Spring 2018
Abstract
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Internship Abstract

Traditional Internships
Internship Abstract

Title: Clean Energy for a Better Future

Name: Aubrey Abbes

Preceptors: Matthew Smith, Senior Organizer
           Cecille de Laurentis, Outreach Coordinator

Agency: Food & Water Watch

Purpose: To plan two educational forums on two New Jersey college campuses in an effort to engage college students and community members on current energy and environment policy issues in New Jersey.

Significance: As climate pollution accumulates, and as global warming increases, global temperature points are reached where a certain climate change effect is expected to be abrupt and potentially irreversible (Pachauri et al., 2014). New Jersey’s reliance on fossil fuels and promotion of natural gas pipelines perpetuates a dirty energy future that threatens climate (Sol Warren 2017). It is urgent that community members are informed of the current climate crisis and know how to take action, so New Jersey can transition to 100% renewable energy by 2035. Today, people of all ages, but especially young adults, are concerned about the future of their environment.

Method/Approach: A google excel spreadsheet was created to keep all pertinent event planning information for both forums such as timelines, partners, panelists, media outlets and events for promotion, and venues for forum locations. Forum locations were determined upon desired attendees; 100. Emails were sent out to relevant organizations and clubs to gain cosponsors. The intern team collaborated to create a Facebook and flyer for promotion. Flyers were distributed and posted on campuses, at relevant club meetings, and progressive events. For each event, phone calls and texts were sent to people who have taken action with Food & Water Watch for an invitation.

Outcomes/Results: The two forums were hosted by Food & Water Watch and partner; the Andrew Goodman Foundation. The forums were titled, “Clean Energy for a Better Future”. Panelists included, Scott Edwards, Cynthia Mellon, and Dr. Robert Laumbach, who discussed specific energy developments being proposed and policy solutions protecting water and public health. The first was at Rutgers, which had seven cosponsors and 80 guests. Ramapo had seven cosponsors and 105 attendees.

Evaluation/Conclusion: The number of guests in attendance were determined by sign-in sheets that were on the registration table. A limitation in the accuracy of attendees is if some passed the table without being signed in. The goal of 100 attendees was not reached for the Rutgers forum. Based upon feedback from post forum surveys emailed to attendees, it will be beneficial for future forums to increase attendance by considering parking availability, focus more on social media versus telephone, and by giving a forum length estimation in advance.
Title: Educating New York City Youth: A Comprehensive Guide to Well Being

Name: Shahinaz Abdelhamid

Preceptors: Delaine Powerful, Youth Initiatives Coordinator

Agency: National Institute for Reproductive Health

Purpose: To educate youth in New York City about a variety of free and low cost social services offered that they can utilize to achieve overall health and well-being.

Significance: Black, Brown and Indigenous (BBI) people in the United States have worse health outcomes than those of White people (Nickens, 1991). The history of reproductive oppression explains this disparity. Forced sterilizations and experimentations on Black and Brown bodies perpetrated by Western medicine have created distrust in the healthcare system among BBI people (Ross et. al, 2016). As a result, there is a hesitancy present within these communities to seek care. In addition, other factors such as cultural, social, and economic barriers have also contributed to this distrust (Moss, 2004). This guide aims to highlight BBI providers in order to ensure comfort and safety for the population that this guide will serve as well as make people aware that these affordable services exist.

Method/Approach: A comprehensive guide of 14 pages was designed using a graphic design tool (canva.com). It is available both physically and online on the National Institute for Reproductive Health website (nirh.org). This guide features instructions and information about a range of services provided in New York City that were compiled by conducting research and engaging in outreach to various organizations. The services featured are NYC assistance programs, Medicaid, Family Planning Benefit Program, free and low-cost recreation centers, mental health care, health screenings, abortion services, drug and substance use care, wellness centers, legal services and additional miscellaneous programs. This guide was distributed to seven sexual health peer educators (ages 15-18) along with a 13 question survey to evaluate its need, importance and effectiveness.

Outcomes/Results: Of the seven teens (n=7) that completed the questionnaire, 71% reported that they were more comfortable visiting providers that they can relate to in terms of identity. All of the teens (100%) inquired that they were not aware of the existence of all these services which emphasizes the importance of a resource such as this. Additionally, 100% of them said that the guide is useful, beneficial and that they plan on utilizing it.

Evaluation/Conclusion: Feedback from the teen peer leaders indicated that this guide overall is effective and important. However, in the additional comments section, there were indications that there needed to be an increased focus on services for other marginalized groups such as the LGBTQ+ community as well as undocumented people. This lack of focus stems from a low number of services available for these groups of people. As more services become available, this resource will be updated and expanded upon over time.
Title: Challenges, Pitfalls, and Opportunities of Patient Recruitment in Clinical Studies

Name: Duaa Abdulla

Preceptors: Steven Senko: Media and Outreach, Kaylee White, MA: Clinical Site Manager

Agency: Princeton Medical Institute

Purpose: To analyze the low patient recruitment success in clinical depression studies and offer reasons as to why the challenges are present.

Significance: Major depressive disorder is leading cause of disability for Americans aged 15-43 and one of the most common mental illnesses present. There are 16 million Americans that have been diagnosed with this crippling disease, and millions who are undiagnosed. 15% of our country’s population is estimated to be affected by depression. In 2016, 37% of Americans diagnosed with depression received treatment (NIMH 2017). However, the treatment prognosis is quite positive, as 60-80% see improvement. Symptoms are many and may be quite severe, including feelings of not being able to overcome the state of sadness (hopelessness), trouble doing ordinary activities, and suicide (25% of those who commit suicide had a history of depression) (AAS 2014). While clinical medication trials are an alternative avenue for treatment, there is a disconnect between the need and the feedback in the community.

Method/Approach: An analysis of the recruitment feedback from sponsors such as Clinedge was conducted to assess the funding allocated to such marketing methods with the return on the number of patients who have followed through into the study. The success rates on the recruitment of patients for depression studies versus Alzheimer’s was compared, in order to see why the latter has a much better turnover rate. Lead study coordinators were also interviewed to help understand what the subjective reasons expressed by patients for this phenomenon.

Outcomes/Results: During the study interval between December 2017 and April 2018, a sample size, elicited from Clinedge, (n=590) of potential Major Depression study patients were contacted for a preliminary depression screening. 12% of those contacted requested and/or were approved to schedule a pre-screening appointment. Out of the 70 pre-screen appointments, only 50% of those individuals appeared for their appointments. Conversely, the Alzheimer’s and memory loss referral system elicited from the Abbvie sponsor portal generated 50 potential study participants. However, due to the success of doctor and self-referrals, there were 84 patients who showed up to the clinic for their appointment.

Evaluation/Conclusion: There was a significantly higher return on advertising for Alzheimer’s studies as compared to advertisement for studies dealing with depression. Possible explanations for this phenomenon is that antidepressants are widely available and inexpensive to purchase. On the other hand, medications for Alzheimer’s are rare and not as widely circulated. There is also the element of stigma that comes with depression, as opposed to Alzheimer’s which may be viewed as a biological disease.

https://docs.google.com/document/d/1sVEUFl65elpRK0GZZC2NJ3dXz6VlokeP1N6J4IlHYW0/edit?usp=sharing
Title: Best Practices for the Recruitment of Subjects for the Project 18 Study

Name: Ariana Acosta, Research Intern

Preceptors: Direct Supervisor: Staci Barton, Project Director, MPH
Center Director: Perry Halkitis, PhD, MS, MPH

Agency: Center for Health, Identity, Behavior and Prevention Studies

Purpose: Identify the best practices for recruiting and retaining urban HIV-negative young men who have sex with men in New York City.

Significance: The assessments conducted at the Center for Health, Identity, Behavior and Prevention Studies assess the mental health burden, sexual behaviors and substance use behaviors of young men who have sex with men (YMSM). The findings of this longitudinal study contribute to the knowledge and progress of issues affecting this population by utilizing syndemic theory. This theory provides information to researchers to develop effective tools in preventing the spread of HIV and STIs among this population.

Method/Approach: Participants were drawn from social media sites, LGBTQ events, a variety of venues and community centers. In order to be eligible for the study, participants had to: be 22 or 23 years of age at baseline, have been assigned male at birth, be HIV-negative or unknown, have had sex with a man the last six months, and agree to HIV and STI testing. After the screening process, those who were eligible to participate in the study were then scheduled for their first assessment. At each follow-up visit participants were asked to complete the Timeline Followback (TLFB) measure (SOBELL & SOBELL, 1995) which gathers information on their sexual and substance use behaviors over the past thirty days. Every 12-month participants also completed a measure that asked questions regarding their social support system and the types of relationships they have with their peers.

Outcomes/Results: The study revealed that the best way to reach HIV-negative YMSM in New York City is through social networking websites and apps. The use of social networking websites/apps proved to be especially useful since it allowed researchers to filter by age, sex, and race/ethnicity. The study also found that the most effect strategies in achieving high retention rates were: taking care of participants and anticipating their needs, providing linkages to care, creating a flexible scheduling environment, providing testing and referrals, and sending email and text reminders for upcoming appointments.

Evaluation/Conclusion: Behavioral, structural and social conditions must be considered to retain the new generation of YMSM research participants. Attending to the participants’ specific needs has proven to increase retention rates in the P18 study. The study also revealed important knowledge gaps that call for further research such as: combination of biomedical, social support and behavioral strategies to reinforce safe behaviors and implement effective HIV prevention programs for this population.
Title: Strengthening Families Program

Name: Diana Adams

Preceptors: Kathleen McFadden

Agency: Atlantic Prevention Resources

Purpose: For both parents/children to identify their needs/wants as a family and create positive ways to resolve any conflict or unwanted behaviors.

Significance: Strengthening Families Program is significant to Atlantic Prevention Resources because it improves upon relationships with family members and their individual roles within the household. The program is important because it empowers parents with the necessary tools and family-skills building curriculum that helps effectively communicate with their children and reduce the risks of any negative ‘unwanted’ behaviors within their children's’ lives.

Method/Approach: Formal group sessions meet (for 2 hours each session) once a week with a total timeframe of either 7 or 12 weeks. The program goes to different cities throughout Atlantic County. The program uses learning games, realistic videos, and role-playing that help strengthen communication and family bonds. The sessions begin with parents/children eating dinner together for a half hour prior to breaking out into group sessions. The children will work with highly skilled adults in their groups to present issues that occur in their daily lives. The parents meet in a separate group to also discuss routine issues they have with their children. After the 1 hour separate session the families collaborate for the last half hour in a family game or activity.

Outcomes/Results: Parents and their children came together to resolve tension and conflict that was affecting the household in a negative manner throughout the week. What was learned is the fact when children and parents can discuss their own personal individual issues within a sensitive setting to promote growth it helps to increase the chances of positively changing negative behaviors into more desirable (positive) actions. The group setting allowed parents to interact with each other and learn things from listening to one another. The children were taught valuable life skills such as peer pressure resistance and coping skills so they too can recognize feelings in themselves and in others.

Evaluation/Conclusion: My evaluations are that the Strengthening Families program reveals that parents can indeed set appropriate limits and show affection and support for their children. I also observed that parents/children who engage in weekly activities together are less likely to argue on a regular basis. Furthermore, parents and children who talk, participate in family outings, eat dinner together, and watch television together are more likely to view their families within a positive outlook. These family activities also help to increase children’s self-esteem and productivity within school.
Internship Abstract

**Title:** The Use of SNOMED-CT and its value in clinical settings

**Name:** Anuoluwapo Adedeji

**Preceptors:** Dr. Sharon Rial, Director of Laboratory Services

**Agency:** Trinitas Regional Medical Center

**Purpose:** The purpose of this project is to update the SNOMED code system for the State of New Jersey and research its effects on patient care.

**Significance:** This project focuses on one of the “behind-the-scenes” aspects of patient care as a function of Public Health. SNOMED-CT is an acronym for Systematized Nomenclature of Medicine – Clinical Terminology. It is an international system that allows for communication in a common language with an end goal of improving the quality of patient care. With a standard database of medical terminology used, it improves patient data analysis. Therefore, it is important for this database to be regularly updated.

**Method/Approach:** The first step of this project is to match codes and names of certain microorganisms with their corresponding match in a much larger information database. Due to the rather extensive and complicated nature of SNOMED coding, in order to study the effects it has on patient care, literature reviews were performed to study the extent to which SNOMED-CT has been used, and is being used in clinical settings. The characteristics of the papers selected were based on, the version of SNOMED used, when the coding was used, and if SNOMED worked, and had an effect on care. The papers also came from many different fields of study, including, but not limited to, nursing, cancer, pathology, and primary care.

**Outcomes/Results:** Almost all of the organisms were able to be matched with names in the larger database. A few were not present, in any form in the larger database.

The result of the literature review shows that currently, most research focuses on the potential, rather than actualized effects of SNOMED-CT on patient care. Many of the studies provide insight on the importance of SNOMED in theory. Few of the studies provided information of the usage of SNOMED in clinical settings.

**Evaluation/Conclusion:**

Many of the organisms matched were actually not direct matches. Further research had to be done in order to make logical matches. There were a few spelling errors and misclassifications that needed to be rectified and made note of. Although the lack of information on the usage of SNOMED codes in clinical settings does not directly mean that it is not being used, it does suggest that more implementation needs to be done. This topic was very interesting and hopefully more effort is done to push the usefulness of SNOMED from theory to actuality.
Title: Project Inspire: Inspiring Young Minds for a Healthy and Active Life

Name: Adewumi Adetayo

Preceptors: Direct Supervisor: Ms. Mariam Merced, Director; Ms. Yesenia Hernandez, Program Coordinator; Project Supervisors: Ms. Marlene Spina, RN and Ms. Leslie Malachi, MS

Agency: RWJUH- Community Health Promotions Program, New Brunswick, NJ

Purpose: To analyze the knowledge of the participants in the New Brunswick community about nutrition related subjects and the effectiveness of the Project Inspire in making healthier choices for the prevention of other obesity-related diseases.

Significance: 56% of the New Brunswick population are Latinos, and many among them have diabetes. Many of the children raised in these families are first-generations; therefore, serving as the target contacts for the prevention of future diseases. The Project Inspire is a free 5 session initiative that occurs 3 times a year to teach the youths in the New Brunswick area, especially those related to people with diabetes. The program serves as a free platform to teach, promote and empower youths on how to cultivate the habit of non-sedentary lifestyles, healthy eating, and maintaining active lifestyles. In return, the RWJUH-Community Health Promotions Program (CHPP) hope that the children embrace these learned lifestyles and encourage their parents to cultivate in the same culture of healthy living.

Method/Approach: The CHPP recruits 10-14 year old children through outreaching connections in clinics and schools. The selected 21 youths serve as a prevention group for their diabetic relatives. A survey was created to measure the outcome of these classes, and a test was administered to weigh the knowledge of the participants before and after the sessions. During the 5-day session, the children engaged in cooking, interactive nutrition classes, and 1-hour exercise sessions every day. The survey serves as an evaluation of the youth’s knowledge on healthy eating, physical activity, appropriate T.V hours, and also to weigh the benefits of the programs.

Outcomes/Results: Pre/Post tests were distributed to all participants to measure the activity levels and influence of the program. 29% of participants reported being related to someone with diabetes which increases their risk. All of the participants reported making healthier food choices since the start of the first session, and plan to continue. From the test, we can assume that 57% (12) participants understand the MyPlate method and reported using it more than once at home, 38% (8) people have used the method at least once and 1 has not used it at all. Of the 21 participants, 20 students thought the sessions were very helpful and 95% (20) of them had increased their knowledge in nutrition.

Evaluation/Conclusion: The results of the tests and survey indicate that Project Inspire was beneficial to all participants. The participants increased their knowledge and demonstrated their understanding by creating healthier meals including all food groups and participating in different activities to keep them active.
Internship Abstract

Title: Evaluating the Effectiveness of a Newly Developed Program that Teaches the Definition of Consent in Hook-Up Culture

Name: Nidhi Agrawal

Preceptors: Direct/Project Supervisor: Loren Linscott

Agency: Violence Prevention and Victim Assistance (Rutgers Campus)

Purpose: To evaluate if a newly developed 60-minute program can teach the complex and dynamic definition of consent during hook-ups.

Significance: Sexual assault on campus is a highly prevalent issue despite efforts to change laws, and implement educational programs and bystander interventions. Rates of sexual assault on campus have not decreased since the 1980’s. According to Rainn, 20% to 25% of women in college will experience sexual assault of some kind. A common way students engage in sexual activity on campus is through hook-ups. Garcia (2012) defines hook-ups as “uncommitted sexual encounters”. Approximately 84% of college students will have engaged in at least one hook-up by the time they finish college. Programs that can effectively teach college students the dynamic and complex meaning of consent and show them how to apply the meaning in an intimate setting can lead to lower rates of sexual assault on campus.

Method/Approach: A 60-minute program was adapted from VPVA’s program called “Sexy and Mandatory” which is a 90-minute session that teaches about consent. Additional activities were added based on other programs from Binghamton University and Party with Consent. In addition, the story of Aziz Ansari’s accusation was incorporated into the syllabus of the program. The program was conducted on Rutgers campus by Nidhi Agrawal and Jonel Vilches. Students were given a questionnaire to complete at the beginning of the program that determined what student’s perceptions of consent were. The questionnaire was open-ended and asked the students what they wanted from a hook-up, how they define consent, to state how they give consent and how they perceive others give consent. It also asked the students if people can give consent under the influence of drugs and alcohol and if coerced consent was consent. The students went through the session and were given the same survey at the end.

Outcomes: There was no gendered response to what students wanted out of a hook-up; men and women both focused on emotional support and physical pleasure. There was a change in how people defined consent and whether or not they believed that people could give consent under the influence. Only 6% defined consent as an “enthusiastic yes” in the pre-survey; however, 45% defined it as an “enthusiastic yes” in the post survey (n =31). In the pre-survey 23% of the people believed that you could give consent under the influence as opposed to 3% in the post-survey (n=31).

Conclusion: The program was able to change the some of the perceptions that people had about consent. It was able to show that there is at least short-term change in how people define consent. Further studies need to be done to determine if this program has a long-lasting impact on students and if it can change student behavior.
Title: Volunteer Database Management for Millennium Memory Care, LLC.

Name: Tina Agarwal

Preceptors: Direct Supervisor: Galina Markovich, Director of Millennium Memory Care, LLC.

Agency: Millennium Memory Care, LLC. at Monroe

Purpose: To create databases of health aides and activities volunteers for Millennium Memory Care locations.

Significance: Each Millennium Memory Care facility houses between 15 to 20 residents who require around-the-clock care. Significant gaps of Home Health Aides (HHAs), Certified Medication Aides (CMAs), and Certified Home Health Aides (CHHAs) exist in nursing homes. Interested HHAs may choose to take a CMA certification class taught by Galina Markovich. The class turns over newly certified CMAs for work at Millennium. Additionally, Millennium Memory Care relies on a network of volunteers who are willing to showcase their talent (e.g. music, dance, hairstyling). This project helped organize information on the availability of HHAs, CMAs, CHHAs, and volunteers.

Method/Approach: Databases were created for each of the Millennium Memory Care locations: Monroe, Matawan, Ocean, and Holmdel. The first database listed available HHAs, CMAs, and CHHAs. Data was collected by calling aides. The second database contained interested HHAs in taking a CMA class, taught by the director of Millennium Memory Care. The last database contained volunteers for activities, such as musicians, hair stylists, and choirs.

Outcomes/Results: Data was collected for 73 out of 127 contacts. Of those, 8 CHHA, 6 CNA, and 7 HHAs were available to work shifts at either Holmdel or Monroe. Aides for Ocean county and Matawan were not found. Additionally, Holmdel remains understaffed and in need of CHHA/CNA/HHAs. Monroe has fulfilled all positions for aides. Of 16 interested HHAs, none were specifically interested in completing a CMA course. After calling 23 contacts from the volunteers list, 3 musicians, 2 hair stylists, and 10 choirs were identified.

Evaluation/Conclusion: Ongoing newspaper and online job advertisements are needed to staff Holmdel, Matawan, and Ocean County. The location of the nursing homes, hours required for work, and salary level were the main deciding factors for the employees. Therefore, incentives such as free lunch or free dinner may garner more interested staff. Furthermore, the CHHA/CNA/HHAs must be updated every year to ensure availability of aides, in case of an emergency.
Title: Integrating Primary Health Care and Behavioral Health Care to Link At-Risk Patients with HIV/HCV Care and Behavioral Health Services

Name: Catherine Allende

Preceptors: Direct Supervisor: Richard Marlink, MD, Director of Rutgers Global Health Institute Project Supervisor: Anna DiColli, MPH, Senior Administrative Associate

Agency: Rutgers Global Health Institute, New Brunswick

Purpose: To analyze existing approaches healthcare providers use to integrate Human Immunodeficiency Virus (HIV), Hepatitis C (HCV) and behavioral health care.

Significance: People living with HIV or HCV are more likely to suffer from anxiety, depression, and substance abuse disorder, which can lead to lower rates of adhering to HIV/HCV treatment and seeking medical help, as well as worse health outcomes overall. Rates of HIV infections can be up to 76 times higher for individuals with a serious mental illness compared to the general population. There is a need for integrative care in order for people living with HIV/HCV to receive mental health care and vice versa. If behavioral health clinics are able to facilitate connecting patients at risk for HIV/HCV to pre-exposure prophylaxis (PrEP) and refer them to other HIV/HCV primary care, this population can be better served.

Method/Approach: A literature review on integrative primary and behavioral care was conducted using various search engines such as Academic Search Premier, Medline, and Google Scholar. Endnote referencing software was used to compile a library of literature for this project. Specific topics of interests researched were trauma-informed care, peer support, case management, the evidence base for PrEP use, and routine opt-out testing for HIV and HCV.

Outcomes/Results: The analysis composed of 31 full text journal articles on HIV, HCV, and behavioral health combined. The literature shows that there were various methods of integrating primary HIV care and behavioral health care. Patterns show that integrative care was mostly provided in a multi-facility setting and that integrative care results in better health outcomes for adults dealing with the infectious disease and behavioral health comorbidities. Collaborative care was managed by various mixtures of primary care physicians, psychiatrists, case managers, HIV care providers, mental health professionals, and nurses. Certified Community Behavioral Health Clinics (CCHBC) and the Behavioral Health and Primary Care Integration Program are two initiatives that provide integrative care in New Jersey. Between these two programs, there is a total of 13 clinics that provide integrative health services in the state.

Evaluation/Conclusion: Findings show that care integration can provide a supportive network of professionals and peers for patients with behavioral health problems at the primary care level. This review suggests that integrating HIV/HCV and behavioral health services can result in positive outcomes. However, further quantitative research on the efficacy of integrative HIV/HCV and behavioral health care is needed.
Title: Equipment Calibration Project

Name: Daniella Anconetani

Preceptors: Direct Supervisor, Patricia Jones, Secondary Supervisors, John Lambert and Carmelle Durand

Agency: Occupational Safety and Health Administration

Purpose: To evaluate OSHA’s laboratory equipment and send pieces of equipment that are due for their calibration intervals to Cincinnati Technical Center for calibration.

Significance: The Occupational Safety and Health Administration is required to sample for chemical and/or physical hazards in some cases. OSHA uses a variety of sampling equipment in order to provide objective evidence that a violation occurred. The proper calibration of these instruments is crucial, and OSHA mandates that “the only way to safely detect a hazardous atmosphere is with a calibrated direct reading instrument” (Smith). In 2017, the Avenel Area Office of the Occupational Safety and Health Administration used equipment that included personal air samplers (which all tested for silica, cadmium, chromium, lead, vanadium, zinc oxide, inorganic arsenic, and general particulates), area air samplers, personal noise dosimeters, and area noise dosimeters. These pieces of equipment must be calibrated properly in order to provide correct information.

Method/Approach: Lab equipment was sorted and deemed ready for calibration if the date printed on the equipment is past due. The equipment was documented properly in OSHA records. The name, barcode, manufacturer information, serial number, and model was recorded in the area office’s documents. That information as well as a description of the required service (i.e. 3-year calibration interval) was written on the document being sent to the Cincinnati Technical Center. The pieces of equipment were then packed into a box and sent and was received (calibrated) in about two weeks.

Outcomes/Results: At the end of the project a variety of dosimeters, air pumps, and audiometric measuring devices will have been recalibrated and ready for field work. Normal use of dosimeters does include a margin of error, but the margin of error would be significantly greater when not calibrated properly. This project will be forever ongoing, because equipment will always be going out of calibration over time. With attention drawn to this project, equipment will not be out of calibration in order to avoid systematic error. Overall, 28 pieces of equipment were sent out for calibration. An additional 19 pieces of equipment were sent to receive new parts to become operational.

Evaluation/Conclusion: As a result of the project, a spreadsheet was created with dates of recommended re-calibration. One month prior to the future calibration dates posted on the pieces of equipment will serve as this deadline. This project will be ongoing and needs active attention given to the dates on the spreadsheet. Keeping up with the equipment calibrations will ensure that data recorded in the field is not subjected to systematic error (Instrument Calibration).
Title: Health Topic Interests in the Elizabeth, NJ Community

Name: Frances Arcales

Preceptors: Direct Supervisor: Opal Montes, Director

Agency: Bayway Family Success Center (BFSC)

Purpose: To assess what health topics are of most interest in the Elizabeth, NJ community in order for Bayway Family Success Center to host events that will educate and provide families with the proper resources.

Significance: The proper knowledge and practice of dental hygiene is important for preventing disease. According to the CDC, “children from lower income families often do not receive timely treatment for tooth decay and many still go without simple measures that have been proven effective in preventing oral diseases and reducing dental care costs”. Since Bayway Family Success Center is a resource to many surrounding low-income families, it is necessary to address different topics that support the health and well-being of the community. With the community’s interest in dental health, a dental fair was hosted at the center for families with children to attend.

Method/Approach: I contacted dentists, university dental programs and dental organizations through phone and email to request their attendance for the fair. Flyers were created to advertise the event, which were then posted throughout the center and given to every visitor or attendee of another event. The event advertised free check-ups and cleanings for every child that would attend. ShopRite gift cards would also be given to every family that attends. Parents who were interested in this event filled out their child’s medical history form provided by The KinderSmile Foundation, the non-profit dental organization providing the service. The first part of the fair was focused on educating the proper techniques of oral hygiene, followed up by check-ups and cleanings. Children received a dental goodie bag at the end of their treatment while parents received dental pamphlets to reiterate what they learned during the fair. Healthy snacks and refreshments such as water, apples and bananas were provided throughout the event.

Outcomes/Results: The KinderSmile Foundation was the only organization that was able to attend. 20 out of the 25 children originally signed up for the event, attended and received treatment. Dr. McGrath, the CEO and guest speaker of this event, engaged every child and made sure they understood the meaning of good dental hygiene. Children would answer all her questions correctly which assessed their understanding of the topic.

Evaluation/Conclusion: Satisfaction surveys were given to each family when they stopped by the center to pick up their ShopRite gift cards. The surveys assessed whether the community felt this health topic was successfully addressed and whether they would like to attend similar events in the future. We received positive feedback overall and an increased interest from the community to bring in more health events into the center. BFSC will be planning more health events this year.
Internship Abstract

Title: Length of Stay Assessment for Rehab Patients

Name: Gerard P. Arnold Jr

Preceptors: James Dunleavy PT DPT MS

Agency: Trinitas Regional Medical Center

Purpose: The purpose of this project was to analyze patient length of stay in patients who are referred to inpatient rehab and propose a Pilot project to cut patients within that population's stay by at least one day.

Significance: One of the problems affecting hospitals all over the nation is length of stay. In the current post Affordable Care Act era, pressure is being felt all over the hospital to try and bring down the average length of stays in every department. This can be seen within the inpatient physical therapy unit in the hospital. Various patients who are being admitted to the hospital late in the week or the weekend are on average sitting in the hospital, on average, a day longer than needed. The extra time that the patient is sitting in a bed and not being seen is affecting both the overall average length of stay of patients within the units and it is costing the hospital more money through staying a day without receiving physical therapy treatment.

Method/Approach: An internal review was conducted on medical records and admissions within the inpatient physical therapy department. The medical records software systems Allscripts and Crimson were used to capture and analyze data from a broad group of patients, seen by the unit in 2017. The cluster was reduced to patients seen within the second half of the year, and from there, 30 patients were selected and put into groups based on length of stay and days in which they were admitted and discharged. By breaking it up into these groups, a pattern started to emerge within the data showing how patients were not being discharged until either late Monday or more commonly, Tuesday and Wednesday.

Outcomes/Results: Through in-depth analysis, the reason why patients were staying in the hospital for an extra day was due to delay in the start of their physical therapy evaluation because no physical therapists were on duty on Sundays. By having physical therapists on duty on Sunday, patients could be seen on Sundays. When patients are seen on Sundays, this resulting in social workers receiving recommendations earlier leading to quicker discharges as well as quicker placement into other necessary care facilities.

Evaluation/Conclusion: This Pilot project is something that is needed within the inpatient unit of the hospital. A large number of patients that come through the hospital are either on medicare or don't have any insurance at all. This proposed pilot project, if implemented, has the ability to save the hospital money. If the physical therapists reduce the stay of at least one patient by one day through seeing patients on Sundays, the pilot pays for itself along with saving the hospital money.
Title: Strengthening Community Collaborations

Name: Abayomi Asokeji

Preceptors: Project/ Direct Supervisor: Darrin W. Anderson, Sr., PhD, MS

Agency: New Jersey Partnership for Healthy Kids (NJPHK)

Purpose: To generate a survey and organize ongoing projects by New Jersey Partnership Healthy Kids to strengthen the organizations that are members of the advocacy coalition.

Significance: Today New Jersey Partnership for Healthy Kids, has made more than 200 ecological and policy changes have been actualized to help advance a superior personal satisfaction through good dieting and physical action in various nearby New Jersey neighborhoods. Asset inventory will provide information to be utilized to inform structure and action planning. The survey will determine the skills, expertise, and resources that exist within the coalition (organizational or individual member) to conduct advocacy and public policy activities. The results of this survey will be used for planning, execution and advance policy in improving population health, creating healthy, equitable communities and fostering a culture of health.

Method/Approach: This survey depended on consolidating the deductive approach with the qualitative investigation approach, where the deductive approach was utilized to root the subject through books, periodicals and logical interchanges and electronic articles distributed on the web. After constructing and disseminating the online asset inventory survey and follow up with members of the coalition (email and photo calls) to ensure high response rates. Information gathered will then be summarized into a chart/spreadsheet that can be used to conveniently highlight the strengths and resources of the partnering organizations.

Outcomes/Results: After carefully constructing questions that will maximize the effectiveness of the project, the organization received the finalized result. Thus coming to the realization that the number of respondents was lower than expected and skewed the qualitative data results. Leaving the analytical aspect of project indifferent and immeasurable. Date was not released but based off the few surveys recorded a few treads can be highlighted. Most of the organizations have committees to advocacy and have a strong understanding of key policy issues related to their mission. But priorities of the organizations that responded varied when asked what area their organization is willing to contribute resources and assets towards.

Evaluation/Conclusion: Although the survey was sent out to all participating organizations, the numbers of responses were low within the time frame the survey needed to be completed. A better resolution would have been to have completed survey sooner to allow recipients to have a greater period of time to complete the survey. There should have been a better method of distributing the survey so there would be a larger set of answers to get more of an accurate reading for the end result.
Title: Improving RCINJ Precision Medicine Oncology Infrastructure

Name: Nida Athar

Preceptors: Direct Supervisor: Frances Di Clemente, Research Analyst

Agency: Rutgers Cancer Institute of New Jersey

Purpose: To determine the change in infrastructure, training, and workflow necessary to implement a Precision Medicine Oncology (PMO) approach at the level of community-based cancer centers.

Significance: Precision Medicine has advanced to become the frontline of personalized medicine by offering targeted therapies based on genomics. Providing targeted cancer treatment is now feasible at the level of community-based providers, however the ability to interpret the genomic has not been achieved across all providers. Patients have demonstrated a preference for turning to community centers when seeking treatment, therefore, the accessibility and need for community providers is crucial. Research indicates that community-based strategies will improve outcomes by increasing outreach and public education, along with establishing patient navigation programs to reduce barriers (Freeman 2006). The interdisciplinary collaboration needed between academic and community-based cancer centers to institute genomic-driven cancer treatment requires a significant foundation in infrastructure, training, and workflow. The rate of success of precision care is contingent on increasing access to care, bridging gaps in education, and decreasing fragmented coordination.

Approach: Reviewed the barriers to implementing PMO with the Precision Medicine team. Conducted interviews with the study staff. Identified the roles and perspectives that were active during the initial effort to create a collaborative PMO team between academic and community-based hospitals. Attended weekly board meetings to keep track of contribution to the protocol. Examined previously collected data during pilot feasibility stage. Highlighted the issues that contributed to the overall rate of unsuccessfulness.

Outcomes: Examination of data collected from Atlantic and Meridian Health Systems illustrated inconsistencies in infrastructure, training, and workflow between the institutions and RCINJ. There was a lack of understanding, clarity, and communication both internally and externally. Quality and quantity of staffing was not identical at all sites. Due to this, there was a complete breakdown of workflow which resulted in poor data outcomes. Additionally, there was no centralized role of communication or Precision Medicine team present at all locations.

Conclusion: Currently, there is a communicative disconnect between the RCINJ PMO and OHRS department. To establish fluidity, there must be supportive relationship between project coordinators, data abstractors, and research coordinators when exhibiting identical clinical practice. Parallel staffing units within the collaborative institutions will improve overall processes. Training methodology and education must be revised to function operationally.
Title: Improving Nutrition Knowledge Through Interactive Online Education Sessions

Name: Ada Augustyniak

Preceptors: Manuel Castañeda

Agency: New Brunswick Tomorrow

Purpose: To conduct a formative evaluation to determine the New Brunswick community’s interest in interactive question and answer sessions on the Live Well -Vivir Bien app related to nutrition information.

Significance: From 2012 to 2016, obesity has increased from 21% to 29% in the city of New Brunswick according to the New Brunswick Tomorrow sponsored Community Survey administered by the Eagleton Institute of Politics (2016). According to this survey, the rate of diabetes in 2016 was 25% among residents of New Brunswick. According to the CDC (2017), 9.4% of the US population has diabetes meaning that New Brunswick residents have significantly higher rates of diabetes. This data indicates a need for better nutrition education programs to educate residents about the importance of healthy eating. A survey will be administered to gauge community interested in educational learning methods to best improve nutrition knowledge.

Method/Approach: The Live Well Vivir Bien New Brunswick mobile app is being used by the community and includes a “social” section that can be used to share information and have virtual dialogues amongst residents. The goal of this initiative is to invite nutrition experts to educate residents on nutrition information via the app as a means to positively impact health outcomes. The aim of the survey is to assess New Brunswick residents’ 1.) Perception of nutrition and how it pertains to them, 2.) Interest in learning from a nutrition expert, 3.) Perception of whom they consider an expert, 4.) Interest in learning via the app, 5.) Daily availability for online sessions. The survey has been translated into Spanish and administered to New Brunswick residents during community outreach events and via social media.

Outcomes/Results: Based on the completed surveys, 68% of respondents believe nutrition is very important to their health. In total, 85% of respondents would be somewhat or very interested in asking a nutrition expert questions about healthy food. The majority of respondents (82%) consider a nutritionist to be the most reliable expert to discuss nutrition information. More respondents (78%) would prefer to leave a question for a nutrition expert to answer at a later time on the app than participate in an interactive question and answer session (68%).

Evaluation/Conclusion: Based on these results, it is recommended that an interactive component is added to the “social” section of the Live Well - Vivir Bien New Brunswick mobile app that would educate users about nutrition information. It is recommended to invite a nutritionist as an expert to use an open forum for users to leave questions to check at a later time. Once implemented, success of this initiative can be measured by analyzing the number of users that utilize the online forum compared to total app users.
Title: Polycystic Ovarian Syndrome in Adults vs. Adolescents

Name: Nashwah Azam

Preceptors: Dr. Charletta Ayers, MD, MPH, Department of Obstetrics, Gynecology and Reproductive Sciences

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

Purpose: To compare the symptoms of Polycystic Ovarian Syndrome (PCOS) in adolescents and adults to see if the syndrome is different between age groups.

Significance: Polycystic ovary syndrome (PCOS) is a health problem that affects one in 10 women of childbearing age. Women with PCOS have a hormonal imbalance and metabolism problems that may affect their overall health and appearance. Women of all races and ethnicities are at risk for PCOS, but your risk for PCOS may be higher if you are obese or if you have a family member with PCOS. The diagnosis of PCOS in adolescence does not easily parallel the diagnosis of adult PCOS. The presentation of PCOS in adolescents and adults is different due to number of aforementioned factors, so the question remains: is adolescent PCOS different from adult PCOS?

Method/Approach: A questionnaire was developed based on questions and information obtained from an extensive literature review. The IRB approved questionnaire was administered by the study team after informed consent to 20 teens with PCOS, 20 teens without PCOS, and 10 adults with PCOS from the Rutgers OB-GYN Department. Each subject completed the questionnaire and the results were analyzed. The non-PCOS and PCOS adolescent groups was compared for common themes and differences in phenotypical presentation scored from the questionnaire. The results were compared with the adult PCOS subject group questionnaire results.

Outcomes/Results: 50 individuals were given the survey. Of the 50 women, 20 were teens with PCOS, 20 were teens without PCOS and 10 adults with PCOS. Of the sample cohort of teens with PCOS (n=20), 14 teens (70%) had an irregular period, 16 teens (80%) had acne and 6 teens (30%) noticed increased hair growth. Of the sample cohort of teens without PCOS (n=20), 4 teens (20%) had an irregular period, 12 (60%) teens had acne and 4 teens (20%) noticed increased hair growth. Of the sample cohort of adults with PCOS (n=10), 6 adults (60%) had irregular periods, 4 adults (40%) had acne, and 8 adults (80%) noticed increased hair growth.

Evaluation/Conclusion: More than half (66.7%) of women with PCOS reported to having an irregular period and acne, and 46.7% noticed an increase in hair growth. 20% of girls without PCOS have an irregular period, 60% had acne and 20% noticed hair growth. Results are preliminary due to the small sample size. In order to achieve more conclusive data, additional subjects should be recruited.
Title: Evaluation of Programming Survey of 2017-2018 Analysis

Name: Kyung Mi Bae

Preceptors: Susan Kramer-Mills

Agency: Town Clock Community Development Corporation

Purpose: To analyze data in order to understand how long-term housing and trauma-informed programs assist recovery in order to inform future programming.

Significance: In the United States, 20 people per minute are physically abused by an intimate partner, of which 1 in 3 are women and 1 in 4 are men (National Coalition Against Domestic Violence). There are 10 million abuse victims each year and 70,000 calls in the NJ annually to report abuse (NCADV). There are only 13 long-term apartments in New Jersey. The data analysis is important for understanding how long-term housing and trauma-informed programs assist recovery. The analysis will also help Town Clock CDC demonstrate the effectiveness of long-term housing and programs when applying for grants to continue/increase funding for Dina’s Dwellings residential programs.

Method/Approach: An Evaluation of Programming Survey of 2017-2018 was handed out to each resident at Dina’s Dwelling. The questions were both qualitative and quantitative. Nine evaluations out of ten were included in the analysis. The overall participation rates, ratings, and feedback were organized in order to compare and contrast which events were liked/disliked and why. The overall program participation percentage and average ratings of each program were calculated. For qualitative questions, reason for ratings was clustered into several categories, such as knowledge, self-improvement, enjoyment, in order to better assess trends in comments. The mean, median, and mode of participation percentage and ratings were computed to provide a basis for comparison.

Outcomes/Results:
The most popular program was Community Dinners. It had 100% overall resident participation and 3/3 ratings. Residents especially enjoy the delicious food provided and being able to voice their opinions. Financial literacy, pumpkin painting, storytelling event, Domestic Violence Awareness March & Rally, and scholarship to further educational goals were rated 3/3. Residents stressed the importance of scholarship to further educational goals in the “Reason for Rating” section. Residents wrote how integral education was for bettering their and their children’s lives.

Evaluation/Conclusion: High average ratings demonstrate that residents overall enjoy the programs designed and provided by Dina’s Dwelling staff members. Participation rates and strongly positive comments for the Community Dinners and scholarship to further educational goals especially prove how much residents value the programs. This is the first time this evaluation has been collected from residents. The results will need to be collected over a period of five years or more to create in-depth statistical analysis.
Title: Hearing Conservation in the Manufacturing Industry

Name: Eva Bahrami

Preceptors: Project Supervisor: Mike Patrick, Environmental Health & Safety Specialist

Agency: Agfa Corporation, Branchburg NJ

Purpose: To identify, measure, and evaluate potential human, noise exposure in an Agfa Corporation, Branchburg manufacturing facility

Significance: Noise-induced hearing loss is one of the most common occupational related illnesses in the United States. Exposure to high levels of noise can cause permanent hearing loss that neither surgery nor hearing aids can correct. Furthermore, loud noise can create physical and psychological distress, reduce productivity, and interfere with communication and concentration. High noise exposure to humans causes hearing loss over a long time period (chronic health hazard). People do not feel any pain at the time of exposure and do not realize that their hearing acuity may be failing them. The Occupational Safety and Health Administration (OSHA) requires employers to administer an effective Hearing Conservation Program if employee noise exposures equal or exceed an 8-hour time weighted average sound level (TWA) of 85 decibels (dBA). Agfa Branchburg Hearing Conservation Program is designed to address the risk of occupational induced hearing loss by performing exposure monitoring, both area and personal, to determine the source(s) of loud noise then to try and abate them to below safe levels with engineering controls. If noise reduction cannot be achieved on initial tries, then Agfa will administer a Hearing Conservation Program.

Method/Approach: Data collected from past noise exposure surveys were first reviewed to understand the scope of the issue. Currently, there are two motors and one fan in the converting area of the production line that are suspected of emitting significant noise levels. Instantaneous decibel ratings were measured on the equipment using a noise dosimeter.

Outcomes/Results: Motor #1, facing the passenger walkway of the production line emitted approximately 86 dBA at full speed and approximately 79 dBA at normal speed. Motor #2, located behind the line emitted approximately 87 dBA at full speed and approximately 82 dBA at normal speed. Fan #1, located behind the line and at the end of the process area emitted approximately 80 dBA at full speed and 72 dBA at normal speed.

Evaluation/Conclusion: At full speed, both Motor #1 and Motor #2 were above 85 dBa. Motors are only set on full speed for short periods of time during production. However, the noise emitted can contribute to the overall sound level. An evaluation was completed to identify appropriate sound absorptive equipment. Enclosing the motors with sound-proof panels or blankets is one approach to decrease sound levels. Overall, this study shows the importance of periodic sampling and monitoring for hearing protection.
Internship Abstract

Title: Achieving the Gold Award for Excellence in Quality

Name: Hena Bajaj

Preceptor: Catherine Martino, Administrator

Agency: Parker at Stonegate

Purpose: To create a plan for applying for the American Health Care Association/National Centers for Assisted Living Gold Award for Excellence in Quality in 2019

Significance: Assisted living facilities that receive the Gold Award for Excellence in Quality show superior performance in leadership, strategic planning, and customer and staff satisfaction. Gold Award applicants address the Baldrige Criteria for Performance Excellence in Health Care in its entirety. Preparing to apply for the Gold Award is significant for Parker at Stonegate because they have received both the Bronze and Silver Awards and must attempt to apply for the Gold Award by 2019 in order to maintain their Silver Award status.

Method/Approach: Initial research was conducted about the Baldrige Performance Excellence framework and the Gold Award for Excellence in Quality in order to create an outline of the application format. Since possible Gold Award recipients may receive a site visit, a document was created outlining the site visit criteria. An eight-week timeline was created for this project in order to layout the foundation of the application. The employee version of the Baldrige Performance Excellence self-assessment was distributed to all 7 departments. Graphs were created showing the results for each department and potential areas of concern/improvement. These results were shared with the leadership team in order for each department’s director/manager to determine what improvements can be made immediately or in the future. A list of suggestions was created for each department that would help that specific department’s director/manager make the changes that would be needed for the site visit.

Outcomes/Results: According to the survey results, statements 2C “I know the parts of my organization’s plans that will affect me and my work,” 4B “I can use this information to make changes that will improve my work” and 7C “I know how well my organization is doing financially” are a concern among most departments. One (Category 3- Customers) out of the seven categories of the application has been completed and put the leadership team ahead of schedule.

Evaluation/Conclusion: Due to the demands of the leadership team, there were time constraints with providing information needed to make progress on the application. Employees were very cooperative and returned the surveys in a timely manner. Leaders have started to discuss changes that need to be implemented overtime within their departments.
Internship Abstract

Title: Composite Treatment vs. Crowning Treatment for Dental Patients

Name: Dominique Dawn B. Balbin

Preceptors: Dr. Majd Mohsen, DMD, Dr. Catherine Lagrada, DMD

Agency: Somerset Dental Professionals, LLC

Purpose: To observe and analyze the different tooth restorative treatment plans and determine the most beneficial final restorative treatment for a patient’s dental case.

