mind and performance. Daily monitoring of the "Accountability Tracker" was conducted to identify patients needing extra support.

Outcomes/Results: Regular communication was established by reaching out to patients weekly, with 4 out of 7 patients enrolled in the MRP program between 9/15/23 and 11/15/23 for a total of 180 minutes of patient support. Response times for patient questions and concerns were drastically improved, reduced from 36-72 hours to less than 24 hours.

Evaluation/Conclusion: By monitoring the "Accountability Tracker" and reaching out to patients, questions could be answered in a time frame of less than 24 hours. This improved response time allowed patients to understand their tasks promptly and relieved the busy practice of the need to respond to a high volume of patient questions. Patient and preceptor feedback was positive. According to Dr. Boesler, patient utilization of the "Accountability Tracker" significantly increased, indicating higher program compliance, comprehension, and patient satisfaction.