Significance: Patients seek their dentist’s opinion to maintain and restore tooth structure. According to the American Dental Association (2018), “prevention is the best medicine” and there are simple steps that can drastically decrease a patient’s risk of cavities and other dental diseases. Because most patients do not follow preventative steps, recurrent decay will destroy tooth structure. The ultimate goal of a dental provider is to provide patients the resources needed to maintain healthy oral hygiene. A dentist can either perform a simple composite filling procedure or a more complicated dental crowning approach for tooth restoration. Observation and analysis of different tooth restorations are crucial in oral healthcare to allow the dental provider to determine the procedure that will provide long-term, beneficial results for patients.

Method/Approach: Before diagnosis, dental x-rays were taken to examine and evaluate a patient’s overall oral health. The dentist discussed the most beneficial treatment plan with patients, while also informing them of alternatives. Ten patient cases were chosen that involved the completion of composites and/or crownings. Five were male patients ranging from 15-63 years old, while the other five were female patients ranging from 15-68 years old. The amount of composites and/or crownings that were completed in a patient were recorded and observed. After the completion of each procedure, previous x-rays were compared to new x-rays to show the progress and differences in tooth structure.

Outcomes/Results: Of the sample size (n=10), four males (40%) and one female (10%). had both composites and crownings. One male (10%) and four females (40%) only had a composite procedure performed. Since composites and crownings cannot be done at the same time, five of these patients returned to the office for follow-up procedures that are needed for crownings. Because the crowning procedure is more complex than a composite, patients were required to visit the dental office to replace the temporary crown with the more personalized, long-term, and fitted porcelain crown that was made at a dental laboratory.

Evaluation/Conclusion: There are many factors that determine the best treatment plan for a patient, such as position of the tooth, the severity of a decay, remaining tooth structure, age, patient behaviors, and a patient’s medical condition. The extent of the caries or loss of tooth structure will determine if a composite or crown procedure will be performed. Typically, composite fillings were put in before a crowning, which explains why some patients had both composite and crowning procedures performed. The patients put their trust in Dr. Mohsen and Dr. Lagrada and were pleased with their results.
Title: Delegated Credentialing Plan

Name: Dhara Balsara

Preceptors: Direct Supervisor: Belinda Doyle Puglisi, Director of Payer Services/ IV & A
Project Supervisor: Lynn Francisco, Payer Services/ IV & A Coordinator

Agency: Children’s Specialized Hospital

**Purpose:** To create a Delegated Credentialing Plan for Children’s Specialized Hospital to streamline the process between the clinical and payer services department and become National Committee for Quality Assurance (NCQA) certified Credentialing Verification Organization (CVO).

**Significance:** Each year the medical industry wastes a billion dollars due to the lack of standardization and coordination of administrative policies and procedures. When a hospital gets their allied health professionals credentialed through a third party insurance company, there is an increase in the redundancy of work as well as an increased cost. A Delegated Credentialing Plan helps optimize revenue cycle management and decrease costs. The credentialing process is a gateway for provider data. The data that is collected during the credentialing process becomes part of the provider’s profile within the health system. If one provider is credentialed at multiple hospitals in a health system, there are essentially separate copies of the provider’s profile at each hospital. With a Delegated Credentialing Plan, there is one source of a provider’s profile and each hospital can view and update it as needed.

**Method/Approach:** The inefficiency of time and money was recognized by Children’s Specialized Hospital. There is an average of a 6 month delay for the allied health professional and facility payment with the current credentialing process. From January - May 2018, a delegated credentialing plan was created with the aid of NCQA and payers templates and guidelines. After the plan is created it is submitted along with a $5,000 application fee. There is a six month wait period where NCQA evaluates the plan and how the facility is running with it. At the end of the six months, the facility will find out if the plan was accepted or rejected. If accepted, there is a $12,500 final fee due prior to NCQA doing their on-site survey.

**Outcomes/Results:** The project is ongoing; as of April 12, 2018, the anticipated submission date for the Delegated Credentialing Plan is June 1, 2018. The plan is an updated set of policies and procedures which is in compliance with NCQA standards. This update will allow Children’s Specialized Hospital to reduce time in the credentialing process and reduce the lag in payment periods of the allied health professionals and the facility.

**Evaluation/Conclusion:** The project will conclude in December 2018. The success of the plan will be determined if the facility becomes NCQA certified CVO. If the plan is rejected, there will be a revision of the Delegated Credentialing Plan and it will be resubmitted.
Title: The Importance of Finance in Healthcare

Name: Sneha Bardhan

Preceptors: Direct Supervisor: John DiLeo, Vice President of Finance

Agency: Robert Wood Johnson University Hospital Somerset

Purpose: Create an outreach and educational program on the importance of finance in healthcare and hospitals for the employees of RWJUH, Somerset.

Significance: There is a lack of financial literacy in healthcare. Although most employees understand the importance of improving financial performance, few understand how they directly impact the financial condition of the hospital through their everyday decisions. A strong foundational understanding of how the hospital gets paid through the revenue cycle, what costs are essential to run the hospital’s operations and how the hospital measures performance is essential. There is a need for directors, department heads, nurses, and employees from all departments to have the financial knowledge required in this new economic environment. Educating all levels of an organization is important in improving financial literacy and translating that to overall financial performance. This is also a crucial piece of RWJUH Somerset’s strategic financial plan.

Method/Approach: A PowerPoint deck was constructed after researching and compiling information about revenue cycle, operating and capital expenses, financial statements & key performance metrics. The slide deck also included a current state overview of financial challenges faced within hospitals, today and tomorrow. I discussed with my preceptor to determine the relevant topics to research and include in the presentation. Eye-catching graphics and short notes to grab the audience’s attention were created. Additional collaboration was necessary with the revenue cycle leadership for RWJUH Somerset, including the Pre-Reg/Registration, Utilization Review, Coding and Billing/Collection teams. The completed PowerPoint deck will be used to present throughout 2018, with the goal to conduct one presentation each quarter. To notify employees of RWJUH Somerset of the presentations, announcements will be posted on the intranet and via emails and flyers in cafeterias and units.

Outcomes/Results: Outcomes will be recorded the day after a presentation is given. The number of RWJUH Somerset employees who attend the presentation will be recorded as a metric. The employees who attended the presentation will be given a short quiz to answer. This will gauge whether the employees were able to easily understand and retain the information from the presentation.

Evaluation/Conclusion: From a program lifecycle perspective, this program is now in the planning phase, the next stage of the program will be the execution phase when the presentation will be delivered and results measured. The success of this program will be achieved by having RWJUH employees from all levels and departments to attend a presentation and pass the financial quiz.
Title: Cholera and its Impact on Haiti

Name: Etphane D. Barthelus

Preceptors: Direct Supervisor: Frederique Joseph MD

Agency: Lyons Medical Center

Purpose: To conduct a literature review on the policies/methods that can be used to reduce the severity of future cholera epidemic outbreaks in Haiti and create educational pamphlets for educators/patients.

Significance: The 2010 cholera epidemic in Haiti became one of the world's largest such epidemic over the past decades. Cholera had not been reported in Haiti since the 1800s. The October 2010 outbreak was due to the contamination of the Artibonite river which was contaminated by UN peacekeepers from Nepal where cholera happens to be endemic. The government reported approximately 526, 524 suspected cases and 7,025 deaths starting from the initial outbreak in October of 2010 until January 2012. With an already weak infrastructure made even worse with the January 2010 earthquake, Haiti is a country where only half the population have access to health care. In terms of water and sanitation, only 24% of the population have access to a toilet, 69% have access to an improved water source and only 17% have improved access to sanitation facilities which means that open defecation is very common. Educating the patients at the Lyons Medical center on the symptoms of cholera and what can be done at the household level to prevent the disease, can lead to the education of family members in Haiti.

Method: An extensive literature review was conducted on the cholera epidemic using the Rutgers University Libraries database. Abstracts were individually reviewed and were retained according to their relevance to the research question. The keywords that were used included cholera in Haiti, responses to the cholera epidemic in Haiti, public health in Haiti. The literature review resulted in a comprehensive look at the impact that the cholera epidemic had on the general population.

Results: An initial search using the Rutgers Libraries database resulted in over 2,000 peer reviewed articles which was further narrowed down to 302 articles using the keyword cholera. After abstracts were reviewed, a total of 25 full-text articles were retained. The areas of assessment that were discussed were the lack/access of medicine/hospitals, training of health workers, improvements in water, sanitation and hygiene sector, and short term and long-term responses.

Evaluation: The major finding showed that while rates have gone down significantly, cholera in Haiti continues to surge annually, specifically during rainy seasons and hurricanes. The people affected by this epidemic were mostly the ones who used water from the Artibonite River which happens to be the most important river on the island and nearly 80% of the confirmed cases came from the Artibonite department. These findings further support the need for the improvement of the water and sanitation infrastructure. The educational pamphlet created will hopefully serve to help inform the Haitian diaspora that cholera is still a danger to their family members back in Haiti and that precautions need to be taken.
Title: Developmental and Disabilities Job Discovery Profiles

Name: Natalie Belvin

Preceptor: Adeyinka Edwards, Supervisor of Employment Programs

Agency: Leake & Watts Incorporated

**Purpose:** To complete documentation on developmental disabilities service users’ profiles required for state evaluations.

**Significance:** According to the U.S. Census Bureau about 1 in 5 people are living with a disability, and about 56.7 million people reported having a disability in 2010. The rates are increasing and only about 41% are employed, compared to the 79% without disabilities. Leake and Watts Inc. helps those living with intellectual/developmental disabilities (I/DD) overcome the social stigmas that say those living with developmental disabilities cannot live independently and be employed. The Community Prevocational Program helps those with I/DD discover their career interests, and gain work skills. Once they complete this program many of them move on to the Supported Employment (SEMP) program where they are given a job coach to assist them with their employment needs. As the agency provides services to these individuals, their profiles must be maintained in its database for billing, to identify a person's functioning level, and provide a profile of who is in the program. In addition, the staff must maintain daily documentation that is used to bill Medicaid.

**Method/Approach:** The developmental disabilities profile 2 (DDP2) is a form that is sent to the New York State Office for People with Developmental Disabilities (OPWDD). This form takes data about a person’s capabilities and once submitted, returns a score that corresponds to the level of support that each person needs. These forms were completed and submitted to OPWDD through their CHOICES Online Portal. A second database used at Leake and Watts is Foothold. Foothold is an electronic health record that is used to maintain all documentation for the program that is used for billing. The SEMP program had not yet begun to use Foothold and needed to figure out how to implement it in the program. We had to figure out how to input the plans of service in a way that would allow the staff to appropriately document their daily services.

**Outcomes/Results:** Providing accuracy and efficient data input assists management and administration in generating critical revenues and assuring higher quality client services. The updated database with all of their clients in SEMP and the Community Prevocational Program meets all state requirements.

**Evaluation/Conclusion:** The information is reviewed by the supervisor to assure that all information was done correctly. The programs and databases can be evaluated in the future by staying up to date with the profiles on a yearly basis.
Title: Rx Newsletter Dispersion
Name: Jenna Berger
Preceptors: Theresa Stenger
Agency: Trion Group

Purpose: To generate interest in and provide clients and employees with Prescription Drug Trend information in a timely manner through the creation of a newsletter.

Significance: Prescription drug trend prices continue to be a national debate within the United States. Plan sponsors are struggling with cost management while still providing prescription drug coverage that is affordable and maintains adherence. PwC reports that prescription drug trend spend represents 10.1% of the National Health Expenditure. According to an OptumRx 2016 report, Prescription drug costs represent approximately 26% of the total healthcare spend and is on pace to being the number one component of total medical spend. CVS health predicts that by the end 2018 50% of all drug spend will be made up by Specialty Drugs. Understanding prescription drug trend through the generation of interest and distribution of information is beneficial to clients who may or may not have an idea of what goes on in Pharmacy. This type of thought leadership will jump start clients thoughts on partnering with the Trion Rx Coalition to help decrease their expenditures which in turn helps employer and employee alike.

Method/Approach: A work group was created to execute the tasks associated with developing the Rx Newsletter. The work group consisted of multiple women who are experts in their field. A timeline was established that outlined when each task was to be completed. Each woman in the work group was tasked with developing a newsletter article pertinent to her field of expertise. Once created, the articles were reviewed and edited. The Rx Newsletter template was finalized once the articles were finished. The articles were then placed into the template and formatting was finalized. Lastly, the newsletter was launched both internally and externally. The newsletter was launched externally via account managers to their clients and internally via the strategic initiatives department.

Outcomes/Results: The Newsletter provided clients of all sizes with current market trends, provided a spotlight on a new drug, gave clients more details on popular clinical management programs and provided a Pharmacy 101 section for those who have less experience with Pharmacy. The Rx Newsletter was completed in 21 days instead of the intended 33 days. This is 12 days or 1.57x faster than originally intended. This shows that the newsletter was established in a timely manner. As of 2017 Trion has 60 clients consisting of over 250,000 members utilizing the Trion Rx Coalition. At the end of 2018 we will compare year end numbers to determine if the Rx Newsletter had an effect on Rx Coalition growth.

Evaluation/Conclusion: As part of the Rx Coalition, a Prescription Drug webinar will be held later this year in which we will review the most current market trends and get more details on recent hot topics like Point of Sales rebates and Lesser of/Greater of Copay options. We have reformed an Rx work group to continually monitor the market and produce the quarterly Rx Newsletter due to interest in the topic.
Title: Improving Growth and Development of Children

Name: Afia Boateng

Preceptors: Beatrice Simpkins

Agency: AIDS Resource Foundation for Children

Purpose: To improve the growth and development of medically fragile children to facilitate reunification.

Significance: There are approximately 6,000 children each year in New Jersey, who do not live with their families and are placed in temporary home care facilities. This is as a result of child abuse and neglect. In 2015, cases on child abuse and neglect in NJ were 57,180. Other factors which contribute to child living apart from their families are being a risk to the community and social issues. This information signifies the importance of placing children with health-related obstacles in home facilities to enhance their well-being for a period of time before reunification thus returning the children to their families.

Method/Approach: Three children with specialized medical needs were placed in St. Clare’s home located in Elizabeth, NJ for care. The program allows stay for a maximum of 15 months. Pediatric nurses provided medications and routine checkups at the hospital as required. There was an active supervision, surveillance, provision of daily needs and activities. Charting was done by child care workers to record daily intake of food, sleep/nap routine, medications, movement, speech and weekly weight. In addition, counseling services were given.

Outcomes/Results: The results have shown an enhancement in the overall health of the children. One out of the three children got adopted. The table below is the weight of the children before and during placement.

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<tr>
<th>Child</th>
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<td>C</td>
<td>15</td>
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Evaluation/Conclusion: Evaluation is based on how long the children stay in the program and that is used as a measure of success. Other measures include the weight of the children, their functionality, health condition, educational and developmental milestones achieved. Future plans include getting a feedback/evaluation from a state representative of the Department of Child Protection and Permanency.
Internship Abstract

Title: Weill Cornell Medicine and Rutgers University Internship Collaboration Through Program Planning

Name: Nicole Bogstahl

Preceptors: Andrew Crawford, Divisional Administrator; Michelle Venezia, Grants Administrator

Agency: Weill Cornell Medicine

Purpose: To implement a sustainable and long-lasting internship collaboration between Weill Cornell Medicine (WCM) and the Rutgers University, Bloustein School of Planning and Public Policy.

Significance: Weill Cornell Medicine is an organization that is constantly expanding. In July of 2015, the Association of American Medical Colleges named WCM the fastest growing medical college in the country based on its substantial increase in operating revenue from 2010 to 2015. As a result, 40 new locations of medical practices and administrative offices have been built around New York City since then. However, there are not enough personnel to keep up with these expansions, as the healthcare field experiences a workforce shortage and administrators struggle to fill jobs across a wide range of positions. The Bureau of Labor Statistics (2017) states that healthcare monthly employment slowed from 2.5% in 2016 to 1.7% in 2017. It now takes approximately 49 days to fill a healthcare position, which is two weeks longer than it takes to fill a position in the highly competitive IT sector. Therefore, there is a great need to broaden the pool of personnel for support roles within WCM.

Approach: An employer satisfaction survey was created and sent to the 2 current internship supervisors at WCM. The results were sent to 10 other divisional administrators within the Department of Medicine, along with an “Are You Ready for an Intern?” questionnaire, an “Internship Program Benefits” flyer, and descriptions of the current interns’ responsibilities - with the purpose of acquiring more divisions to take part in the collaboration. Request for a general job description was sent to interested parties, which included what type of intern they are looking for, what types of duties the intern would be performing, and how many interns total they could accommodate.

Outcomes: Employer satisfaction survey shows 100% of current supervisors want another intern - with ratings of “strongly agree” to most questions and 5/5 for overall satisfaction. Of the 10 DA’s contacted, 5 responded (50%); 2 were negative (40%) and 3 were positive (60%). 1 Division - Pulmonary - is actively seeking interns, and is willing to accommodate more than 1 per semester. Contact information of the DA of this division, who will serve as the primary ongoing form of communication with Rutgers, was forwarded to the Rutgers Internship Coordinator, along with sample job descriptions, so that WCM could be added to the general application.

Evaluation: More than half of the divisions contacted were unresponsive, or uninterested in participating in the collaboration. This is a new initiative within the Department of Medicine, so many may be afraid of what and how much this process entails. The Pulmonary DA intends to share her feats with the partnership, so that it grows to include more divisions. Moreover, intern satisfaction surveys will be created to evaluate efficiency of WCM in regards to onboarding, supervision, and overall satisfaction in order to understand where improvements can be made, so that this collaboration is successful moving forward. Available intern roles have been presented and a linkage, or collaboration, has been created.

Sources: https://docs.google.com/document/d/18yOmKUHiR-Xb0-dPLe17f6231WRLc350_Bk8RdEGWlk/edit?usp=sfsharing
**Title:** “Eat Well” Healthier Restaurant Menu Initiative

**Name:** Samantha Borbon

**Preceptor:** Manuel Castañeda, Director of Community Health

**Agency:** New Brunswick Tomorrow

**Purpose:** To develop the implementation plan for the “Eat Well” Healthier Restaurant Menu Initiative, a community nutrition project whose objective is to increase the number of healthier menu options in New Brunswick restaurants in order to help promote a culture of healthy eating.

**Significance:** Restaurant meals tend to be served in larger portions and are higher in calories and fat than food prepared at home. More and more people are dining out to obtain their meals (Fakih et al., 2016), thereby increasing the risk for chronic conditions such as diabetes, obesity, and heart disease. A higher rate of these conditions is seen in New Brunswick, with 48% of children being overweight or obese compared to 21% nationally, and 24% of residents living with a diabetic household member compared to 8% nationally (Eagleton Institute of Politics, 2017). Many more people understand the importance of a healthy diet and are now seeking healthier menu options in food establishments. Considering all of this, it is imperative that restaurant owners in New Brunswick take initiatives to create healthier menu options as they are partly responsible for the dietary health of their patrons (Seo & Lee, 2017).

**Method/Approach:** A comprehensive literature review was conducted to identify evidence-based programs and evaluations of programs with goals similar to the “Eat Well” Healthier Restaurant Menu Initiative in order to inform its implementation plan. The evidence-based programs that were selected for review were chosen because they mirrored the demographic composition and population size of New Brunswick. Critique from a registered dietitian nutritionist was also used to inform and finalize the implementation plan. Approval from the New Brunswick City Market was obtained for support.

**Outcomes/Results:** A comprehensive implementation plan was developed as a result of an extensive literature review and informed input from a registered dietitian nutritionist. A document, which will be presented to restaurant owners, was created that outlines the purpose of the “Eat Well” Healthier Restaurant Menu Initiative, its importance in the New Brunswick community, guidelines and requirements for restaurants to participate in the initiative, and benefits of participation for the restaurant owners.

**Evaluation/Conclusion:** A pilot test should be conducted to test the feasibility of the “Eat Well” Healthier Restaurant Menu Initiative for restaurant owners. Results of this proposed pilot test will be used to improve and/or support the “Eat Well” Healthier Restaurant Menu Initiative. Outreach should be conducted to restaurants located on George and French Streets and Easton Avenue to evaluate restaurant owners’ receptiveness and attitudes towards the purpose, guidelines, requirements, and benefits of the “Eat Well” Healthier Restaurant Menu Initiative.
Title: Ethical & Legal Considerations of The CRISPR/Cas9 Genome Editing Technique

Name: Alexandra Braun, Public Health Student

Preceptor: Dr. T. Patrick Hill, Associate Teaching Professor

Agency: Edward J. Bloustein School of Planning and Public Policy, Rutgers University

Purpose: To catalogue journal articles in order to capture an accurate representation of the technical development over time including, but not limited to, how the application of CRISPR/Cas9 is growing, in what areas of research, and with what outcomes.

Significance: According to the CDC, 7.3 million women aged 15-44 have used infertility services at least one time in their lifetime. CDC. (2016) CRISPR/Cas9 could potentially reduce arduous IVF cycles for infertile women, since only the best embryos would be used for implantation. CRISPR/Cas9, when applied both effectively and cautiously, could potentially eliminate a tremendous amount of health-related problems for the human race-- infertility being just one of many. While CRISPR/Cas9 has the ability to transform modern medicine (in many aspects) as we know it, there are many possible unintended, harmful consequences that may arise. Schaefer and Wu, et al. (2017) Both germline and somatic cell applications of CRISPR/Cas9 uncover pressing problems concerning a variety of topics such as social justice, cost, and access to the groundbreaking medical technology.

Method/Approach: A comprehensive literature review was completed throughout the course of the semester to track both the legal and ethical progressions of CRISPR/Cas9. Significantly more journal articles, especially the popular press, discussed in depth the ethical components rather than the legal aspects. This is partially due to the fact that little legal progress has been made, with the exception of one significant patent case between MIT and Berkeley. Barriera. (2015) Cataloguing included writing brief summaries of each article/paper that was reviewed. Organizing summaries into sections titled 1) pros, 2) cons, and 3) new questions proved to be most useful when writing the final literature review. Additionally, a journal of complex terminology was kept in the form of a word document in order to better understand the journal articles.

Outcomes/Results: Overall, CRISPR/Cas9 has been applied to an interesting array of topics such as 1) disease, 2) infertility, and 3) cancer. The specific types of cancers that have been used in human clinical trials include (a) lung, (b) prostate, and (c) renal cell cancers. Kang and Soh, et al. (2017)

Evaluation/Conclusion: Based on my research, it appears that CRISPR should be used, but not abused, in today’s society-- yet there is most definitely a fine line between the two.
Title: Mental Health Suicide Awareness Video

Name: Brea Brown

Preceptors: Director: Francesca Maresca, PhD, CHES®

Agency: Rutgers HOPE

Purpose: To create content for a suicide and mental health awareness video to be used as a part of the Rutgers HOPE Mental Health and Media Campaign.

Significance: Mental health covers a wide variety of areas including emotional, psychological, and social wellbeing. Mental health is a complex subject and affects the way a person may act, think, or feel and is important in how people make choices, handle stress, and relate to others. The World Health Organization found that around 800,000 people die by suicide every year. That is about 1 person, every 40 seconds. It is the second leading cause of death among 15-29 year olds globally (WHO, 2018). This age bracket includes college students. Using multimedia like videos to help promote conversations about mental health, access to services, and suicide prevention can help reduce the stigma and increase help-seeking behaviors.

Method/Approach: A brief needs assessment was developed and disseminated to the Rutgers University student body via email listservs and social media to determine students’ thoughts on content for a suicide prevention video. Data from 53 respondents was analyzed and key issues and themes were identified. Potential content for the video was created.

Outcomes/Results: A script and video overview was created for the future creation of the video with major themes including student testimonials, coping mechanisms, and real life stories.

Evaluation/Conclusion: Student input is key in the development of media addressing mental health issues. What students want to know and how they want to be informed must be considered before content is developed. Once the themes are decided and actual content developed, the video will be filmed and edited and then pre-screened by a panel of students for additional input. The final video will be disseminated as a part of a larger health and wellness campaign on campus. Some limitations that will be encountered include measuring educational effectiveness and reach because it will be distributed on social media outlets.
Internship Abstract

Title: How Postpartum Depression Affects the Newborn Child

Name: Nicole Burrowes, Research Intern

Preceptors: Dr. Percy Yeung, Dr. Gloria A. Bachmann MD

Agency: Women’s Health Institute

Purpose: To assess the effect of the mother’s postpartum depression on the newborn child and propose a potential survey to further identify how much of an influence the mother’s mental health has on the baby as they are maturing.

Significance: Postpartum depression affects approximately 20% of mothers. The typical period of onset is usually approximately a month after the baby is born. During the early first years of a child's life, the neutrons in their brain grow/develop as certain areas a being used more they grow, and as others areas are being used less they weaken. When children grow up with mother's suffering from postpartum depression, they are negatively affected in many ways.

Method/Approach: A thorough literature review was completed, by analyzing data and studies assessing the effects of postpartum depression on the newborn child. The literature review consisted of several studies illustrating the negative effects of postpartum depression.

Outcomes/Results: It has been found that many of these children that have mother’s suffering from postpartum depression have mood and anger issues and less developed motor function. A crucial part of human development for newborns is "smile to smile interaction", which is the interaction a baby has with the mother as they smile at each other. This interaction helps to develop a child's emotional skills and well as develop the mother-child bond. As postpartum depression mothers are not smiling as normal mothers would smile and interact with their baby, this "smile to smile interaction" is underdeveloped.

Evaluation/Conclusion: As a result of my literature review, I propose conducting a survey to observe the lives of children whose mother’s suffered from postpartum depression ten years later and measure their emotional and mood skills and development.
Title: Using Publicity to Keep Workers Coming Home

Name: Hanna Campbell

Preceptors: Marcy Goldstein-Gelb, Co-Director; Peter Dooley, Senior Project Coordinator

Agency: National Council for Occupational Safety & Health

Purpose: To collect, record, and analyze the burden of mortalities related to occupational health and safety and make them accessible to the public. The Occupational Safety & Health Administration discontinued listing workplace fatalities on their website in 2017.

Significance: 4500-5000 Americans die every year in work-related incidents, with 50-100,000 [NIOSH, ILO] more succumbing to diseases they acquired at work and 3 million injured at their jobs. Unfortunately, most Americans are completely unaware of the number of people who died from work related traumatic fatality incidents. These tragic incidents are largely preventable and due to system failures of the workplace health and safety programs. Up until recently, OSHA had published all mortality reports on their website. Under the new administration, these reports have ceased to exist. National COSH is attempting to more widely publicize work-related deaths with their worker fatality database, a convenient and simple collection of all media reports on employees who pass away on the job. National COSH then uses these examples to campaign for more comprehensive workers’ rights.

Method/Approach: The database is added to by perusing national, statewide, and local news sites for reports of worker deaths. Community members can also add to the database as they hear reports in their own towns. Each fatality is organized by state, vocation, and cause of death, and their employer (if that information is released) is recorded for future reference. National COSH then analyzes this data to look for trends and cases in which the fatality could have been avoided with better training, supervision, or policies.

Outcomes/Results: So far, over 200 fatalities have been recorded for January 2018 and half of February 2018. Results of this data are pending, and will continue to be until OSHA investigates many of the incidents which occurred during this time period.

Evaluation/Conclusion: With the wider publicization of their database, National COSH hopes to see more conversation about worker fatalities, with greater emphasis on what can be done to keep workers coming home to their families and communities safe, healthy, and in one piece.
Title: Shotgun metagenome sequencing of deer tick (Ixodidae: *Ixodes scapularis*) guts

Name: Camille Cancino

Preceptors: Dana Price, Ph.D., Associate Research Professor

Agency: Rutgers Department of Plant Biology

**Purpose:** To compare tick gut microbiota of two tick populations in Monmouth County, New Jersey for potential use in disease surveillance and research in coinfections, paratransgenesis, and tick population structure.

**Significance:** Ticks are responsible for transmission of most vector-borne diseases, and the cases of tick-borne diseases have steadily increased throughout the years. Eisen, R.J., et al. found that new pathogens continue to emerge with 40% of currently known tick-borne pathogens only described within the last 20 years. Research by K. Clay and C. Fuqua suggests that the microbiome of ticks can influence the acquirement, transmission, and virulence of known vector-borne disease and new emerging pathogens. By manipulating the microbiome, morbidity and mortality caused by tick-borne diseases could be significantly reduced. Currently, tick microbiome research is being done in order to fill in the gaps of knowledge.

**Method/Approach:** The midguts of 6 *I. scapularis* ticks from one population in Perrineville Lake Park (Millstone, NJ) and 6 ticks from one population in the Naval Weapons Station Earle (Colts Neck, NJ) in Monmouth County, New Jersey were collected. DNA was extracted using the Qiagen AllPrep Kit. Using the Nextera DNA Flex Protocol (Illumina, Inc.), DNA libraries for both tick populations were created and shotgun-sequenced using Illumina MiSeq Next Generation Sequencing System. GMAP (Genomic Mapping and Alignment Program) and Geneious were used for COI short read mapping. The base pair region in cytochrome oxidase 1 (COI) is used as a standard barcode for identifying species.

**Outcomes/Results:** The raw Illumina reads corresponding to each tick population were mapped against the reference *I. scapularis* sequence (shown along the top of the map). Of the two tick populations in Monmouth County, genetic differences were seen in the COI short read mapping. As indicated by the colors in the map, there are potential segregating single nucleotide polymorphisms (SNPs) to discern population structure. Several polymorphisms in the allele frequencies between the two populations were found, as indicated by vertical colors in various areas of the map.

**Evaluation/Conclusion:** This data will serve as preliminary knowledge for prospective research in tick populations, disease surveillance, coinfections, which is the simultaneous infection of multiple pathogens, and paratransgenesis, which attempts to manipulate the microbiome to control tick populations. Future research in this area will develop strategies to slow the transmission of tick-borne diseases.
Title: Assessing the Health Needs of Seniors in Middlesex County: A Community Health Survey

Name: Jessica Carlucci

Preceptors: Direct Supervisor: Margaret Drozd MSN, RN, APRN-BC, Director, Community Mobile Health Services
Project Supervisor: Zachary Taylor MEd, CHES, Coordinator, Community Health Improvement Plan

Agency: Community Health Services at Saint Peter’s University Hospital

Purpose: To distribute Saint Peter’s University Hospital’s Community Health Survey to select Senior Centers in Middlesex County and compile results of the evaluations in order to better understand the health areas in greatest need of services or programs.

Significance: According to the U.S. Census, the population is expected to become much older, with one in five U.S. residents aged 65 and older in 2030, “By 2030, all of the baby boomers will have moved into the ranks of the older population. This will result in a shift in the age structure, from 13 percent of the population aged 65 and older in 2010 to 19 percent in 2030.” According to the 2016 Community Health Needs Assessment for Middlesex County, 42.5% of seniors are overweight, with 26.6% reporting they have not exercised within the past 30 days. Understanding the health needs of the elderly population in Middlesex County can lead to improving their overall health.

Method/Approach: Saint Peter’s University Hospital’s Community Health Survey was distributed to eight senior centers within Middlesex County. Upon completion, surveys were collected and the information was analyzed. Focus was placed on identifying any outliers or trends that persist among the senior population in Middlesex County. Recommendations were shared with Community Health Services staff in order for them to know where to focus their interventions.

Outcomes/Results: Of the 118 surveys returned, three health topics emerged as areas of focus. The two top requested categories were exercising/fitness and nutrition with 45 positive responses (38.1%) each. The third was weight management, with 43 (36.4%) requesting more information. In addition, the most common health condition diagnosed by a doctor, nurse, or other health professional was high blood pressure, with 87 seniors (73.7%) reporting yes. The other disease trends related to lifestyle were 63 having high cholesterol (53.4%) and 37 being overweight/obese (31.4%). Of note is that 29% reported that they did not exercise at least 30 minutes daily.

Evaluation/Conclusion: By reporting these outcomes to Saint Peter’s University Hospital’s Community Health Services department strategies can be developed to address these issues. These can include targeted health information sessions for adults aged 65 and older about lifestyle changes, e.g. healthy eating with Registered Dietitians or the importance of physical activity from Physical Therapists. These will benefit the elderly population of Middlesex County and may decrease the prevalence of these chronic diseases.
Internship Abstract

**Title:** Creating a Blog Content Interview Process for Healthcare Clients

**Name:** Chiara Carmelino

**Preceptor:** Kelsey Stanley, Head Account Manager

**Agency:** Today’s Business

**Purpose:** To improve available blog content for healthcare facilities by creating a simple formatted interview process to follow adding accuracy and content to blogs.

**Significance:** A vital part of digital marketing is coming up first in major search engines, in particularly Google, when looking up the healthcare facility. Search Engine Optimization (SEO) helps with this by going through a website and picking up keywords related to the organization in order to help their website’s ranking with Google. Frequently writing blog content for these healthcare clients and adding it to their website helps them with SEO. Today’s Business wanted to improve the accuracy of their blog posts for their healthcare clients and improve SEO for their websites.

**Method/Approach:** Existing blog posts were reviewed to get a general idea of the different types of healthcare clients and the types of questions that will target their field. A blog interview process was created for interviewing a medical professional in order to get accurate medical information and improve efficiency. Pre-interview calls with the client were made to agree on the topic of interest. Customized questions were added to the template.

**Outcomes/Results:** A trial run was conducted on 4 different clients with a total of 10 blog posts. Within the 10 posts that were written using the template, 8 of them stayed within the topic the client wished to focus on for that month, and 2 changed topics after the pre-interview call. All 10 were accurate in terms of using correct medical terminology according to the healthcare clients. It was also found that by getting customized information directly from the doctors themselves it not only made the process easier for Today’s Business but it also provided better content for the client’s website. Since the doctors know what the common questions many patients ask, they are incorporating popular topics that are frequently being asked in search engines, such as Google. By having this content being thorough, detailed and accurate it increased the likelihood of the client’s website showing up since the blog content is related to the frequent categories that people are searching for which also increased the client’s SEO success.

**Evaluation/Conclusion:** This new process proposed helps Today’s Business with its efficiency and ensures patient satisfaction. It also makes it easier for the SEO team to write blog content since it is coordinated with the client. This efficiency allows the team to spend more time improving SEO ranking in other ways. Also, since the doctors know more about the patients’ concerns with medical procedures the blog interview process allows the blog posts to be concurrent with what people are searching in Google and in other search engines, which goes hand in hand with increasing SEO success for clients.
Title: Grupo Vida- Latino Diabetes Prevention and Wellness Program

Name: Tiffany Carreno

Preceptors: Mariam Merced (Director), Yesenia Hernandez (Program Coordinator), Leslie Malachi (Nutritionist), Marlene Spina (RN-BSN)

Agency: RWJ- Community Health Promotion Program New Brunswick, N.J.

Purpose: To evaluate the effectiveness of the Grupo Vida - Latino Diabetes Prevention and Wellness program as measured by changes in eating habits, activity levels, and diabetes management care.

Significance: The high prevalence rates of diabetes mellitus within the Hispanic and Latino population bring about great concern to our public health. It is estimated that 10.4 percent of Hispanic and Latinos living in the United States who are 20 years or older have diabetes. Uncontrolled diabetes can lead to complications in the body such as obesity, heart disease, kidney failure, vision loss, and nerve damage. Considering this, providing education, prevention, management and care for diabetics is crucial. Hispanic and Latinos are the second most populated race in the New Brunswick area.

Method/Approach: Thirty-two members were divided into two categories “active” define as those who came 8 out 12 months and “Less active” those who came 4-7 months out of 12 months. A survey that measured activity levels, eating habits, blood pressure (BP) changes, and knowledge on diabetes was administered. Additionally, quantitative data that comprised of our member’s blood pressure, weight, and height changes within the past 12 months was also analyzed.

Outcomes/Results: All of the members in the “active” participate in our free gym membership program and attend an average of 3-5 days a week. These members have lost weight and maintained their new weight, have decreased their sugar levels and as a result their A1C, and do not suffer from hypertension. Our “less active” members did not have the same outcome. From those, 25% do not participate in our free gym membership program or any other gym, the other 75% have memberships and go on average of 1-3 days a week. 33% have no weight changes, but the rest have lost and maintained their new weight. 40% reported no glucose level changes, but the other 60% have seen their glucose levels go down and as a result so has their A1C. Finally, 20% reported discrepancies with their BP levels, 33 % has seen their BP lower significantly, while the rest do not suffer from any arterial issues. Overall, all our members said to have developed healthy eating habits and diabetes management and care. They all expressed that the group has been a great support tool and have gained at least one friend for additional encouragement.

Evaluation/Conclusion: The Latino diabetes wellness and prevention program was effective in providing the community with culturally sensitive ways to self-manage their diabetes. The members increased their physical activity levels through education and active participation, which has resulted in the reduction of diabetes related complications. Subsequently, participation of each member has a significant impact to the degree at which these changes occur.

https://docs.google.com/document/d/1t7GJYhnsr4FtgoFhhqlhlh0LsjBOECVkJYY2nxGFFViNog/edit?usp=sharing
Title: Center of Cardiovascular Excellence Accreditation- TnI Door-to-Result

Name: Shawnee Chaudhury

Preceptors: James Schneider, Project Manager, Performance Management

Agency: JFK Medical Center

Purpose: To bring the Door-to-Result time for TnI blood tests to below 60 minutes for patients entering the Emergency Department with chest pain symptoms.

Significance: In JFK Medical Center’s pursuit of becoming accredited as a Center of Cardiovascular Excellence by the American College of Cardiology, it must meet the following criteria: “promote increased participation in care decisions by patients and family members; inform patients about clinical research studies and trial options; collaborate with communities to provide cardiac prevention and educational events; focus on a system of care that ensures optimal treatment and outcomes; improve quality, care coordination and compliance with national care guidelines,” (American Heart Association, 2017). As a subset of these criteria that must be met, a roadblock has been the hospital’s Door-to-Result time for TnI blood testing. It is necessary to reduce it from 99 minutes to under 60 minutes.

Method/Approach: A multidisciplinary team approach was taken to ensure that all aspects of the problem were addressed to maximize the results. They had the opportunity to map out the initial process together using sticky notes. Once that was completed, the group brainstormed solution ideas and decided upon implementing a nurse-driven protocol that would allow the nurse at the emergency room greeting station to order the TnI blood test right after noting chest pain symptoms in the patient. After that, the patients would move to the triage room one at a time where their blood would be drawn and the necessary electrocardiogram test would be performed as well. The solution was integrated into daily operations by educating nurses and lab technicians on the new procedures starting January 29, 2018.

Outcomes/Results: As a result of the nurse-driven protocol, the Door-to-Result time for TnI testing dropped down by 56 minutes (57%) within 2 months. Furthermore, it was evident that the Door-to-Order time showed the most improvement due to the targeted solution. It decreased by 41 minutes (95%), while the Door-to-Result time decreased by 15 minutes (22%). In terms of compliance, there was also a 60% increase, starting at 12% and now at 72%, surpassing the preliminary goal of 60%. Overall, the length of stay for emergency room patients with chest pain was reduced by 134 minutes (30%).

Evaluation/Conclusion: JFK Medical Center was exceedingly successful in reducing the Door-to-Result time for TnI testing resulting in a 43 minute median and 72% compliance. Therefore, on April 12, 2018, the ACC Representative recommended JFK Medical Center for accreditation as a Center of Cardiovascular Excellence in Chest Pain.

https://docs.google.com/document/d/19vbatiRtfQZIaZsUpXro0yQSFfE694EiKMAIn_XHOGs/edit?usp=sharing
Title: Analysis of Worker Fatalities and Citations

Name: Sam Cherfas

Preceptors: Patricia Jones- Area Director

Agency: Department of Labor: Occupational Safety and Health Administration

Purpose: To analyze the relationship between the types of preventable worker fatalities and the types of citations issued in the following year.

Significance: Every day, roughly 13 workers die on the job in the United States. The Occupational Safety and Health Administration enforces standards to ensure safe workplaces and reduce worker fatalities. The focus of this research is to analyze a relationship between preventable worker fatalities and the citations issued for the following year.

Method/Approach: Using already provided research on worker fatalities in 2016, transportation and workplace violence incidents were removed from the sample to get the number of preventable workplace fatalities. Fatalities were categorized into the following: falls, contact with moving objects or equipment, chemical & hazard exposure, and fires. The top 10 issued citations for 2017 were also categorized into the same four groups. Analysis of the data will describe a relationship between citations and preventable worker fatalities.

Outcomes/Results: The largest percentage of preventable fatalities were caused by falls (38%). The commonly issued citations related to falls accounted for 45.6% of top 10 citations in 2017 (CFR 1926.501). The second most common fatality event, contacts with objects or equipment, was responsible for 34.3% of fatalities. The commonly issued citations related to contacts with objects or equipment accounted for 24.2% of citations (CFR 1910.147). The third most frequent fatality event, exposure to harmful substances and environments, was responsible for 23.3% of fatalities. The commonly issued citations related to this event made up 25.2% of citations in 2017 (CFR 1910.1200). The rarest fatality event, fires, consisted of 3.9% of fatalities in 2016. The corresponding citations for this event consisted of 4.8% of top 10 citations in 2017 (CFR 1910.305).

Evaluation/Conclusion: In general, the types of citations issued in 2017 were representative to the types of preventable fatalities documented in 2016. Citations for violations pertaining to fall safety, were slightly over-represented, by 7.6% Citations for violations pertaining to contact with objects or equipment were underrepresented by about 10%. This gap can be explained by the fact that there were no violations present at the time, and the cause of the incident was employee misconduct. More training and awareness is needed for machine guarding, lockout/tagout, and fall prevention, as these are the leading causes of preventable workplace death and injury.
Title: Gender Center Health Education Initiative

Name: Eden Chin

Preceptors: Gloria Bachmann, MD, Director of WHI

Agency: Women’s Health Institute (WHI) at Rutgers Robert Wood Johnson Medical School

Purpose: To survey the effectiveness of a transgender educational video designed to support transgender youth and their families by showing specific behaviors indicating desire to explore transgender options.

Significance: In the United States, there are currently about 1.4 million individuals who are transgender. In New Jersey, there are estimated to be over 30,000 people who identify as transgender. With the lack of understandable educational resources available to transgender youth and their families, they currently face a health disparity as they lack the guidance and information to help direct them through their journey to gender harmony. According to the Journal of Clinical Endocrinology & Metabolism, stress is increased because current transgender resources are too complex for adolescents to comprehend (Hembree et. al., 2009). The Women’s Health Institute’s Gender Center Project has a main goal to enhance education for transgender individuals. This project seeks to evaluate an educational video on specific behavior indicating if an individual wants to become transgender, in order to help adolescents understand more about transgender health, and improve the discussion and understanding between the medical community and pediatric patients and their families.

Method/Approach: A procedure was drafted to research and create a video, intended for transgender youth and their families created with Powtoon, a cartoon-based video software. This video describes specific behaviors which indicate if an individual desires to be transgender. This project is evaluated by members of the Gender Center Initiative Project to evaluate if the videos are age-appropriate, have a positive tone, and proficient educational value. The project titled Gender Center of New Jersey, The Center of Excellence, a non-interventional research initiative to enhance education for transgender individuals was submitted to be reviewed by Women’s Health Institute and the Rutgers Institutional Review Board.

Outcomes/Results: The participants will include members of the Gender Center Initiative Project. Feedback was incorporated after the video was shown, as these members have vast knowledge in transgender health. Their feedback is instrumental which will help reveal a meaningful understanding about the educational videos for a qualitative feedback.

Evaluation/Conclusion: This study will be evaluated by analyzing the feedback after watching the video. After analyzing and gathering the information from the feedback, then the effectiveness of the video will be determined.
Title: Child Safety Kit Program Promotion and Evaluation

Name: Alexandra Chmiel

Preceptors: Corey P. Hallom

Agency: Giglione-Ackerman, American Income Life Insurance Company

Purpose: The efficacy of the C.S.K program will be improved using sample locations to determine patterns and techniques maximizing promotion, awareness, and positive family responses to the program.

Significance: The child safety kits promoted by American Income Life are sponsored by the International Union of Police Associations and the Federal Teachers Association in an effort to ensure children's' safety within the communities where agents work. Unfortunately, child abductions continue to occur and the majority of these children are killed within the first twenty-four hours. The AMBER alert system used by the U.S. Department of Justice has helped find hundreds of missing children; however, a plethora of vital information is needed to set off an alert including the child’s DNA which parents/guardians do not normally carry with them. This kit was designed to keep all of this information in one safe place in the case of an emergency for parents to easily be able to set off an alert for their missing child.

Method/Approach: The Avenel and Carteret locations were used as a sample to examine the efficacy of the program in towns in the state. In order to evaluate progress, interviews with all program staff and agents needed to be conducted to gather baseline data regarding box placement, response cards collected, and eagerness of families to participate in the program. Cardboard boxes with marketing information and response cards were then strategically placed in businesses and other community places with owner approval and employee education about the child safety kit program.

Outcomes/Results: The final outcomes have shown that small businesses and family-owned stores where different adults come in everyday generated more community exposure than corporate stores or establishments with the same daily adult patrons. The levels of positive family responses were similar among those collected from small businesses and habitual facilities, and the quantity of responses varied among locations depending on the familiarity of the staff with the program. Thus, mom-and-pop shops whose employees explained the program well generated the highest amount of families to receive a kit.

Evaluation/Conclusion: The results of this examination have determined the best methods that Giglione-Ackerman agency within AIL should employ within the C.S.K Program in order to keep the children in New Jersey communities safe. A presentation to the agency, including the owners and Program Staff, will summarize the results and present potential routes of integration to increase the program’s efficacy; learning materials for the facility staff, research on community-backed small businesses, and child-activity centers frequented by adults are key in raising access and promotion.
Internship Abstract

Title: Human Trafficking Resource Directory

Name: Chinenye Chukwu

Preceptors: Rosario Sanchez, MSN, RN, Doctoral Student, Rutgers School of Nursing
Diane Starace, Injury Prevention Coordinator, Trauma and Injury Prevention Department

Agency: RWJ Trauma and Injury Prevention Department

Purpose: To create a database of organizations, facilities, and providers who offer services and resources for human trafficking victims/survivors in the state of New Jersey.

Significance: Human trafficking is a form of modern slavery which includes forced labor, commercial sexual exploitation, and domestic servitude. The International Labour Organization estimates that there are 24.9 million victims of human trafficking globally. Of those 24.9 million, 64% are involved in forced labor, 19% are involved in sexual exploitation, and 17% are involved in state imposed forced labor. In the United States alone, up to 300,000 people under the age of 18 are lured into the commercial sex trade every year. Though human trafficking victims can be any age and any gender, women are disproportionately involved as both victims and perpetrators.

Method/Approach: With a list provided by the New Jersey Coalition Against Human Trafficking, the aim is to contact organizations throughout the 21 counties in New Jersey. Contact with the organizations will be carried out by phone or email to assess the services they offer, if any, to victims/survivors of human trafficking. The next step is to compile a list of organizations along with the services they provide.

Outcomes/Results: 71 organizations were contacted. Of those 71, 30 organizations provided a list of services that they provide. Some of these services include drug intervention programs, housing accommodations, and legal advocacy.

Evaluation/Conclusion: Through the assessment of the services provided by the 30 organizations, it was found that none of them provide services that cater to families of victims/survivors of human trafficking. There is a need for family services because family members also go through trauma as a result of human trafficking. Services such as counseling and therapy would be beneficial in helping them cope with that trauma.
**Title:** Improving Rutgers University-New Brunswick Student Engagement with Smile Train

**Name:** Sabrina Chung

**Preceptors:** Caitlin Roarke, Senior Manager of Community Fundraising, Adina Lescher, Director

**Agency:** Smile Train, New York City

**Purpose:** To present a Smile Train educational program to Rutgers University students to raise awareness of the organization’s mission and services.

**Significance:** From 2015 to 2017, only about 3% of Smile Train’s Community Fundraising efforts were generated from university students. An educational program was created hoping to initiate a relationship between Rutgers University-New Brunswick students and Smile Train. Smile Train provides free cleft lip and palate repair surgery and comprehensive cleft care to children in 85+ developing countries. Smile Train aims to improve their fundraising outreach to university students. For charities to establish relationships with students, it is important to educate them at a young age because they are likely to remain connected and loyal to those charities. In many community foundations, there are youth philanthropy groups that are looking for organizations to teach their young participants about philanthropy and nonprofit work. (Davis, 2012).

**Method/Approach:** Student knowledge and interest about Smile Train’s presence was measured by administering a pre and post survey consisting of eight Likert Scale and Yes or No questions. This educational program was held on March 25, 2018, 45 Rutgers University students attended. Each student is affiliated with an organization on campus. Prior to the start of the educational program, a survey was distributed to each student in the room to collect their original knowledge of Smile Train. The educational program consisted of a viewing of “Osawa,” a brief video that focuses on the personal journey of the recipient of Smile Train’s one millionth patient and an open discussion about Smile Train’s services. A post survey was given to the students to collect quantitative data to see the effectiveness of the program.

**Outcomes/Results:** The educational program analyzed the overall student satisfaction with Smile Train. The program helped identify a way to improve fundraiser engagement in university campus organizations. Before the program, 4% of the students were aware of this organization. After the program, there was a 95% increase of student interest for Smile Train’s mission and services.

**Evaluation/Conclusion:** More than half (n=43, 95%) of the students learned about this organization. This program revealed that an initial educational program to students affiliated in on-campus organizations is an effective strategy to (a) enhance long-term fundraising efforts from university settings and, (b) improve Smile Train’s community outreach methods for student engagement.

Source: https://bit.ly/2GPKS6H
Title: Street Harassment: My Name Isn’t Campaign

Name: Ashli Clarke

Preceptors: Loren Linscott, Director for the Office of Violence Prevention and Victim Assistance

Agency: Rutgers Office of Violence Prevention and Victim Assistance

Purpose: To create a program that targets sexual violence awareness on the Rutgers campus by executing the “My name Isn’t Campaign”.

Significance: Street harassment and sexual violence are a growing human rights issue globally. It typically occurs around ages of puberty and up, among women. However, men and individuals apart of the LGBTQ community are victim to street harassment as well. The initiative of the program is to create an awareness of sexual violent language in order to create a street harassment free and potentially sexual violence free campus community at Rutgers University.

Method/Approach: The campaign is to encourage proper street talk and end street harassment. It is to better the response of rejection to both men and women. The campaign includes taking individual pictures and allowing the individual to boldly write across their picture, in red, a name they were called whether derogatory, abusively, or sexually stated. The writing out of the name is to confidently free oneself of the word they were called acknowledging that they are not a product or associate of the name. The program will take place the week of April 18 to April 21, 2018 at the 2018 Vagina monologues and Sunday April 22, 2018 at the Walk a Mile in her shoes event.

Outcomes/Results: The outcomes for the program are that participants feel a sense of relief as they boldly recognize the term, name, or phrase they do not want to be called. In addition, the program creates awareness about inappropriate calls, gestures, and sexual behaviors toward the opposite or same sex in public or private sector as harassment.

Evaluation/Conclusion: The effectiveness of the program will be measured by the amount of support and students that participate because it shows interest and understanding of the topics importance among students. The recommendations moving forward with this project is working more with the LGBTQ community and gaining feedback on sexual violence and street harassment knowledge from Rutgers students.
Title: The Sanction Screening Process at Saint Peter’s Healthcare System

Name: Kiarra Coleman

Preceptor: Leslie Boles CCS,CPC,CPMA, Compliance Audit Manager at Saint Peter’s Healthcare System

Agency: Saint Peter’s Healthcare System (SPHS) New Brunswick,NJ

Purpose: To provide insight on the monthly sanction screening process implemented by the Compliance Department at SPHS and to ensure that anyone that works for or with SPHS is not sanctioned.

Significance: Sanctioned individuals and entities are “excluded, suspended, debarred or ineligible to participate in federal /state healthcare programs such as Medicare and Medicaid as they have been convicted of a criminal offense related to healthcare items or services.” If sanctioned individuals provide services and/or refer patients to SPHS or if sanctioned vendors are involved with patient care at SPHS, the healthcare system cannot be reimbursed for those services by federal or state healthcare programs. SPHS is not penalized for vendors not involved in patient care due to contracts that were signed by vendors stating the vendor was not sanctioned. If the vendor is sanctioned, SPHS must terminate those contracts. If the screening is not done at all then SPHS can be subject to a significant Civil Monetary Penalty, a fine due to illegal or unethical activity.

Method/Approach: Sanction screenings consist of two parts: licensure and exclusion analysis. Licensure analysis is used to make sure that all licensed employees have up to date licenses. Exclusion analysis is used to make sure that all medical staff, employees, volunteers and vendors are not excluded from any federal or state programs. To perform the analysis, SPHS uses a system called VeCred. The names of employees, physicians, vendors and volunteers are entered into VeCred and then VeCred screens the names against federal and state exclusion lists. In return, VeCred gives the names of individuals and entities that it believes are sanctioned. To confirm that VeCred is correct, further research needs to be done by using the NJ healthcare profile and/or the NJ Division of Consumer Affairs website. These websites make sure that the individual/vendor in question have up to date licenses and/or do not have any current or past healthcare related criminal offenses.

Outcomes/Results: All sanctioned individuals and entities must be reported to the Executive Compliance Committee. It is their job to ensure that sanctioned individuals are no longer employed by SPHS sanctioned individuals can no longer refer a patient to SPHS and sanctioned vendors have no contracts with SPHS during their sanction period.

Evaluation/Conclusion: SPHS continues to follow their policy by not employing or contracting with any sanctioned individual or entities. In order to abide by their policy, SPHS continues to perform sanction screenings on a monthly basis.
Internship Abstract

Title: Reducing ED Hospitalizations to Meet Quality Requirements for CPC +

Name: Daniella Commisso

Preceptors: Project Supervisor: Dr. Cathy Heath, MD and Dr. Elizabeth Clarke, MD
Direct Supervisor: Jennifer Rodriguez, Project Coordinator

Agency: RWJ Department of Family Medicine and Community Health

Purpose: To identify trends of unnecessary emergency department (ED) visits in the first quarter of 2018 and develop strategies to increase the use of outpatient services provided at Family Medicine (FM) instead of unnecessary use of the ED.

Significance: Approximately 65% of patients go to the ED for medical reasons that could have been treated in an outpatient providers office. Going to the ED for non-urgent matters increases the cost of healthcare. A prior study done by FM showed that Blue Cross Blue Shield on average paid $503 for an ED visit. If this patient came to the office instead, the insurance company would have only paid $155. Following Comprehensive Primary Care Plus Program (CPC+) requirements, helps offices improve the quality of care provided and FM follow up with patients who were in the emergency room within 7 days after discharge to reduce future ED utilization.

Method/Approach: In order to meet CPC+ requirements, data were collected from January 1, 2018 to March 31, 2018 for quarter one of this year. Due to collaboration with RWJBarnabas, FM received a daily email summary on each patient seen in the ED. This email contained the patient’s age, insurance, chief complaint, and time of arrival. From analyzing the data, trends were identified within the patient population and a spreadsheet was used to track all of this data.

Outcomes/Results: The findings included the patient’s time of arriving to the ED, age, and insurance being used. Of a total of 325 patients (n=325) 67.1% were female (n=218) and 32.9% were male (n=107). There were 34 patients with multiple repeating visits and 47% of patients were going to the ED during normal business hours (n=152). The largest age group going to the ED, 20%, was between 50-59 year olds (n=67) and 20.9% used Medicare B (n=68) followed by 15.1% using “Self-Pay” (n=49) insurance. Over the last three months, CPC+ follow ups increased from 74.26% to 76.00% to 100.00% and the number of patients entering the ED reduced from 100, to 75, to 68 patients. Overall, from quarter one, the office was successfully able to meet CPC+ criteria by 81.63% for ED follow ups in comparison to Q4 of 2017 which we only contacted 32.8% of patients.

Evaluation/Conclusion: Relatively 50% of patients go to the ED when the office is open, therefore the same protocols will be used in the future with the ongoing project to reduce ED hospitalizations by continuing to observe the data and new data gathered in Q2 of 2018. By the spreadsheet being a success and a target population identified, the next steps would be to further investigate reasons patients went to the ED and continue with CPC+ follow ups.
Internship Abstract

Title: Process Evaluation and Improvement of the Chronic Illness and Chronic Pain Management Program

Name: Liana Concepcion

Preceptors:
- Direct Supervisor: Belinda Puglisi, Director of Payer Services/ IV & A
- Project Supervisor: Beverly Norman-Thomas, Manager, IV & A
- Project Supervisor: Janet Giordano, Director of Patient Care Coordination
- Project Supervisor: Cindy Green, Director of Referral Development - Medical

Agency: Children’s Specialized Hospital

Purpose: To analyze current inpatient pre-admission and admissions processes around referrals to the Chronic Illness and Chronic Pain Management Program to identify strategies for improvement.

Significance: Populations around the globe have been undergoing an epidemiological transition, wherein chronic diseases have overtaken infectious diseases as the leading causes of morbidity and mortality. Chronic pain is described as pain which lasts longer than 6 months and chronic illness is described as a disease which lasts for more than 3 months. Chronic pain syndromes, such as Fibromyalgia, are most commonly occurring in children between the ages 9-16 and rates of chronic illness, such as diabetes, are rising particularly in children living in poverty. The typical payers for Chronic Pain and Chronic Illness patients are commercial insurers and Medicaid, respectively. Perrin and Anderson, et al. (2014) reported that from 1960 to 2010, the percentage of children living with a severe health condition that interfered with daily activities rose from 1.8% to 8%. This data have highlighted the need for healthcare to improve the management of chronic diseases and prevent further disability by these conditions which the program offers through a multi-disciplinary approach to the adolescents referred to the facility.

Method/Approach: Observation of referral, pre-registration, admission, and care coordination processes will occur to understand current procedures. A structured questionnaire will be created to use during a focus group to assess current practices regarding the Chronic Illness and Chronic Pain Management Program. These questions will be posed to the Referral Development and Payer Services teams to identify areas for improvement. Continuous process improvement will occur using weekly, benchmark follow-ups.

Outcomes/Results: The focus group will be conducted on April 25th and will produce qualitative data to be analyzed. Process improvements will occur to make necessary modifications to current procedures. These changes will be monitored and weekly benchmarks will track evidence of improved or impeded patient flow. The follow-up stage of this project is expected to be implemented in early May.

Evaluation/Conclusion: This continuous process improvement approach will be carried out as an ongoing project. A limitation is out-of-state Medicaid, which each state regulates and cannot be modified at this level, and commercial payers. Future plans include further collection of data and continued improvement of the patient process flow of the Chronic Illness and Chronic Pain Management Program.
Title: Sex Education for Young Adults & Teens in Newark

Name: Kiaya Conover

Preceptors: Stephanie Franklin, Founder/ Executive Director

Agency: Masakhane Center

Purpose: To provide sex positive education services to teenagers and young adults in the city of Newark New Jersey.

Significance: The Masakhane center is a non profit whose main focus is on happy, healthy outlooks on sex education. By teaching innovative and interactive sex education workshops participants are presented with important information that they may not get outside of the program. Sex Education amongst young people is important however only 20 states require sex and HIV education. According to the Stay Teen Organization 71% of American 19 year olds have had intercourse and 99% of Americans will have sex in their lifetime. Proper Sex Education can prevent the prevalence of unauthentic sexual information, and is very important.

Method/Approach: In order to implement the workshops the first thing that had to be done was to become knowledgeable about sex education topics such as puberty, menstrual cycle, first time sex, and STIs. On site training on specific topics was done during the month of January along with online training and assessments. Upon completion of training workshops began in 4 different locations that were chosen by my preceptor. These sites were Science Park High, East Side High, Lincoln Elementary School and Project WOW. Each week I chose a topic to cover for each group and determined the format of each plan. Every workshop lasted between 45 to 80 minutes long and included learning activities as well as time for open discussions and questions.

Outcomes/Results: After four months of teaching workshops in multiple high schools and afterschool programs participants knew a lot more about sex education topics. Participants were able to demonstrate learning through answering questions after a workshop. I taught an average of 5 workshops per week and each workshop had at least 15 participants. The workshops have benefited the community and the weekly meetings allowed students to have a safe space to talk about subjects that they do not go over in a more traditional health class.

Evaluation/Conclusion: By conducting interviews with participants in Masakhanes workshops it can be concluded that participants learned a lot from the meetings. Many participants were more aware of resources available to them and were able to make more informed decisions about their sexual health.
Title: The Effective Meeting Tool Kit

Name: Ankita Dasmunshi

Preceptors: Ruth K. Bash, Vice President and Chief Culture Officer

Agency: Children’s Specialized Hospital (CSH), New Brunswick, NJ

Purpose: To create a guide for hospital leaders that will provide effective tools and methods to improve “meeting” culture at Children’s Specialized Hospital.

Significance: According to Harvard Business Review, upon surveying senior managers in a range of industries, “65% said meetings keep them from completing their own work and 71% said meetings are unproductive and inefficient” (Perlow, Hadley, and Eun). CSH instills the values of Teamwork and Collaboration throughout the organization. When meetings do not embody such values, it in turn negatively affects the entire organization. The goal of providing these training methods will be to ensure that CSH has the tools to continue to uphold these core values.

Method/Approach: Initial research was done on best practices on meetings throughout a variety of industries. After preliminary research, interviews were conducted with each of the Senior Leaders at CSH on their opinions of meeting culture and what can be improved on for meetings. A series of questions were asked regarding meeting agendas, meeting time frames, meeting roles, and other organizational specific issues. Analysis of major points addressed by each of the Senior Leaders were compiled into a presentation to be presented at CSH’s quarterly Leadership Learning Retreat (LLR).

Outcomes/Results: The Effective Meeting Toolkit presentation was debuted on February 26, 2018 at the LLR. At this retreat, leaders were given a preliminary four question survey asking about their current experiences and thoughts on meetings. Baseline data was collected and on average 44% of respondents said meetings were well prepared sometimes, 40% said meetings ran smoothly sometimes, 49% said meetings have good participation sometimes and 41% said meetings deliver results often.

Evaluation/Conclusion: Once the survey was completed, leaders were presented with the effective meeting presentation. Key takeaways included always having a prepared agenda, moving away from the 12pm-1pm time for meetings, and following up with “offline” conversations. Leaders will be able to take what they learned from this presentation and use it as a guide to implement what they feel necessary to better their future team meetings. The goal is to survey again at the following LLR to track whether or not there was improvement.
Internship Abstract

Title: Care Gaps in Cervical Cancer Screening

Name: Natalie Davila

Preceptors: Beata Reshetar, Vice President of Quality Improvement

Agency: Ocean Health Initiatives, Neptune, NJ

Purpose: To identify and track members who are due for Cervical Cancer Screening, assist in scheduling pap-smear appointments or retrieve outside reports to satisfy quality measure.

Significance: According to the Center for Disease Control and Prevention, about 4,000 women in United States died from Cervical Cancer in 2014. Regular screening for cervical cancer is important because symptoms rarely present themselves in the early stages. “More than half of women diagnosed with cervical cancer cases had never or rarely been screened” (CDC, 2014). There are many reasons why women do not get screening, two important ones to note are the lack of time and lack of health insurance. Knowing these factors, an outreach campaign to those with open gaps in Cervical Cancer Screening would help improve these outcomes.

Method/Approach: Data were exported into an excel spreadsheet through the organizations EMR system of patients seen in 2017 who have opened gaps for Cervical Cancer Screening. After these patients were identified, a call was placed to the patient to offer an appointment with the gynecologist. If patient stated having completed the screening at a gynecologist outside of the health center, an attempt to retrieve the report was made. The goal of this campaign is to close these care gaps, reach as many patients possible in the limited amount of time, to schedule them for screening at OHI, and to improve the overall population health for women.

Outcomes/Results: 368 patients were called but only 148 women were reached. Of those women reached, 48 women (30%) stated they had a cervical cancer screening completed at a different facility that was not associated with Ocean Health Initiatives. However, only a few (9) reports were able to be retrieved from these outside facilities. About 30% of the patients (41) reached agreed to be scheduled with the Gynecologist. About 40% of the women (59) stated they would call back to schedule or simply declined at the moment.

Evaluation/Conclusion: A significant amount of patients with open care gaps who were contacted had completed their screening somewhere else. In order to improve care coordination, sharing of medical information between primary care providers and specialists should be made easier and electronically. Also, those women (30%) that declined an appointment should be given education material regarding the importance of completing cervical cancer screenings. This education can be accomplished through flyers, pamphlets, patient contact letters, electronic reminders sent to their emails and/or phones. If more time was allocated for this project, these efforts would increase the organization’s cervical cancer screening rate.
Title: The Impact of Estrogen on the Recovery of Brain Injuries in Both Genders

Name: Jessica DeBlank

Preceptors: Gloria Bachmann, MD, Director of Women’s Health Institute

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

Purpose: To conduct a literature search to analyze the gender differences associated with brain injuries and the impact of estrogen on this type of injury.

Significance: The incidence of head trauma in the United States is about 2 million each year. Half a million cases necessitate a hospital stay while 80,000 result in long-term disability. Men are injured twice as often as women and are at four times the risk of injury. Traumatic brain injury is the leading cause of death and disability under 45 years of age causing a mortality rate of 25 per 100,000. Motor vehicle accidents account for over 50 percent of injuries; falls cause 21 percent and violence and sports and recreational activities make up 22 percent. Overall, health costs associated with traumatic brain injuries are 35 billion dollars per year (Rao & Lyketsos, 2000). The results from this literature review may be helpful in discerning the effects of estrogen on brain injuries.

Method/Approach: A review of medical literature was conducted using databases to find data on gender differences in brain injuries. Additionally, the impact of estrogen on both male and female rats was examined through literature searches. The combination of these literature searches enabled a sufficient analysis of the influence of estrogen on male and female head injuries.

Outcomes/Results: Various studies conducted demonstrate the influence of estrogen on the brain of rats and their recovery after head injuries. Estrogen is the mediating factor between male and female outcomes in head injuries. In both genders of rats, a pretreatment of estrogen before an induced brain injury resulted in a reduction of cell death. The neuroprotective effects of estrogen on rat brains include decrease in brain edema, blood-brain barrier disruption, and intracranial pressure. Estrogen supplements appear to assist in the recovery of brain injury through vasodilation and increased cerebral blood flow. Through the lessening of certain factors and a surge in others, estrogen plays an important role in brain injury outcomes and recovery time. Rats untreated with estradiol had only a 50 percent recovery rate compared to rats treated with estradiol post-brain injury.

Evaluation/Conclusion: The results of the studies executed on rats show promising data for the use of estrogen in human subjects. Because rats are a valuable animal model for human disease and studies, the research collected on rats demonstrates hopeful outcomes of estrogen application to reduce recovery time and efficiency in brain injury. The literature review demonstrates that additional research in the significance of estrogen in both male and female head injuries is warranted and will be valuable in the treatment of head injuries in both genders.
Internship Abstract

Title: Seasonal Influenza Vaccinations for Children in Foster Care

Name: Kathryn DeLucia

Preceptors: Supervisor: Peggy McHale, Senior Associate

Agency: Public Catalyst - Iselin, NJ

Purpose: To assess the timeliness of influenza vaccinations for children in foster care and propose educational opportunities to foster parents that explain the importance of herd immunity.

Significance: According to the CDC, Influenza (flu) is a contagious respiratory illness that may lead to serious hospitalization or death. The flu vaccine is the best method of prevention against the disease. During the flu season, young children are at a higher risk for serious flu-like complications. For foster children, about 1 in 3 children enter foster care with a chronic health condition. Foster children face challenges of receiving proper health care due to changing caregivers and locations, lapses in immunizations, and finding doctors who take Medicaid (McGill 2016).

Method/Approach: A random selection of children’s case files within the past year were chosen under two requirements: (a) the child is currently under the custody of the state, and (b) the child is between the ages of 3 to 18. Information on a foster child receiving a flu shot was inputted into the child’s casefile by the social worker. The social worker referenced each child by a number ID to keep the child’s name anonymous. The data indicate the child’s age, gender, and medical history. Ages were divided into three groups to determine whether a child’s age effects their chances of receiving the flu shot.

Outcomes/Results: Of the sample cohort (n=103), 52% of children received the flu vaccine, 40% did not receive the flu vaccine, 5% did not receive the flu vaccine due to parental refusal, and 3% did not have any medical history available to view. The study was further broken down into three age categories. Of those children who received the flu shot, 55% were between the ages of 3 to 7, 39% were between the ages of 8 to 12, and 60% were between the ages of 13 to 18.

Evaluation/Conclusion: Less than half of foster children either did not receive the flu shot or there is no record of the shot available. Reasons for this number could be (a) foster parents forgot or opted to not send the child to get his or her flu shot, (b) foster parents are not aware of herd immunity, (c) social workers are not properly communicating with foster parents, or (d) social workers did not input the child’s medical history into their case file. Ways to increase awareness during flu season are for social workers to remind foster parents through home visits, Email, phone calls, and pamphlets.
Internship Abstract

Title: Addressing Youth Obesity In Preschoolers Through Proper Nutrition

Name: Gagan Dhamrait

Preceptors: Executive Director, Gina Stravic

Agency: Raritan Valley YMCA

Purpose: To bring change in the eating choices of the YMCA Preschools through education.

Significance: Statistics from Rutgers, The Center for State Health Policy show that in the United States children from ages 3-5 (preschoolers) are 10% obese. The obesity rate of kids aged 3-5 in New Jersey is 15.3%. The youngest children of New Jersey are more likely to be obese than their national counterparts. This is a very concerning health issue that I decided to study. The kids at the YMCA preschool program are also from New Jersey, ages 3-5, which gives me a perfect chance to observe their home made lunch boxes and educate them about the food pyramid. The type of educational program that I will encourage is called C.A.T.C.H (Coordinated Approach To Child Health).

Method/Approach: Firstly, YMCA’s Preschoolers were given a pre- test which included separating healthy food pictures from unhealthy pictures, based on the food pyramid. The sample size was 20 Preschoolers and 30% passed. Next, I spent a week observing their lunch boxes brought from home. The first week 60% of the Preschoolers had healthy meals, based on the food pyramid. To increase these results, I taught them a weekly nutrition topic for 10-15 mins at least 3 times a week, for 11 weeks. I observed and took pictures of their lunch boxes to kept a record of how many kids are being impacted by my education and encouragement. I also sent home a healthy eating checklist to the parents where they can check mark if the child ate his/her vegetables or not. This helped with the parents involvement in this project and to create a constant unconfused diet for the child at home and at the YMCA. At last, I performed a post- test and the results were highly impacted by my education.

Outcomes/Results: The post- test pass rate was 95% and the healthy lunch box percentage increased to 95%. There were no limiting categories for food, just a healthy meal based on the food pyramid for lunch and a healthy snack. Over time, the lunch boxes that had chips or cakes changed to fruits and vegetables. Out of 20 kids observed, the weekly percentage for 11 weeks in order was, 60%, 75%, 65%, 75%, 70%, 80%, 85%, 100%, 45%, 85%, 90%. The low percentage weeks such as 45% and 65% included holidays causing Preschoolers to bring in holiday meals. Otherwise, vegetables and fruits started appearing more often in the lunch boxes. Even though the YMCA already encouraged healthy eating, now the kids learned the reasons behind that encouragement.

Evaluation/Conclusion: A change in the YMCA preschooler’s lunch boxes, brought from home, occurred. The students along with the parents gained the knowledge of why healthy eating is important and the encouragement on healthy eating will continue even after my internship is over.
Title: Child Nutritional Intake Assessment

Name: Sukhnoor Dhillon

Preceptors: Assistant Director: Tara Conover; Head Teacher: Amanda Sgro

Agency: Rutgers Child Development Center

Purpose: To monitor what children eat while at the development center and whether healthy eating habits are being followed.

Significance: Nearly 1 in 3 children in America are obese and the biggest reason is the lack of a healthy diet. One of the most important building blocks for preschoolers is calcium and milk is the best option to serve for calcium intake. The other important nutrient needed is fiber which mainly aids in digestion and fruits, vegetables, and whole grains are the best options for preschoolers. Fiber is also significant in the matter that heart disease is the leading cause for death in the United States and fiber is correlated with the prevention of such diseases. Lastly, water is very important in that it makes up more than half a child’s body weight and is needed to keep all parts of the body functioning properly (AAP, 2016).

Method/Approach: Observations were made during every lunch and snack time for a week (7 days) as to what exactly was being served and how many children accepted the food compared to how many resisted eating it. The food was served to them and handed out one by one. Whichever student rejected the food in any fashion by saying no to it or did not eat more than half of the quantity was marked as rejecting the food. What was served to them was also written down and kept for the record which allows for a trend to be seen as to what types of foods are being rejected for the most part. The amount of students present on each day was recorded and the amount that resisted eating what was being served was recorded.

Outcomes/Results: On average, about 14 students are present at the development center. Of them, on average, 2 students resist eating what is served to them which is 14% of the children. Also, from the 7 days, there was 1 day where one of the main important nutrients was failed to have been served; specifically fiber. All seven of these days consisted of lunch and snack so a full day’s nutritional value was measured for experimental purposes. Therefore, the required nutrients that preschoolers need were served on 86% of the sample days.

Evaluation/Conclusion: The fact that 86% of the monitored days followed the required nutrition value for preschoolers and the fact that 86% of the students accept the food that is served to them shows that the development center is on good pace in regards to providing students with nutritious value. To make these percentages even higher, the development center could start by adding some more fiber products to their menu. The best way to achieve that is using whole grain foods such as oatmeal and beans. On the other hand, to get students to consume more of the healthy foods and bump those percentages up, more efforts can be made in the classroom. While in the classroom, teachers can educate the children more about the healthy foods and why they should be eaten through nutrition education activities and nutritional books.
Title: The Technical Future of Patient Care

Name: Derick Diaz

Preceptors: Direct Supervisor: Barbara Davis, IT Network Manager
Project Supervisor: Lisa Slater, MSN, RN

Agency: The Francis E. Parker Memorial Home

Purpose: To manage and oversee all technical projects pertaining to the lives of elder residents in a healthcare setting within an assisted living facility.

Significance: Each year at least 35,000 people in the United States aged 65 or older run away from where they are living. With projects involving tracking systems in everyday gear such as the shoes needed to travel, we as an assisted living facility are able to drastically reduce these numbers. Other projects such as some which will assist with everyday operations such as using an Amazon Echo speaker with the built in Alexa virtual assistant, to let them know of what is on the menu for lunch, any news they would like to know, any phone numbers needed such as taxi cabs for travel, and let them know when they have a notification such as an email from someone, so that Alexa can read it for them.

Method/Approach: With the assistance of tracking devices in shoes, watches, and wearable pendants, Parker is now able to know where the patients/residents are at all times, leaving them much safer than they would be without the help, considering many elders when they run away are subject to muggings, starvation, freezing, etc. Products such as the Amazon Echo will help us battle 3 of the main things elders suffer from according to The Eden Alternative®, which Parker Life, is a partner of. The three things being: loneliness, helplessness, and boredom. From a simple conversation with a virtual assistant, to having someone answer however many questions you have, and whenever you have them helps us in assisting with helplessness and boredom because they are technically conversing with someone.

Outcomes/Results: Since the inception of the projects, we have thankfully have not had a single resident go missing. The Amazon Echo has since been updated to allow residents to choose 3 built-in “skills”, which are personalized by Orbita, Inc. The skills allows for residents to personalize their experience with Alexa, the virtual assistant. Residents are also handed their own personal login so that they can create their own music library, wakeup message, phrases, preferences, etc.

Evaluation/Conclusion: These projects, along with many others, are the start of the future of healthcare pertaining to elders in assisted living facilities. Considering it is impossible to have someone there for residents 24/7, kickoffs such as the Amazon Echo project really aid in battling many of our everyday problems and assist in solidifying our core principles of creating a vibrant, inclusive aging services world, that is easier to navigate, offers flexible solutions and designs ways for seniors, families, friends, and communities to actively stay connected.
Internship Abstract

Title: Infectious Disease Patient Satisfaction Assessment

Name: Jennifer Diaz

Preceptors: Direct Supervisor: Cindy Leon, MPH, Public Health Representative

Agency: Eric B. Chandler Health Center, New Brunswick, New Jersey

Purpose: To analyze satisfaction of HIV-Positive patients in the Ryan White Program and to measure patients’ knowledge of services offered.

Significance: Since 2016, over thirty-seven thousand people have been living with HIV/AIDS (PLWHA) in New Jersey alone (NJHealth Statistics, n.d.). Although overall incidence rates have been declining, there are still some populations that are disproportionately affected such as Black/African Americans and Hispanics/Latinos. New Brunswick, New Jersey ranked #11 of Cities with 100 or more Cumulative Cases (n=1,026 cases) (NJHealth Statistics, n.d.). 86% of those cases reported were Black/African American and Hispanic/Latino. Surveying HIV-Positive patients at Eric B. Chandler Health Center (EBCHC) would capture how satisfied patients are with care and treatment services received and identify areas of improvement. The Ryan White Program at EBCHC focuses on primary medical care and adherence to medications, since they are important steps for a healthy, normal life for their patients.

Method/Approach: A 26-question comprehensive survey was created to capture patient demographics, satisfaction with clinical and support staff and to measure patients’ knowledge of services offered on-site. With Community Board’s approval, the survey was administered during the patient’s appointment time or via telephone interviews. Patients completed the survey either on their own or with the assistance of the student intern. The data were tracked using Microsoft Excel and analyzed using Pivot Tables.

Outcomes/Results: Overall, EBCHC has high satisfaction ratings among their Ryan White patients. A total of thirty-three surveys (n=33) were collected within a month time frame. Patient demographics consisted of 48% Black/African American, 36% Hispanic, 12% White and 3% Asian. 18% of patients said they sometimes had questions about their HIV care, but did not ask their doctor. Only 66% of patients said they were aware that EBCHC offers free and confidential HIV RAPID Testing.

Evaluation/Conclusion: 39% of patients had positive comments about the program and their care. Patient suggestions include: more evening appointment availability, provide support groups, increase privacy in the waiting room, improve confidentiality via telephone notifications, increase staff’s display of attentiveness, compassion and have more detailed explanations of their care from staff members. Recommendations for the future include increase number of surveys collected, improve wording of questions, increase patient knowledge of services offered including RAPID HIV Testing, and increase level of comfort and trust among patients and staff.
Title: Nonalcoholic Fatty Liver Disease (NAFLD) Risk Factors

Name: Ashley Dilkes

Preceptors: Direct Supervisor: Traci Arline, Office Manager
Project Supervisors: Dr. Allan Plumser, MD, Dr. Jose Costa, MD

Agency: Digestive Health and Nutrition Center, LLC, East Brunswick, NJ

Purpose: To evaluate trends in risk factors of patients diagnosed with nonalcoholic fatty liver disease (NAFLD) between 2009 and 2017.

Significance: Nonalcoholic fatty liver disease affects approximately 30 to 40% of American adults according to the National Institute of Diabetes and Digestive and Kidney Diseases, and about 20% of those with NAFLD have nonalcoholic steatohepatitis (NASH). The progression of NAFLD goes from a normal, healthy liver to fatty liver, followed by NASH then cirrhosis. The purpose of this study was to see if the national statistics regarding NAFLD are comparable to the patient population at the Digestive Health and Nutrition Center.

Method/Approach: Diagnosis codes were used to find potential patients to include in the retrospective study of NAFLD. Patients with a history of alcohol abuse were excluded. Each patient’s sex, age, body mass index (BMI), BMI classification, and history of diabetes (Type I or Type II), hypertension, or hyperlipidemia were recorded for comparison.

Outcomes/Results: Of the females with NAFLD, a quarter had hyperlipidemia, 29.6% had type II diabetes, 45.1% had hypertension, and the average BMI was 33.6 (obesity class I). 28.4% of males with NAFLD had type II diabetes, a third had hyperlipidemia, half had hypertension, and the average BMI was 31.9 (obesity class I). 70% of females and 61% of males with NAFLD were obese, with the majority considered obesity class I (BMI of 30-34.9). Of the total patient population, 57% of females and 67% of males were overweight or obese. Of the 3946 female patients with a BMI greater than or equal to 25 seen, 6.08% had NAFLD, and of the 3839 males with the same parameters seen, 4.98% had NAFLD.

Evaluation/Conclusion: The major findings of this study were that the majority of NAFLD patients were categorized into the BMI classifications of obesity class I or overweight, and approximately half of NAFLD patients also had hypertension. The prevalence of NAFLD in this population (3.7%) did not match the national statistics (30-40%), but this is likely because patients in this study were found solely from diagnosis codes in the office’s medical record system. Since obesity, which affects a third of patients in this population, and hypertension are significant risk factors for NAFLD, primary care physicians should screen for obesity and refer these patients to both gastroenterologists and cardiologists. Then, all overweight and obese patients should be screened for NAFLD.
Title: Community Outreach to Local New Jersey Schools for Grief Expressions Summer Camp

Name: Jessica Dilley

Preceptors: Internship Advisor: Christina Morris, Program Manager

Agency: Good Grief, Morristown, New Jersey

Purpose: To increase awareness of local non-profit organization, Good Grief, by assisting in community outreach for their Grief Expressions summer camp occurring in August of 2018.

Significance: In New Jersey alone, there are approximately “280,000 grieving children under the age of 18,” (Good Grief, 2017). This number is significant as grieving children can often find it difficult to understand the loss of the loved one. By opening up various avenues of discussion for children, teens and young adults, Good Grief allows participants to feel supported by their peers and find new ways to allow grief to be good. Community outreach is thus crucial and will aim at increased awareness of Good Grief as well as its various events & fundraisers throughout the year.

Method/Approach: Outreach efforts began by first compiling a list of middle schools and high schools in an excel spreadsheet, including the name, address and phone number of each school as well as an email address and phone number for 1-4 staff members to use as our point of contact. The lists were further divided up based on school type and location. The staff members who were chosen as a point of contact within each school were generally guidance counselors, social workers, school psychologists, or staff members working in the art/drama department. Following the lists completion, a minimum of one individual was contacted within each of the middle schools on the master list, discussing with each individual crucial information regarding Good Grief and the upcoming Grief Expressions camp. After each call, notes were taken regarding the conversation including additional questions the individual had during the call, or it was noted if a voicemail message was left in lieu of conversation. A follow-up email was then sent to each individuals on the list to provide additional information as well as the flyer for the upcoming summer camp.

Outcomes/Results: Of the 84 total schools contacted, combined with outreach that was completed within the community at local libraries & small town businesses, the Grief Expressions Camp has reached a total of 27 campers and 10 camp counselors, thus far. A total of 52 towns were contacted during this project, increasing awareness not only of the upcoming camp, but also of Good Grief in general.

Evaluation/Conclusion: Community outreach can be difficult to quantify, as it is hard to measure exactly which form of outreach brings an individual to a non-profit organization. It is important to note that during this project, a minimum of 96 individuals have been informed about Good Grief and the upcoming summer camp with the intent that sometime in the future this information will be passed on to individuals who can use the important resources that Good Grief offers to the New Jersey community.

https://docs.google.com/document/d/1C2FPXq2MdXqxVN5ZyH7wtaf-AbiGqUB57X-pKvg_jpQ/edit?usp=sharing
Title: The Importance of Health Care Coverage and Financial Planning

Name: Angela Dong

Preceptors: Michael Riley, Divisional Vice President, LUTCF, Accredit Asset Management Specialist, Retirement Income Certified Planner, Financial Consultant

Agency: AXA Advisors, LLC

Purpose: To help and educate individuals about long term care, disabilities, affordable health insurance plans to cover the expensive medical costs incurred for various health related expenses like serious health disorders or illnesses, routine check-ups, diagnosis tests, physical examinations, prescription drugs, doctor consultation and various other expenses.

Significance: According to the latest data are available from the National Health Interview Survey’s Early Release Program, number of persons under age 65 uninsured at the time of interview is 28.2 million people. The rate of U.S. adults without health insurance jumped in the first quarter of 2017, 11.3% of US adults were without health insurance coverage in the first quarter. However, the onset of a sudden or serious illness such as cancer, diabetes and a traumatic event (ski accident, car crash) can leave the person with staggering medical bills. The inability to pay high medical bills, one of the most common reasons people file for personal bankruptcy, can ruin your credit history and set you back for years. Therefore, understand the importance of health care coverage and different services that it provides for people who are qualify for the right financial plans, as well as the proper tools and knowledge in those cases.

Method/Approach: To get more uninsured clients onboard; some of the methods are being conducted are warm calls, one on one consultation, business networking events; meeting with prospective clients to address their current and future needs and goals. These approaches serves as tool to get the know our clients’ demand and need, so the right services and health plans can be applied accordingly. Efforts to change the mindset and behaviors of consumers, providers, and health care systems will necessarily be gradual.

Outcomes/Results: Of the sample size cohort (n=500), 320 (64%) clients are interested but needs time to think about it with the health policy; 133 (26%) clients showed little interest; 27(5.4%) no response; 15(3%) clients are successfully onboard and satisfy with the services and healthcare coverage. Overall, the results are positive and creates great potential prospect for the uninsured and in-demand population.

Evaluation/Conclusion: In a market where the required care is always increasing in cost, it is important that people are aware of all the options they have when it comes to covering the cost of their health care. By obtain health insurance is important for several reasons. Uninsured people receive less medical care and less timely care often result in worse health outcomes; lack of insurance is a fiscal burden for them and their families. Moreover, the benefits of expanding coverage outweigh the costs for added services. Safety-net care from hospitals and clinics improves access to care but does not fully substitute for health insurance.
Title: Patient Flow Improvement in the Emergency Department

Name: Jonathan Dubin

Preceptors: Joe McTernan, Vice President of Special Operations

Agency: Trinitas Regional Medical Center

Purpose: To observe and model hospital departmental work processes and subprocesses using both LEAN methodologies and project management tools, then converting the data into charts and graphics for further executive analysis.

Significance: Efficient Patient Flow is a hot topic within the healthcare field, particularly within hospitals. In a publication released by IHI titled *Achieving Hospital-wide Patient Flow*, that details methods of improving clinical pathways within the hospital environment, found that improving patient flow requires a system-wide overhaul rather than siloed initiatives. Amongst many other prescriptions, the paper suggests providing oversight of system-level performance through the understanding of the issues of the process. The creation of process maps of Emergency Department will become useful in pinpointing specific areas in the process for improvement.

Method/Approach: Throughout the process mapping process, a variety of hospital stakeholders such as department managers and directors were contacted to collect relevant data. Data collection was conducted during a series of meetings with various department heads and directors to discuss their department’s role in the patient’s process of care in the Emergency Department. After each meeting, the resulting notes were used to construct process maps using the diagram software Gliffy. The culmination of these charts formed a knowledge base from which executives could draw from in order to see the process from a ground-floor perspective.

Outcomes/Results: As a result of the project, 6-process maps have been created, detailing the comprehensive patient pathway through the Emergency Room with an additional 7-supplementary subprocess maps to accurately model possible deviations in patient care. In addition to the creation of the deliverables, insight into the mechanics of the Emergency Departments part in Patient Pathway has been gained by the management team. For example, when shown the Transfer Subprocess from Impatient to a Psych Facility, the Vice President of Special Operations was astonished about how many superfluous steps were being taken. Ultimately, the commission of the knowledge bank, which features the Main ED portions of the Patient Pathway by which all else flows through, will help give those within the C-Suite a better understanding of the the Emergency Department operations.

Evaluation/Conclusion: Overall, the project was successful in that it produced models by which the hospital runs and thus can allow executives to decide on future projects. Currently, the Vice President of Special Operations has associated the flowcharts into a presentation given to the hospital’s CEO. Going forward, the process maps created will spur other process improvement projects and in some cases be amended to reflect optimization efforts.
Title: Improve Greek Coalition with H.O.P.E

Name: Jaquan Dunn

Preceptors: Tanisha Riley, Director of Alcohol and Drug Prevention

Agency: Health, Outreach, Promotion and Education (H.O.P.E)

Purpose: To develop an outreach program to increase the engagement of the Greek Organizations at Rutgers with Health Outreach, Promotion and Education (H.O.P.E).

Significance: Every year, about 1,800 college students die due to binge drinking in the United States. With the increasing amount of interventions occurring on college campuses, universities have found several techniques to lower the prevalence of alcohol related incidents on campus. Borsri and Capone, et al. (1999) found that greek organizations have a large influence on student life on campus including alcohol frequency. This article draws attention to the relationship that Greek life has on alcohol use on college campuses.

Method/Approach: An outreach campaign was conducted to gather the number of active Greek Organizations on Rutgers New Brunswick Campuses. Data was compiled to find info about each organization to approach them on a relatable and in a personal way; years of workshop completed, evaluation forms, number of workshops conducted, and the number of evaluations were compiled on a spreadsheet. Bar graphs and pie charts were created to assess the information.

Outcomes/Results: Of the several different Office of Fraternities and Sororities Affairs councils (IFC, MGC, Panhellenic, and Professional) each category had an increase in workshop request; the Interfraternity Council 32%, Multicultural Greek Council 35%, Panhellenic 41%, and Professional 23.1%. Some of these results show an increase in workshop request from previous years, however the Professional Fraternity Council has decreased from previous years.

Evaluation/Conclusion: For every workshop H.O.P.E performs they require an evaluation be completed by the organization and the attendees (which was also looked over in this project). By collecting the data and evaluating it, it will then provide H.O.P.E with the information in which will lead them to the next step of a safer culture at Rutgers. In Office of Fraternities and Sororities Affairs at Rutgers, policies have changed in regards to professional development which will possibly cause a strain on this outreach project.
Internship Abstract

Title: Community Supported Dinner for the Homeless
Name: John El-Maraghy
Preceptors: Direct Supervisor: Kelsey Lynch RN, BSN
Agency: Archangel Raphael’s Mission (ARM)

Purpose: To facilitate private-public partnership and promote community involvement via a community supported dinner for the homeless.

Significance: Given the recent rise in homelessness in Middlesex County and disproportionate representation in New Brunswick, homeless continues to persist as a human services issue for years to come. A main component of ARM’s overall mission is connecting the issue with immediate stakeholders. With student volunteers, local businesses, community leaders, and other in attendance for the dinner they can learn about homelessness and its effects from those experiencing it.

Method/Approach: The approach was to build on ARM’s previous Community Dinner connections with Hidden Grounds Coffee and several other local businesses to start the beginning stages of planning the event. I was met with measured success marketing via social media channels, and it was something that my preceptor will now be including in their targeted outreaches moving forward. The event will require a robust volunteer effort so working with established charity volunteers as well as work to include city and other local service providers was essential. This has been accomplished as described below. Finally, I worked with the ARM board to get the word out to the homeless community, as well as with local stakeholders.

Outcomes/Results: The City of New Brunswick will be sending at least one representative from Social Services to assist, help organize, and engage the population. Hidden Grounds Coffee Shop has agreed to offer up their store as a donation for the event for over three hours. The new Blackthorn Pub, Evelyn’s Restaurant, Barca City Cafe, Destination Dogs, Hansel & Griddle, Deltas, and Harvest Moon are all signed on to donate a dish or two of their delicious food. Elijah’s Promise has agreed to help us get the word out to the target community alongside local student organizations like the Delta Phi fraternity and the House the Hub club. Additionally, I was able to secure a donation of over 1000 socks from the Bombas socks company through their Corporate Social Responsibility department. This is a connection that will continue to be valuable to the charity for years to come..

Evaluation/Conclusion: With seven local restaurants donating, I estimate the value of time and product donated to be in the neighborhood of approximately $1000 without counting the space, another estimated $750 (at $250/hr for a hall rental). We were met with extreme success regarding communication as the two most significant sources of communication and information are Elijah’s promise and the City of New Brunswick. The donation of socks I estimate to be worth about $3,600. A grand total of $5350 in estimated in-kind donations.
Title: Meet the Families - Patient Stories as a Marketing Strategy
Name: Mounika Ellanti
Preceptors: Direct Supervisor, Erin Shevlin - Marketing and Communications Director
Agency: Children’s Specialized Hospital, New Brunswick

Purpose: To gather patients' experiences staying at the Children’s Specialized Hospital in order to create and publish stories to the hospital's website. Hearing patient stories is a free of cost marketing strategy which is more impactful and personable than an advertisement. This strategy has the potential to attract new patients and give current patient families more information on different programs and types of patients residing at the hospital.

Significance: Each day, approximately 200 to 300 people go online and request appointments at Children's Specialized Hospital. The biggest advocates of the hospital are the patients and their families. Because most patients coming to the hospital were based on referral to the website, expensive advertising campaigns were deemed to be less effective in drawing more patients to the hospital. Talking directly to current patients and discussing their experiences was cost-free and gave potential new patients an idea of what their own hospital experience would be like.

Method/Approach: Data were collected from past patients who had already signed a waiver giving permission to contact them on their child’s diagnosis and journey residing at the hospital. In addition, current patient families were also contacted and asked to share. Once all information on patients who elected to participate was gathered, prewritten questions were asked to the patients via phone calls or in-person interviews. After the patient stories were drafted, each story was reviewed by the marketing director before being published onto the website. Social media posts were published about the articles to bolster the amount of views to the site. My director gathered data after a patient story was posted to gauge the impact this marketing strategy had. The data and click rates monitored were taken from Facebook Analytics for the social media posts, and Google Analytics for Children’s Specialized website.

Outcomes/Results: There was an increase in traffic to the website for the past three months. 8,200 people, on average, saw patient stories on the Children's Specialized Hospital social media posts, and from that number, 1,000 people, on average, clicked the link provided to be taken to the website. An average of 800-1000 people engaged with the social media posts through reactions, comments, and/or sharing. For a recent patient story, there were 848 post clicks to the website’s patient story.

Evaluation/Conclusion: Through this project, the results have shown that the stories not only improves traffic to the website, but also engagement. No matter the kind of patient story, there is an increase of traffic and greater awareness of what Children’s Specialized can offer patients through publishing stories. With the continuation of publishing patient stories and diversifying the portfolio of stories to focus not only on different diagnoses, but also different activities and programs patients were involved in, potential patients can continue to be interviewed.
Internship Abstract

**Title:** da Vinci Surgical Robot a Business Case to Improve Triple Aim

**Name:** Diane Ellard

**Preceptors:** Dustin Connelly. Perioperative Director, Project Supervisor

**Agency:** Robert Wood Johnson University Hospital, New Brunswick

**Purpose:** To analyze the financial, quality, and patient accessibility advancement benefits of purchasing a da Vinci robotic surgical system.

**Significance:** The da Vinci Surgical System is designed to simplify a complex surgery using a minimally invasive technique. This is executed as the surgeon controls all da Vinci arm movements from a console in proximity to the patient through three or four small incisions. By performing such procedures while handling the da Vinci Surgical System, it has been shown that patients are able to resume daily life activities at a rate quicker than traditional surgery. Patients benefiting from the use of the da Vinci Robot experience outcomes where recovery times are significantly enhanced when compared to traditional approaches. Furthermore, as patient satisfaction and access rise, hospitals as a whole benefit financially from the cutting edge technology.

**Method/Approach:** A comprehensive analysis of 2017 financial and quality data along with market research was performed to predict advantages of acquiring the da Vinci surgical system. The return on investment was calculated by projecting incremental volume, percent growth, contribution margins and utilization percentages over a span of two years. Targeted key performance indicators included; volume, revenue, expenses, appropriate DRG weight, utilization as well as patient length of stay.

**Outcomes/Results:** The hospital will be able to realize a full return on investment in sixteen months. The study predicts 29% incremental growth in volume. Conversions from traditional to robotic surgery was predicted to increase 19% with a stay reduction of 177 days. Utilization of the new machine will be 66% creating a 70% overall utilization for the 3 systems within the hospital.

**Evaluation/Conclusion:** With these projected volume targets, Robert Wood Johnson University Hospital will become one of the busiest programs in the state, resulting in an increase in patient access and satisfaction; yielding a profit of 42%. The da Vinci Robotic Surgical Systems allow surgeons and hospitals to provide more efficient and beneficial care to patients, as well as faster recovery times, in comparison to traditional surgery. Based on the market analysis and commitments from surgeons, as well as outcome data in the realm of quality and financial metrics, purchasing a third da Vinci Robotic System will benefit RWJ as a whole, including patients served as the investment would be worthwhile in today’s healthcare market.
Internship Abstract

Title: STI’s and HIV Services Within Human Trafficking Organizations

Name: Jennily Eshak

Preceptors: Rosario Sanchez and Diana Starace

Agency: Robert Wood Johnson Human Trafficking Healthcare Committee

Purpose: To create a database of New Jersey human trafficking organizations who offer STIs and HIV services to victims and survivors of human trafficking.

Significance: The global sex trade is worth $32 billion annually. Human trafficking victims go through difficult physical and psychological health conditions and are always at high risk to contract HIV and STDs which occurs to women of all ages. It has been estimated that there are about 300,000 children in the United States that are at risk for sex trafficking every year. Human trafficking is a public health issue that affects children, adult, men, and women, of all socioeconomic status, religions, and cultures and continues to occur in all parts of the country.

Method/Approach: The first step of this internship was to create a database based on the different services that human trafficking clinics offer throughout the state of New Jersey. Many of the clinics provided direct care to the victims and survivors of human trafficking. By contacting different human trafficking organizations around the state of New Jersey. The questions that were important to the database included location, what types of services are provided, if it is a walk in or appointment only clinic, the age group that they accept, if the clinics need insurance or ID, whether they have health screenings, etc. By looking at the different counties within the state of New Jersey, it shows how many different clinics are in each county and if they offer the health services such as HIV and STD testings to the victims and survivors of human trafficking.

Outcomes/Results: The outcomes of the other clinics that do offer pre-screenings for HIV and STDs are 4 in the whole entire state. Currently, many of the clinics refer out to different locations such as hospitals and different health clinics that are nearby. However, many of the clinics that have been contacted throughout the state do not offer STD and HIV testing to those individuals that are affected by sex trafficking. With this project, clinics should be able to distinguish what services are more common throughout the county and have at least one clinic per county be connected to health clinics that offer these types of services to the victims and survivors of human trafficking.

Evaluation/Conclusion: Overall, clinics throughout the state of New Jersey refer out to different clinics that offer HIV/ STD screenings. This database will be with the New Jersey Coalition Against Human Trafficking and will be continued to be updated, especially with the different services that are offered. Many changes can happen in the future in regard to HIV and STD screenings within the clinics. The proposed follow up to keep this sustainable is to continue calling the clinics and see the different updates they did to their services and whether they have new referral clinics that are not listed with the coalition.

Sources:
https://docs.google.com/document/d/1XMI0hpGRAExoFE9SVlmzZw2rD5g_gJsp9HC74ehAFXs/edit?usp=sharing
Title: Let’s Cook pre-& post survey

Name: Ike Essilfie-Obeng

Preceptors: Andrew Schlesinger, Urban Agriculture & Project Coordinator
Chef Elizabeth Sadi, Let’s Cook Program Coordinator

Agency: Elijah’s Promise

Purpose: To assess whether there are any changes in the dietary choices and health of participants taking a healthy cooking course, and what those changes are.

Significance: Research has shown that there are neighborhood disparities in access to healthy food options. It is usually the poorest areas that fair the worst when it comes to food accessibility. This has led to some low-income neighborhoods being dubbed “food deserts” because of a lack of access to a full range of affordable and nutritious foods. As a result, residents in these communities, “face substantial barriers to eating a healthy diet; these barriers may be related to higher rates of obesity, diabetes, and other diet-related diseases” (Breneman et al., 2015).

Method/Approach: A pre and post survey were given to Elijah’s promise Let’s Cook participants both consisting of six questions about eating habits and health. The surveys were adapted from already existing surveys related to nutrition and dietary health. A short pre-test will be given before the start of the first class to gauge where the participants are in terms of overall healthfulness. There will be three following classes in consecutive weeks before handing out the post-test at the end of the last class.

Outcomes/Results: At this point in time we have not been able to hand out any surveys as we are still gathering participants for the next Let’s Cook program. The project has been limited by our ability to attract new participants for the class, but the surveys have been created and are ready to be distributed. The goal is to get participants to start thinking about providing a healthier lifestyle for themselves and their families.

Evaluation/Conclusion: The program will still be a success even if 1 person begins a healthier diet. This is because a majority of the people taking the course cook for their families as well so family members (and friends) also benefit as a result of the Let’s Cook program. Time constraints are a really big problem in terms of program evaluation. Because of other responsibilities, individuals may not have enough time in the day to cook a healthy meal. Also, participants may need more time to try out what they’ve learned by giving them the post survey on the last day of class may be too soon. The issue was how to get participants to respond/complete the post survey after the course was over but a reliable option that would give participants more time was not forthcoming. The goal is to at least get participants thinking about being healthier, and that starts with food preparation and hopefully leads to a more active lifestyle.
Title: The Feel Good Fight in Managing Diabetes Through Health Education

Name: Danielle Etienne

Preceptors: Direct Supervisor: Leslie Oleaga MSN, RN, CPN, CCRN

Agency: CHOP at Virtua Hospital

Purpose: To implement an educational health and wellness program geared towards adolescents, between the ages of 13-17, diagnosed with type 1 diabetes.

Significance: According to the American Diabetes Association, 193,000 Americans under the age of 20 years old suffer from Diabetes Mellitus type 1. Unfortunately, studies have shown that adolescents have substantially more problems with diabetes management than school-aged children or adults (Peters & Laffel, 2011). Currently, Virtua Hospital does not offer an educational class for those living with type 1 diabetes and due to lack of knowledge and management, these children are admitted into the Pediatric Intensive Care Unit. The Feel Good Fight in Managing Diabetes Through Education was created to offer substantial resources to promote a healthy lifestyle for teens living with type 1 diabetes, as well as create awareness of the risks that occur as a result of improper management.

Method/Approach: An educational PowerPoint was presented to 8 children ranging between the ages of 10-18 years old that currently suffer from type 1 diabetes. Prior to displaying the slides, a pretest was given to each child which consisted of a series of 9 multiple choice questions. These questions were written in a way that would help assess the degree to which the children understood the overall impact of type 1 diabetes. After the presentation, a post-test was given to evaluate each child’s comprehension in healthy eating, exercise and glucose management. Given that this is a one day program, each test was administered within 1 ½ hours of each other.

Outcomes/Results: Based on the answers provided from the perspective pre-and post questionnaires, the greatest impact was made between the ages of 13-15. While the overall average increase in knowledge gained, where n=8, was 29.5% (3 questions), the adolescents that participated ranging between the ages of 13-15 were above average resulting in an 35.5% (4 questions) increase. The 10 and 18-year-old made the least amount of improvement, each resulting in an 14.5% (1 question) increase in knowledge.

Evaluation/Conclusion: Given the intensive planning needed to create a new program, the data above reflect the trial and error stage. The results from the pre-and post-test displayed how effective students were in retaining the educational information the program addressed, but this data only accounts for a small percentage of children living with type 1 diabetes in the United States. Given that the intended group for this program was 13-17 years old, the significant 35.5% increase in knowledge among those that participated between the ages of 13-15 years old validates that the greatest impact in teaching this educational class would be seen if pre-teens are targeted.
Title: Chinese Herbal Medicine

Name: Chiamaka Ezenduka

Preceptors: Dr. Gloria Bachmann, MD, MMS and Dr. Joy Wang

Agency: RWJUH Women’s Health Institute

Purpose: To create a literature review of the potential benefits of using Chinese Herbal Medicine to alleviate symptoms of Vaginal Atrophy in Postmenopausal women.

Significance: Castelo-Branco et.al. defined Vulvovaginal Atrophy (VVA) as a condition common in postmenopausal women that is associated with decrease in estrogen levels and sex hormones. VVA involves changes in the labia majora/minora, clitoris, vestibule urethra, and bladder. Changes in the vagina includes itchiness, dryness, irritation, burning sensation, and sometimes, painful intercourse and urinary tract infections. Castelo-Branco et. al. 2015 also found that 40% of post menopausal women suffer from this condition and VVA does not only affect sexual functioning, but also affects daily activities and body image. Similarly, Cahill 2012 found that oral hormone replacement therapy (HRT) is being used as a treatment option for VVA, however The North American Menopause society 2007 in Cahill 2012 indicated that there is a high risk of endometrial hyperplasia, carcinoma, and breast cancer as side effects with the use of HRT. This is quite obvious in its significance that the treatment of Vaginal Atrophy calls for an evaluation towards the use of an alternative method for treatment.

Method/Approach: An extensive literature review of journal articles using Pubmed as the search database for published articles on the topic of Vaginal Atrophy and Chinese Herbal Medicine was first conducted. This search consisted of three parts. Part I consisted of a search on published articles on the definitions and treatment of vaginal Atrophy. Part II consisted of a search on the philosophies and history of Chinese herbal medicine. Part III was a search combining the effects of Vaginal Atrophy (inflammation, estrogen levels, microbial activities, and epithelial cells) with 16 different Chinese herbs. Result from the search were compiled in a literature review using 50 journal articles.

Outcomes/Results: From the literature review, it was discovered that 16 Chinese herbs have anti-inflammatory properties. 2 out of the 16 herbs showed that they have an effect on epithelial cells; Astragalus (Huang Qi) and Angelica sinensis (Dang Gui, Dang Guai). 7 out 16 showed increasing effect on estrogen levels and 5 out of the 16 herbs has an effect on microbial activities.

Evaluation/Conclusion: Although there have been several studies on Chinese Herbal Medicine as an alternative medicine for different gynecological disorder, there is limited research on the effect of Chinese herbs on Vaginal Atrophy. Further studies are still required and encouraged--particularly in identifying any side effects when using the herbs alone or in combination.
Title: Becoming an Ambulatory Care Facility

Name: Yessenia Faican

Preceptors: Deloris Dockrey, MPH, Clinic Director

Agency: Hyacinth AIDS Foundation

Purpose: To facilitate process of converting Hyacinth in Newark, NJ to Hyacinth Health and Wellness Center, an ambulatory care facility, by analyzing data to complete requirements to obtain licensure

Significance: As of December 31, 2016, the county of Essex has reported 9,578 people living with HIV/AIDS in which 5,860 cases are males and 3,718 are females. In Newark, 5662 persons are living with HIV/AIDS in which 3,485 cases are males and 2,177 are females. By becoming an ambulatory health facility, Hyacinth in Newark will be renamed Hyacinth Health and Wellness Center. After obtaining their license to become a clinic, it will be allowed to offer preventive, diagnostic, and treatment services to patients on the same day. Other ambulatory care services will include primary care and hospital outpatient services.


Outcomes/Results: After analyzing the Manual Of Standards for Licensing of Ambulatory Care Facilities, existing policies were modified and new ones were created to meet the new requirements necessary to be approved. The first policy created included a chart delineating the lines of authority, responsibility, and accountability for the administration and patient care services for the facility. The second policy included services that will be provided by the clinic which include preventive, diagnostic, and treatment services.

Evaluation/Conclusion: Modified and newly created policies will be handed to the supervisors of Hyacinth in Newark to ensure everything is in place. The policies will then be handed to the State of New Jersey to obtain a license to become Hyacinth Health and Wellness Center by the end of 2018.
Title: Assessing Adult’s Motivation, Expectation and Satisfaction of Orthodontic Treatment

Name: Emily Fernandez

Preceptors: Direct Supervisor: Jordan Albanese
Project Supervisor/Doctor: Dr. Celestine Vives

Agency: Robbinsville Orthodontics

Purpose: To analyze what adult patients expect from orthodontic treatment that might influence the treatment outcome, patient satisfaction and cooperation.

Significance: As an orthodontic office in Robbinsville, NJ the office has seen that majority of the new patients coming into the office are adult patients in the last year. Generally, patients at this office are 7-18 years old. Dr. Vives wants to better understand her adult patients (19+) and what made them want to start orthodontic treatment at their age, any discomfort during treatment and satisfaction with teeth movement. By assessing and gathering information, Dr. Vives wants to become more confident in treating her adult patients and whether in the future to target marketing in the growing adult population interested in orthodontic treatment.

Method/Approach: Data were gathered using a patient-centered questionnaire to use as qualitative evaluation to assess motivation factors for adults seeking orthodontic treatment. This was achieved by structured investigations and key questions that were used to construct the questionnaire assessing motivation for treatment. The questionnaire was given to 52 adult orthodontic patients who were close to finishing their treatment. Ages ranged between 19 years old to 70 years old. Average is 35 years old.

Outcomes/Results: Of the sample size (n=52), 36 are women while there are 16 men over 19 years old that have been patients for over a year and/or almost done with their treatment. At the beginning of treatment patients were asked why they wanted orthodontic treatment. Dislike of appearance of teeth (37 patients/71%), problems chewing or flossing (7 patients/13%), need treatment for future work like bridge or implant (5 patients/10%), miscellaneous (2 patients/4%). After meeting with Dr. Vives the first time, 90% of patients gave the doctor a 8 or higher out of 10 level in trust with her treatment plan. After treatment or close to end of treatment, 23% complained about pain after adjustments, 40% had issues flossing, 16% complained about treatment taking longer than doctors given timeline, 18% of patients were told by Dr. Vives that she will do her best to get their ideal smile based on certain limitations. About 59% of patients believed that had better results than expected while 41% expectations were met. 100% felt safe and are happy with their overall treatment.

Evaluation/Conclusion: Data gathered from interviews and patient-centered questionnaires from the 52 patients shows that adult patients pay more attention to details and have a high interest in their esthetic smile. With given results, being aware of limitations and trust in the doctor influenced the overall experience. Dr. Vives can conclude that adult patients are great candidates for orthodontic treatment.
Internship Abstract

Title: Training Compliance Audits
Name: Julianne Ferraro
Preceptors: Carrie Johnson, Program Development Specialist
Agency: Middlesex County Office of Health Services

**Purpose:** To standardize training expectations, identify gaps within each job role, and increase compliance with OSHA general industry training requirements.

**Significance:** An estimated $13.5 million dollars per year is lost in a business from ineffective training per 1000 employees. Training is the best opportunity to expand knowledge and increase quality standards within a workplace. According to the Occupational Health and Safety Administration (OSHA), training is an essential part of all safety and health programs in order to protect workers from injury and illness. In addition to preventing injury and illness, workplace training strengthens skills, increases innovation, creates consistency across individuals, and helps with employee retention. Above all, training creates standardization. Standardization streamlines every process in a workplace, defines expectations, and increases accountability, productivity, and efficiency.

**Method/Approach:** A baseline evaluation of employee FEMA training records was conducted in 2015. To expand upon previous training records, expectations for each employee per specific job role were discussed, categorized into 7 groups, and set with department heads. Training expectation syllabuses were created for each group, but not distributed. A request for training transcripts was sent out to all Office of Health Services employees and every employee was given 4 weeks to hand in proof of training acquired since the year 2010. Data from 104 employees was exported to a spreadsheet and tracked each week. At the end of the collection period, a gap analysis was conducted, and post measurements were analyzed to determine the organization’s current compliance rate.

**Outcomes/Results:** Overall training compliance for the organization increased from 27% to 52%, a 25% increase. The Nursing Division (n=30) had a 20% increase among 11 required trainings, the Inspections Division (n=27) had a 55% increase among 8 required trainings, the Environmental Division (n=26) had a 27% increase among 16 required trainings, the Administrative Division (n=11) had a 28% increase among 5 required trainings, the Deployment Team (n=24) had a 14% increase among 24 required trainings, the Public Health Preparedness Division (n=6) had a 24% increase among 11 required trainings, and the Health Education Division (n=4) had a 20% increase among 11 required trainings.

**Evaluation/Conclusion:** Every department showed an increase in training compliance. If trainings prior to 2010 were accepted, the overall training compliance rate would be even greater. Gaps between division head expectations and corresponding training compliance rates were discovered. Based on the continued existence of gaps, it is recommended that the job role training expectations be formally communicated to existing employees as well as any new hires.
Title: Green Infrastructure for the City of Trenton, Mercer County, New Jersey

Name: Dylan Fisher

Preceptor: Leslie Floyd, Planning Director for Mercer County

Agency: Mercer County Planning Department

Purpose: To compile a report for the proposal of green infrastructure in the City of Trenton, New Jersey to benefit the community on environmental, economic, and social scales.

Significance: Trenton is one of the most historic locations in all of New Jersey. Despite its rich history and being the center of New Jersey state government, Trenton has significant infrastructure and environmental problems. Trenton continues to struggle with waste water management problems, due to the fact the city continues to use a combined sewer system (CSS). When using combined sewer systems, both waste water and sewer flow in the same channels, thus attributing to major health hazards throughout the city. The most effective way of dealing with this health hazard is through an approach known as green infrastructure. Green infrastructure, otherwise known as GI, can be defined as a, “an approach to water management that protects, restores, or mimics the natural water cycle.” (American Rivers, 2018).

Method/Approach: This report requires many hours of analysis and research. The first step entails identifying the problem, finding the most cost effective infrastructure for Trenton, and then studying policies passed in other states that have begun using green infrastructure. The following cities are used as examples throughout the report: Pennsylvania, Connecticut, New York, Chicago, and Canada. Additionally, conversations with Mercer County urban planners who are well versed in this topic took place to further aid in research. The types of green technology recommend for Trenton are based on publications, green infrastructure guides, and other scholarly documents.

Outcomes/Results: Investing and building green infrastructure can be very difficult and challenging, due to a variety of financial and governmental barriers. Only a limited amount of green infrastructure efforts have been adopted in New Jersey. Despite its limitations in the garden state, GI has numerous advantages that are clearly defined by the New Jersey Department of Environmental Protection which include but are not limited to, “improved air quality, reduced carbon emissions, reduced heat island effect, property value uplift, cost-effective water quality improvements, energy savings, recreational improvement…” (New Jersey Department of Environmental Protection, 2018).

Evaluation/Conclusion: Overall, adopting green infrastructure for the state of New Jersey is a challenge. Cities that have already implemented green infrastructure have the appropriate legislation to support such endeavors. Unfortunately, until New Jersey updates its current legislation that supports and approves of green infrastructure, not much can be implemented within the state of New Jersey, let alone Trenton. Besides law adaptation, community awareness and outreach has also been found to increase GI efforts.
Internship Abstract

Title: Safety Ambassador Program Impact on Elementary School Safety Behaviors

Name: Kimberly Fivek

Preceptors: Direct Supervisor: Diana Starace, Injury Prevention Coordinator
Project Supervisor: Jay Okesola, Safety Ambassador Program Coordinator

Agency: Robert Wood Johnson University Hospital- Department of Trauma and Injury Prevention

Purpose: To assess the effectiveness of the RWJ Safety Ambassador Program in improving safety by analyzing pre- and post-data that reveals the safety behaviors of participating 1st and 2nd grade students in Middlesex County.

Significance: According to the Centers for Disease Control and Prevention, unintentional injuries are the leading cause of mortality and morbidity for children in the United States. More than 9.2 million children are treated for unintentional injuries in emergency departments each year across the United States. The Safety Ambassador Program aims to put an end to this phenomenon, by partnering high school students who are trained in four injury risk areas, with 1st and 2nd graders across Middlesex County, to educate them about ways to prevent injury.

Method/Approach: Pre- and post-program data were collected from the elementary students using a “yes/no” answer sheet. Elementary students were presented with four questions that were designed to reveal their safety behaviors. Incomplete answers were excluded from the data. Through self-report, student responses were recorded in an excel spreadsheet.

Outcomes/Results: When analyzing the safety in and around cars statement “I sit on a booster seat every time I ride in a car” for the 2016-2017 school year, 81.1% of students answered with the desired response on the pre-test, compared to 89.5% on the post-test. For the 2017-2018 school year, 84.3% of students answered with the desired response on the pre-test. When analyzing the statement “When I ride my bike, scooter, or skateboard, I always wear a helmet” for the 2016-2017 school year, 94.7% of students answered with the desired response on the pre-test, compared with 97.6% on the post-test. For the 2017-2018 school year, 94.9% of students answered with the desired response. When analyzing the fall prevention statement “I stop to tie my shoe, or ask someone to tie it for me, whenever it comes undone” for the 2016-2017 school year, 85.3% of students answered with the desired response on the pre-test, compared to 92.9% on the post-test. For the 2017-2018 school year, 85.8% of students answered with the desired response.

Evaluation/Conclusion: For the 2016-2017 school year program, elementary students showed an 8.4% improvement in desired behavior response for the booster seat statement, 2.9% improvement for the helmet statement, and a 7.6% improvement for the shoe tying statement, comparing pre- and post-data. Effectiveness of the Safety Ambassador Program is proven to be true, as there was an average improvement of 6.3% among behavioral questions from pre-test to post-test. Data from 2017-2018 will be further analyzed once post-data is received in late May.
Internship Abstract

**Title:** Examining Technology Usage in Breast Cancer and Prostate Cancer Survivors

**Name:** Grace Fletcher

**Preceptors:** Direct Supervisor: Shawna Hudson; Project Supervisor: Stacy Davis

**Agency:** Robert Wood Johnson-Department of Family Medicine

**Purpose:** To compare technology usage in breast cancer and prostate cancer survivors using a local sample (n=45) compared to data from the Health Information National Trends Survey (HINTS) (n=162).

**Significance:** It is predicted that the amount of cancer survivors will increase to approximately 18 million by January 2022 (Siegal et al., 2012). Cancer survivors are at risk for comorbid conditions and need follow-up care to stay healthy. Identifying how both breast and prostate cancer survivors use technology may lead to more efficient ways to manage their after-treatment care.

**Method/Approach:** HINTS data from breast cancer and prostate cancer patients were compared to data collected from our Rutgers study called Extended Cancer Education for Long-term Survivors (EXCELS) which recruited 45 breast and prostate cancer survivors from two local primary care practices. Patient-reported outcomes were collected using survey methods. Three questions asked if the participant: 1) ever went online; 2) ever used the internet to communicate with a doctor or doctor’s office; and, 3) ever shared health information on a social networking site. All analyses were conducted using SPSS.

**Outcomes/Results:** There were differences in technology usage between the HINTS and EXCELS study populations. Use of internet and email was higher for the EXCELS participants (96% breast cancer and 95% prostate cancer) than reported in HINTS (65% breast cancer and 79% prostate cancer). Communication with a doctor or doctor’s office online was higher among the EXCELS study population (58% breast cancer and 52% prostate cancer) than reported in HINTS (26% breast cancer and 48% prostate cancer). Sharing health information on a social networking site was higher among the EXCELS study population (38% breast cancer and 10% prostate cancer) than reported in HINTS (12% breast cancer and 7% prostate cancer). As well, breast cancer survivors displayed higher usage than prostate cancer survivors of social networking for sharing health information.

**Evaluation/Conclusion:** Usage in the EXCELS groups was higher than usage in the HINTS groups for each of the three questions. Residents of New Jersey, possibly due to the state’s density, may have more exposure to technology compared to people in other parts of the country. This finding may indicate that our local population maybe more receptive to using technology driven educational material aids in healthcare facilities to communicate with patients than other sites locally. In addition, breast cancer survivors displayed different rates of usage, e.g., higher rates of social media than prostate cancer survivors. Since most breast cancer survivors are women and all prostate cancer survivors are men, this may indicate that there are gender differences that should be considered when designing and distributing patient education materials.
Title: Cancer Survivor Health Screening Compliance

Name: Carolina Foksinski

Preceptors:
Direct Supervisor: Evelyn Robles-Rodriguez, RN, MSN, APN, AOCN
Project Supervisor: Roxanne Berger, LPN

Agency: MD Anderson Cancer Center at Cooper, Camden, NJ

Purpose: Extract 2016-2018 electronic medical record data to compare health screening recommendation compliance of cancer survivors who attended an end-of-active treatment survivorship care plan visit to patients who opted out of the visit in order to provide insight on patient health management routines, measure program success in encouraging patients to adopt preventive screenings and healthy lifestyles, and determine the need for survivorship care plan visit protocol changes.

Significance: According to the National Cancer Institute, in 2018, an estimated 1,735,350 new cases of cancer will be diagnosed in the U.S., and 609,640 people will die from the disease. Fortunately, early screening and corresponding early treatment greatly reduce the mortality from cancers of the colon and rectum, breast, cervix, and lung. Today, there are an estimated 15.5 million cancer survivors in the United States. A new study showed that the percentage of US adults within appropriate ages screening for colon, breast, and cervical cancers are only 58%, 73%, and 81%, respectively.

Method/Approach: Retrospective data was collected from Cooper’s electronic medical record system, EPIC, on MD Anderson Cancer Center patients who have completed active treatment. Patient data regarding individuals’ compliance with screenings by their target due dates—mammogram, and/or colonoscopy, and/or Pap smear, and/or PSA test—were recorded and the directly adjusted rates of the two patient groups—survivorship care plan visit participants and nonparticipants—were analyzed.

Outcomes/Results: The sample size cohort comprised of two groups of cancer patients who completed active treatment. The first group constituted patients participating in the survivorship care plan visit (n=497) and the second group constituted patients who did not (n=180). Data collection revealed a 61% overall screening compliance rate for all applicable screenings amongst the participating group and 43% compliance amongst the latter group. Colonoscopy screening rates for the first and second group yielded 72% and 63% compliance, correspondingly. Despite 24% of program participants and 29% of nonparticipants having undergone bilateral mastectomies and not needing further routine screening, mammogram utilization by remaining patients yielded 90% and 79% compliance rates, respectively.

Evaluation/Conclusion: The Survivorship participant group exhibited 18% greater overall screening rates than the nonparticipant group, and 14% higher compliance for colonoscopies and 17% higher for mammograms, than the general US public. Health education seminars, screening due date reminders via telephone and mail, and promotional screening events for underserved populations aim to further increase screening rates. While current rates indicate efficacy of patient management tools and follow up care plans, greater patient engagement could be achieved through internal program expansion.
Internship Abstract

Title: The Effects of Increased Cesarean Sections in the United States

Name: Chrystal Fredericks

Preceptors: Gloria Bachmann, MD, Director of Women’s Health Institute; Percy Yeung, Ph.D.

Agency: Robert Wood Johnson Medical School Women’s Health Institute

Purpose: To understand the causes of increased surgical deliveries and the health impacts on mothers and newborns in the United States during the past thirty years.

Significance: The cost of cesarean sections that may not have been indicated in 2008 was estimated at over $687 million in the United States. The average cesarean section costs $20,000 compared to $11,500 for vaginal deliveries. Understanding the potential causes of increased cesarean section rates will give providers and patients the proper tools and knowledge in those cases in which there is an option between cesarean section or vaginal delivery.

Method/Approach: Research was conducted on the origin of cesarean sections. Followed by its procedure, risks, benefits, uses, and costs in the United States. Databases such as MEDLINE, PsycINFO and Ovid Healthstar were used. Governmental studies and expert advice was also referenced.

Outcomes/Results: The first cesarean section in the United States was performed on a 14-year-old girl in Nassau, New York in 1822 by the patient herself. In time, cesarean sections have become more frequent. The overall rate of cesarean sections in the United States increased 60% between 1996 and 2009 (from 20.7% to 32.9% respectfully). Although declining to 32.7% in 2013, nearly one-third of births in the United States are delivered by cesarean section each year. The country had the third highest rates of cesarean sections in 2008, many of which may not have been indicated. Reasons for this high number are, but not limited to, convenience, monetary incentives, and malpractice concerns. Cesarean sections can cause short and long-term risks for both mothers and babies. Some risks being an increased risk of infection, surgical complications and increased prevalence of uterine rupture in subsequent pregnancies. Newborns are at risk of asphyxia, scalpel lacerations, and neonatal respiratory morbidity. Increasing knowledge of risks and benefits and following evidence-based practice can allow providers and patients to make proper choices. Potentially decreasing the number of non-indicated cesarean sections and costs associated with it may be assisted by optimal patient education. Future WHI interns may be able to use the information from this project to create informative and culturally appropriate posters and pamphlets that can be displayed in obstetrical ambulatory areas.

Evaluation/Conclusion: Although research has revealed the high rates and costs of non-indicated surgical deliveries, the United States still continue to have an increased number of these deliveries. Creating informative posters and pamphlets geared towards local ambulatory clinical areas can allow future interns to create more awareness to this issue for pregnant women and their families.
Title: Understanding the Community of Aging LGBT People of Color and Housing

Name: Mara Friedman

Preceptors: Jeanette Williams, Board Member- Secretary

Agency: Hyssop Housing Inc.

Purpose: To develop a tool to understand and analyze the housing needs and desires of aging LGBT people of color.

Significance: Appropriate housing is a key factor for the successful aging of seniors. By the year 2050 eighty-four million people in the United States will be senior citizens. The population of seniors that are a racial minority will double from 20% to 42% over the course of the next thirty years with 12% identifying as African American. It is understood that at least 3.8% of people identify as members of the LGBT community currently and that this percent is likely grow as acceptance expands. AARP does not collect information about sexual orientation of seniors. SAGEUSA is a fully funded organization that advocates for LGBT seniors and certifies health professionals to work with this population. They only provide one optional course that addresses the unique needs of LGBT seniors of color despite growing research showing that this subgroup has distinct needs. This has created massive barriers to the successful aging of older LGBT people of color without a pathway towards remediation.

Method/Approach: An analysis in SPSS of previous iterations of the organization’s survey instruments revealed opportunities for growth and particular trends in the population. A literature review was conducted to understand the scope research on the intersections of age, race, and sexual orientation as it relates to housing, with preference given to the variable of age. This amassed only 20 articles. A review of existing survey instruments designed to capture slightly different populations was conducted. These surveys were collected from organizations like AARP and Greenhill Senior Living. Finally, the proposed instrument was compared to proven survey research methods as outlined in Making Sense of the Social World 4th Edition.

Outcomes/Results: The simple two page survey instruments is both aesthetically pleasing and founded on the principles of survey research. All of the specific published studies observing this community utilize a qualitative approach. The AARP and Greenhill Senior Living Survey are over four pages long. Question response rates from the initial survey varied greatly from 100% to 50%, therefore major themes from qualitative research such as social engagement and fictive kin were posed concisely.

Evaluation/Conclusion: Each component of the approach lead to specific insights about the many variables of the necessary to this unique survey. The final survey instrument eliminates many of the ambiguous and distracting aspects of the original instrument. An internal formative evaluation will be used before the implementation of the survey.
Internship Abstract

Title: Quality Improvement of Chronic Disease Self-Management Program Marketing Strategies Based on Ishikawa-Fishbone Analysis

Name: Yonatan Gershon

Preceptors: Devangi Patel

Agency: Montgomery Township Health Department

Purpose: To eliminate barriers to successful implementation of Stanford University’s Chronic Disease Self-Management Programs: CDSMP, DST, and CST.

Significance: About of all adults have a chronic health condition, including cancer, diabetes and hypertension. Self-management education courses have proven effective for people with chronic conditions. These interventions can reduce symptoms, restore confidence and independence and better overall quality of life. Courses are generally very affordable and are designed by reputable organizations like Stanford University and are taught by certified instructors. In 116 workshops, of ~1400 attendees, only 71% completed their courses. Eliminating barriers to participation will make a big difference in quality of life for chronically ill people who otherwise would remain unable or unwilling to attend.

Method/Approach: A focus group of 20 facilitators was convened to collect, organize, and assess the issues organizations were having attracting participants to their chronic disease programs. The issues were organized into an Ishikawa cause-effect Fishbone diagram to determine which factors needed to be addressed. Two months later, a second meeting was conducted with 10 facilitators and the Fishbone was refined further. The Fishbone diagram was used to identify the root causes of the barriers identified to program implementation and propose solutions that address the root causes.

Outcomes/Results: From our Fishbone analysis we decided on several deliverables to be completed by the end of 2018. We decided on a number of measures aimed at addressing the problem: a marketing campaign including a flyer with a master schedule of all programs in the county for the year, a section on the GMPHP website where organizations can share resources, a data tracking system to pool data collected for each program, trainings to help facilitators conduct provider outreach and manage groups more effectively, and trainings to help doctors market the programs to their patients.

Evaluation/Conclusion: The main idea to be taken from the Fishbone diagram is the importance of increased communication. That means better communications between facilitators, between facilitators and attendees, and between facilitators and providers. Organizations and healthcare providers that provide the workshop need to avoid “siloing” their CDSMP data. By combining their efforts, facilitators can tackle attendance issues more efficiently. The GMPHP chronic disease workgroup has a clearer vision and an action plan now.
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Evaluation/Conclusion: Each component of the approach lead to specific insights about the many variables of the necessary to this unique survey. The final survey instrument eliminates many of the ambiguous and distracting aspects of the original instrument. An internal formative evaluation will be used before the implementation of the survey.
Title: Community Health Education and Resources within Elizabeth and Union County

Name: Taylor Gibson

Preceptors: Roselena Twyne, Clinical Support Specialist

Agency: Trinitas Regional Medical Center

Purpose: To promote Trinitas RMC services within the greater Elizabeth area and Union County through health education seminars and increase attendance at health education events.

Significance: Trinitas Regional Medical Center is a small community-based hospital within Elizabeth, that serves the city and surrounding communities. The Community Health Education department’s mission is to increase the community’s awareness through informative health education seminars and discuss resources on different areas of health and treatment. By providing health seminars, the objective is to implement health promotion and disease prevention in effort to combat poverty, lack of resources and health disparities.

Method/Approach: The community health education department reviewed their previous marketing strategies and events from last year. The department then reviewed the Community Health Needs Assessment (CHNA) to see if the disparities changed from last year to this year in order to properly target this year’s audience. CHNA is a document that is created by a hospital to help strategize opportunities to improve the health of the community. After reviewing data, the department noticed that the audience remained the same, thus deciding to host similar events. After deciding the target audience, the department determined to market events differently. Past events were marketed by using email lists, Facebook and flyer handouts. This year’s events will be marketed through word of the mouth, local businesses, advertisements and partnership with Shaping Elizabeth, a community initiative group comprised of the areas stakeholders and Eventbrite. After applying these methods, the department will evaluate whether there was an increase in attendance from January-March 2017 to January-March 2018.

Outcomes/Results: After applying new marketing methods such as becoming hands on with distributing flyers amongst local businesses, creating a department email list, twitter page and Eventbrite, the department saw an increase in attendance especially amongst crowds that used social media. The first quarter in 2017, the department averaged at 22% in volume. The first quarter of 2018 after implementing new techniques, the department saw a 78% increase.

Evaluation/Conclusion: During future events, the department will conduct a formative evaluation asking where attendees heard about the event (e.g. Facebook, Twitter, flier, Eventbrite, website, email or word of mouth). The next few questions asks about comments on the program, the days and times that are best for those to attend lastly clarifying name and email address of the attendee. These evaluations will be measured to identify whether or not the techniques work. In conclusion, the department was able to see an increase in attendance at community health events through making marketing technique changes.
Title: Woodlands Restraint Use Analysis

Name: Jay Gillespie

Preceptors: Kristen Farry

Agency: Woods Services

Purpose: To analyze data on restraint use in the Woodlands Program

Significance: To study the social question of whether restraint use decreases over time for individuals. Consumers at Woods are often people with the most extreme developmental and intellectual disabilities. They often have violent outbursts where they harm themselves or are likely to harm others. Although there is empirical evidence to back the effectiveness of restraint use in a comprehensive treatment package, restraint use is regulated to emergency situations in which an individual might be harmed and other interventions have already been tried. The Eric Weiss report on deaths from restraint use drives efforts to reduce the use of restraints. This study was to ascertain the pattern of restraint use in the Woodlands Program.

Method/Approach: As individuals are discharged, they are replaced by new admissions whose behaviors typically require high levels of restraint use. For this reason, the number of restraints per month remains relatively static across the population while it should be decreasing at individual levels. Instead of looking at the total restraints used, it is more helpful to look at people on an individual level to see if there is a decrease over time. This way it is possible to see whether restraint use declines, increases, or remains the same as people go through the program. The group selected for this was admitted between 7/1/15 and 12/31/16. All these individuals had a full 12 months of data. For all cases, month #1 is the first full month the individual was in the Woodlands Program. The data used in this study was obtained from the Excel database maintained by the Woodlands Program. All data is directly referenced to the individual, so it is possible to see how often that person was restrained in any given month.

Outcomes/Results: For all subgroups, the trendline shows a pattern of deceleration in restraint use. Not only is there always an appreciable decline in restraints but the number of individuals in this group restrained per month is 14.2. This means only 12.9% were restrained on average in a given month. Most of the restraints used in any given month are used on just a small group of repeat offenders. 64 individuals were never restrained while 19 were restrained 5 or more times and 10 were restrained 10 or more times. Data of people who had been restrained were separated into subgroups of 5 or more times and 10 or more times. When comparing the group of individuals that had been restrained 5 or more times to those that had been restrained 10 or more times, it was easy to see that the 5 or more group had a much greater deceleration. The data were then further separated, and a new 5-10 group was created. Individuals who were restrained 5-10 times showed a much greater deceleration over time that those individuals restrained 10 or more times.

Evaluation/Conclusion: All subgroup showed a pattern of deceleration over time. Although for certain groups it is more effective. Individuals who were restrained fewer that 10 times were much more likely to see a decrease in restraint use over time. Restraint use has been shown to be an effective part of a comprehensive treatment package among all subgroups. It should be looked at in the future to see if this data holds up in the second year of treatment and with the implementation of the Ukeru program.
Title: Rogue One Database

Name: Shanika Gracien

Preceptors: Direct Supervisor: Tamara Swedberg, Instructional Technology Specialist

Agency: Edward J. Bloustein School of Planning and Public Policy

Purpose: To allow the internship search for the preceptors and students to run efficiently by creating a database that will be lasting and malleable.

Significance: Every academic year Edward J. Bloustein School of Planning and Public Policy has over 500 students that enter into the internship program. These students intern all over the New Jersey and New York to gain experience in professional settings. Unfortunately, most students face difficulties finding those internships. They usually have a difficult time finding an internship that aligns with their interest. A list of preceptor contacts from different organizations exists but this list isn’t easy to search or update. Creating a database using either AirTable or Knack will allow for the preceptors to search organizations based on the students interest and email or print that list out for the students.

Method/Approach: Research was completed on over 15 different CRM, WordPress Plugins and cloud based spreadsheets. After looking at the features of the different databases and comparing them to what was needed, two were selected to go to the trial stage. The two that were selected were AirTable and Knack. During the trials, data were imported to see how easily it was to manipulate, search, add, and update the information.

Outcomes/Results: Once all the trials were completed an assessment took place. This assessment compared it’s flexibility, how simple it was to search and its ability to send emails. A proposal was then written to showcase which database was best. After the assessment and the proposal were completed it was determined that AirTable would be the best for the program. A presentation took place to compare the different databases with the leaders of the internship program. Each database were explained and the trials were shown. They decided to move forward with AirTable.

Evaluation/Conclusion: This database will allow students to have a easier way of getting contacts for their internship search. It will allow the forms to be created to allow organizations to update their information. It’ll cut time search time down for program leaders and organize the all of the internships into a single space.
Title: Disaster Cycle Services (DCS)

Name: Josephine Grana

Preceptors: Lisa McGee, Regional Workforce Engagement Manager

Agency: American Red Cross

Purpose: To reach out to volunteers throughout the New Jersey region to encourage and keep them engaged as much as possible in missions within the American Red Cross.

Significance: The American Red Cross depends on community service from volunteers to carry out humanitarian work. During hurricane season, volunteer numbers increase and decreased afterwards. ARC’s mission is to keep these volunteers active all year round. However, if the ARC is able to get these volunteers to be active all year round, The ARC can make it possible to respond to nearly all disasters every year, most of them home and apartment fires. Disaster volunteers also provide preparedness services and information before disaster strikes and assist those who have experienced a disaster with their recovery.

Method/Approach: All volunteers were contacted through phone calls and emails to confirm their statuses for the last two months. Volunteers that indicated that they were no longer interested in volunteering, were removed and inactivated. The survey targeted volunteers interest in activating to work in American Red Cross shelters specifically.

Outcomes/Results: The list of volunteers that were assigned to work on, contained about 1,200 volunteers. About half of the them were removed from that list. When we finished making all the calls, our list of active volunteers decreased drastically. This gave us a more efficient roster that we can work with, it improved about 58%. We had volunteers that were willing to respond to emergencies and disasters. We collected a total of 482 responses out of 5000 from the surveys that were sent out to all the volunteers. In the survey, 279 out of 479 responses, 58.25% said that they would prefer to volunteer for sheltering services, and 138 out of 216, 63.89% had already participated in a sheltering program. There was an evenly distributed amount of volunteers among all of the counties in the New Jersey region. We asked our active volunteers, what shelter roles have you been trained in? There were a total of 206 respondents. There were 43.69% feeding in shelter, 43.69% Dormitory Management, 50.97% Registration, 18.93% Family Reunification, 10.68% Disaster Health Services, 8.74% Disaster Mental Health, 23.79% Shelter Manager/Shift Supervisor, and 36.41% Have not any of the above shelter training.

Evaluation/Conclusion: From all the phone calls, emails, and the surveys that were sent out, we can say that we successfully improved the effectiveness of the volunteering program. Now, we had a list that was more reliable than what we started with. All the volunteers that stayed active were more likely to respond to an emergency or a disaster. This project is done annually, and our results have been very beneficial to organization.
Title: Improving Grant Writing Procedures through Client Satisfaction Ratings

Name: Chelsea M. Gray

Preceptors: Stacey Abate, Grants Consultant

Agency: Stacey Abate Grant Consulting, Ocean County, NJ

Purpose: To analyze the effectiveness of the grant writing process used through client satisfaction ratings and to establish better methods of practice to improve grant writing efficiency and completeness and strengthen client relations and satisfaction.

Significance: Quality improvement measures have changed throughout the years due to changes in taxpayer resources and government funding. As a result, many agencies have been given the task to do more with less funding available (McLees, Nawaz, Thomas, & Young, 2015). Grants have become a mainline source used to ensure that all agencies, especially those grounded in public health, can continue to increase quality improvement levels. While difficult to obtain initially, prior funding has shown to be the best predictor of continued government support (Suárez, 2011). Increased sustainability, accountability, and efficiency amongst agencies provides opportunity to test current performance measures in order to ensure maximum efficiency across all sectors (Suárez, 2011).

Method/Approach: A literature review was found to establish the definitions for efficiency and effectiveness. Following these guidelines, a survey was created and sent to 8 clients (N=8) in order to evaluate their experience in the grant writing process with Stacey Abate Grant Consulting in the last year. The survey, composed of 9 questions, touched on various topics that analyzed the services they received before, during, and after the grant process was completed; it asked questions in a yes/no, open-ended, and Likert scale format. Data was exported to a data sheet and categorized under an overall performance rating of: a) extremely dissatisfied, b) dissatisfied, c) neutral, d) satisfied, and e) extremely satisfied.

Outcomes/Results: Of the sample cohort size (N=8), 5 responses were recorded. 100% of alpha testers were returning clients. 100% of respondents reported the reception of 5+ grants with the agency, 100% of respondents rated their overall satisfaction with the agency with “satisfied” or better, and 100% of respondents felt that the agency exceeded all expectations. Process evaluation often examines the program before, during, and after it is implemented, but never looks at the process behind what it takes to actually receive a grant. It is assumed that, if a program is funded, the grant consultant has essentially done their job. However, it fails to analyze the attitudes and work ethic of the grant consultant. This survey is the first to do so and can one day be used to evaluate current grant practices.

Evaluation/Conclusion: The grant writing process can be further evaluated with a focus group consisting of grant professionals that aids in establishing best practices and provides suggestions of improvement for the nuisances that frequently occur during the grant process. The results of this focus group could potentially increase client numbers and respective clientele relations that are incurred in the process.
Title: Human Trafficking And Substance Abuse

Name: Jezabel Guerrero

Preceptors: Rosario Sanchez and Diana Starace

Agency: RWJ and the New Jersey Coalition Against Human Trafficking

Purpose: To create a database with Robert Wood Johnson Hospital dealing with the State of New Jersey dealing with substance abuse in human trafficking.

Significance: Most cases dealing with human trafficking are associated with drug exchange. Not only are dealing with drug exchange but they can become addicted. Once they are addicted it becomes harder to get help. When the victim has an addiction, they rely on the person giving them the drugs and then organizations find it harder to help them, because now they are considered addicts and don’t specialize in that. The truth is that human trafficking is the world's fastest growing in crimes, according to the U.S. State Department. 18,000 people are being trafficked in America today. The most common form of trafficking is forced labor in which 16.4 million people are involved with today.

Method/Approach: A database was created to keep records of the organizations dealing with human trafficking in the State of New Jersey only. The website records were kept in New Jersey only since it pertains to the residents there. Each county in New Jersey has a clinic or shelters for survivors. Steps for the project included on calling organizations and asking questions about their clinic. The 3 major counties in New Jersey and others were assigned more since the counties were smaller. The meetings attended, dealt with future projects and raising awareness. Each week there was meetings with the coordinator named Rosario, she would help find the contact list needed to call for each county. Every week emails would be sent to people associated with human trafficking. All tasks need to be recorded for the next interns to take over and complete.

Outcomes/Results: For the outcomes of this project, the organizations dealing with trafficking should be listed. Each county of New Jersey will provide help for survivors and lists all the hours and information for the organizations we find. With the organizations listed we will provide a hotline number and help if the person is dealing with substance abuse because many organizations don’t specialize in that. This information will help survivors be informed and aware that help is around. The database will be listed in English and also in Spanish. The goal is to find all the information and organizations in each of the counties assigned to help future survivors.

Evaluation/Conclusion: To make sure the project works, an evaluation has to be done of each county A reference will be made to keep track on how someone was informed about an organization in hopes that it was found through the database created.
Title: New Jersey Gender Earnings Gap Analysis

Name: Deena Hadhoud

Preceptor: Elaine Zundl, Research Director

Agency: Center for Women and Work

Purpose: To analyze gender differences in earnings and wages in New Jersey and identify policy solutions.

Significance: In 2016, the earnings gap between male and female full time year-round workers was $11,737 in New Jersey. The gender earnings gap is a complex and misunderstood issue varying by race, age, marital status and state. Earnings affect one’s quality of life and ability to qualify for government programs. Therefore, researching the extent and the demographics of those affected in New Jersey, can inform policies that help alleviate its causes and symptoms.

Method/Approach: First we researched the earnings gap and its causes, reading over twenty articles, reports and briefs. Then we analyzed data from the Census, American Community Survey (ACS), Bureau of Labor Statistics and Current Population Survey to define extent of the earnings gap based on race, gender, age, income bracket, and marital status with Excel. Finally, we did policy analysis and identified policies that could help reduce the effects or consequences of the gap.

Outcomes/Results: There is a larger gap between men and women earning $75,000 and over in New Jersey than in the rest of the country (12.5% in the U.S., and 14.2% in New Jersey). In 2016 21.6% of female heads of households fell below the poverty line as opposed to only 11.6% of male heads of households. Women of color also face larger earnings gaps than white women, Hispanic women being the most disadvantaged group. Earnings inequality also increases over one’s lifespan. The high cost of living in NJ only worsens the situation. A chapter in a report on these findings is under way including the policy suggestions below.

Evaluation/Conclusion: The earnings gap is a national issue that varies by state. Policies such as S-104, fair scheduling, universal preschool, and implementing use of a Supplemental Poverty Level could help alleviate the causes and symptoms of the earnings gap in New Jersey. Once the report is published it could benefit the public, policy makers, or legislators who are concerned about the issue.
Title: Analysis of AIDS Resource Foundation for Children’s Program Development Process

Name: Reina Hamayama

Preceptors: Annie Chen, Chief Operating Officer

Agency: AIDS Resource Foundation for Children (ARFC), Newark, NJ

Purpose: To assist in, document, and provide an analysis of program development techniques used by ARFC as the organization significantly expands its supportive housing initiatives serving HIV-positive homeless individuals.

Significance: Housing is healthcare for a person living with HIV/AIDS. ARFC has recently embarked on 2 major initiatives that address the supportive housing needs of HIV-positive individuals living in New Jersey. First is the NJ HIV Housing Collaborative, a statewide project that started in October 2017 with the main goal of ensuring every HIV-positive homeless person in NJ receives emergency housing, transitional housing, or supportive permanent housing. Second is the new transitional housing program, The Salon, working with women who live at the crossroads of HIV and domestic violence/sexual assault. Research has shown that 75% of the deaths in HIV-positive women who have experienced trauma are attributed to causes outside of their HIV diagnosis and are more likely to die from causes such as substance abuse, domestic violence, or even self-inflicted deaths. The goal is to develop and document how trauma-informed housing services can help the long-term health outcomes of individuals living with HIV/AIDS.

Method/Approach: The method being used to analyze ARFC’s program development work is an approach adapted from a framework called Appreciative Inquiry (AI). AI is defined as a model of organizational change in which its fundamental purpose is to take the overall perspective of an entire process to engage in the wholeness of it and “inquire” into that process or system’s strengths, possibilities, and successes. Essentially, AI asks strengths-based questions and attempts to provide strategies that use a group’s assets instead of just concentrating on its weaknesses or challenges. Throughout the process, the organization has begun to exhaustively collect data, analyze for trends, conduct consumer feedback groups, and facilitated focus groups--all through the lens of an Appreciative Inquiry approach. These assessments are monitored by the chief operating officer and the program developer and include in-depth follow-up discussions with me.

Outcomes/Results: As both programs are in its beginning stages, the areas that were studied and analyzed include results of the initial data being collected from the Housing Collaborative program including the demographics of homeless HIV-positive population in NJ, service needs of clients, trends in reasons for homelessness, etc. This program is entrenched in data collection because it needs to be flexible and adaptive to statewide conditions and is being evaluated by the Commissioner of Health’s office as a key initiative in New Jersey, with possible replication implications for other states.

Evaluation/Conclusion: Due to the time constraints of the internship, it was difficult to follow the programs through a full cycle of analysis. The method of Appreciative Inquiry has proven successful through the work of the ARFC in building teams and in being able to recognize and address changes to programs that will benefit clients in the long-term. AI has supported the development of a completely comprehensive program of The Salon.
Title: Assessment of Mental Health Service Usage Among Rutgers Students

Name: Barbara Hannan, Student

Preceptor: Direct Supervisor: Mark Cruz, Health Education Specialist

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

Purpose: To research the overall use of mental health services provided on and near Rutgers New Brunswick campus.

Significance: Males and females aged 18-24 have the highest prevalence of various mental health disorders including generalized anxiety disorder and depression (SAMHSA, 2018). In the largest national survey of transgender young adults to date, 41% of respondents reported having attempted suicide (SAMHSA, 2018). Furthermore, as socioeconomic status decreases, the prevalence of mental health disorders increases (2018). When comparing race, Georgia State University found that non-hispanic white patients were significantly more likely than other racial-ethnic groups to receive medication (2016). These varying statistics are worth examining in order to understand the reasons behind the trends in mental health status among college-aged individuals. Aside from researching the prevalence of several mental disorders, a miniature-horse therapy event will function to relieve stress on students as well as to get an representative idea of how students feel about their current mental health status.

Method/Approach: Several mental health facilities on and near Rutgers New Brunswick campus including Counseling, ADAP, and Psychiatric Services (CAPS) and Early Intervention Support Services (EISS) will provide information on student usage. Representatives from each facility will be interviewed using a survey. Accurate data on usage and services offered will be collected and compared to analyze trends in usage, reasons for seeking help, and the main reasons for not pursuing mental health assistance. A three hour-long miniature-horse therapy event will take place on April 9, 2018 at the Cook campus student center to act as a de-stressor for students. A short survey will be given to attending students which will provide feedback on the effectiveness of the event itself and the trends in mental health service usage among students.

Outcomes/Results: 82 current Rutgers students attended the miniature-horse therapy event and 74 surveys were completed. 100% of students reported that the event was helpful in reducing stress or taking some negative thoughts away. 54% of students reported that they are often stressed, depressed, and/or anxious during the semesters, but have not sought help on or near Rutgers campus. Only 25% of students reported feeling stressed, depressed, and/or anxious during the semesters and seeking help on or near Rutgers campus. Representatives from both CAPS and EISS claim that the stigma is the main reason people do not seek help. More expansive results on the interviews with EISS and CAPS are shown below.

Evaluation/Conclusion: Students generally attend a more casual event to alleviate negative thoughts or stress rather than seek professional mental help at a facility on or near Rutgers. While the stigma is the primary reason students do not utilize mental health services, accessibility, cost, and fear also play roles.
Purpose: To analyze and compare each region in New Jersey’s compliance with the Human Trafficking Survivor’s Assistance Fund found in the state’s Human Trafficking Prevention, Protection, and Treatment Act in order to propose solutions and make the best recommendation for the future.

Significance: New Jersey has taken steps to eliminate human trafficking, or modern-day slavery, and support both victims and survivors since amending its statutory law in 2013. In 2017, 161 cases of human trafficking were reported in New Jersey via the National Hotline, a 17 percent decrease since 2016. While these statistics show an improvement in New Jersey’s overall handling of human trafficking, an assessment of the resources and services for these victims and survivors mandated by the state is necessary. This analysis will determine whether or not services for human trafficking victims and survivors need to be developed in New Jersey.

Method/Approach: A questionnaire to assess the services and resources currently offered to human trafficking victims and survivors was created. Over 50 organizations and facilities were contacted from February 5th, 2018 until April 6th, 2018. Answers were received from 30 of these organizations and were combined in a shared spreadsheet. 40% of these responses were acquired by me. The answers were then sorted by county (21), then region (3). The “Human Trafficking Prevention, Protection, and Treatment Act” was analyzed, with a specific focus on Section 52:17B-238.

Outcomes/Results: Upon completion of this project, I found that Central Jersey has the highest frequency of organizations and facilities that provide services to human trafficking victims and survivors (12), followed by North Jersey (9) and South Jersey (9).

Evaluation/Conclusion: Based on these results, we can conclude that Central Jersey is the most compliant with the Human Trafficking Survivor’s Assistance Fund. While the other regions are not far behind, there are not an equal amount of resources throughout New Jersey. Thus, it is apparent that Section 52:17B-238 of Human Trafficking Prevention, Protection, and Treatment Act needs to be revised. Specifically, by stating that the state will intervene in areas where there is a lack of services for human trafficking victims and survivors, New Jersey can better aid this vulnerable population. A policy memo with possible solutions and a recommendation for Governor Phil Murphy will be mailed to the office of the Governor by May 4, 2018.
Internship Abstract

Title: UAS-NY Assessment Implementation and Effectiveness

Name: Bernard Hartley

Preceptors: Caroline M. Kelly, RN, Director of Nurse Management

Agency: Centers Plan for Health Living

Purpose: To explore the effectiveness of using the UAS-NY assessment and see how the process has become more streamlined, efficient, and accurate within the healthcare system.

Significance: Levels of care can be determined in many ways. However, in New York, the UAS (uniform assessment system) is used comprehensively to determine levels of care and type of care. The physical human effort/time spent to generate these patient recommendations decreases, as UAS is used. Compiling all important data factors and patient history into one digital database allows for streamlining the whole process of charting and care.

Method/Approach: To fully understand the UAS-NY, a registered UAS-NY user must access the system. Upon doing so, one is prompted to utilize a comprehensive assessment system linked to outpatient and long-term care facilities. Implementation of the system was adopted in 2014. Gathering aggregate data and opinions prior to UAS-NY would serve to be crucial to answer the question of effectiveness. Levels of care determined before UAS and after can be compared to see which recommendations proved to be most beneficial for the patients, as well as the providers.

Outcomes/Results: There was an overwhelming sense of appreciation for the implementation and usage of the UAS-NY. Not only does the UAS-NY allow for greater accuracy of assessments for patients, but it also allows for providers to use taking tools and to get more done. Having a system where data is compiled and sorted in a way that it can give recommendation based on other statewide inputs, allows for the most flawless integration of recommendations and assessments for long-term care patients. Providers at Centers Plan have adopted UAS-NY with higher than ever accuracy, year after year.

Evaluation/Conclusion: The more data we can gather in UAS-NY the better the recommendations and assessments can be. A system that is constantly changing and learning can only get better over time. At the moment, the UAS-NY is being used statewide. I believe that in order to further solidify the effectiveness of this system, we must expand the reach of it. A nationwide long-term care database would not only aid in complex situations, but it would also allow for even greater integration of patient needs to provider tasking.
Internship Abstract

Title: Community Health Intervention Assessment

Name: Margaret Haskopoulos

Preceptors: Pablo Garrón, Global Brigades Nicaragua Executive Director

Agency: Global Brigades

Purpose: To assess medical and public health interventions in rural Nicaraguan communities using brigade data and statistics.

Significance: Waterborne illnesses, including those caused by bacteria, virus, and protozoa are endemic to Central American countries. The World Health Organization estimates that 3.4 million people worldwide die yearly as a result of water-related diseases. Among the most common of limitations to addressing these illnesses in Central America is a lack of public health infrastructure in regard to sanitation and water access. Global Brigades, an international non-profit organization, implements a holistic, public health model in rural Nicaraguan communities to address health issues such as waterborne illness. These programs include the construction of latrines, hygiene stations, septic tanks, and water storage units. In their communication with Global Brigades staff, most communities expressed “lack of latrines or properly functioning latrines” and “limited access to potable water” as their top needs. Assessing the effectiveness of such interventions through a comparison of community health data and statistics is both beneficial and viable to future medical and public health programs in rural Nicaragua.

Method/Approach: Medical diagnosis and prescription data were collected during a medical brigade to the rural community of La Vainilla. Data were collected on 419 patients using health record forms completed by patients and physicians. The health forms were uploaded to a database and compiled into a report. Global Brigades’ Data Informatics team generated a report listing patient health outcomes and diagnosis statistics. Using data from medical brigades pre and post-public health intervention, the data informatics team created a report on the community of Los Encuentros de San Gabriel. Reports from both communities were compared for differences in waterborne disease frequency.

Outcomes/Results: Analysis of health data acquired before the implementation of public health interventions from Los Encuentros de San Gabriel and La Vainilla displayed a high frequency of probable waterborne illness such as infections of the gastrointestinal and urinary tracts in both communities (30.6% and 30.3% respectively). Examining health data from Los Encuentros de San Gabriel after the implementation of public health interventions displayed a decrease in waterborne illness (24.7%). The frequency of urinary tract infections decreased by 50% post-public health intervention.

Evaluation/Conclusion: After the construction of functional latrines, hand-wash stations, and water-storage units, the community of Los Encuentros de San Gabriel saw a decrease in waterborne illnesses such as infections of the gastrointestinal and urinary tracts. Further implementation of Global Brigades’ public health model will serve to promote better health outcomes among communities.
Internship Abstract

Title: Hepatitis C Screening Establishment

Name: Suemair Hassan

Preceptors: Vice President of Operations: Lydia Stockman  
Program Director: Anamika Desai

Agency: Robert Wood Johnson Hospital

Purpose: To sponsor Hepatitis C screenings around Central New Jersey and admit those that test positive to start a treatment plan or those that are at a high-risk to help them be aware of this disease. As well as to increase the number of liver patients at the liver center

Significance: Hepatitis C affects more than 200,000 individuals in the United States and many people don’t know they have the disease until it is too late. The disease is treatable but there is no vaccine at the moment. It is easily spreadable, and people do not show symptoms beforehand. It is spread by contaminated blood through the use needles or sexual contact. It has caused around 496,000 deaths in 2015 and we need to raise awareness and get people screened before it gets worse.

Method/Approach: Contact all the local community health organization and the local health departments that would be willing to collaborate with RWJBH to set up HCV screening sites in high prevalence areas. Also set up community fundraising/awareness programs for the general population to be aware of the dangers of hepatitis C. Partner with the NHL team NJ Devil to display an advertisement about these screenings and then table and raise awareness about the disease. However, screening events are the main source of reaching out to individuals and increasing the number of patients for the Liver Center. There is also a newsletter that must be released for individuals inquiring about the Center for Liver Diseases and Masses and what the center provides.

Outcomes/Results: At the moment, progress has been made in finalizing the screening events that will take place throughout the year. The month of May is Hepatitis awareness month and it is aimed to have multiple screenings in this month to target as many individuals as possible. We have reached out to New Brunswick township, Middlesex county, Somerset County, South Brunswick Township, and Monmouth County on possible sponsorship for a screening event. We have also contacted the Dominican American Communitarian Association, inc, NJ for providing us with a HCV screening table at their annual community health fair on June 24.

Evaluation/Conclusion: We will have results and conclusion once all of the screenings and events are completed.
Title: The Bold, Upstream, Integrated, Local, and Data-driven (BUILD)-Healthy Housing Assessment

Name: Nadia K. Hercules Barrera

Preceptors: Mariam Merced, MA, Director, Yesenia Hernandez, MPH, Coordinator and Ana Bonilla Martinez, BSPH, CHES.

Agency: Community Health Promotions at RWJUH, New Brunswick, NJ

Purpose: The Bold, Upstream, Integrated, Local, and Data-driven (BUILD) - New Brunswick Healthy Housing Collaborative tackles housing-related hazards by conducting home assessments, community education, and referring families to programs to address the health-related housing problems. The aim of the project is to engage residents and identify and implement solutions concerning healthy housing in New Brunswick, in particular for the Unity Square and Esperanza neighborhoods.

Significance: Home environments play a significant role on the health of individuals with children spending around 70% of their time at home. In New Brunswick, health hazard exposures stem from its industrial past, aging infrastructure, and an immigrant population (36.8%) with high levels of poverty (31%) and low education levels (34% with less than H.S diploma/GED). The highest incidences are concentrated in the Esperanza and Unity Square Neighborhoods. These neighborhoods have a high prevalence of health disparities, and lack health insurance, live in old overcrowded housing, and uninsured households. About 80% of the houses predate the end of lead paint and about 90% predate the end of lead piping in 1978 and 1986 respectively. In 2015, blood levels for screened children under 6 were 60%, a decrease from 75% in 2003.

Method/Approach: Focus on increased awareness, outreach, and policy changes through canvassing and recruitment of community members into education and training programs. Pre-and post-surveys will be conducted to evaluate understanding of healthy housing and needs in the community. Recruitment of community health workers, who will receive training and conduct outreach activities and home assessments. Home assessments will survey and analyze the living quarters for health hazards such as mold, lead, pest droppings, radon and asbestos.

Outcomes/Results: To execute the project, 50 stakeholders were trained on the seven principles of healthy housing. Twelve applicants were recommended and interviewed for the community health ambassador (CHA) position, eight CHAs were hired and trained on healthy housing, program model, outreach, and home assessments. Outreach and awareness for the program were done at a Pap Smear Screening in New Brunswick, Townsend Resource Fair, Adult Learning Center Health Fair, and New Brunswick Food Forum. At these events, 77 residents were reached and 25 signed up to get their home assessed for health hazards.

Evaluation/Conclusion: This evaluation established that the project addressed a diversity of healthy homes issues. Even though recruitment for the home assessments proved to be a challenge, only 36% of residents that were spoken to enrolled. The majority of the Unity Square and Esperanza neighborhoods are comprised on the Hispanic/Latino community, and current tension about immigration and fear that programs like these may have a negative impact on their home situation are major concerns for these families. Through the recruitment of the CHA’s who are New Brunswick resident as well, the residents will feel more comfortable, build trust, and have taken measures to ensure that our confidentiality is understood during every phase of the program.
Title: Clean Energy For a Better Future

Name: Elizabeth Holmes

Preceptors: Matthew Smith, Senior Organizer | Cecille de Laurentis, Outreach Coordinator

Agency: Food and Water Watch, New Brunswick, NJ

Purpose: To plan and execute a series of forums at New Jersey colleges to inform college students, and those in the surrounding community, about the effects climate change.

Significance: Climate pollution continues to play a crucial role in global warming and threatens our environment every day. The Paris Agreement of 2016 brought together 197 nations and expressed that if our temperature exceeds 2 degrees Celsius we will begin to see severe environmental impacts (United Nations, 2018). New Jersey’s dependence on dirty energy has encouraged the growth of fossil fuel infrastructure and continues to contribute to climate change (State of New Jersey, 2011). New Jersey residents have the ability to request change within the state to move us towards 100% renewable energy, by 2035.

Method/Approach: A detailed spreadsheet was utilized to align event logistics with our proposed timeline. Information included event sponsors, elected officials, media promotion, marketing events, panelists, and venues. Emails and phone calls were sent to 10 out of 60 organizations for potential partnership opportunities. Venue locations were selected at 3 state colleges based on desired number of attendees. Flyers and social media posts were used to promote the events. Flyers were distributed at 6 of the 50 relevant campus events and locations. Phone banking and text messaging systems was used to personally call Food & Water Watch supporters for event invitations.

Outcomes/Results: Each event was organized and hosted by Food & Water Watch and The Andrew Goodman Foundation, in partnership with 14 local co-sponsors. The event titled “Clean Energy for a Better Future” hosted 4 panelists that consisted of national experts on climate change and the policy implications that follow. The first event was hosted at Rutgers University and yielded 79 attendees, 30 of them students. The second event was hosted at Ramapo College and yielded 105 attendees, 34 of them students. The third event that was intended to be hosted at Montclair University was cancelled due to weather and planning complications.

Evaluation/Conclusion: 34% of total attendees consisted of college students (n=64) and only 1 of the events yielded our goal number of attendees (n=100). Follow up emails and phones calls will serve to (a) acquire interest in potential future events, (b) to provide attendees with materials needed to contact local officials about climate change initiatives, and (c) inform supporters of proposed legislature and infrastructure in New Jersey that can have potential harmful environmental impacts. Follow up event surveys provided feedback for the event and found that increased parking availability, a detailed event program, and increased social media presence would increase program attendance.

https://docs.google.com/document/d/1HiU32EMTdWnK6cBywrdpU8xzAnajMyr3YhR2W7NyV0M/edit
Internship Abstract

Title: Current Global Health Course Offerings at Rutgers University

Name: Jada Houston

Preceptors: Reena Antony

Agency: The Rutgers Global Health Institute

Purpose: To create a database of global health courses currently available in all Rutgers schools to evaluate gaps in the global health curriculum.

Significance: With the rise in globalization also comes an increase in health inequities. Public and nongovernmental agencies have begun to take a global health approach to addressing these health disparities and other transnational issues, which is why there is such a large growth in global health within Academia (Williams & Des Marais, 2016). The Rutgers Global Health Institute, therefore, wants to offer a comprehensive database of the global health courses available by the university both to help students and faculty with interests in global health, as well as to promote interprofessional collaborations for the purpose of resolving global health challenges.

Method/Approach: The methods used for creating this course inventory began by collecting a list of keywords. These keywords were used as a criterion for course inclusion in the database. The keywords were chosen to cover a range of global health terms from the individual level, to the population level including vulnerable populations, as well as the environment, and included words like ‘disparity, migrant, and vulnerability.’ There was an effort to include health topics that are important in global health, but not addressed as frequently such as mental health. For this course database we used keyword searches in the Web registration system. Some barriers existed with access to the system but were overcome by using the Rutgers Course Catalog. Each course was evaluated by course description. Courses were placed in the database if their description possessed one or more of the keywords or used words of similar meaning. Courses that described keywords or terms but did not explicitly use the term itself were also placed into the database.

Outcomes/Results: A total of 30 spreadsheets with varying amounts of global health courses have been created. The School of Public Health has the highest level of global health material with 109 courses, while The School of Engineering and the School of Nursing in Camden have only 3. The Mason Gross School of the Arts, University College Camden, and University College Newark have no discernible global health courses. In total, 636 courses were identified.

Evaluation/Conclusion: An excel workbook detailing the amount of global health content available in each course was sent out to the appropriate faculty of each school for feedback. As of April 17, 2018, responses have yet to be collected. Upon completion, this project will be placed on The Rutgers Global Health Institute Website to be used as a tool for interested students and staff to find global health courses in their school or department. This project is to be updated annually to track the progress of global health education here at Rutgers.
Title: Cancer Support Community of Central New Jersey Latino Outreach
Name: Leslie Hoyos
Preceptors: Manisha Narang, Health Educator
Agency: Cancer Support Community of Central New Jersey

Purpose: To conduct a program assessment of the Cancer Support Community Central New Jersey Hispanic outreach and continue to develop an evidence-based program that is culturally competent for this underserved population.

Significance: Cancer Support Community Central New Jersey (CSCCNJ) is an affiliate of an international nonprofit that provides psychosocial support to cancer patients and their caregivers. The 2017 Cancer Experience Registry report stated that from a sample of 2,821 people, only 4% were Hispanic. Luckett, et al. (2011) found that Hispanic cancer patients reported worse psychological distress and health quality of life compared to the majority patient population, which implicates disparity in care. CSCCNJ recognizes Hispanics are an underserved population that could benefit from the organization’s services; therefore, this project was created to give recommendations based on Hispanic demographics, health disparities, and evidence-based interventions that improved the health quality of life of Latino cancer patients.

Method/Approach: An extensive literature review was conducted that identifies the national demographic profile of Hispanics and the New Jersey profile. Cancer statistics were collected from the New Jersey cancer registry, Centers for Disease Control (CDC) reports, and the American Cancer Society (ACS). The review also describes health disparities affecting the Hispanic population and psychosocial intervention models to create an evidence-based outreach. A resource directory of psychosocial, legal, and medical organizations that are culturally relevant to Latinos was created as a resource for the clients.

Outcomes/Results: According to the CDC, cancer is the leading cause of death among Hispanics in the US. In New Jersey, the State Cancer Registry reported that from 2010 to 2014, Hispanics represented 9% of all cancer cases. Though Hispanics have a lower overall incidence and mortality rate for cancer compared to the general population, Hispanics suffer higher rates of stomach, liver, and cervical cancers. The ACS reported that Hispanics are less likely to receive cancer screening, have medical insurance, and more likely to have financial and language barriers. These barriers are suggested to contribute to the fact that Hispanics are more likely than non-Hispanic whites to have late-stage diagnosis.

Evaluation/Conclusion: McNulty, et al (2016) suggested that interventions targeting the Hispanic population are feasible if they are culturally relevant. Methods to create a culturally relevant program includes using bilingual or bicultural professionals. Structuring the intervention based on cultural concepts such as familismo will help recruitment and retention. The CSC outreach is currently in its planning stages with grants, partnerships, and a day of wellness in its future.
**Title:** Scheduling Department Patient Satisfaction Improvement Plan

**Name:** Amirah Hussain

**Preceptors:** Project Supervisor: Veronica Gomez, MBA, Patient Access Assistant Director
Direct Supervisor: Natalie Socha, Data Analysis Specialist

**Agency:** Hospital ABC (Undisclosed to maintain confidentiality)

**Purpose:** To analyze the underlying factors fueling the decreasing Press Ganey scores in the scheduling department of Hospital A and B and propose a process improvement plan.

**Significance:** The patient satisfaction scores across similar hospitals are compared on Press Ganey. Throughout the Hospital ABC system, Hospital A and Hospital B had consistently decreasing scores for the past six months (June’17-Dec’17) as opposed to Hospital C, which was on the rise. “Our overall goal should be to reduce the suffering experienced by patients, their families and their caregivers” (NCBI). It is the goal of healthcare to provide service catered to the patient in their time of need. The purpose of these scores are to pinpoint areas of weakness and focus efforts on improvement.

**Method/Approach:** A phone survey was created to evaluate patient satisfaction regarding outpatient procedure appointment scheduling. Patients with appointments at the two hospitals within the system with the lowest scores were called and feedback was collected, both quantitative and qualitative. Patients were asked to rate their satisfaction on a scale of one to five in regard to wait time, the number of holds, accommodation and other factors. Next, the calls between patients and schedulers were monitored for script accuracy, major problems, and deviations.

**Outcomes/Results:** Approximately 400 phone calls were made, and 115 survey responses were compiled. From Hospital A (n=44), the overall patient satisfaction with the scheduling system was a 94.8% while for Hospital B (n=71) the score was 93.1%. 72% of Hospital A patients gave the scheduling department a perfect score while only 41% of Hospital B patients rated their experience as perfect. The Press Ganey scores for Hospital A rose from the 36th percentile to the 89th percentile while the score for Hospital B rose from the 21st percentile to the 38th in the past three months (Jan’18-Mar’18). Using the patient feedback, a presentation will be made to the scheduling team and supervisors with suggestions on what is working well and what can be improved upon.

**Evaluation/Conclusion:** The data compiled coincided with the Press Ganey scores. By asking “what can we do to improve your experience?”, specific problems were identified, therefore, feedback was an essential part of this process. A majority of the scores were good, however it is the few bad reviews that brought the overall score down. Those particular encounters were compiled into groups of major complaints. It is possible that among other factors, the increase of scores was due to the phone surveys. Calling patients before their appointment either reinforces their good experience or makes them feel heard and valued if they had complaints. The presentation is intended to encourage the team to continue providing superior service as well as make them aware of potential mistakes they may be making.
Title: Budget Improvement and Strategy for Nursing Home

Name: Dai Huynh

Preceptor: Dr. Frank Damiani - Director of Resident Care

Agency: Roosevelt Care Center

Purpose: To analyze the financial reports from 2016 - 2017 and propose a strategy plan to improve the financial outlook.

Significance: The number of American ages 65 and older is projected to be more than double, from 48 million today to over 98 million by 2060. This will result in rising demand for elderly care facilities such as skilled nursing facilities. However, there are many issues affect to the financial outlook of nursing homes, for example: underfunded Medicaid, shortage of nursing staffs, overspending budget, which also affect the quality outcomes. Blank and Eggink, et al. (2001) found that strong financial performance is an important determinant of high quality in nursing homes. This evidence indicates the gap in understanding the importance of nursing homes’ finance and its quality of care.

Method/Approach: An analysis of financial reports of Roosevelt Care Center facilities (Edison and Old Bridge) was conducted for the past two years, and a projected budget was created for 2018. First, comparisons were made between the budget and its actual spending for 2016 and 2017. Then, comparisons were used to analyze if there is a pattern between the two years to conclude if the nursing home controls the cost and improves its finance. There are three factors needed to focus in the analysis: (1) the census – number of residents; (2) third-party payers – private payers, insurances, Medicaid, Medicare; and (3) staffing. Lastly, solutions for change were suggested in order to follow a 2018 projected budget which was proposed by the director.

Outcomes/Results: The revenues in each facility (Edison and Old Bridge) decreased 2 million (10%) from 2016 to 2017. In Edison facility, the total expenses were reduced by 2.6 million over two years: 13% decreasing in salaries expense, 17% in fringe benefits, 9.5% in overtime, and 7% for contracted services, as well as 17% in pensions and 51% in write-off debt expenses. However, there are other increasing expenses: 18% in retirement benefits and 72% in nursing agencies. In Old Bridge facility, the total expenses were reduced about 1.8 million over two years: 7% decreasing in salaries expense, 7.5% in fringe benefits, 8% in overtime, 10% for contracted services, and 57% in bad debt expenses, no other increasing expenses.

Evaluation/Conclusion: The labor costs in both facilities were accountable for nearly 40% of the total expenses. Therefore, developing a system for adherence, cross training will serve as an effective tool to control overtime budget; retrain staff into similar positions and share jobs between them. In addition, improving coding on billing system, following up and submitting claims on time will minimize unnecessary losses on revenue in overall and keep the budget on track.
Internship Abstract

Title: Guidebook for Providers in New Jersey

Name: Bhavani Jaikaria

Preceptors: Aldina Hovde, Safety and Trauma Informed Care Initiatives Supervisor

Agency: New Jersey Chapter, American Academy of Pediatrics

Purpose: To update the State of New Jersey’s Guidebook on Child Maltreatment that equips health care providers with the practical tools necessary to identify and report suspected child abuse.

Significance: According to NJ Statute 9:6-8.9, an abused child is under the age of 18 whose parent or guardian has inflicted or allowed to be inflicted upon such child physical, mental and/or emotional harm. (1) Throughout the United States, nearly 700,000 children are abused annually. (2) Child maltreatment manifests most commonly in three ways: sexual abuse, physical abuse and neglect. Pediatricians and healthcare providers play a pivotal role in the prevention and identification of child abuse and neglect. Healthcare providers includes but is not limited to: Emergency Medical Services, Dentists, Physicians and Nurses. Pediatricians and healthcare providers “are in an excellent position to...protect children and to address factors that put them at increased risk of abuse.” (3) With the appropriate tools, pediatricians and healthcare providers have the capability of recognizing and preventing child maltreatment.

Method/Approach: The Guidebook was reviewed to determine what information needed to be updated. Legal information was obtained regarding the current definitions and laws surrounding child abuse and neglect. This information was written easily comprehensible manner. Data was collected regarding the various physical and mental signs associated with child abuse and neglect. Instructions were written on how to speak with families and children when child maltreatment is suspected. Flow charts were constructed to demonstrate the necessary steps when reporting child abuse and neglect. Resources were found on the various hotlines and organizations that are working to protect children.

Outcomes/Results: The Guidebook consists of a variety of sections. Each section, informs healthcare providers on a different aspect concerning the prevention or intervention of child abuse and neglect. With this toolbook, providers will learn how to identify the red flags of child abuse. Additionally, the Guidebook includes detailed steps on how to report child abuse. The various hotlines listed, are valuable resource providers can give to families and children in need of family strengthening services.

Evaluation/Conclusion: The Guidebook will be distributed to 800 pediatricians and healthcare providers throughout the state. Through the Guidebook, healthcare professionals are included in the plethora of resources dedicated to ending child abuse and neglect. The Guidebook is a valuable and imperative resource needed to support and protect children.
Internship Abstract

Title: Clean Energy For a Better Future

Name: Kathryn Jakubowski

Preceptors: Matt Smith, Senior Organizer and Cecille de Laurentis, Outreach Coordinator

Agency: Food and Water Watch

Purpose: Host two educational forums for college students and community members about the effects of climate change and energy policy issues both locally and globally.

Significance: The warming of this planet has already caused significant damage (Climate Central, 2012). The effects may not be seen as much by people in developed countries, but the effects are real and can be seen within New Jersey. Climate change has already created devastating storms like Superstorm Sandy and will continue to bring about more violent storms and other strange weather (Trenberth, Kevin E, 2015). New Jersey, as well as other states and countries around the world need to make a push towards 100% renewable energy by 2035 or else the effects of climate change will become irreversible.

Method/Approach: To start, a google excel spreadsheet was created in order to keep track of the planning process for the two forums being held throughout New Jersey. This sheet included things such as timelines, event partners, potential speakers, media outlets for promotions, venues for forum location, and other related events for promotion. We chose event spaces based on how many people we hoped would attend; 100. Emails were sent out to potential co-sponsors; phone banking thousands of people was done telling people about the event and asking them to come. Flyers were created to hand out a climate related events on and off campus.

Outcomes/Results: The forums were entitled “Clean Energy for a Better Future”. The same four panelists spoke at each of the events. The first event was held at Rutgers University on the Cook campus. At the event, seven cosponsors tabled and helped promote the event. Eighty attendees showed, 28 of which were students, and one elected official attended. The second event was at Ramapo College. Seven cosponsors also tabled and helped promote this event. One hundred and five attendees showed, 34 of which were students and two elected officials came.

Evaluation/Conclusion: At the Rutgers event, the goal of the number of attendees was not met. A survey was drafted and sent out via email to everyone who attended in order to obtain feedback about what could have been improved. Upon looking at the results of the survey, it was clear that location of parking, as well as how to get to the venue from the parking lot needed to be improved upon. Signs to help attendees locate the venue from the parking lot for the next event were crafted. Even after doing this, people still seemed to have some trouble due to the confusing nature of Ramapo College. Another limitation of the events was with the way people were signed in. People may have walked past the registration table and not signed in, so the numbers may be off. All in all, the event went well and based on the data from the survey people enjoyed it and learned how they can get involved.
Title: Assessing Community Need for Mental Health Resources on the Live Well Vivir New Brunswick (LWVBNB) Mobile App

Name: Clair Janal

Preceptors: Manuel Castañeda, Director of Community Health

Agency: New Brunswick Tomorrow (NBT)

Purpose: To analyze the need/interest for mental/behavioral health resources (videos, fact sheets, etc) on the LWVBNB mobile application by the community related stress.

Significance: Many of the residents in New Brunswick are of Hispanic/ Latino background. This group experiences the highest (APA) and most diverse amounts of stress related to immigration, finances, family life, education barriers, and education (NAMI). In a survey by the APA, 1 in 5 adults never engage in stress relief activities (APA). Even more so, they are unaware of the strategies and tools that can help relieve stress. This series of information is free to access using the Live Well Vivir Bien application and will allow users to access information on what causes stress, ways an individual can relieve stress, and prevent stress from leading to mental health issues. The end goal is to better inform community members on ways they can individually help themselves with mental illness stigma still very prevalent in Hispanic populations. This community tends to be very private and do not talk in public about at home challenges (NAMI). As a community, 20% are less likely to seek mental health treatment (NAMI).

Method/Approach: To collect how much interest there is in the community for the mental/behavioral health resources stated above, an eight-question survey will be disseminated to New Brunswick residents at various outreach events throughout the city. The questions in the survey are related to what part of the New Brunswick community they are in (Rutgers or not), language spoken, interest in this information related to stress, and awareness of chronic stress. The results of the survey will then be analyzed to determine if there is any significance or positive feedback related to these informational tools.

Outcomes/Results: Survey results included 58 respondents from the New Brunswick and Rutgers Communities. Of the respondents, 37.93% of people selected that they experience mild stress, 31.03% experience high stress, and 12.07% experience extreme stress. 51.72% of people determined that they are impacted by chronic stress. The respondents reported that 73% use exercise to manage stress. Of the total respondents, 79% would like to see self-help tools and ways to relieve stress (breathing exercises, meditation) and 69% would like information on identifying signs of mental illness. 68% are interested in having this information on the LWVBNB application. This demonstrates the importance of including these resources in the mobile app and a pilot should be initiated where analytics will be collected to determine success.

Evaluation/Conclusion: Due to the very limited and potentially costly resources, it is important for New Brunswick residents to have free or low cost resources to use that can help tackle everyday problems that may lead to mental illness. Since many people cannot access health services due to health insurance or stigmatized beliefs on mental health, this can be a resource to seek individual, effective help.
Title: Outreach Strategy for South Asian Community to Meet Cancer Needs

Name: Shaminder Jassil

Preceptors: Manisha Narang, Health Educator

Agency: Cancer Support Community of Central New Jersey

Purpose: Launch a South Asian Initiative in Central NJ to increase awareness of resources available to anyone affected by cancer and analyze the effectiveness of such programs through program satisfaction surveys.

Significance: This project is vital for increasing awareness of resources available to South Asian patients and their families residing in Central New Jersey. Cancer Support Community of Central New Jersey (CSCCNJ) is a non-profit organization that focuses mainly on providing educational programs and support groups for cancer patients and their friends and family. According to CSCCNJ demographic data, there are over 300,000 Indian Asians in New Jersey with a 72.5% growth rate in the state; yet only 6% of patients who are admitted in healthcare settings annually are South Asian. This data shows that there are increasing numbers of South Asians not receiving adequate health care screenings, support or care due to limited knowledge among community members, ethno-cultural discordance and health education programs with medical jargon. The South Asian community is one of the hardest communities to reach due to the high cultural stigma, shame and health illiteracy associated with such diseases like cancer.

Method/Approach: The project plan included understanding how to deliver educational material to the South Asian community in ways that are culturally appropriate for them as well as identifying what health needs exist. At the Day of Wellness, there were three South Asian facilitators presenting culturally relevant educational programs including a yoga instructor, a registered food dietician and an oncologist who afterwards held a question and answer session. A short satisfaction survey was administered and take-home bags filled with CSCCNJ brochure(s) and South Asian super food recipes were given to all attendees of the program.

Outcomes/Results: This was the first South Asian Day of Wellness to be held by the organization and a total of 10 people in attendance. Within the short satisfaction survey administered, the majority of people rated the workshop as excellent in the workshop meeting their expectations, the presenters addressing their questions and concerns, and the material being clear and easy to understand. At the end of the program, the evaluations provided data regarding the effectiveness of the Day of Wellness and a way to inform future psycho-social and health workshops.

Evaluation/Conclusion: To evaluate the project, a satisfaction survey was administered and analyzed to understand the needs of the South Asian community affected by cancer. Using the surveys as a tool to see if the Day of Wellness was effective to the people who attended proving that it indeed was an effective strategy to create awareness and communicate more with the community.
Title: Fall Prevention Alarms Assessment and Elderly Patient Fall-Risk Evaluation

Name: Risha Javines

Preceptors: Direct Supervisor: Ari Stern, Facility Administrator

Agency: Monmouth Care Center

Purpose: Analyzing the efficiency of fall-prevention alarms that are placed on elderly, fall-risk patients upon admission; these include tab alarms, chair alarms, and bed alarms.

Significance: The original intent for the assignment of the alarms is to be used as an intervention in the resident’s safety plan as a form of fall prevention. These alarms indicate any movement on the patient, specifically to alert any near by caretaker or nurse that the patient has attempted to move without supervision. Many healthcare providers have also voiced that such alarms have caused desensitization in the facilities, causing professionals to be reactive instead of proactive. In October of 2017, Centers for Medicare and Medicaid Services (CMS) issued the latest version of their Long-Term Care Facilities Resident Assessment Instrument, indicating that such alarms can now be coded as “restraints”. Defined as “any manual method or physical or mechanical device, material or equipment … that the individual cannot remove easily, which restricts freedom of movement or normal access to one’s body”; in turn, long-term care facilities must make efforts in order to reduce their use of these alarms.

Method/Approach: An assessment of alarm assignment was conducted facility-wide counting the total number of alarms in place. There were a total of 90 alarms assigned to 98 patients staying in the long-term care facility. Within each unit, a document was fashioned where nurses, CNA’s, and any other clinical staff during each shift were told to record when and what time an alarm went off starting in December of 2017. The document also asked for whether the patient had fallen and for what reason(s) there was movement. Continually, in order to boost morale in reducing the alarms, I issued a facility-wide survey and had personal conversations with staff to see where opinions lied on the alarms.

Results: Of the data recorded, 63% of the alarms that went off were deemed as unnecessary or not useful towards fall prevention. In other words, the majority of the reasons why the alarm(s) sounded off were due to the fact that the patient was moving to readjust him/herself (45%) or wanting to go to the bathroom (27%). During the course of this study, there were 3 falls that occurred; however none were prevented by the alarm — the patient(s) had already fallen.

Conclusion: Being that the majority of the alarms that were set off were not intended for their use, it is apparent that bed, tab, and chair alarms do not aid in fall-prevention. In the same manner, it is also apparent that the devices are not used for fall-prevention per say, but rather for indication of movement. Literature suggests that the use of such alarms should instead be replaced with more surveillance rounds and/or more proactive reassessments. In order to completely wipe the facility of all alarms, patients must be re-evaluated for their fall risk to prevent unnecessary assignment.

Citations: https://docs.google.com/document/d/11gU_B_k_OwYKOJIA7fZGbO4uautZB_vakU--scf1to
Internship Abstract

Title: Clean Energy for a Better Future Campaign Organizing

Name: Nicole Jimenez

Preceptors: Matt Smith: FWW Senior Organizer

Agency: Food & Water Watch (FWW) New Brunswick, NJ

Purpose: To reach at least an 80% turnout rate for the Clean Energy for a Better Future events at two NJ Universities in order to promote for 100% clean renewable energy by 2035.

Significance: Although fossil fuels are currently the world’s primary energy source, the world’s dependency on it will lead to environmental, social, and economic problems (Energy Information Administration [EIA], 2007). These issues hence called for the most aggressive and ambitious renewable energy bill that advocates for a swift and just transition to 100% clean, renewable energy by 2035, the Off Fossil Fuels Act (FWW, 2018). As a non-profit organization that fights for independence, democracy, human rights, and sustainability, FWW aims to support the Off Fossil Fuels Act by providing environmental education forums for New Jersey residents.

Method/Approach: FWW chose two universities, Rutgers University and Ramapo University, to hold the “Clean Energy for a Better Future” Campaign, two events that promoted the Off Fossil Fuels Act. A master Google Excel Spreadsheet was used to keep track of timelines, panelists, and venue locations. Advertisement and obtaining co-sponsors was done through the Callfire Telephony System, a huge task divided between interns to ensure efficiency. Flyering and canvassing opportunities around campus as well as other towns in proximity to the University in question were done a week prior to each event. Selection of speakers, creation of the event program and PowerPoint presentations were arranged by FWW interns. FWW Senior Organizer, Matt Smith finalized all decisions for the two university events.

Outcomes/Results: After advertising for the events, 110 people were anticipated for Rutgers and 120 were anticipated for Ramapo. On the day of each event, sign in sheets were utilized to record the number of guests, to obtain contact information, and to find out how each guest heard about the event. The event at Rutgers University had 79 attendees, 30 of which were Rutgers students. On the other hand, the event at Ramapo University had 105 attendees, 34 of which were high school or college students. 7 out of the 18 co-sponsors the FWW interns contacted came to the event and had their own tables to advertise their organizations.

Evaluation/Conclusion: Rutgers had an unsuccessful 70% turnout rate while Ramapo had a successful 90% turnout rate. Advertisement for Rutgers was done independently by the FWW team, while advertisement for Ramapo was done in collaboration with the Ramapo Green Student Organization and Ramapo Professors who offered incentives to students. Limitations with manual sign in sheets, included missing some individuals or refusal to sign in. Based on feedback from post forum surveys emailed to guests, it would be beneficial for future events to focus advertisement on social media rather than phone and have more parking availability.
Internship Abstract

Title: Reducing Nulliparous Term Singleton Vertex (NTSV) Cesarean Deliveries

Name: Ameya Jindia

Preceptors:
Direct Supervisor: Aline Holmes, DNP, MSN, RN, Sr. Vice President-Clinical Affairs
Project Supervisor: Angela Centellas, MPH, Project Coordinator

Agency: New Jersey Hospital Association (NJHA)

Purpose: To analyze NTSV Cesarean Section rates and implement educational tools and interventions to reduce NTSV C-Section Deliveries.

Significance: Primary cesarean deliveries are a major contributor to the large increase in total cesarean delivery rates in the United States over the past two decades. Moreover, approximately 90 percent of women who have a primary cesarean delivery are likely to deliver by cesarean again in subsequent pregnancies, which incurs higher costs and progressively higher morbidity risks with each additional cesarean delivery. For most low-risk NTSV women, cesarean birth increases risk of hemorrhage, infection, uterine rupture, abnormal placentation and cardiac events. The cesarean rate among low-risk NTSV births in New Jersey has seen an increase from 23.5 percent in 1990 to 36.3 percent in 2009.

Method/Approach: In order to address NTSV C-Sections, NJHA will use audit sheets for data collection. Baseline data will be collected using audit sheets, which will be completed for three consecutive months. Each hospital is told to audit 20 delivery cases, usually the first 20 of the month to avoid bias. Once initial data collection is complete, NJHA will sort and share it with each hospital so their team can review the results and identify key strategies they want to implement using baseline data to support. Thereafter, the hospitals will be asked to audit at least 20 charts per month on one or both of the clinical indication areas chosen to record progress. Overtime, the data will show hospitals their improvement and allow them to compare their rate to other hospitals’ rates. Webinars will be held every other month to provide aid throughout the initiative and update participants on the progress of the project.

Outcomes/Results: Out of 49 obstetric hospitals in New Jersey, 47 have agreed to participate. A kick-off webinar was held on February 21st, 2018 to inform participating obstetric hospitals on ways to implement the initiative and explain key methods. A coaching call was held April 24th, 2018 to guide hospitals through the process of completing the audit sheet and answer pressing questions about the initiative. The next steps will be to collect audit sheets and gather data on safety measures in the obstetric departments of each hospital. The baseline audit and safety survey will be due by May 2018.

Evaluation/Conclusion: The NTSV Cesarean Section Initiative is an on-going project that will continue into 2019. The 2018 timeline includes completing the audit data collection as well as improving safety in obstetric hospitals. NJHA has implemented key leaders to help achieve their perinatal quality improvement aspirations. 96 percent of obstetric hospitals in NJ have agreed to participate, so NJHA’s hard work will reduce the frequency of NTSV C-Sections by the desired amount of 10 percent by 2019.
Title: Telegenetics Implementation and Assessment

Name: Brianna Johnson

Preceptors: Direct Supervisor/Project Supervisor: Dr. Jordan Tannenbaum, Chief Medical Information Officer and CIO

Agency: Saint Peter’s University Health Care System

Purpose: To improve and ease clinical communication between St. Peters genetics counselors and newly diagnosed cancer patients in order for counselors to be able to counsel patients while in the oncologist’s office.

Significance: Cancer is a major public health concern worldwide and is the second leading cause of death in the United States (Siegel, Miller and Jemal, 2018). Inherited genetic mutations play a major role in about 5 to 10 percent of all cancers (National Cancer Institute, 2018). Genetic counseling addresses this issue by offering specialized or personalized medicine. Counselors evaluate the patient’s cancer diagnosis along with family histories of cancer to help the family understand their risk of an inherited medical condition. Counselors get permission to do genetic testing, as well as help prepare patient for what to expect going forward. Their findings can affect prognosis, treatment, and other important factors for the patient. Currently, cancer patients have to schedule an appointment separate from their oncologist for genetic counseling and are responsible for getting to that other location. With telegenetics, patients have access to counseling remotely, usually right from their oncologist’s office. This is extremely beneficial to patients as this type of care is more patient-centered, convenient, accessible, and engaging.

Method/Approach: The initial telegenetics implementation process officially began in November 2017 and is now in Phase 2, leading out of the test phases and towards going live. The entire process, from registration to EMR sharing, has been tested by department staff and counselors. A review by Saint Peter’s genetics department staff and the Regional Center Care Associates was done in order to select a go live test patient. This patient was chosen based on their specific case and ideal testing required. A survey, adapted from UCDHS Telemedicine Survey, will be given to the patient following the telegenetic consultation to assess the service and obtain feedback.

Outcomes/Results: Outcome/results are currently pending. In the short term (end of April), we will pilot the go live test patient and the outcome expected is a successful system performance and satisfied patient review. Over the longer term (Dec 2018), the expected outcome is an increase in referrals, increase in average volume, decrease in barriers to access for patients, increase patient education, and eventually allowing patients to do consultations from home.

Evaluation/Conclusion: In the upcoming year, this program can be evaluated to see if it works by comparing metrics such as average volume, number of referrals, and patient satisfaction using the survey I created. With telegenetics, patients have access to counseling remotely, usually right from their oncologist’s office. This is extremely beneficial to patients as this type of care is more patient-centered, convenient, accessible, and engaging.
Title: The Attributes of a Successful Private Practice

Name: Heather Kaplan

Preceptor: Dr. Judith Gurfein

Agency: Arista Counseling and Psychotherapy

Purpose: To evaluate the key features that go into running Arista Counseling and Psychotherapy, a successful private practice counseling center.

Significance: Arista Counseling and Psychotherapy was established over twenty-five years ago by Dr. Judith Gurfein. When starting a private practice, it is important to establish ways to promote it and bring in new clientele. Currently, Arista Counseling and Psychotherapy has about 100 clients that come in for therapy. With two locations in New Jersey and one in Manhattan, Dr. Gurfein is actively seeking new clients. In order to run a successful private practice, it is important to investigate the best ways to bring in new patients. Modern technology such as social media and the internet significantly contribute to Arista’s increasing client amount.

Method/Approach: There are several ways that the team of intake counselors promote Arista Counseling and Psychotherapy. When a prospective patient calls to set up an appointment, the intake counselor must go through an intake form with them where their demographic and insurance information is collected. The patient is also asked how they heard of the practice. It has been observed that media outlets such as Psychology Today and review sites such as Google and Yelp made major contributions. Knowing this information, the team visited each outlet online and assured that Arista Counseling and Psychotherapy was being properly promoted. If any demographics were incorrect, that respective site was contacted with the correct information. Major contributions were also made to the Arista Counseling and Psychotherapy website. Articles regarding various psychological issues are being written by the interns to be put on the website. The blog posts aid in attracting more potential patients to the website. The team also sits in on meetings with representatives from Shire Pharmaceuticals. Shire explains how newly released psychotropic medications work and promotes Dr. Gurfein to prescribe it to her patients as needed. Having the ability to prescribe the most effective medication possible assures utmost patient satisfaction.

Outcomes/Results: Arista Counseling and Psychotherapy has continued to bring in many new patients. Currently, on average there are 3-4 new intakes completed each day. Many people are hearing of our center through Psychology Today, Google and other various sites, referrals, and friends/family.

Evaluation/Conclusion: Intakes counselors will continue to promote Arista Counseling and Psychotherapy through the media. Each prospective patient on the call will continue to be asked how they heard of the practice to better attract more clients.
Title: Mental Health Media Campaign

Name: Sneha Karla

Preceptors: Dr. Francesca Maresca, Director of RU HOPE

Agency: Rutgers HOPE

Purpose: To assess whether the development of podcasts as an effective mental health resource for the Rutgers population.

Significance: The discussion surrounding mental health issues on college campuses has been steadily increasing in the past years. There is now more awareness and dialogue regarding mental health issues on college campuses. As stated by the American Psychological Association, “ninety-five percent of college counseling center directors surveyed said the number of students with significant psychological problems is a growing concern in their center or on campus” (American Psychological Association 2013). Podcasts have steadily grown to be a popular source of entertainment and information making it a new frontier for health promotion. Delivering relevant information, especially medically sensitive information, to the demographic of the Rutgers population can be difficult therefore finding a new medium through which information can be communicated is paramount.

Method/Approach: A brief survey was developed to assess interest in podcasts and the actual production of a podcast was explored. The survey was distributed via social media contacts and asked if students wanted podcasts as a resource, if they thought it was effective, and what more could be done to improve podcast development and distribution. Podcast development is comprised of three steps: pre-production, recording, and post-production. The pre-production phase involves research regarding general podcast structure (length of the podcast, number of speakers, style of podcast, topic, audience engagement opportunities). The recording phase is when the actual podcast is recorded with a combination of professionals (CAPS psychologists) and students. Post-production is the editing and publishing of the podcast on RU Student Health platforms. The efficacy of the podcast will then be determined when the podcast goes live through an online survey made public to the Rutgers population regarding whether or not they found/will find the new resource useful for their needs.

Outcomes/Results: A total of 56 people participated in the assessment. The result is that 21 people (37.5%) find podcasts effective as a resource for mental health while a majority of the surveyed population generally felt that podcasts were not as effective of a resource as other method but that a greater collection of podcasts as well as better marketing could prove more effective. Additionally, 44 people (78.6%) requested more podcasts about other Rutgers health services beyond RU HOPE.

Evaluation/Conclusion: Podcast development is more involved than anticipated but the need for a new health promotion platform is necessary and students more and more are relying on podcasts for information, making this a pertinent and desirable healthcare opportunity to pursue and build upon.
**Title:** Improving Patient Satisfaction through Patient Rounding  

**Name:** Harpreet Kaur  

**Preceptors:** Yaniris Garcia, Patient Advocate  

**Agency:** Trinitas Regional Medical Center, Elizabeth, NJ

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**Purpose:** To improve patient satisfaction at the individual level in the hospital setting by conducting daily rounds that address immediate patient needs and concerns before discharge.

**Significance:** Patient satisfaction in a hospital setting is a vital measure to monitor quality of care because patients are more likely to comply to medical advice and have better health outcomes if they have a positive care experience (AHRQ 2018). Satisfied patients will most likely give the hospital high ratings on the 40-question Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey that they receive after discharge, which asks them to evaluate their care experience. The results of this survey are published online by the Centers for Medicare and Medicaid Services (CMS) and they determine if hospitals will either gain or lose about 2% of Medicare payments (API Healthcare 2015). The public disclosure of this information and financial incentives make it increasingly important for this hospital to improve upon patient satisfaction.

**Method/Approach:** To improve patient satisfaction, daily rounds were conducted on all new inpatient admissions. Translation services were provided by language-proficient certified hospital staff for patients that were non-English speakers. During these rounds, patients were asked if they were satisfied with the service that was being provided to them by their nurses, housekeeping staff, and the dieticians. All minor concerns shared by patients were referred to the Clinical Support Staff for immediate resolution. At the end of the visit, the patient was left with a “Thank You” card with contact information. In the event that patients requested to file a formal complaint, an investigation was conducted by the Patient Advocate, Yaniris Garcia. At the conclusion of patient rounds, the total number of patients visited was recorded and each patient experience was categorized into four types of categories: 1) very satisfied (no issues), 2) satisfied (minor issues resolved), 3) dissatisfied (formal complaint filed), and 4) no response.

**Outcomes/Results:** Of the sample size cohort (n=346), 161 (47%) patients were very satisfied and did not voice any concerns with their stay, 22 (6%) patients were satisfied but had minor issues that were resolved immediately, 6 (2%) patients were dissatisfied and filed formal complaints, and 157 (45%) patients were categorized as no response because of a non-responsive state or unavailability. Altogether, 53% of patients were satisfied with their stay.

**Evaluation/Conclusion:** The 53% of patients that had a positive care experience at the hospital may see better health outcomes and provide positive feedback on the HCAHPS survey, which would potentially increase hospital reimbursement and improve public image, as per CMS guidelines.
Title: Improving Immunization rates in Daycare Centers in Monmouth County

Name: Harpreet Kaur

Preceptors: David A. Henry and Concetta Polonsky

Agency: Monmouth County Regional Health Commission No.1

Purpose: To evaluate workshop success for increasing immunization rates in child care and preschool facilities in Monmouth County.

Significance: More than 100 people were sickened across the country in a recent measles outbreak, which has turned the spotlight on the 48 states like New Jersey that have laws allowing parents to opt out of vaccinating their kids, based on their personal or religious beliefs. According to state The Health Department officials, Monmouth and Atlantic counties have 90 percent vaccination rate for pre-kindergarten children, the lowest rates in the state. The higher the rate of vaccination, the stronger the overall protection for individuals and communities, from diseases like measles, mumps, and pertussis.

Method/Approach: Monmouth County Regional Health Commission held a workshop, “Immunization Training for Child Care and Preschool staff.” Sixteen people attended the workshop. At the beginning of the workshop, a five-question pre-test was given to daycare centers and preschool staff attendees to test their knowledge on “Prevent, Protect, and Prepare Against Vaccine-Preventable Diseases.” A post-test was given to see how much knowledge they gained after the presentation. I used Excel to measure and compare the frequencies.

Outcomes/Results: For question one, regarding DTaP doses, 56% answered the question right on the pre-test, and 75% answered the question right on the post-test, (19% increase). For question two, regarding students previously vaccinated for varicella, 50% got the question right on the pre-test, and 88% got it right on the post-test, (38% increase). Regarding two doses of polio and three doses of DTaP, 50% answered correctly on the pre-test, and 88% answered correctly on the post-test, (38% increase). Regarding flu vaccine to enter in child care/preschool, 81% got the question right on the pre-test, and 94% got the question right on the post-test, (13% increase). For question five, regarding pneumococcal vaccine, 50% answered correctly on the pre-test, and 81% answered correctly on the post-test, (31% increase).

Evaluation/Conclusion: By the end of the workshop, attendees gained more knowledge on how to identify immunization requirements for school entry and attendance. Attendees were also able to locate tools for interpreting and applying school immunization requirements. The shortcoming of the workshop was the lack of a visual aids for vaccine schedules and charts. Also, the presenter should go over how to keep track of children’s vaccinations.
Internship Abstract

**Title:** Bridging the Gap in Diabetic Eye Care

**Name:** Aalia Khan

**Preceptors:** Natalie Terens, Population Health Program Manager

**Agency:** Trenton Health Team

**Purpose:** To understand perceived barriers to diabetic eye screening among primary care physicians and ophthalmologists that treat Trenton residents with diabetes.

**Significance:** There is a high rate of diabetes among Trenton residents. In 2009, 16% of Trenton residents had diabetes. Individuals who are diagnosed with diabetes are at a higher risk of developing diabetic eye diseases such as diabetic retinopathy, diabetic macular edema (DME), cataract, and glaucoma. The National Eye Institute reports that diabetic retinopathy is the most common cause of vision loss in diabetic patients as well as the leading cause of blindness in working-age adults. DME can develop as a result of diabetic retinopathy. It has also been found that adults with diabetes are two to five times more likely to develop cataracts than those without diabetes and their risk of developing glaucoma is doubled (National Health Institute). These conditions may remain unnoticed until vision loss occurs, therefore it is important for diabetic patients to receive routine screening for diabetic eye diseases in order to detect diseases at early stages and receive timely treatment.

**Method/Approach:** Two surveys were created, each one specifically designed for primary care physicians and ophthalmologists. Three primary care providers and three ophthalmologists were surveyed. The surveys include questions about the number of diabetic patients the physician currently treats, how many are screened annually for diabetic eye disease and their approach to patient education. In order to determine perceived barriers, primary care providers and ophthalmologists were asked to rate specific barriers to eye screenings, such as transportation, financial issues, language issues and others, from least important to most important.

**Outcomes/Results:** Lack of transportation was the most common perceived barrier among primary care providers (67%) and for ophthalmologists it was financial issues (100%). The three most common perceived barriers among both were lack of transportation, financial problems and language issues. By analyzing the survey data, a research paper was compiled that compares the perceived barriers of primary care providers and ophthalmologists and includes suggestions on how to address these barriers.

**Evaluation/Conclusion:** Primary care providers and ophthalmologists were found to have similar perceptions of barriers to diabetic eye screenings. In order to evaluate the success of the survey, respondent debriefing was conducted. Respondent comprehension and appropriateness of the length of the survey was assessed.
Internship Abstract

Title: Completing Backlogged Patient Medical Files and Improving on Compilation Techniques in Outsource Denial Claim Management.

Name: Faisal Khan

Preceptors: Direct Supervisors: Vivian Valentin (Manager), Sheeba Muruganpillai (Project Liaison), Christian Walker (Manager), Fernanda DeJesus (Manager); Project Supervisor: Lillie Eyeson (Supervisor), Jason Turner (Director), Mike Defilippo (Director)

Agency: Aergo Solutions, Iselin NJ

Purpose: To keep a track of and attempt to streamline patient’s medical records as they are sent their designated law offices.

Significance: Each year there is an abnormally large amount of patient health insurance claims that do not get approved, exactly 24% of medical claims (Schoen). A lot of these claims are pending because of a backlog of medical requests that a lot of agencies are dealing with. Insurance agencies have a 78% - 83% utilization claims, and that creates almost a gap in how many claims are coming in, and how many are being processed (Tyree). This in turn costs the company a substantial amount of money, because pending and denied claims are not bringing money to the patient and the company is contracted to try to get as many patients their money back as possible.

Method/Approach: The first method implemented would be to spread the workload between alternating days for the different health systems (Hacketstown Medical Center, Chilton Medical Center, and Capital Health). This will enable longer work days to focus on tasks thus finishing more work in a certain time frame, instead of constantly switching tasks (Dodgson). Different templates will also be created for specific attorneys, so information dictation will be minimal. The amount of pending records will be updated daily into the worklist, and the goal is to check the number every two weeks to see if the gap is closing. A shared excel sheet will be placed on a virtual server that contains all of the pending accounts that have zero payments due, and so it will be easy to highlight the duplicate patient accounts. The workflow process was updated in order to better the record keeping of patient files sent along with reducing and eliminating any pending medical records.

Outcomes/Results: Patient records have closed in with about 14 pending medical requests, with n=220 files. This is with two people alternating on tasks between 0 balance patients and Medical records. The 0 balance patients started with almost 300 but is now at 45. (This may be due to a lot of accounts being added and a lot being completed).

Evaluation/Conclusion: Based on the new workflow processes and record keeping techniques that were implemented we were able to clear the gap between new and pending medical records and close most of the zero balance Qualcare Employee Accounts. Future efforts to reduce backlogged patient medical record requests include clearing all duplicate accounts after verifying that the account does not need any amendments and making sure all medical records are sent on time Wednesdays, so the Hospital’s Record Department has ample time to send their records.
Title: Women’s Health Video Series

Name: Marym Khan

Preceptors: Direct Supervisor: Percy Luk Yeung, PhD, Study Coordinator
Project Supervisor: Chi Wei Lu, PhD, Research Coordinator

Agency: Robert Wood Johnson’s Medical School Women’s Health Institute

Purpose: Enable easy access to reliable information through the creation of an educational video series on women’s health topics.

Significance: As our world becomes more technologically advanced, there is an increasing trend of healthcare information becoming more readily available over the Internet via multiple social media outlets such as YouTube, Instagram, and Facebook. Surveys show that 8 out of 10 internet users access health information online, and that internet information influences 75 percent of patients with chronic illnesses. These results demonstrate that internet mediums have great potential in aiding healthcare providers/educators to reach broader audiences. Simultaneously, the crowd-based nature of content contribution raises growing concerns about the quality and accuracy of internet-based information. Therefore, establishing social media outlets featuring credible sources, such as academic healthcare institutions, will not only provide accurate and reliable information, but also educate audiences on good habits in information uptake and be capable of combating the spread of misinformation.

Method/Approach: Prior to the creation of the informational video series, research was conducted on the usage, accuracy, and accessibility of internet information regarding women’s health through (1) Literature searches through NCBI/Pubmed; (2) analyses of various healthcare institutions’ websites and (3) analysis of social media content. Several topics were chosen to design content for interviews with medical specialists: Maternal Health, Transgender Healthcare, Bladder Control During Menopause, Vaginal Infections, and Pelvic Pain. Physicians at WHI who specialize in each of these fields were invited to discuss each of these topics and to be video recorded. The post-production of the videos was completed using iMovie software. These videos were used to create a YouTube channel and an Instagram and Facebook page that is accessible to the general public.

Outcomes/Results: Five videos are currently in production and will be posted on the WHI’s social media outlets. Discussions of assessing view counts, feedback, and comments on the videos are in process to determine the efficacy of the video series production.

Evaluation/Conclusion: Enabling a prominent presence of information supported by healthcare providers/institutions is of eminent importance in combating the spread of misinformation. Future works to enhance the efficacy in communication include dissemination through health information applications, target-specific promotion, and interactive internet forums. Engaging professional video production personnel, as well as tools such as animation and video software will improve the content and quality of the posted media content.
Title: Transgender Parents and Their Relationship Abstract

Name: Saman Khan

Preceptors: Preceptor: Dr. Gloria Bachmann, Women’s Health Director,

Agency: Robert Wood Johnson University Hospital; Women’s Health Institute

Purpose: To create an abstract determining how children with transgender parents feel during and after the transition.

Significance: Seventy percent of transgender parents who came out to their families still speak to them, while 61% says their relationships with their families has slowly recovered as stated by Forge, et. al. (2011). Many children with transgender parents are unable to comprehend what they are feeling. The abstract will serve to educate, inform and shine light upon the subject which has little to no previous research. The abstract will focus on different aspects of children of all ages and how they feel about their transgender parents; topics such as school life will also be discussed.

Method/Approach: A literature search was started using the Journal of GLBT Family studies and the Early child development and care journal. Then articles were compiled that had the keywords transgender parents, impact, school, children of, and adolescents. When significant information was found on the subject it was categorized into different paragraphs pertaining to where it fit best. For example; school life was affected when the transgender parent came out to the child which could negatively or positively impact the child’s life.

Outcomes/Results: The relationship between the transgender parent and their children depends on many different factors. Some factors include the age of the child, socioeconomic status, relationship between them before the reveal, environmental and behavioral aspects. When the abstract was being compiled, and research was being conducted the journal articles showed a correlation with the age of the child and the time period in which the transgender came out or began the transition.

Evaluation/Conclusion: The concept of younger children finding it easier to accept their transgender parents as opposed to adolescents is still a work in progress. If a child is younger there is a higher likelihood that the child will have more time to adapt to the change and try to understand their transitioned parent. Many of the articles elaborated on the fact that the older a child gets the harder it becomes for them to interact with their transgender parents. If the relationship between the pair was decent, the chances of acceptance is higher than if the relationship was not. However, there is not enough research being conducted on the subject matter. If there is more prospective research being done on the subject, then a better understanding of the relationship between transgender parents and their children can be established.
Purpose: To analyze the relationship between physical activity and household income in the Monmouth County area of New Jersey.

Significance: According to the Center for Disease Control and Prevention (CDC), students (ages 6-12) that participate in extracurricular sports or physical activity tend to have better grades, school attendance, cognitive performance and classroom behaviors. However, the Sports Fitness Industry Association (SFIA) states, children from 6-12 years of age from low income households are half as likely to engage in physical activity when compared to children of wealthier households. To address these disparities, collective coordinated action must be taken on a national level to develop shared goals around encouraging children of all economic backgrounds to participate in physical activity.

Method/Approach: Surveys were distributed at the Morganville location of Monmouth Spine & Soft Tissue to parents of children from March 20, 2018- April 7, 2018. The sample size included youth aged 6-12 that completed the survey. Three aspects of participation were investigated from data collected in the survey: low physical activity, minimum physical activity, and high physical activity participation. As per the CDC: youth with less than 1 hr. were at a low physical activity level, 1 hr. was the acceptable minimum, and greater than 1 hr. was high physical activity. Results were uploaded to a spreadsheet where they were grouped by median household income of their township for analysis.

Outcomes/Results: Of the sample size (n=129), 1 was low income, 32 were middle income, and 96 were high income. Of the low-income patients 100 % spent greater than 1 hr. being physically active. Out of the 32 middle income patients 25 spent greater than 1 hr. being physically active (75%) while 7 spent at least a minimum of 1 hour being active (about 21%). Out of the 96 high income patients 100% spent greater than 1 hour being physically active.

Evaluation/Conclusion: Although 100% of the patients that were low income participated in greater than one hour of physical activity, it is important to note the distribution of the sample size. For example, low income patients don’t even make up 1% of the sample size. It is also important to note that many low-income patients view chiropractic care as a luxury or indulgence, therefore being another limiting factor as to why/how the sample size is skewed. Another factor skewing the sample size is Monmouth Spine & Soft Tissue is connected to Sentinel Performance and Strength and they operate under one roof. Therefore, student athletes that train at that facility are the youth that often visit Dr. Holmes. This in turn, makes most of the youth that visit our office extremely active. However, for the youth (that reside in low income towns) that are not represented in this sample size more needs to be done to incentivize physical activity.
Title: Patient Account Research

Name: Jacqueline Kimelman

Preceptors: Direct Supervisor: Vivian Valentin, Manager of Clinical Denials Team
          Project Supervisor: Lillie Eyeson, Denial Coordinator & Supervisor

Agency: Aergo Solutions

Purpose: To catalyze our appeal process for clinical and technical denials by retrieving patient data and updating the company database while coordinating with

Significance: Rapidly rising healthcare costs have been associated with poorer health statuses, according to a study done by Kottke et al. (2010). Richman and Brodie, et al (2014) elaborated that vulnerable populations have been linked to having higher difficulties of paying for medical care, thus leading them to being less likely to seek it out. The escalating healthcare costs lead a significant percentage of Americans to avoid getting the medical help that they need simply because they do not want to pay for it. Additionally, there are plenty of people that do receive expensive healthcare, but then have to make up for the cost by cutting down costs in other departments, such as groceries. According to a study done in 2015 by the OECD, the United States spent the most on healthcare than any other country, despite having the lowest rate of healthcare coverage in comparison to 12 other countries. These appeals help people get their necessary hospital costs paid for so that they can seek the medical help that they need and still be able to afford other necessities in their lives.

Method/Approach: Hospital bills for patients are reviewed by specific departments, and factors based on the patient and their hospital visit are considered when deciding whether or not it is appropriate to construct an appeal. Once it is decided that there will be an appeal for the patient, there are many steps involved with the process. The first step is the analyzation of the high volume of incoming physical and electronic correspondence letters, where the outcomes and next steps regarding the appeal are determined, therefore this information gets uploaded into the company database. Occasionally, calls to insurance companies must be made in order to retrieve necessary information regarding specific patient accounts’ appeals and their statuses. The utilization of another company database is also exercised when medical records need to be uploaded and condensed into the company’s share drive to move forward in the appeals process. Coordinators use all of this research and information to go forward with the appeal.

Outcomes/Results: Majority of the appeals that were worked on did not end up getting approved, however a significant portion of them were successful in overturning insurance companies original decisions. Less than half of the total appeals, 21% (n=1,734), yielded overturned insurance decisions. About 5% of the appeals taken care of via calling insurance companies (n=40) were overturned. 35% of the appeals that did not yield approval (n= 1,370) were denied because we filed it too late for the insurance’s timeframe.

Evaluation/Conclusion: Overall, this project was moderately successful. Despite not achieving a 100% rate of insurance overturns, every overturn that does occur has an extremely significant impact on the patient’s life, and we were able to achieve that for 365 accounts. This data additionally suggests that the most important aspect to ensure maintenance of is the timeliness of our filing in order to increase our turnover rate. This finding could enhance the appeals process for the future and potentially increase the amount of patient accounts we gain insurance coverage for.
Internship Abstract

Title: Updating the Middlesex County Septic Management Plan

Name: Grant King

Preceptors: Mirah Becker, Supervising Planner, Middlesex County Office of Planning

Agency: Middlesex County Office of Planning

Purpose: To update and readopt the Middlesex County Wastewater Management Plan (WMP) and conduct research to expand and improve the Septic Management Plan (SMP) within.

Significance: New Jersey State law as administered by the NJ Department of Environmental Protection (DEP) requires that the 21 counties of New Jersey update their wastewater management plans. A large portion of the recent update is to gain more specifics on nitrate dilution figures for different soils within the county as well as make projections for land that can be developed and added to Sewer Service Area (SSA).

Method/Approach: The data management division of the planning office will conduct the necessary calculations for nitrate dilution of soils, as well as calculate the current operating volume of the sewer system in Millions of Gallons per Day (MGD). The nitrate dilution calculations are to ensure that future developed land is within the state’s nitrate dilution standard of 9 mg/l. The sewer area calculations were done to project the water flow in MGD for the possible “build-out” of the system for new properties that are on land that is developable. Zoning and the maximum units by zone is calculated and it is decided if there is sufficient wastewater capacity within the system run by the Middlesex County Utility Authority (MCUA). The plan addresses where septic systems need to be placed to lower nitrate dilution limits. It also evaluates wastewater capacity and projects for a 20 year build out given current progression of growth. Data are then reformatted and checked and proofread for placement into the final draft of the Wastewater Management Plan.

Outcomes: The capacity of the system is still greater than the current and projected flow amounts. At present estimations, the county is fully capable of expansion and growth from continued development and redevelopment of land. However, soils in areas of the county are high in nitrates and towns will have to modify zoning ordinances for lower density development or replace septic systems with package treatment plants. This is elaborated on in the implementation phase of the SMP and allows for compliance from municipalities.

Evaluation: Overall, the process of creating an updated Wastewater Management Plan was efficient and procedural. A great deal of the recalculations done for the Waste Management Plan were reexamining the areas of the county that could be viable for development. These different parcels of land had features that needed to be confirmed. Examples being: Proximity to endangered species habitats, wetland delineation, and nitrate dilution and recharge rates. A nitrate dilution strategy was also formulated and placed within Chapter 8 of the WMP. One of the largest and most important goals for the WMP is to increase public awareness of proper septic system maintenance and proper usage of household devices that flow into the sewer system. Ongoing communication must be made with the state Department of Environmental Protection (DEP) and the 25 municipalities of the county until and after the new WMP is approved by the Board of Chosen Freeholders.
Title: Assistant sensory motor coach

Name: Jake King

Preceptors: Betsy Stoeber, Center Director
Kyla Murray, Program Director

Agency: Brain Balance Achievement Center of Summit, NJ

Purpose: Collaborating with other staff members to get hands on experience with kids that have challenging behaviors, academics, social issues, trouble focusing, learning disorders, sensory processing issues, etc.

Significance: Awareness of a variety of behavioral, cognitive, and social issues that many children face is beneficial to the growth of the individual. From a cultural standpoint medicine is typically used to address such issues to minimize negative behavior and reinforce good behavior. The use of traditional medicine can have many side effects and could even impede growth and brain development. Through brain balance, a holistic approach is utilized to show that results can be sought through conditioning and exposure. Intervention will help families as well as the child’s sense of belonging with other kids.

Method/Approach: Assess each child individually to see naturally what side of the brain is dominant and structure a program catered to strengthening the weak one. Students participate in sensory motor activities, as well as cognitive lessons. Utilize a variety of lessons at various levels based on the strengths and weakness. Monitor and track every child’s performance as well as have the parents play an active role in contributing towards improvements at home. All the children in the program come to the center 3 times a week for a one-hour session. The duration of the program can last from 3 months to 6 months depending on the goals of the child.

Outcomes/Results: The data analyzed on the areas of upper body, core, vision, auditory processing and fine motor skills have shown gradual improvement in several students during a three-month interval. From the beginning of the child’s enrollment to the ending of the program, data can be used to see what accomplishments that have been made, where students have difficulty, parents view on the results and the progress monitored during sessions. Seeing how the kids interact around others or by themselves. Assessing improvements in behavior, sensory motor skills and cognitively.

Evaluation/Conclusion: Through the program, connections in the brain are strengthened on the less dominant side of the brain showing that many issues that children face such as ADHD, behavioral issues, autism and down syndrome can be improved by training. With the data found from this assessment, teachers and parents can be more aware and knowledgeable on how to work with some kids for best results. Students show improvements ranging from levels 1 to 15 to assess performance. Each level corresponds to the appropriate age that child is equivalent too for that level. For aged based categories the numbers range from 3 to 17.
Title: AtlantiCare Pantry at the Plex Pop-Up Produce Market Patient Satisfaction

Name: Javen King

Preceptors: Laura Engelmann, MHA, Community Health & Wellness Manager

Agency: AtlantiCare Pantry at the Plex

Purpose: To assess patient satisfaction, accessibility, and utilization of the Pantry at the Plex fruit and vegetable pop-up market at the AtlantiCare William L. Gormley Health Plex, Atlantic City

Significance: One of the main purposes of the Pantry at the Plex pop-up markets is to provide patients cared for at the Plex with fresh fruits and vegetables every 1st, 2nd and 4th Thursday of the month at no cost. Some barriers to eating fruits and vegetables for Atlantic City residents are identified as “cost of purchasing”, “time it takes to prepare”, and “lack of availability” as the top three barriers. According to Behavioral Risk Factor Surveillance System (BRFSS) fruits and vegetables are major contributors of important under-consumed nutrients, that may reduce the risk of many chronic diseases, and may help individuals achieve and maintain a healthy weight when consumed instead of higher calorie foods. Fruit and vegetable intake is also an indicator of a healthy overall diet.

Method/Approach: A convenience sample of 50 patients was surveyed to analyze patient knowledge and satisfaction with the Pantry at the Plex produce pop-up markets. A survey was developed to administer to patients in a three-day time frame. The survey utilized 5 questions: 1. Have you ever participated in a Produce pop-up market? 2. Do you eat fruits and vegetables? 3. Do you have any problems preparing the produce? 4. Do you rely on the pop-ups for your fruits and vegetables? 5. Where do you purchase fruits and vegetables? The data collected was compiled into an excel spreadsheet and analyzed to determine frequencies and correlations.

Outcomes/Results: Of the patients surveyed all were residents of Atlantic City (n=50), 36% attend a pop-up market, whereas 64% never have. 100% of the patients all ate fruits and vegetables and have no problems preparing fruits and vegetables of any sort. Whereas 36% rely on the pop-up market for produce and 64% have never received produce or heard of the pop-up. Moreover, patient produce purchase from a store was high, but with produce prices being so high many patients do not purchase from a store at all. The findings were that 100% of all the patients would recommend the pop-up market to surrounding residents and family but prefer that the produce pop-up name be changed for all cultures and languages found in the Atlantic City area.

Evaluation/Conclusion: Although 36% heard and attend the produce pop-up, the 64% that have not heard about it were interested. The post survey findings would recommend that produce pop-up name be changed to cross all cultural language barriers. Recommendations would also include advertising be taken into consideration to attract other city residents in need of fresh produce and healthcare services provided at the Atlantic City Health Plex.
Title: The Alliance for Innovation on Maternal Health (AIM) Severe Maternal Morbidity Improvement Project

Name: Margaret Klein

Preceptors: Direct Supervisor: Aline Holmes, RN, MSN, DNP, Sr. Vice President of Clinical Affairs  
Project Supervisor: Angela Centellas, MPH, Program Coordinator

Agency: New Jersey Hospital Association, Princeton, NJ

Purpose: To analyze data to better understand and propose improvements for the rates of ‘severe maternal morbidity’ in NJ.

Significance: The significance of this is that the rate of mothers dying or getting severely ill during pregnancy in New Jersey has started to rise while across the country the same rate has fallen. A severe maternal event includes women who receive four or more units of blood, women admitted to the ICU, and an unexpected severe medical event (as determined by the facility).

Method/Approach: The method used has been to analyze the data and try to understand why this phenomenon is occurring. Is it because of a specific set of hospitals or a specific demographic, or something else entirely? After this data has been gathered it is then sent to the hospitals in New Jersey as a blinded tornado chart where they can see a picture of all New Jersey hospitals data, along with the average and median. If the hospital then agrees to participate in this coalition they receive their blinded ID allowing them to see where their specific hospital ranks. After this there are multiple webinars to teach hospitals how to bring down their rates of severe maternal morbidity, and why it is an important statistic that needs more attention.

Outcomes/Results: So far two webinars have taken place with an average of 50 participants per webinar, and the tornado charts have been sent to all hospitals and participating hospitals have received their blinded ID’s.

Evaluation/Conclusion: This is an ongoing project and though I have high hopes that New Jersey will see lowered rates of mothers dying or being ill during pregnancy, there will be no definite conclusion until the data comes back. The goal for this project is to reduce the rates by 10% by 2019.
Title: Acquisition and Analysis of Patient Data at Princeton Medical Institute

Name: Gaurav Kumar

Preceptors: Direct Supervisor: Andrew Sciarrota, Study Coordinator

Agency: Princeton Medical Institute

Purpose: To recruit patients and analyze marketing strategies for a phase 3 clinical trial for an adjunct antidepressant therapy for major depressive disorder (MDD).

Significance: Major Depressive Disorder (MDD) is a serious disorder that is characterized by recurrent feelings of sadness or a lack of interest in everyday activities. In the United States, the incidence of depression is approximately 20-26% for women and approximately 8-12% for men. Seventy percent of patients with MDD do not respond to commonly prescribed treatments (SSRIs and SNRIs). In January 2016, the U.S. FDA designated Rapastinel, a novel antidepressant developed by an American pharmaceutical company, as a breakthrough therapy for the treatment of MDD. Princeton Medical Institute (PMI) is currently recruiting patients for a phase 3 clinical trial for Rapastinel.

Method/Approach: Medical records of 606 patients who had visited PMI in the past 10 years and indicted interest in clinical trials were analyzed. Potential patients were then called to assess patient interest and eligibility in the study, to analyze marketing strategies, a total of 448 patients who had recently expressed interest in the study were asked how they heard about the clinical trial. Data was analyzed using Microsoft Excel. Additionally, patient attendance for pre-screen appointments was investigated.

Outcomes/Results: From the 606 patients who had visited PMI in the past years, 76 patients were identified as potential candidates for the study. After further examination, 6/76 patients did not meet inclusionary criteria. 17/76 were not interested in the study. Voicemail messages were left to 39/76 total patients. 12/76 patients’ phone numbers were no longer in service. 2/76 patients expressed interest in the study. Out of the 448 patients that recently expressed interest in the clinical study, 110/448 (24.6%) heard about the study from Google ads. 320/448 (71.4%) of the patients heard about the study from advertisements and promotional pages on Facebook. Patient data was not available for 18/448 patients (4.0%). Of the 448 patients that expressed interest in the study, 59/448 (13.2%) booked an appointment for an interview with the clinical research coordinator. Of the 59 patients who booked an appointment, 23/59 (39.0%) attended the interview. 23/59 patients (39.0%) did not attend the appointment (no-show). Patient data was not available for 13/59 patients (22.0%).

Evaluation/Conclusion: The method used to contact previous patients for recruitment purposes was not successful overall. Promotional pages on Facebook are currently the most effective method used to recruit patients for clinical trials. A more effective method needs to be developed to encourage interested patients to schedule in-site interviews with clinical research coordinators.
Internship Abstract

**Title:** MRI/Ultrasound Fusion Biopsy: Performance Assessment

**Name:** Grace Kuo

**Preceptors:**
- Direct Supervisor: Christina Cancel, MBA, Business Manager
- Project Supervisor: Mark Shapiro, MD, Chief of Radiology

**Agency:** Englewood Hospital and Medical Center (EHMC)

**Purpose:** To determine if the MRI/Ultrasound (US) Fusion Biopsy technique offers an improved ability to perform accurate prostate biopsies.

**Significance:** Prostate cancer is the most common cancer found in men and can only be diagnosed through a biopsy. The most common method to perform a prostate biopsy involves the urologist blindly taking multiple tissue samples of the patient’s prostate, which can lead to missing any potential tumors. New technology allows radiologists to mark suspicious lesions on the patient’s MRI, and then overlap the MRI with ultrasound technology in order to create a 3D image to find the exact location from which to take the sample. Vourganti et al. (2012) found prostate cancer in 73 of 195 men with prior negative biopsies using MRI/US fusion, with 21 of these men having high-grade cancer. This study indicates the benefits of using an MRI/US fusion biopsy in regards to accurately diagnosing prostate cancer, as earlier detection of cancer can increase one’s chance for successful treatment and survival.

**Method/Approach:** MRI/US fusion biopsies were recommended to a specific patient population at EHMC, which included: patients with elevated Prostate-Specific Antigen (PSA), with or without a digital rectal exam, and no previous prostate biopsy, patients with elevated PSA and a previous negative biopsy, or patients on Active Surveillance. Data for all men who received a pelvic MRI were exported to a database to differentiate between the various results. The data collected were separated based on whether or not the patient’s prostate was checked, and what his PI-RADS score was. The PI-RADS system is important in this study, as it determines the clinical significance of having prostate cancer through an MRI. A PI-RADS score of 3, 4, or 5 means there was a clinically significant presence of cancer, so any patient with a score of 3 or higher was strongly recommended an MRI/US fusion biopsy.

**Outcomes/Results:** Of the men who received a pelvic MRI (n=222), 195 (87.84%) men had their prostate viewed. Of the 195 men, 188 (96.4%) of the men were assigned a PI-RADS score, and 68 of the 188 (36.17%) received a PI-RADS score of a 3, 4, or 5. Only 11 men had an MRI/US fusion biopsy. Two men were diagnosed with carcinomas, one with prostatitis, and the rest with benign prostatic hypertrophies.

**Evaluation/Conclusion:** Only 11 of the 68 men with a significant presence of a prostate tumor received an MRI/US biopsy at EHMC. The Chief of Radiology would like to create potential changes in educational resources and patient communication methods in order to increase patient retention rates. The Radiology and Urology Departments at EHMC will continue to recommend MRI/US fusion biopsies to patients who fall under the correct patient population, as they are producing more accurate biopsy results.
Internship Abstract

**Title:** Patient Account Activity Assessment

**Name:** Linda Lam

**Preceptors:** Charles Wilson, VP of Operations; Karen Sheperd, Director of Laboratory Outreach

**Agency:** Robert Wood Johnson University Hospital

**Purpose:** To review and research patient accounts with unsubmitted claims due to incorrect or incomplete insurance information related to insurance priority.

**Significance:** Robert Wood Johnson University Hospital Laboratory Outreach Program employed innovative strategies, technologies, and analytics to build a service model that drives profitability and value. Due to high volume of patients at the registrar, a short sighted approach of data entry has led to unintended consequences of incomplete, inaccurate, or out-of-date information. With the use of LEAN practices, health record problems will be reduced and report generated on results in order to improve reimbursement.

**Method/Approach:** A list of 60 unbilled Medicare patients was collected on March 6, 2018. Patient’s account information was given and put on Excel spreadsheet to show the unbilled patient activity trend. After analyzing the unbilled list from March 6, 2018, information technology and billings suggestions will be given to help decrease the unbilled list.

**Outcomes/Results:** The problem was that there is information interference when identifying primary and secondary insurance. Phlebotomists tend to assume that Medicare is always the primary insurer. They do not usually go back to check if this is actually the case. Because of this error, patients do not get billed. Putting in the wrong insurance priority derails the system, and as a result, RWJUH Laboratory does not get paid for their service. This evaluation process demonstrated that patients’ accounts often have commercial payers as their primary insurance and Medicare as their secondary insurance. Although, it is beneficial to have all phlebotomist to change their workflow, potential ideas have not made any changes to the unbilled list. The only way insurance priority practice can be improved within RWJUH Laboratory Outreach is to continue strengthening LEAN and Six Sigma tools. This will change the workflow and shorten the unbilled list.

**Evaluation/Conclusion:** Two excels sheets will be compared to measure if there’s improvement on the numbers of patients in the unbilled list. Patient’s account information will be made by backtracking the process in front of the registrar. The goal is to decrease the unbilled insurance list by 25%. This findings will lead to a conclusion that LEAN and Six Sigma practices are positively associated with timely deliveries, productivity, first-pass yield, elimination of waste, reduction in inventory, reduction in costs, reduction in defects and improved demand management. RWJUH Laboratory Outreach will continue to strengthen use of LEAN and Six Sigma in order to improve patient account activity.
Title: The Importance of Genetic Testing in Identifying New Phenotypes and Management of Rare Diseases

Name: Nina Landa

Preceptors: Direct Supervisor: Erin Savage, B.A., Coordinator
Project Supervisor: Janet Malcolmson M.S., LGC, Genetic Counselor

Agency: Saint Peter’s University Hospital, Department of Genetics and Genomic Medicine

Purpose: Compile a database of chromosomal alterations identified on SNP Microarrays to determine genes located in these regions for the purpose identifying new phenotypes.

Significance: Genetics is a crucial area of medicine because it answers the question of why something is happening. Genetic testing allows for the creation of more accurate management plans for diseases, understand disease occurrences, and identification of inheritance patterns. According to NORD, there are over 1,200 genetically traced disease and thousands of more to be found. Creating a database is important for linking patients with similar symptoms or genetic testing results.

Method/Approach: After compiling a list of patients with positive results on the SNP Microarray for genetic alterations, I began to input patients based on their deletion or duplication. The information regarding which chromosome, if it was on the top (p) or the bottom (q), its exact coordinates, and inheritance pattern were documented. The type of exam, its markers, and the lab who tested the samples were also noted. Finally, the patient's phenotype and reason for referral was listed. Upon completion of this cohort of patients, the database was then organized by coordinates to determine if there were any matches.

Outcomes/Results: Upon completion of the SNP Array Sheet, nine partial matches were found (which included five duplications and four deletions), and five whole matches were found (including three duplications and two deletions). All of these matches were found to be known diseases. This project was started in hope to capture patients with similar phenotypes or genotypes, since there are limited pools of aggregated genetic information from testing nationally and internationally. This database will aid Saint Peter’s University Hospital in assessing patients that appear to have the same or similar phenotypes. It will also help link patients to resources needed for better management. Being able to match genotypes helps define phenotypes in order to identify a new disease and explain how to better manage it.

Evaluation/Conclusion: As more patients are referred to the office for genetic consultation and testing, more patients may be added to the sheet, allowing for a greater chance of finding matches, and potentially even new disease phenotypes. There are several limitations when conducting a study like this. The first is that there is no short-term measure of success. The second is that there is limited quantifiable measures to monitor. The third is that there is always a high chance of loss to follow up or patient non-compliance.
Internship Abstract

Title: Analysis of the Rheumatoid Arthritis Market

Name: John Lee

Preceptors: Christina Banks Senior Manager of Data Integrity

Agency: IQVIA, Parsippany, New Jersey

**Purpose:** To research the Rheumatoid Arthritis (RA) market, evaluating the current & future prescription drug treatments by therapeutic class to determine the most profitable treatment sector over the next 5 years.

**Significance:** Drug manufacturers within this market rely heavily on reported IQVIA data to be accurate to support their business needs (e.g. prescriber profiling, compensation, monitoring payer influence, market event assessment etc.). By IQVIA understanding the most profitable/up and coming treatment sector(s) in the RA market, they will be able to create data analytics packages for key accounts, proactively communicating data coverage, expected market trends and potential data reporting concerns.

**Method/Approach:** IQVIA is the nation’s largest CRO and health data mining company. The company’s coverage of prescription and sales data was leveraged heavily for this project. Research about RA was completed to understand the indication, investigate recent innovations in the market and patent lengths. US sales and prescription data was acquired through SMART, an IQVIA data extraction platform. Through data extraction & evaluation, the RA market was redefined to only include 18 key drugs all within the same drug class (DMARDs). Data on most common drug distribution channels was then extracted from queries by editing SQL scripts. The extract was then pivoted in Excel and used to populate templates that provided a visualization of the data and allowed identification of trends that may need further investigation.

**Outcomes/Results:** Focusing on the DMARDs RA therapeutic class, comprised of 18 brand drugs, earning over $70B over the past two years. Humira, the world’s leading drug by sales, produced by Abbvie, accounted for 46% of these sales. The next largest competitor held 26% of the market share. Fulfillment and distribution of prescriptions was done primarily through the mail channel, accounting for 64% of total demand. Research of the pharmaceutical industry revealed the filing of numerous patents to protect the highest earning drugs keeping other manufacturers from producing similar products and preventing generics to enter the market.

**Evaluation/Conclusion:** As drugs in this therapeutic class may also be used to treat additional indications (not limited to RA) not all $72B in sales can be attributed solely to RA. The RA market continues to be dominated by brand drugs, making it not only one of the most competitive spaces but also one of the most saturated, and remains so due to the multitude of patents protecting key products. However, the introduction of biosimilars and generics may reduce brand dominance. The concluding recommendation is for IQVIA to continue to invest in proactive data analytics reports for the DMARDs drug therapies.
Title: Cardiac and Concussion Screenings in Children and Teens

Name: Madeline Lee

Preceptors: Jean Mckinney, Regional Director, Community Health and Education

Agency: Monmouth Medical Center, Long Branch/Lakewood Campuses

Purpose: To establish a contact network and provide logistical support to the Cardiac and Concussion prevention and screening network in Monmouth County and to determine the reach of community programing in order to better provide effective events for at risk communities.

Significance: According to the CDC, in 2013, approximately 2.8 million people were hospitalized, visited the emergency room, or died from traumatic brain injuries. Of those 2.8 million, about 330,000 of them were children, specifically children who received injuries from sports or other high intensity recreation programs. Between 2001-2012 the number of children who had traumatic brain injuries doubled. Monmouth County has many underserved populations who find it difficult to access or pay for healthcare, and many youth cannot get regular screenings for cardiac and concussion related issues. In order to help provide a service to these underserved communities, efforts are being made to network this free event to all people who may need it, even those who cannot access computers or cell phone networks.

Method/Approach: Network with community organizations that see high volumes of the target populations (youth athletes aged 5-18) and establish a connection with them to bring provide the event flyer and explain the program when necessary in order to increase awareness to the event. Cold calling and cold emailing has been relatively effective for connecting with people who can help distribute information to the target population. The primary focus was on municipality recreation departments, sports arenas/leagues, and the most local middle schools and YMCAs. After the connections were made, there was the collection of the most effective point of contact for each organization. This information was then centralized into a database (currently an excel sheet) to be utilized for later for networking for subsequent events.

Outcomes/Results: The registration metrics show that there are 105 total children booked for cardiac appointments, and 26 children (ages 12-18) and 44 children (ages 5-11) booked for concussion screenings. This is more than three times the amount from the previous registrations of this event. While I was contacting municipalities, several also expressed interest in hosting the hospital events on their campuses. 22 total municipalities were represented by the event. 3 municipalities were not interested in the event. The remaining 32 municipalities not represented were predominantly the far west, north, and south parts of Monmouth County.

Evaluation/Conclusion: An upward trend in the number of children registered was seen in networking and awareness on the event. However, many individuals did not wish to drive to the event. This indicates that while the networking might have been improved, there needs to be a location that is more accessible for the municipalities further away.
Title: Current Reputation Rankings Database

Name: Thomasin Lee

Preceptors: Smriti Sateesh: Global Strategy and Insights Team

Agency: Johnson & Johnson Global Strategy and Insights Department

Purpose: To compare Johnson and Johnson’s current reputation ranking to previous years’ rankings and top competitor’s rankings, based on publicly available, third party reports.

Significance: The reputation of a business is the factor that makes or breaks the company. Having good reputation leads consumers to have more trust in said company and therefore more likely to purchase products and services provided by those companies. Reputation can have an impact on a company in a multitude of ways including but not limited to; overall customer preference, future value of the company in the marketplace, likelihood of consumers to purchase the company’s products and services, support for the organization in times of crisis and/or controversy, and likelihood of consumers to recommend said company to others. Competitors include: Procter & Gamble (P&G), Unilever, L’Oréal, GlaxoSmithKline (GSK), Merck and Pfizer.

Method/Approach: Data collection and reputation ranking analysis of outside sourced reputation reports was completed to determine Johnson & Johnson's 2018 reputation ranking compared to previous years. The reports used for data collection included; Reputation Institute’s RepTrak Report, the Harris Poll Reputation Quotient, The Drucker Institute Most Admired Companies Report, and the Fortune Most Admired Companies List. These reports showcased Johnson & Johnson’s rankings in comparison to some of their top competitors. For example, in the 2014 to 2018 Reputation Institute RepTrak reports, companies from all industries were ranked from 1 to 100 by their overall reputation score.

Outcomes/Results: Focusing on the Reputation Institute RepTrak Report, Johnson and Johnson held the highest ranking among its competitors from 2014 to 2017. In 2018, L’Oréal jumps up to the highest-ranking competitor leaving J&J to take 2nd place. Top competitors, Merck and Pfizer did not appear in the top 100 list in the years 2014 to 2018. While there was a drop in Johnson & Johnson’s overall ranking, they consistently maintain a spot in the top 100. Consumer industry held higher rankings than the pharmaceutical industry, suggesting a higher level of trust in consumer companies.

Evaluation/Conclusion: From 2014 to 2018 we see a general decline in reputation rankings and scores for J&J and some of their top competitors. This suggests a drop in overall reputations of Consumer and Pharmaceutical Industries. With that said J&J is the only pharmaceutical company that has held a top spot in the top 100 and is continuing to outrank its competitors. Analysis of the Harris Poll Reputation Quotient, The Drucker Institute Most Admired Companies Report, and the Fortune Most Admired Companies List, show similar results to those found within the Reputation Institute RepTrak reports.
Title: Workforce Engagement Satisfaction and Inactivity Assessment of Red Cross Volunteers

Name: Nina Liang

Preceptors: Project Supervisor: Lisa McGee, Regional Workforce Engagement Manager

Agency: American Red Cross, Fairfield, NJ

Purpose: To analyze volunteer inactivity for deployment of the Disaster Cycle Services in the tri-state area in order to improve volunteer satisfaction.

Significance: Every year, the Disaster Cycle Services Team at the American Red Cross deploys volunteers to assist those in need, such as during natural disasters or home fires. The New Jersey Red Cross operates the activities of thousands of volunteers every day, sending out volunteers to locations in need of assistance based on volunteer qualifications and preferences. While the Red Cross in New Jersey has a sufficient supply of volunteers to assist local emergencies, every year, volunteers will go inactive or cease volunteering activity with the Red Cross. By speaking with inactive volunteers and recording logs of volunteer experiences, reasons for inactivity and dissatisfaction can be analyzed to improve volunteering experience.

Method/Approach: Through collection of data for American Red Cross volunteers in New Jersey, reasons for inactivity and negative experiences were recorded. Data collected from 278 New Jersey American Red Cross volunteers in Essex, Bergen, Camden, and Hunterdon counties was recorded through phone calls and emails and then analyzed in an Excel spreadsheet. Each volunteer was asked for their reason of inactivity and if they would like to pursue future volunteering activities with the Red Cross. If a phone call was not returned, then a voicemail message was left. Volunteers who responded via voicemail would then have their volunteering status response recorded. Recorded responses were analyzed and divided based on volunteering status (active, inactive, pending), and volunteers with reasons for inactivity were recorded and divided into groups based on their response.

Outcomes/Results: Of the sample size, 68% of volunteers did not answer their phones or respond to emails. An overwhelming majority (86%) of inactive volunteers responded that their main reason for inactivity was due to real life circumstances interfering with volunteering obligations. Some (11%) of the inactive volunteers responded that their inactivity was due to other volunteering activities. Few (3%) of the inactive volunteers responded that their inactivity was due to poor experiences with the Red Cross or trouble with the process becoming an active volunteer.

Evaluation/Conclusion: While most inactive volunteers in these New Jersey counties did not reply to phone calls, the ones that responded stated their main reason for inactivity was due to real life responsibilities. When prompted to join a less intensive volunteering area, very few, if any, of these volunteers were interested. While minimal negative feedback was received from inactive volunteers, these reasons will be reported to the Red Cross to ensure more satisfactory volunteering experiences in the future. A major limitation of this study was that there was no data for these results to be compared to.
Title: Model Program Aimed at Improving Cognition in Older Adults

Name: Amanda Lin

Preceptors: Melanie Ford, Director

Agency: New Brunswick Senior Citizen Resource Center

Purpose: To determine whether the following activities: calligraphy therapy and piano playing would positively affect the cognitive mind of the older generation.

Significance: According to a study, there are significant changes in cognition starting at the age 60. The assessment consisted of 800 participants and concluded that between age 60 and 96, the decline in speed variables was about twice as great than that of adults under age 60, and the decline in memory variables was almost four times greater. Cognitive decline burdens senior citizens’ independent function on a daily basis. Cognition declines rapidly with age and may develop to hindering basic activities such as dressing or remembering phone numbers. In order to slow down the progression, New Brunswick Senior Citizen Resource Center works to implementing programs and activities that work with memory retention, executive processing, and visual attention.

Method/Approach: An assessment was given to 28 seniors, 18 signed up for piano lessons and 10 participated in calligraphy lessons. 8 seniors were involved in both. The participants in the calligraphy group had no prior experience with calligraphy or with Chinese characters. Over the course of 4 months, this group was taught how to handwrite a series of Chinese characters using calligraphy brushes. Similarly, to the calligraphy group, the participants in the piano group had no prior experience playing the piano. These participants were taught how to play London Bridge, Happy Birthday and Hot Cross Buns with their right hand over the same period of time. The assessment given tested each participant’s ability to recall information. The instructions were to repeat the three words I spoke, draw a clock and set the hands to 10 past 11, then recall the three words previously said. After 4 months of lessons, the same assessment will be given to see if there was improvement in their scores.

Outcomes/Results: The seniors participating in piano lessons, 15 scored higher by 1-3 points. The seniors participating in calligraphy therapy, 6 scored higher by 1-2 points. Lastly, the group of 8 seniors that attended both classes scored higher by 2-3 points. Overall, 21 of 28 senior participants improved their scores (75%). One senior only came to the first and last piano lesson and showed a significant drop in her score by 4 points.

Evaluation/Conclusion: At least 60% of the participants scored higher than their scores prior to the lesson. These results suggest that the cognitive engagement of the senior participants facilitated improved scores on memory retention. This information opens another perspective for understanding cognition and encourages more diverse programs to be incorporated into the New Brunswick Senior Citizen Resource Center.
Title: Endoscopy Suite Process Improvement Plan

Name: Kol Lin, Intern

Preceptors: Brian Walch, Senior Manager of Operations

Agency: Jersey Shore University Medical Center

Purpose: To analyze each surgeon’s activity and turnover time between each case at Endoscopy Suites and identify areas of possible improvement.

Significance: Patient satisfaction is an important indicator for measuring the quality of health care. According to Dr. Bhanu Prakash, “the amount of time the patient spends in the waiting corridor area plays a very important role in determining the outcome of patient satisfaction” (2010). Currently turnover time at Jersey Shore University Medical Center Endoscopy Suites is approximately 22 minutes on average and the goal is to ultimately reduce turnover time to 15 minutes. Reducing turnover time can ensure that patients spend less time waiting which will increase patient satisfaction. Reducing turnover time also improves efficiency which allows more procedures to be scheduled and done in the same period of time. A higher volume will positively impact the Endoscopy Suites financial performance as well.

Method/Approach: Reports for each surgeon’s activity in 2016 and 2017 were generated using Surgical Information System. These reports were entered into Excel. Line and bar graphs were created to compare how many procedures were done by each surgeon at the Endoscopy Suites. Inpatient and outpatient volumes were also compared using bar and pie graphs. Reports of turnover time were also entered into Excel and compared against operating room schedule. Outliers were eliminated, and monthly average turnover time was calculated from October 2017 to February 2018.

Outcomes/Results: In 2016, the five major physician groups (a, b, c, d, e; due to confidentiality, practice names are not mentioned here) volume share was 21%, 13%, 24%, 12%, and 9% respectively. These practices accounted for almost four fifths of the total volume. Of these five groups, one of them received more patients from the hospital than the group brought in. The remaining four received similar number of patients compare to what they brought in. Outpatient and inpatient (includes observation) accounted approximately 40% and 60% of total volume respectively. In 2017, the five major physician groups (a, b, c, d, e) volume share was 21%, 15%, 30%, 12%, and 10% respectively and they accounted for almost ninety percent of the total volume. The same group that received more patients from the hospital in 2016 still did so in 2017 while number of cases the remaining four brought in were relatively close to what they received. Outpatient and inpatient still split at 40% and 60% of total volume.

Evaluation/Conclusion: To reduce Endoscopy Suite turnover time at Jersey Shore University Medical Center, ongoing monitoring of turnover time and physician activities will be undertaken to ensure continued improvements in the future.
Title: Community Outreach for Diabetes Analysis

Name: Alyssa Link

Preceptors: Beryl Sowah, APN

Agency: JFK Medical Center Plainfield Health Connections

Purpose: Analyze diabetic and prediabetic patients’ health knowledge and behaviors of diabetes before and after participating in the wellness program established by the Plainfield Health Connection’s community outreach department.

Significance: The American Diabetes Association suggests that an A1C, which is a test that measures blood glucose levels, over 7% can diagnose a patient with diabetes. Specifically, in New Jersey, 12% of the adult population has the chronic disease. Every year, an estimated 39,000 people in New Jersey are diagnosed with diabetes. This disease is influenced by diet, exercise, compliance with medication, genetic influences, and health behaviors such as smoking, alcohol, and drug use. Many people, specifically in the greater Plainfield area, who are affected by this disease do not understand its severity, are uneducated about disease, and do not have the means to maintain a healthy lifestyle while living with diabetes. The community outreach department at JFK Medical Center’s Satellite Emergency Room developed a program to educate those patients who are uneducated, uninsured, or underinsured in order to improve their A1C levels, and ultimately help them manage living with diabetes according to their current living situations.

Method/Approach: A survey reviewed by the Nurse Practitioner was administered to 20 diabetic and prediabetic patients to see how their health behaviors and knowledge of the disease have improved since starting the wellness program with JFK’s outreach department. These patients included individuals of different races, genders, and ages. Also, there was no discrimination against when the patients started the program. For example, patients who have already completed the program to patients who have just started the program in January were all included. The point of this was to assess if the program catered to all individuals and if it was successful in helping all patients with diabetes learn how to maintain healthier living behaviors from when they first started.

Outcomes/Results: Of the sample cohort (n=20), eleven patients have received a final A1C count. Out of these eleven patients, ten A1C levels have improved. The other nine patients analyzed were not in need of a follow up blood test at this time, but they will be assessed within the next five months. Twenty of the patients, or 100%, have changed their health behaviors in some way after enrolling in the outreach program. These behaviors varied anywhere from reducing sugar intake, reducing meal portion sizes, exercising more, or even quitting smoking. One of the final questions in the administered survey asked, “Do you think this program has helped you learn more about healthy living behaviors and how to manage living with diabetes?” and all 20 patients, which is 100% of the intake, responded “Yes.”

Evaluation/Conclusion: Because 100% of the diabetic patients assessed changed their health behaviors in some form, reduced their A1C levels in their blood tests, and learned about how to manage living with diabetes, one can conclude that Plainfield Health Connections’ program is successful in educating patients and teaching them how to manage living with diabetes. Even after the patients graduate from the outreach program, the community outreach team is always available as a resource to continue to help these patients manage their diabetes.
Internship Abstract

Title: Educational Implementation to Reduce Postpartum Hemorrhage in Ghana

Name: Deyssi Macario

Preceptors:
Direct Supervisor: Gloria Bachmann, MD
Project Supervisor: Charletta Ayers, MD, Adrienne Simonds, PT, PhD

Agency: The Women’s Health Institute-Rutgers Robert Wood Johnson Medical School

Purpose: To research educational models to implement in low-resourced areas to help educate and reduce postpartum hemorrhage in Ghana.

Significance: According to the World Health Organization (WHO), postpartum hemorrhage (PPH), defined as the blood loss of 500 mL or more within the first 24 hours after birth, is one of the global leading causes of maternal mortality in low-income countries, accounting for about 99% of maternal deaths. Half of these deaths occur in sub-Saharan Africa, commonly resulting from uterine atony, which is the failure of the uterus to contract after delivery. Ghana in particular, has recorded as of the year 2013, a maternal mortality rate of 380 per 100,000 per live births compared to developed countries with a maternal mortality rate of 12 per 100,000 live births (Owiredu et al. 2016). For this reason, postpartum hemorrhage has become a very important topic to analyze and develop educational methods to promote awareness and reduce maternal mortality in Ghana.

Method/Approach: A literature search was conducted to identify educational methods to promote awareness of PPH in low-resourced areas. Continuing Medical Education (CME) is vital in the medical profession to keep up with the different advances, as well as reiterating medical content to healthcare providers, such as nurses and midwives. A successful educational method to provide Continuing Medical Education in a low-resourced area and help reduce postpartum hemorrhage includes the use of videos that can often be played repeatedly for educational purposes to healthcare providers, including the public. As a result, a Powtoon video presentation will be developed for postpartum information, more specifically uterine atony, which is one of the major causes of PPH.

Outcomes/Results: Information gathered from literature review searches and scholarly articles indicate that learning through video content, which includes the combination of video-motion, images, and audio, which not only serves as an effective method of spreading awareness through memory retention, is also cost-effective when helping reduce postpartum hemorrhage.

Evaluation/Conclusion: Lifelong learning is pertinent in all fields, including the medical field. However, in certain countries like Ghana, where certain resources are low and finding ways to help medical professionals in continuing medical education can pose quite a challenge. For this reason, certain educational implementations, like the use of video content will not only help spread awareness, but also help in the reduction of postpartum hemorrhage, while proving to be cost-effective in low-resourced areas.
Title: Utilizing Health Competition to Enhance Morale and Productivity/Effectiveness

Name: Courtney Mackrell

Preceptors: Jackie Kozak, Melissa Lefer, Erika Lesser, Teresa Day

Agency: SCIONYC, a division of BGB Group

Purpose: To implement health related competitions throughout the office to motivate employees, boost morale and enhance the overall productivity/effectiveness.

Significance: Productivity and positive morale are two significant factors for employees to acquire to foster a successful business. Exhausting these qualities in employees can result in diminished returns for the company, and for the individual. One way to positively impact an employee’s productivity, effectiveness and morale on a personal level is by improving their health. Creating competition, relating to enhancing one’s personal health, in the office can motivate and influence the company to participate, and can be beneficial. The “Health Challenge” was introduced to the company as a competition relating to the number of steps everyone takes daily via a pedometer. Increasing exercise and promoting healthier habits, such as water consumption and healthy eating, in an individual is known to have exponential health benefits. Employees who are participating in the “Health Challenge” should increase productivity and effectiveness in their work and ultimately in their lives.

Method/Approach: To evaluate the effectiveness of the “Health Challenge”, the employees of the company who decided to participate were surveyed and interviewed. Quantitative data regarding the participants’ daily steps were noted through a longitudinal survey every two weeks. Qualitative data was compiled by conducting interviews. Topics that were probed more in depth related to daily activity, water consumption, eating habits, and emotions about the participant’s work. The goal was to dive deeper into the personal experiences of the participants throughout the month-long challenge and discover how thoroughly it impacted their morale and productivity levels both personally and professionally within the office.

Outcomes/Results: In total, 104 employees participated in the Health Challenge. 79% felt the principles of the “Health Challenge”, had increased productivity and effectiveness in their work. Throughout the duration of the process, participants expressed that the added factor of competition added motivation to continue. Participants had a positive experience with this office-wide health competition, and 74% of employees that participated continued to practice healthy habits, track their activity and track their water intake even after the “Health Challenge” was completed.

Evaluation/Conclusion: The results of the “Health Challenge” will be useful for the company to utilize moving forward. The aspect of competition proved to be a major component in motivation. Using the idea of living a healthier lifestyle and creating a competition revolving around that idea, has proven to have the ability to successfully increase morale and productivity in the office. Moving forward, the Operations Team can use this and create alternative competitions that target enhancing health, to produce a similar outcome. This can positively impact BGB Group, the productivity of the office, and the employee’s experiences with the company.
Title: Assessments: An Approach to Improve Breast Health Knowledge

Name: Sana Mahmood

Preceptors: Direct Supervisor: Serena Collado, Director of Community Health

Agency: Robert Wood Johnson University Hospital-Somerset

Purpose: To outreach and educate Indian-Asian women on the importance of breast health, mammography screening, and healthy lifestyle behaviors.

Significance: According to the World Health Organization, “Early detection in order to improve breast cancer outcome and survival remains the cornerstone of breast cancer control” (World Health Organization, 2018). As of 2014, about 90.7 per 100,000 Asian women in the United States have been affected by breast cancer. Specifically, there is an increased risk for Indian women primarily due to the lack of breast health education. This evidence indicates that there is a gap in understanding the importance of breast cancer risk and annual mammograms. Evidence-based interventions will address these gaps to improve knowledge of breast cancer and to increase the number of mammogram screenings.

Method/Approach: A review was completed by community health departmental staff to assess the knowledge of breast health and mammography rates for Indian women who were above the age of 30. A program presentation of breast cancer risk factors was created that primarily catered to Indian women from the Central Jersey area. Outreaching to different Indian organizations became vital to ensure a stable number of participants for presentations. In total, there were 35 Indian individuals who participated in the program. A pre-test form was first given prior to the presentation and a post-test form was given after the presentation. These forms evaluated the changes in the number of correct answers between the pre-test and post-test. In order to further foster learning, a game called “Myth or Fact” was introduced during the presentations. To help motivate participants, a prize was awarded to the winner for their correct answer.

Outcomes/Results: A total of 35 people signed up and 23 people completed both the pre-test and post-test forms. Of the 23 people, 95.65% of individuals improved or maintained their knowledge of breast health. About 4.35% of the individuals’ scores decreased.

Evaluation/Conclusion: Overall, over half of the participants became more knowledgeable about breast health. Since the program did not achieve a 100% improvement rate, different teaching techniques and hands-on activities will be utilized in the future. Furthermore, the number of Indian women who schedule their mammograms will be recorded in order to keep track of any increases.

Citations: [Link to the document]
Internship Abstract

Title: Improving Sexual Education in the New Jersey Personal Responsibility Education Program (NJ PREP)

Name: Alyssa I. Martinez

Preceptors: Direct Supervisor: Brooke Peery, Program Manager of NJ PREP

Agency: Partnership for Maternal and Child Health of Northern New Jersey

Purpose: To evaluate a Teen Prevention Pregnancy Program (TPPP), the New Jersey Personal Responsibility program (NJ PREP), by analyzing pre-and post-evaluations of youth participants and how positive youth development can reduce pregnancy rates amongst youth.

Significance: The World Health Organization says “Around 1.2 billion people, or 1 in 6 of the world’s population, are adolescents aged 10 to 19” (2017).[1] Teen birth rates among New Jersey adolescent’s counties range from 3 to 44 per 1,000 females. [2] New Jersey has created programs, such as NJ PREP to reduce the rate. The goal of the program is to use positive youth development activities to engage and empower adolescents to make healthy, reproductive choices. Ongoing education makes it safer for teens and has a healthier influence on youth development. The more education provided toward adolescents the less likely they are to engage in bad behaviors. If they do, then they will at least know the options as well as risks that are associated with their choices.

Method/Approach: The sample size for this intervention is approximately 45 participants from Irvington. The program intervention is an evidence-based curriculum (Making Proud Choices) that includes 14 modules that cover STD/HIV knowledge and pregnancy prevention. Pre-and-post surveys are collected from participants ranging from ages 10 to 19 that measure pregnancy rates, sexually transmitted infections (STI’s), and contraceptive behavioral knowledge. Each confidential, de-identified survey includes demographic information, such as race, ethnicity, and age.

Outcomes/Results: Once the 14-module cohort was completed in Irvington, there were approximately 45 students enrolled. Of those 45 participants, 49% were females and 51% were males. There were 35 African American students, 4 Hispanics, 2 mixed, and four students who left it blank. Even though there was a range of students from 10 to 19, the mode age of my students was 14 and 15. At the end of the cohort, only 34 participants completed the full program.

Evaluation/Conclusion: Out of 45 participants, there is an expected increase in pregnancy and STD/HIV knowledge based off of the pre-and post-evaluations. More than half of the students enrolled in our program increased their knowledge more than 50%. Ongoing education and resources given to the students can ensure improvement in the future.

Internship Abstract

Title: Patient Electronic Record Engagement Project

Name: Alexandra Martino

Preceptors: Fran Morrison, Director of Systems Integrations

Agency: Cape Regional Health System

Purpose: To develop and execute a plan to increase patient engagement through use of the Cape Regional Physicians Associates (CRPA) Electronic Patient Portal (FollowMyHealth).

Significance: Cape Regional Health System (CRHS) serves Cape May County. Cape Regional Physicians Associates (CRPA) is an affiliate of CRHS. It is a multispecialty practice that see patients at various locations in the county. There are ten office managers who manage the offices. In order to meet the requirements of certain pay for performance and Quality Programs, CRPA must maintain and utilize an electronic health record (EHR) and ensure a patient portal is available to patients. In addition, they must meet certain thresholds for adoption and utilization as a measure of patient electronic engagement.

Method/Approach: FollowMyHealth (FMH) portal allows patients to access their information which includes lab results, doctors appointments etc. A “FollowMyHealth Workshop” was created and offered to all patients including those not yet enrolled. A PowerPoint “how-to” was also created and presented at a Patient/Family Advisory (PFAC) meeting to increase patient understanding and resolve any issues regarding their portal accounts. Each office manager was interviewed to determine their knowledge of the FMH portal. Documents were created for each office manager with detailed instructions on how to enroll patients in FMH and how to troubleshoot issues. Various patient scenario dialogues were created for managers to practice with staff.

Outcomes/Results: Patient EHR use increased within most offices. Over 45 patients were directly enrolled through the course of the Internship. Qualitative research was conducted by interviewing office managers at the start and end of the span of the internship. Overall, the ten office managers reported that there was a marked improvement in their understanding of FMH. They also reported an increase in the number of staff engaging patients in the use of FMH and a noticeable improvement in staff confidence with encouraging patients to sign up and use FMH.

Evaluation/Conclusion: The most effective method of signing patients up with FMH was one-on-one, as opposed to patients enrolling themselves. With this method, any questions or concerns that a patient has can be answered. In addition, patients and managers increase in knowledge and understanding of the FMH portal system lead to greater use. More than 40 patients were enrolled directly throughout the span of the internship. I recommend continued staff encouragement and instruction on FMH; the more the staff understood the application, the more accepting they became with its use in the system.
Internship Abstract

Title: Education Through Theater: SHADES Theater Outreach

Name: Richy Anne Massey

Preceptors: Direct and Project Supervisor: Mark Cruz, Health Education Specialist

Agency: Health Outreach, Promotion and Education (H.O.P.E.)

Purpose: Research and identify strategies to expand SHADES (Student Health Advocate Developing Educational Scenarios) Theater outreach within the Rutgers community.

Significance: The college population is three times more vulnerable to sexual violence than the average American individual. The LGBTQI (lesbian, gay, bisexual, transgender, questioning, intersex) population experiences 28% more violence than other groups on campus, but only 20% of violence on campus is reported. SHADES Theater raises awareness to these topics and brings to light the issues of the bystander effect, bullying, domestic violence and more through interactive and visual performances and skits. Interactive and visual learning increases retention for learning by 43%. Implementing education of these topics on college campuses is one of the most effective ways to reduce violence on campus.

Method/Approach: Increasing publicity and membership for SHADES Theater and integrating within Rutgers community. Redesigning all of the social media pages and incorporating new features such as online booking through the Facebook page. Planning flash performances followed by the distribution of palm cards. The palm cards were created to act as a promoting and booking tool for SHADES. The cards are to be distributed at student centers, residence halls, sorority and fraternity events. SHADES Theater will have tabling throughout the year along with co-hosting events with larger organizations. A running list of organizations interested in Fall 2018/ Spring 2019 performances and hosting events has been created, and will be incorporated within Director’s duties by the end of May 2018. The SHADES directors will be trained through a workshop on how to improve outreach throughout following semesters.

Outcomes/Results: There’s been over 100% increased interest in booking SHADES Theater for Fall 2018. SHADES Theater had 0 performances throughout spring semester 2018. For Fall 2018, there are 10 organizations confirmed for SHADES. The outreach for SHADES has increased by 150%, the Facebook page has more than doubled the number of followers since the beginning of the semester. There has been an increase in traffic on the Facebook page after updates were made with current photos, videos and promotions. The running list of organizations interested in Shades for hosting/co-hosting events has also seen an increase by over 100%. Prior to intervention there were 4 organizations which has since grown to 10 organizations.

Evaluation/Conclusion: At the beginning of the semester, a survey was filled out by the members of SHADES asking the level of outreach the group was experiencing and satisfaction levels. At the end of the semester a follow up survey will also be completed. The SHADES Directors will be trained on different PR techniques and social media designing tips to keep the statistics for SHADES rising.
Title: A Pilot Resource Guide for Parkinson’s Disease

Name: Justin McAnulty

Preceptors: Cheylena Williams, APDA Program Coordinator; Yesenia Medina-Hernandez, Program Coordinator

Agency: Robert Wood Johnson Community Health Promotions Program (CHPP)

Purpose: To educate prime stakeholders in New Jersey about Parkinson’s Disease by piloting a new resource guide.

Significance: There are an estimated 1 million Americans living with Parkinson’s disease and more than 10 million people worldwide. Parkinson’s disease is a type of movement disorder that is chronic and progressive and can affect the ability to perform common, daily activities. Most people who develop the symptoms of Parkinson’s disease do so sometime after the age of 50, but Parkinson’s disease can affect younger persons as well. A resource guide can equip stakeholders with educational literature and appropriate resources to effectively care for those with Parkinson’s Disease.

Method/Approach: A meeting was held to identify key stakeholders, libraries, and areas in New Jersey where resources on Parkinson’s Disease are needed. Three focus groups were hosted to evaluate literature from the American Parkinson’s Disease Association (APDA) for prime information that would be useful for the audience. A department approved survey was administered to patients and caregivers at support groups and at the Annual APDA Conference to determine which literature and resource topics would be most useful to those affected by Parkinson’s Disease. The resource guide’s literature was drafted and assessed for longevity and usefulness.

Outcomes/Results: Of the 140 surveys completed, 98% responded ‘yes’ to the need of a resource guide. Of respondents who marked which literature topic would be most useful, 61 (~43%) respondents marked treatment literature, 39 (~28%) marked Parkinson’s-focused doctors, 25 (~18%) marked support groups and programs, and 15 (~11%) marked educational literature on signs and symptoms. The resource guide will achieve an aspect of the Community Health Improvement Plan (CHIP) of Middlesex County for access to care and services through the usage of distributed literature.

Evaluation/Conclusion: A pilot resource guide is expected to be completed by the summer of 2018 with qualified Parkinson’s Disease literature and contacts for 30 targeted libraries to distribute to affected families. The survey indicated that treatment literature, as well as Parkinson’s-focused doctors should be the prioritized literature in the resource guide. An influx of calls to the APDA Information & Referral Center, the contact provided in the guide, will evaluate the effectiveness of the pilot resource guide.
Title: Building Self-Confidence in High School Scholars

Name: Maya McFarlane

Preceptors: Aaron Reevey, Mentoring Coordinator

Agency: Rutgers Future Scholars Program

Purpose: To evaluate confidence levels of student participating in the RFS program and implement programs and activities to enhance levels of self-confidence.

Significance: Each year, the Rutgers Future Scholars Program offers 200 first-generation, low-income students the opportunity to attain a college education. Academically promising students from New Brunswick, Piscataway, Newark, Camden and Rahway school districts are chosen to participate in a unique pre-college program designed to prepare students for college. Several studies have shown the correlation between self-confidence and academic success. Huebner and McCullough (2000) stated that higher levels of academic self-efficacy are related to higher levels of academic satisfaction, which in return can lead to higher educational attainment. For this reason, it is vital that students are exposed to different mechanisms and given the tools to enhance self-esteem levels.

Method/Approach: An anonymous self-reported survey was administered to three freshmen at Piscataway high school. This assessment was used to determine their levels of self-esteem. Based on the collected data, intervention programs were created and incorporated into weekly mentoring sessions. Verbal and written activities were conducted (i.e., public speaking exercises and written affirmations). The implementation of various activities was used to introduce the scholars to different self-guided confidence building exercises that can be incorporated throughout the duration of high school and in college.

Outcomes/Results: Out of the three students surveyed, all measured their level of self-confidence as “average.” When asked how confident they are in their ability to overcome challenges, all students identified themselves as “somewhat confident.” All students reported that intervention was necessary in order to successfully navigate through high school and college. Overall, all participating scholars expressed willingness to participate in various activities centered on enhancing levels of self-confidence.

Evaluation/Conclusion: A strengthened sense of self is imperative in order to assure academic success for students participating in the Rutgers Future Scholars Program. The effectiveness of self-confidence activities will be evaluated within the upcoming weeks after administering a post-evaluation survey and comparing it to the pre-evaluation survey results. Going forward, new activities centered on building self-confidence will be introduced to a larger number of students to assure prolonged self-esteem development amongst the scholars.

Internship Abstract

Title: Remembering Those Who Forget Us: The Value of Capturing Memories of Loved Ones with Dementia/Alzheimer’s

Name: Melissa McIntosh

Preceptors: Tatiana Rodriguez, Project Supervisor

Agency: Lifeshots Photography and Films

Purpose: To understand how photography and video legacy stories honoring a loved one with Dementia/Alzheimer's can impact the coping/healing process for family members.

Significance: Dementia/Alzheimer’s (D/Alz) is a memory loss disease that affects more than 5 billion people in the United States. With no cure or treatment to reverse the progression, medical professionals are constantly seeking ways to improve quality of life for patients and their loved ones. Family photos and videos can help families in their coping process. The Hebrew Home, a retirement community in Bronx, NY implemented a program where family members record video messages to help jog their loved one’s memories. This evidence indicates one of the many positive effects photography and video can have for people diagnosed with D/Alz and their loved ones.

Method/Approach: A series of 3 surveys were created. The first one was for family members that have already lost someone with D/Alz. The second one was for family members who are currently caring for a loved one with D/Alz. The third one was for healthcare professionals. The surveys were meant to measure if a legacy video can help family members of people diagnosed with D/Alz during their coping/healing process. In preparation for the surveys, interviews were conducted with a member of The Alzheimer’s Association of Massachusetts/New Hampshire and with a Healthy Aging Coordinator of Morristown Medical Center/Atlantic Health System. Three interviews of individuals who either currently have someone or have lost someone with this disease were also recorded.

Outcomes/Results: The survey was sent to approximately 300 people. The goal was to obtain 10 responses from each survey for a sample size of 30 (10% response rate); however, 15 people (5% response rate) responded in total (2 mental health professionals, 5 family members with loved ones presently living with the disease and 8 family members of loved ones who passed from the disease). Of the 15 respondents, 73% agreed that having a legacy video of their loved one would help a family’s coping/healing process. No one said that it would not be helpful. The remaining 27% were unsure.

Evaluation/Conclusion: There was an overwhelmingly positive response from every interview and survey that this is a significant topic that is worth further exploration. Lifeshots Photography and Films will continue this line of work and will offer a legacy video product as a service to health organizations and family members that wish to capture a person for who they truly are and not for who this unfair disease turns them into as it progresses. Additionally, Lifeshots will also offer a half day workshop to teach others how to create their own legacy videos using the memories already captured by family members in printed photographs, cell phone images, video and other media.
Internship Abstract

Title: Evaluation of the Volunteer Program at Children’s Specialized Hospital

Name: Shivani Mehta

Preceptors: Vivian Cappolla, Volunteer Manager
            Donna Dillon, Executive Assistant

Agency: Children’s Specialized Hospital, New Brunswick, NJ

Purpose: To evaluate the effectiveness of the volunteer program at the Children’s Specialized Hospital.

Significance: For years, volunteers have played an important role in hospitals which contributes to providing the best quality of patient care. Children’s Specialized Hospital has an extremely impressive and extensive volunteer program that stretches across their many location sites, primarily in New Brunswick and Mountainside. The volunteers assist in many different departments of the hospital, some of which include, Physical Therapy, Child Life Recreation, Health Information Management System, and Administration. Jeffrey L Brudney emphasizes in “The Effective Use of Volunteers” that it is important to have a program that is “structured carefully [so] volunteer participation can help agencies realize the benefits and avoid the pitfalls of using volunteers”. To ensure that the high quality of the volunteer program at CSH is maintained, a volunteer program evaluation will be conducted.

Method/Approach: Initial research was done to find the best volunteer evaluation program to implement at CSH. After, interviews were conducted with different department heads on the efficiency, effectiveness, and impact of the volunteers in their respective departments. The questions that were asked pertained to volunteer demographics, participation, cooperation, attitude, and interaction. In addition, an observation of volunteers during their scheduled shift and an analysis of volunteer data provided further information. The compiled results/data was then used to help determine any barriers of success and room for improvement.

Outcomes/Results: CSH has approximately 240 volunteers at the New Brunswick and Mountainside locations. However, only 109 of them are active. An analysis of this volunteer demographic data and discussion with department heads regarding efficiency show that there is a lack of volunteers at CSH. In terms of effectiveness, department heads mentioned the inconsistency of volunteers and the last-minute absences. Lastly, 100% of the department heads interviewed noted the positive impact that volunteers have on the patients and the organization as a whole.

Evaluation/Conclusion: About 45% of the volunteer population are in college. Due to busy schedule of college students, volunteers tend to call out frequently and only stick around during the semester. This creates inconsistency in the schedule and is difficult to fill the gaps of missing volunteers. Creating a semester-based program and maintaining a backup list of available “on-call” volunteers will serve as effective strategies to combat this issue and will create a more streamlined and improved program for the future.
Title: The Flu and Vaccination Education

Name: Amanda Merz

Preceptors: Direct Supervisor: Susan Hanrahan, Infection Control Manager

Agency: Jersey Shore University Medical Center

Purpose: To educate the team members in the hospital about influenza and the benefits of its vaccine and to increase the flu vaccination compliance in accordance with the CMS 2020 goal.

Significance: The 2017-2018 influenza season was record breaking. The influenza virus hit the nation all at once, instead of in waves west to east, as seen in the past flu seasons. The Centers for Medicare & Medicaid Services (CMS)’s 2020 goal is to have 90% compliance of hospital team members to vaccinated. At Jersey Shore University Medical Center (JSUMC), the total compliance among team members in the hospital was only 83%.

Methodology: The percentage of flu vaccination compliance was obtained from Occupational Health at JSUMC. There were three units that were selected to receive the education from the Infection Control Department. Food and Nutrition, and Brennan 6 (Adult Oncology), and Mehandru 5 (Adult Medical/Surgical Telemetry) were the three units with the lowest percent compliances of team members vaccinated for influenza. Using information from the Centers for Disease Control (CDC) website, I created a fact vs. fiction information sheet which explained common misconceptions about the flu and its vaccine. I presented the education to each unit on two separate occasions to get the message out to as many team members of each department. The number of team members in each department to receive their flu vaccine after the education was counted by Occupational Health. These numbers were tracked until March 30th, 2018.

Outcomes: Prior to education, the percent of team members vaccinated in the lowest three compliant units was 62%. After distributing the education to the teams of the lowest three compliant units, each unit’s compliance increased. In the Food and Nutrition department, the total vaccination compliance rose from 56% to 62%. There was a 4% increase which was 61% to 65% in compliance in the Brennen 6 unit. The highest increase was 11% increase in the Mehandru 5 unit. The compliance here increased from 71% to 82%. After the education, the compliance in these lowest three units rose to 70%.

Conclusion: When it comes to the flu and its vaccine, due to the news and social media there is a negative stigma around it. At JSUMC, there is a vaccinate or mask policy. If a team member decides not to get the influenza vaccine by December 1st, they must wear a mask at all times. This policy is meant to keep both the patients and the team members protected from the flu. However, masks do not protect people from the flu as well as the influenza vaccine does. The vaccine reduces the chance of getting the flu, or getting it a second time. Also, if the flu is acquired after the vaccine has been received, the flu symptoms are a lot less severe.
Internship Abstract

Title: Period supply distribution and female absenteeism

Name: Melissa Meyer

Preceptor: Rachel Hurley: Director of Community Engagement

Agency: Mitzvah Circle Foundation

Purpose: To distribute period supplies to low-income school districts and analyze female absenteeism

Significance: After reaching out to school nurses in low income schools in Montgomery County, Pennsylvania, a need for period supplies was evident. By distributing pads and tampons, female adolescents will have one less reason to miss school. The distribution of period products focuses on empowering females while reducing stigma around menstruation.

Method/Approach: Using excel spreadsheets, I began by doing a google search to collect data on local public schools with high percentages of low income students. The National diaper bank, who donated the period supplies to Mitzvah Circle, required me to collect data from low income school districts regarding the need of students for period products. When contacting school nurses by telephone, I asked them whether or not they thought the period products would be useful to students.

Outcomes/Results: Of the sample size cohort (n=25), all 25 schools (100%) reported that there was a significant need for period products.

Evaluation/Conclusion: 100% of schools in districts with high percentages of low income students are in need of period supplies. Donating 1,520 period products to each school that was surveyed will serve as an effective strategy to (a) reduce the rate of female absenteeism due to monthly menstruation and (b) empower women. The Mitzvah Foundation will be reaching out to the schools again to further measure the usefulness and impact of free period products for female students in low income public school districts.
Title: Program Development: Prioritizing various samples for improvement of turnaround time

Name: Mohamad Midani

Preceptors: Direct Supervisor: Sherif Mohamed, Medical Director

Agency: EZ Clinical Laboratory, East Brunswick

Purpose: Designing program to reformat sample distribution. Program to decrease turnover time from incoming samples to outgoing results. Program will include triage method to prioritize doctors with patients who report with critical lab results constantly.

Significance: Proper organizational systems improve productivity by 25-30%. With productivity improved, lab results will decrease overall turnaround time within the lab. Increased volumes of samples leave patients with awaiting results that might be in critical condition due to lab unsystematic techniques. Out of every 20 patients about 4-6 results are flagged as critical due to elevated results. Due to old laboratory techniques, many facilities have not updated their systems.

Method/Approach: An introduction to STAT stickers were made into the lab, creating a new triage section within the laboratory. The incoming samples are all checked through insurance and then are determined whether or not they qualify for STAT. The STAT sticker is for urgent and rushed samples. STAT stickers are given the highest priority for processing analysis and reporting. This program assures that doctors who receive more patients with critical results are put second after those who have a STAT sticker. Therefore, starting with patients that have a STAT sticker and then the doctors who have large volumes of critical patients are evaluated with priority in the laboratory.

Outcomes/Results: Many different tests are ran at the same time from 4 different machines all testing from 10-100 samples at once. With the new program, all the STAT samples were being run first, followed by the samples received from prioritized doctors. By doing this, more critical results showed up together than previously. This effectively reduced turnaround time by almost 3 hours to receive results of patients with elevated results first, followed by patients with normal results. Having the critical results earlier resulted in a quicker information exchange between the laboratory and the doctor.

Evaluation/Conclusion: A process and satisfaction survey was handed out to the employees before the program was designed and implemented. The survey addressed the process of different organizational tools used to triage samples and turnaround time satisfaction. At the end of the semester a similar survey will be administered. As turnaround time decreased all lab technician have adopted the new organizational techniques and will train future employees to do the same.
Internship Abstract

Title: Prostate Cancer Surveys: How you ask matters.

Name: Patricia B. Mkanyia

Preceptors: Ralph Stowe, Advocate and Founder

Agency: Jazz for Prostate Cancer Awareness

Purpose: To share expertise in health surveys to help launch the major data collection program that will be done by Jazz4PCA™ and examine the initial data collected at the Men Who cook event.

Significance: The higher risk of prostate cancer for African-American men is well known in the medical community. However, it is not quite clear why this health disparity exists. According to the Journal of Preventive Medicine, African-American men ages 40-90 have a higher lifetime risk of developing and dying from prostate cancer than non-Hispanic white men overall. Medical professionals are unsure about how prevalent this information is to African American men. Several studies indicate that there is a direct correlation between risk perception and health behavior. As a result, it is important that minority men are made aware of their potential risk of developing prostate cancer. This varies greatly when compared to the majority population.

Method/Approach: In order to devise survey questions, extensive research was applied in order to understand men’s perception of prostate cancer risk, and encourage men to make informed decisions about prostate cancer screening. In order to devise appropriate questions, several literature reviews and scholarly journals from the Journal of Preventive Medicine were used as a guideline. Questions were derived from previous medical surveys that did not violate HIPAA regulations. The primary purpose for this survey was to obtain basic information that would be used in other research. The survey was conducted on April 15, 2018 at the Men Who Cook event hosted by the Jazz for Prostate Cancer Awareness organization. During the event, participants were asked to fill out an online survey. The data from registration was analyzed.

Outcomes: The sample size at this point is too small. Although the total number of male participants at the event was approximately 150, only 9 responses were received. This is a margin of error of approximately +/- 32%.

Conclusion: Initially the research and survey seemed promising, but the results presented several limitations. There were not enough responses to make any statements about the data. Based on these numbers, one can conclude that the survey and its methods were not approached effectively. The JAZZ4PCA™ organization could improve on the development of survey questions that target specific aspects of prostate cancer.
Title: Data Validation for Perinatal Software Service Resources

Name: Sanjana Mohaniraj

Preceptors: Lynne Hagan, MBA, Direct Supervisor & Project Supervisor, Director of Marketing

Agency: PeriGen, Cary, North Carolina

Purpose: Data gathering and analysis to fuel identification and targeting of high-probability prospect hospitals offering labor and delivery for United States field sales force.

Significance: Despite spending more on healthcare than any other country in the world, the United States ranks fifth in infant mortality and number one in maternal mortality. Research finds that many of these deaths are preventable. PeriGen is a perinatal software company specializing in solutions that use artificial intelligence to identify both maternal and fetal patients at risk of complications. One research study done at a multi-site health system found that PeriGen software reduced Neonatal Intensive Care Unit (NICU) admissions by 53% and fetal resuscitation by 51%. The study also found stabilization of cesarean-section rates. Similarly, the institution realized lower rates of malpractice complaints and associated costs.

Method/Approach: A review and analysis of the use of perinatal software systems throughout 600 key targeted hospitals/health systems in the United States was undertaken through the use of Healthcare Information and Management Systems Society (HiMSS) and phone interviews. Approximately 42 accounts were analyzed per week over the duration of the 18-week internship. The data collected included demographics, technology, and decision-making contacts. Upon the accumulation of the necessary data, the data was then analyzed and added to PeriGen’s Customer Relationship Management Database (CRM) to fuel a major sales initiative for PeriGen’s new product, PeriWatch Vigilance. The program is designed to increase share of market and sales volume among 600 targeted hospital accounts.

Outcomes/Results: 100% of the sample hospital accounts were completed per the objective of the internship. The marketing and sales team can now effortlessly navigate through the target accounts, identifying those representing the best prospects for sales wins. Of the various perinatal software systems, Epic Stork was most commonly used at 36%, GE Healthcare Centricity at 33%; OBIX at 21%; Philips OB Tracevue at 9%; and others at 0.8%. The outcome of this internship resulted in an updated dashboard in CRM which identifies the key 600 hospital accounts, to increase the marketing and sales team efficiency, effectiveness, and volume.

Evaluation/Conclusion: 10% of perinatal software systems used by hospitals are out of date. As PeriGen follows up with key hospital stakeholders, future plans include collecting more data, partnering with healthcare systems, and helping their labor and delivery teams deliver the best care possible to prevent maternal and infant mortality.

Internship Abstract

Title: Health Education Social Media Toolkit

Name: Kayla Monroe

Preceptors: Carrie Johnson, Coordinator, Local Information Network and Communications System

Agency: Middlesex County Office of Health Services, NJ Department of Health

Purpose: To help establish social media messages and images to be used to communicate relevant and/or monthly health awareness topics, through research and other methods.

Significance: There is a great importance in educating the community on health safety and awareness topics, as well as to promote healthy living and to provide public health education. In a 2014 Pew Research Center survey, it was reported that 74% of online adults use social networking sites,”(Pew Research Center, 2014). Additionally, “one-third of adults access social media related to health (Hughes, 2010). 88% of the Middlesex County population is ages 18 and over. Providing education to the majority population of this area, via social media, will increase health awareness as well as the safety of the public.

Method/Approach: Created a social media toolkit, pre-planned content, and ideas in advance and generated via Twitter posts, Facebook posts, and Instagram posts for monthly awareness campaigns. Prior to each monthly topic, internet research was conducted in advance about specific topics to generate content based on the awareness theme for that month. After doing research via reputable websites, the next step was to draft tweets, Facebook posts and graphically design Instagram images. From there, information and content would be communicated via preceptor Carrie Johnson who would act as a liaison to forward the toolkit content to those who make approvals and choose whether to publish content.

Outcomes/Results: For the month of March, a total of 26 toolkit pieces of content: 4 Facebook drafts were created, 15 tweets were drafted, and 7 images (for Instagram) were created. It was then narrowed down to a 22-piece toolkit: 14 tweet drafts and 4 images (and 4 Facebook drafts). Of the remaining content created, of the 4 Facebook posts created only 2 were posted (with edits), only 1 of the 14 approved drafted tweets were posted, and of the 4 images/ potential Instagram post created, thus far only 1 has been published overall. In total for an entire month only, 15% of the plethora of content original created actually got published by NJ Department of Health, although 92% of the toolkit was approved within the Middlesex County Office.

Evaluation/Conclusion: Although knowledge was acquired on health topics and marketing, and great feedback was given by my preceptor, concrete feedback from those who do the final approvals at NJ Department of Health was not available, thus ineffective. The process on their end proved to be highly inefficient and slow; many changes can be made to improve the social media process. Perhaps social media can be something that county offices have control over in the future or maybe even an awareness account of some sort. On a positive note, all in all, this internship was a creative outlet, learning experience and taste of the professional world of government processing.
Title: Aligning Education with Hospital Regulatory Standards and Policies

Name: Kea Lani Moy

Preceptors: Melissa McCulley, MHA, CTRS, CCLS

Agency: Children’s Specialized Hospital

Purpose: To create a catalog that aligns the hospital education with the regulatory standard they fulfill, as well as for the content experts to review and update.

Significance: Hospitals are regulated by agencies such as The Joint Commission in order to measure, evaluate, and improve their overall performance. In order for new and current employees to be aware and remain compliant with the regulations, education is sent out upon hire, once, or annually. Content experts need to be up-to-date with all of the regulations, as well as the hospital’s own policies, to make sure employees are compliant and following standards.

Method/Approach: Data was exported from Net Learning, the hospital’s learning management system, on all currently running classes and curricula running at the hospital. Once exported, they were aligned accordingly in Excel. Any course that was not active or being used was removed from both the catalog and archived in Net Learning. From there, 290 courses were deemed active or had employees enrolled in it. However, out of those 290 courses, 170 courses did not have a regulation captured in the Net Learning system which subsequently did not show up in the data exports. Using the RWJBH Crosswalk, 2018 Joint Commission handbook, and CSH policies on their intranet, those 170 courses were reviewed, and the correct regulatory standard or policy was assigned accordingly.

Outcomes/Results: Through manual review of the items listed above, 131 courses were aligned with the regulation or policy they fulfilled. As for the remaining 39 courses, which mostly comprised of the hospital’s clinical aspects, the content experts will be contacted, and they will be able to fulfill them. In the future, content experts can make sure that the regulation or policy their course they created was addressing was indeed captured in Net Learning before going live so that manual review is not required.

Evaluation/Conclusion: When TJC conducts their survey, this catalog can be used if surveyors ask how a certain course fulfills one of their standards. Furthermore, if a new standard comes out or if a hospital policy changes, the content experts can update their courses accordingly. The catalog can also be used as a tool for the hospital when they undergo self-evaluation of how standards are addressed and met.
Title: Analyzing The Social Determinants of Health among The Eric B. Chandler Health Center Patients

Name: Becky Munene

Preceptors: Dr. Shilpa Pai

Agency: The Eric B. Chandler Health Center

Purpose: The purpose of this study is to: 1) Conduct an assessment of Social Determinants of Health among parents/guardians with children 0-5 years of age, and 2) To provide tailored resources based on identified needs.

Significance: Addressing Social Determinants of Health is important for achieving health equity. However, anecdotal evidence suggests that many patients with young children at The Eric B. Chandler Health Center have multiple unmet needs. It is important to identify and address factors associated with unmet needs in order to provide patients and guardians with tailored resources that meet their specific needs.

Method/Approach:
Data Collection: We created The Social Determinants of Health Survey, a 10-item survey to assess social needs of patients attending The Eric B. Chandler Health Center. The survey was administered to a random sample of parents and/or guardians of children age 0-5 years of age attending the clinic. Data was collected four times, in both English and Spanish, over a period of four months.

Data Analysis: Survey data was input in Excel and checked manually for errors and inconsistencies. The data was then uploaded to SPSS for analysis. We conducted both descriptive analysis and correlations to investigate unmet needs and identify factors associated with the unmet needs. We also conducted analysis to investigate potential underlying differences in unmet needs based on race.

Outcomes/Results: The greatest social needs identified included inadequate amount of food and trouble paying bills. Other areas of significant need included: Difficulty getting transportation to go to appointments and getting assistance with reading materials on health-related topics. Compared with English speaking respondents, Spanish speakers were more likely to report not having enough food. Significant correlation between "Trouble paying bills" and “Concerns about being evicted” were uncovered. Immediately following the survey, we provided participants with individualized counseling and resources tailored to their specific needs.

Evaluation/Conclusion: There was not much variation in unmet needs (in all categories) between English speakers and Spanish speakers. However, concern about not having enough food to eat was significantly higher than other needs (for all participants). Based on these, and other needs identified, we determined that tailored resources, including individualized counseling, will help to address the gap in unmet needs. In the coming months, we hope to conduct a reassessment of The Social Determinants of Health to determine whether the resources provided had an impact on identified social needs.
Title: Growing Green Minds: Inspiration through School Gardens Conference

Name: Alejandra Murillo

Preceptors: Tanya Sulikowski, Manager of Programs and Education

Agency: Duke Farms, Hillsborough NJ

Purpose: To coordinate and execute a one-day conference that educates teachers on how to successfully run a school garden for cross-curricular education and improvement of food literacy among children.

Significance: Nearly 75% of Americans do not eat five servings of fruits and vegetables a day and only 4% of children eat the recommended daily serving of vegetables. About 10% of all those under the age of 18 in New Jersey face hunger or have limited access to nutritious food at some point in the year. The widespread lack of access to healthy food and food literacy is contributing to a rise in diet-induced health problems like obesity, high blood pressure, high cholesterol, among others.

Method/Approach: A needs assessment survey for school gardens was created and sent to a database of over 3,000 educators around New Jersey. There were 179 survey responses. Most respondents (68%) were public school educators and 79% already had a school garden. The top three problems faced by educators were lack of financial support (49%), problems with garden seasonality (45%), and difficulties integrating the garden into school curriculum (41%). There were 16 workshop stations developed to address the most common needs of educators. The conference ran for 7 hours.

Outcomes/Results: There was a total of 64 attendees and 15 community partners that presented information. A post-event survey was sent to participants to measure the effectiveness of the conference which received 21 responses. The overall experience was rated as excellent (86%) and good (14%). 90 percent of respondents attended to build partnerships with other teachers, schools, and communities. Comments mentioned that many were able to connect with other teachers and organizations for future collaborations. Most of the educators (80%) said that they would attend the conference again next year while 20% said they would attend if it expanded on material presented this year.

Evaluation/Conclusion: School gardens offer hands-on, experiential learning opportunities that get students and teachers interested in food, improves academic and social skills, and fosters environmental stewardship. The main objective of the conference was to have teachers feel equipped with the necessary resources and connections to run a successful school garden. Based on the the post-event survey results, attendees were overwhelmingly satisfied with the material that was presented and will hopefully help them continue educating children on food literacy through cross-curricular connections with the gardens.
Title: Map of Rutgers Global Health Activity Across the Globe

Name: Prachi Nair

Preceptor: Lara De Meo Hoyt, Manager of Communications

Agency: Rutgers Global Health Institute

Purpose: To create an interactive map of Rutgers global health education, research, and service projects taking place across the university and around the world.

Significance: Rutgers Global Health Institute was recently formed to advance global health activities across the university. The interactive project map, a part of the RBHS strategic plan, will be a key resource in facilitating connections across Rutgers’ 30 schools and more than 300 research centers and institutes. The map is thus an important step toward collaboratively solving pressing global health issues in our local community and beyond. By making this information easily accessible on the institute website, the map will make it easier for faculty with similar interests to connect, for students to seek opportunities for engagement, and for external audiences to understand the depth and breadth of Rutgers’ global health involvement.

Method/Approach: Benchmarking research involving 45 peer institutions informed the desired map format and data fields to be collected. Preliminary map data came from a university-wide faculty survey the institute had administered to 8,292 faculty members in spring 2017. Of the 1,398 who responded, 288 provided their contact information for further outreach. A supplemental survey was then administered to the 288 faculty members, as well as to 137 additional faculty who collaborate closely with the institute. Each survey was individualized and pre-populated with the faculty member’s original survey responses. The responses were then used to create an excel database and an interactive project map using Google MyMaps.

Outcomes/Results: The institute’s survey of university faculty showed that Rutgers’ global health involvement extends to 114 countries, with 307 research projects, 246 education projects, and 100 service projects identified. Although data collection is ongoing, comprehensive information was gathered about a large portion of the projects currently taking place. Information included project descriptions, affiliated schools and departments, donors, funding amounts, published papers, and affiliated faculty and staff.

Evaluation/Conclusion: Although this is a pilot project map and database, it is a one-of-a-kind resource that will now be available to students, faculty and external audiences. However, there were shortfalls in the process. Because data collection has taken more time than expected, the map is being created on a rolling basis. In addition, the survey was first met with a low response rate. Email reminders and clear communication with faculty members helped fix this issue. Gathering comprehensive information on all global health projects taking place at Rutgers is a lengthy and complex endeavor, but this project’s goals were to identify needed data, create a data collection tool, and build a pilot map. Once the map is live, the data collection tool will be available on the website for faculty who want to have their project included.
Title: Systematic Research Review on the Effectiveness of Aspirin Treatment in the Prevention of Superimposed Preeclampsia

Name: Larissa Neilan

Preceptors: Project Supervisor: Dr. Adrienne Simmonds
Internship Supervisor: Dr. Percy Yeung

Agency: Women’s Health Institute at Robert Wood Johnson

Purpose: To look at the effectiveness the United States Preventive Services Task Force's (USPSTF) 2014 guidelines in preventing preeclampsia (PE) in women who are at risk of developing superimposed PE based off of preexisting risk factors.

Significance: Preeclampsia is a worldwide maternal health risk with 76,000 mortalities per year due to PE and hypertensive related diseases. In 2014, the USPSTF released guidelines instructing providers to prescribe low dose aspirin to women past 12 weeks gestation who are also at a high risk of developing PE. While there has been a moderate decrease of women develop PE, the best time of implementation and the benefits seen in women with chronic conditions is contested.

Method: This is a review of current literature on the subject in attempts to illustrate continuing issues. Included in the review were one randomized trial, two secondary analysis studies on previous trials and one retrospective cohort study. From these resources there was a table created outlined key parameters and outcomes of each study is reported. These results then open the conversation for the effectiveness of treatment with high risk women and barriers to the best quality of preventive care.

Outcomes/Results: The overwhelming consensus of this research showed aspirin treatment is safe and to some degree has been a useful tool in preventing PE and its related negative health outcomes. While the main outcome is PE, either mild or severe, other associated issues important in measuring the effects are preterm birth, fetal growth restriction and low birth weight. There is still a large portion of women who do not benefit from aspirin treatment in preventing PE superimposed on chronic hypertension, diabetes, history of previous PE and other various risks.

Conclusion/Evaluation: While aspirin has proven to be a safe and generally effective in preventing some cases of PE, researchers need to focus on the women who have significant risk for the disease. It is important to note that African American women disproportionately suffer from PE and attention is required in the medical field to look at the possible determinants of this including both diagnostic and implementation barriers as well as the high rates of chronic risk factors. There is also promising research of combining aspirin treatment with other supplements that could potentially increase its effectiveness in cases of superimposed PE that can be further studied.
Title: Systematic Review of the USPSTF’s Guidelines of Aspirin Use to Prevent Superimposed Preeclampsia

Name: Larissa Neilan

Preceptors: Project Supervisors: Dr. Adrianne Simonds, PT, PhD; Linda Locke MPH, CNM, LSW Internship Coordinator: Dr. Percy Yeung, PhD & CCRP Study Coordinator

Agency: Women’s Health Institute of Rutgers Robert Wood Johnson Medical School, Department of Obstetrics, Gynecology and Reproductive Medicine

Purpose: To analyze the implementation of the United States Preventive Services Task Forces (USPSTF) 2014 guidelines to reduce preeclampsia (PE) in women at risk of developing superimposed PE based on preexisting risk factors.

Significance: Preeclampsia is a worldwide maternal health risk with over 75,000 mortalities annually due to PE and hypertensive related diseases. In 2014, the USPSTF released guidelines instructing obstetric health providers to prescribe low dose aspirin to women after 12 weeks gestation who are at a high risk of developing PE. Although moderate decrease in the prevalence of women developing PE has been shown, concerns exist about the best time to implement LDA and the benefits for women with chronic conditions.

Method/Approach: A literature review was conducted on PubMed. Search terms included “Aspirin, Preeclampsia Prevention, Superimposed and Chronic Hypertension”. The four articles consist of one randomized trial, two secondary analysis studies on previous trials and one retrospective cohort study. A literature synthesis table was created to outline key parameters and outcomes.

Outcomes/Results: The implementation of the USPSTF’s guidelines resulted in a reduction of recurrent PE by 30%. These protective effects are limited, as none of these studies found significant protective effects for superimposed PE between treatment and placebo groups for aspirin treatment except in one study that found a 41% reduction of late onset PE in women with chronic hypertension ($p=.041$). Preeclampsia also had associated negative effects on pregnancy including low birth weight and preterm delivery with an almost significant relationship discovered between history of PE and births classified as small for gestational age ($p=.086$).

Evaluation/Conclusion: The use of aspirin for the prevention of preeclampsia is a safe and mostly effective practice that currently has a B rating from the USPSTF. Women who are at high risk of developing superimposed PE based off of history of PE, chronic hypertension and diabetes do not reap the same benefits and are at risk to further complications including preterm and low weight births. Further studies are needed and there is promising research on combining aspirin and calcium to better protect women against superimposed PE.
Title: New Employee Training on Johnson & Johnson Earthwards® Approach

Name: Julianna Nienart

Preceptors: Michael Chung, Senior Manager of Product Stewardship

Agency: Johnson & Johnson

Purpose: To develop and implement a comprehensive tool to educate new employees on Earthwards®, Johnson & Johnson’s approach to creating more environmentally sustainable products.

Significance: The product stewardship team at Johnson & Johnson focuses on the environmental life cycle of consumer products, pharmaceuticals and medical devices. From sourcing to end-of-life, product stewardship focuses on reducing costs, increasing efficiency and lessening environmental impacts at each step of a product’s life. The Earthwards® approach is a centralized framework that drives innovation across a product’s life cycle to create products that are more sustainable. To onboard new employees into the product stewardship team, training content on Earthwards® must be created and implemented. A comprehensive PowerPoint presentation helps in addressing this need.

Method/Approach: A team of two Environmental Health, Safety and Sustainability interns developed an approach to create a training PowerPoint slide deck. First, the interns learn and understand the importance and significance of Earthwards® through instruction from a supervisor and reviewing Johnson & Johnson internal websites. With a good understanding of Earthwards®, they then create and develop the PowerPoint slide deck using relevant graphics and step-by-step details on the Earthwards® approach. Next, the interns seek management approval of the draft, and then review, revise and finalize the slide deck. In preparation for implementation, one intern leads a pilot training session with a focus group to ensure the training presentation runs smoothly and without errors. The development of the slide deck concludes with an intern presenting to new employees, thereby successfully educating on the Earthwards® approach.

Outcomes/Results: The result is a training presentation and 48 slide PowerPoint deck that details the benefits of the Earthwards® approach and the process a product must follow to become Earthwards® recognized. The slide deck will successfully educate new employees on the importance of their role on the product stewardship team so they can easily step into their positions. Ultimately, a well-trained staff produces high quality work.

Evaluation/Conclusion: A pilot session will be conducted to a small focus group of new employees in order to evaluate the understandability and success of the PowerPoint slide deck and training presentation.
Internship Abstract

Title: Surgery Center Environment Evaluation

Name: Alessandra Nigro

Preceptors: Direct and Project Supervisor: Melinda Serrano, Consultant

Agency: Ambulatory Consulting and Management, LLC.

Purpose: To create and track environmental logs to monitor the ability for ambulatory care facilities to protect the health and safety of patients who receive ambulatory care services.

Significance: Creating environmental logs allows the staff to assess potential risks that could impact patient/employee safety. Doing so on a regular basis allows facilities to track deficiencies and non-compliance in the center. Furthermore, in order to maintain the facility’s license, it is important to remain compliant with regulatory standards. If a facility does not meet the CMS requirements, it will not receive Medicare reimbursement for as long as it remains non-compliant.

Method/Approach: The first step was to review the Standards for Licensure of Ambulatory Care Facilities from New Jersey Department of Health and Senior Services, and the standards for quality of care and patient safety from the Accreditation Association for Ambulatory Health Care. These standards were used to determine licensure and accreditation status requirements, in addition to CMS requirements, and set forth the parameters of the environmental logs. After determining the required content, the environmental logs were created. The final step was to audit the logs on a weekly basis to ensure that the staff remained compliant and completed the log books when necessary.

Outcomes/Results: Compliance was tracked based on percentage of completed logs monthly for three consecutive months, which was determined through weekly audits of the log books. The percentage of compliance for month one was 90.6%, 92.9% for month two, and 94.1% for month three. In an attempt to become 100% compliant every month, the staff was remediated on the importance of remaining compliant. The top three areas that were identified as needing improvement were: what qualifies as variances in the environment, the impact that improper logging could have on patient safety, and the proper way to check the fire extinguishers and complete the fire extinguisher log. Any variances in the environment were reported to the Director of Nursing for corrective action. There were no findings of deficiencies or patient safety issues in the environment of the surgery center.

Evaluation/Conclusion: The environmental log books allowed the staff to monitor the care of the environment, while allowing the management team keep track of whether or not the staff was being compliant. It would have been more efficient if the logs were completed and stored electronically. Requiring staff to complete the logs manually lead to one of the logs getting lost halfway through the first month, which caused the percentage of compliance to be lower for that month than it otherwise would have been. It would have also been more efficient to conduct a training on environmental log completion prior to implementing the use of the logs, rather than waiting until after the completion of this study.
Title: Improving Physical Activity in New Brunswick

Name: Peace Nosa-Omorogiuwa

Preceptors: Manuel Castaneda

Agency: New Brunswick Tomorrow

Purpose: To access the need for an exercise component on the Live Well Vivir Bien Mobile App.

Significance: Obesity is a rising health issue in the United States, more than 1 in 3 US adults are obese. According to the New Brunswick 2016 community survey final report done by the Eagleton Center for Public Interest Polling, among the health issues surveyed, obesity (29 percent) was among the most prevalent issues reported in New Brunswick. Obesity was reported more often among non-Hispanic Black residents, natural-born citizens, the less educated, and the less affluent. In addition, low levels of physical activity has being linked to obesity. Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease and premature mortality, independent of obesity. The Robert Wood Johnson County Health Rankings reports that 24% of adults age 20 and over in New Brunswick reported no leisure-time physical activity.

Method/Approach: Surveys were designed to assess community members views on physical activity, barriers to physical activity and evaluate usefulness of an exercise component on the Live Well Vivir Bien mobile app. The Live Well Vivir Bien Mobile app is a health and wellness app that compiles health, wellness and social resources like events, talks, health screenings that are taking place in the New Brunswick community. The proposed exercise section will include exercise at home videos with exercises that can be done at home with household items. And exercise at-the-park videos with exercises that can be done at the park, helping showcase the many exercise opportunities that exist at local New Brunswick parks.

Outcomes/Results: Surveys are being distributed so no data is available at the moment about results. Survey questions asked about exercise habits of New Brunswick residents, how many times they exercise in a week, barriers to exercising that they face and how likely they are to use an exercise at-the-park or exercise at home videos on a mobile app like the Live Well Vivir Bien mobile app. Survey results will help guide efforts aimed at improving physical activity in New Brunswick. Responses to survey question on barriers to exercise that New Brunswick residents face will also help direct future efforts to address these issues.

Evaluation/Conclusion: Surveys will provide final evaluation as to whether exercise at home or exercise at the park videos will be an effective way to improve physical activity in New Brunswick. If favorable responses are gotten from community surveys, an exercise component will be implemented on the Live Well Vivir Bien mobile app.
Title: Unraveling the Relationship Between CoREST1 and 53BP1

Name: Fauziat Tolulope Nurudeen

Preceptors: Dr. Bratati Ganguly and Dr. Shridar Ganesan

Agency: The Cancer Institute of New Jersey

Purpose: To understand the relationship between two proteins, which are involved in the DNA damage response pathway, CoREST1 (RCOR1) and 53BP1 (p53-binding protein).

Significance: DNA damage can occur through changes in cellular metabolism, viral infection, replication errors, etc. As a result, DNA double stranded breaks are a significant threat to genomic stability and cellular function. 53BP1 (p53-binding protein) is associated with DNA double stranded breaks and promotes Non-Homologous End Joining (NHEJ) repair. CoREST1, known to be a corepressor of REST (RE-1 Silencing Transcription Factor) is a key component of protein complexes involved in epigenetic modification. Through prior research, it has been established that CoREST1 is recruited to the site of DNA damage and has a role in the DNA repair process. In addition, prior research has shown that CoREST1 expression or recruitment may be dependent on 53BP1 expression levels. Two possible reasons for this phenomenon is either genomic instability and/or proteasome degradation.

Method/Approach: To understand what unique relationship exists between CoREST1 and 53BP1, the genomic instability hypothesis was explored. For this experiment, wt 53BP1 U2OS cells (Control) and 53BP1 deficient cells (sh53BP1 called 8865) where used for RT-PCR (Reverse Transcriptase Polymerase Chain Reaction). wt 53BP1 cells express 53BP1 and deficient 53BP1 cells are lentiviral mediated stable of 53BP1 knockdown, which cannot express 53BP1. First, mRNA was extracted from both the proficient and deficient cells and the cDNA was synthesized using Reverse Transcription (RT). The cDNA pool plus the specific primers for CoREST1, the gene of interest, and GAPDH, the housekeeping gene, were all included in the PCR reaction. This method is known as Two-Step RT-PCR because it improves the yield of rare mRNA targets.

Outcomes/Results: By using the Two-Step RT-PCR method to probe for CoREST1 in 53BP1 proficient and deficient cells, it was found that expression of CoREST1 is dependent partly by the expression of 53BP1. In the proficient cells, mRNA expression of CoREST1 was 100%, in contrast to the deficient cells; mRNA expression of CoREST1 was 50%. Meaning, when 53BP1 is present, there was full expression of CoREST1, and in the absence of 53BP1, the expression of CoREST1 is significantly lower.

Evaluation/Conclusion: To understand the relationship between CoREST1 and 53BP1, it was important to see how CoREST1 interacts in the presence and absence of 53BP1. By utilizing proficient and deficient 53BP1 cells and RT-PCR, it can be said that 53BP1 expression is necessary for the expression of CoREST1. As a result, diminished levels of CoREST1 was due in part to genomic instability. Currently, research is being conducted to see if proteasome degradation also plays a role.
Title: Importance of Influenza Vaccinations Within The Senior Community

Name: Marion Nwangwu

Preceptors: Karen Johnson-LaRussa, RN, AAS, BS, MA

Agency: The City of East Orange Department of Health and Human Services

Purpose: To create a brochure on the importance of influenza vaccinations in adults aged 65 and older in order to raise awareness of the risks factors and complications that result from a lack of immunization.

Significance: The influenza vaccination is very important for adults aged 65 and older because they are at a bigger risk for complications that come from the flu than those who are younger. It is essential for people aged 65 and older to understand that the human defense system becomes weaker with age. According to the Centers for Disease Control and Prevention, adults aged 65 and older bear the greatest burden of severe flu disease. It has been estimated that about 71 percent to 85 percent of seasonal flu related deaths have appeared to be within the age group of adults aged 65 and older. 54 percent and 70 percent of seasonal flu related hospitalizations have also occurred within this age group. It is imperative to discuss the risks for complications of influenza, the risk factors and medical conditions that can stem from a lack of immunization from influenza.

Method/Approach: The New Jersey State Health Assessment Data Resource provides data on various health indicator reports of immunization of influenza on adults. It shows the number of adults aged 65 and older that have been immunized, health objectives and targets. This brochure will entail the following information and stress the importance of influenza vaccinations.

Outcomes/Results: Information from the New Jersey State Health Assessment Data, Centers for Disease Control and Prevention and the New Jersey Department of Health was used to create this brochure. The information that was acquired from the New Jersey State Health Assessment Data is from the years 2014-2016; the most up-to-date information. The information in this brochure is to educate the senior community on actions to take to receive the flu vaccination, practicing good health habits, and seeking medical attention. The brochure will also discuss pneumococcal vaccines because pneumococcal pneumonia is a flu related complication. There is also information included specifically about Essex County senior residents immunization from influenza that will provided by the New Jersey State Health Assessment Data.

Evaluation/Conclusion: This brochure will be available at the East Orange Health Department and will be particularly dispersed to the senior centers; one that is a part of the health department and to all the other five senior centers that are within the city. Although the flu season is almost over, it is still integral that senior citizens are aware of the risks that come from not being immunized from the flu. They will be better prepared for the next year and the years to come. This brochure focuses on immunizations of the flu, but there will also be information available for other vaccinations and the vaccination schedule recommended for adults.
Internship Abstract

Title: Career Planning Handbook for Public Health Students at Bloustein

Name: Stephanie Ohiri

Preceptors: Professor Marci Berger, and Professor Alexandra Lopez

Agency: Edward J. Bloustein School of Planning and Public Policy

Purpose: To collect preliminary, informal data from students, faculty and advisors at the Edward J Bloustein School in an effort to improve services and resources that support Faculty Advising and Career Planning.

Significance: Having a career handbook available for Public Health majors at the Bloustein School would benefit seniors looking to enter the workforce. This project stemmed from the needs developed by the Committee on Faculty Advising and Career Planning.

Method/Approach: A physical survey was distributed to 74 students in Principles of Public Health and Health Policy courses. Students were asked if they preferred a physical handbook, an online handbook, or a combination of both. Students were also asked to give three suggestions that would help aid them in their career planning. Faculty members, as well as the Assistant Director for Undergraduate Advising, were interviewed for input as well.

Outcomes/Results: Of the cohort size (n=74), 28 of them (37.8%) preferred a physical handbook, 8 students (10.8%) preferred an online version, and 38 students (51.4%) said that both a physical book and access to an online version would be beneficial. Additionally, the Assistant Director for Undergraduate Advising, was interviewed for input from an advisor’s perspective. Her suggestion was to establish a physical handbook because she feels as though students do not properly use online resources offered. Also, five faculty members were asked to provide feedback via a short survey. Of the five, four faculty members (80%), did not agree with establishing a physical nor an online handbook. Rather, they felt that “YouTube” videos explaining career options would be a more effective approach.

Evaluation/Conclusion: Based on the majority response, as well as my own independent research, I have concluded that a physical handbook, accompanied by videos, would be an effective way of disseminating information on Career Advising for Public Health Students. I believe that a handbook with the following outline would be beneficial for students: 1. An overview of the Public Health major including five core areas, 2. The benefits of choosing a Public Health Major and Career Plan 3. A comprehensive list of coursework and electives required for the major, and an outline of which classes one should take per semester, 4. A comprehensive list of careers in Public Health including detailed descriptions of job duties 5. Resume Writing /LinkedIn tips specific to the field of Public Health 6. GRE and MCAT tips, and 7. Comprehensive list of contact information for faculty and advisors at Bloustein that are willing to provide support. A series of videos that addresses these topics on the Bloustein channel would also be a unique option for those who prefer to receive information visually. With this content for the guide, EJB students would have viable support as they take on Career Planning pre and post-graduation.
Internship Abstract

Title: Analysis of Qualitative Data from Health and Wellness Focus Groups

Name: Eirene Oji

Preceptors: Francesca Maresca, Ph.D. Director of Rutgers HOPE

Agency: Rutgers Student Health Outreach Promotion Education

Purpose: Assess student perceptions of health and wellness in order to better cultivate a culture of health and wellness within the student body at Rutgers University.

Significance: Many young adults will struggle with different and sometimes comorbid forms of mental and physical illness during their college career. It is important to address these issues in the college or university setting. However, many students struggle with stigma, prioritization of academics and other commitments, as well as help-seeking behaviors. Given that these students will likely carry on their health behaviors and attitudes outside of this setting, developing and nurturing a culture of health and wellness is crucial in order to design more effective policies, programs, and services.

Method/Approach: Focus groups were used to collect qualitative data about perceptions of health and wellness. In order recruit participants, several Rutgers University units and student organizations were contacted. Focus group sign up information was disseminated through flyers, emails, and social media posts from a variety of organizations including the Center for Social Justice and the EOF Office. Incentives were provided to students in order increase participation, including a gift bag of Rutgers HOPE materials, free pizza, and a raffle to win a $25 RU Express gift card. Average goal for focus group size was 8 participants per session with sessions ranging from 1-5 participants. Participants signed to consent audio recording and recordings were transcribed at a later date.

Outcomes/Results: Transcribed focus group responses will be subject to qualitative data analysis. The purpose of this analysis is to reveal recurring themes which portray students’ perceptions of health and wellness at Rutgers University. Themes including physical health, mental health, diet, lifestyle, academics, and stress will be analyzed to determine how respondents conceptualize and verbalize the impact these have on their lives. Recommendations will be made to the Rutgers University Health & Wellness Committee on policies and future programming.

Evaluation/Conclusion: Students often spoke of the difficulty in prioritizing health and wellness while trying to maintain a good academic profile. Many students had some way of dealing with stress, often meditation or some form of exercise. There were similar definitions of health and wellness across demographics and the majority of students felt a feeling of belonging to some community. Awareness and perceptions of accessibility of Rutgers Student Health Services varied. Students were receptive to the idea of receiving health and wellness information, and most preferred the email format for delivery of this information.
Internship Abstract

Title: Palliative Care Program

Name: Jennifer Osterlof

Preceptors: Direct Supervisor: Gilbert Baez, General Manager of Outpatient Oncology Services
Project Supervisor: Gillian McKie, Palliative Care Nurse Practitioner Oncology

Agency: Atlantic Health System - Carol G. Simon Cancer Center

Purpose: To measure the effectiveness of a hospital based Palliative Care Program

Significance: As life-threatening illnesses arise and become unavoidable for many, palliative care is a treatment approach that helps patients and their families through the process. By providing symptom management, goals of care, counseling if needed, support systems and more, palliative care can be implemented early in conjunction with chemotherapy or radiation. To justify and expand services Atlantic Health System needs more staff providing palliative care and by collecting this data it will support this model of care.

Method/Approach: Palliative care is given at every step of the treatment process as an extra layer of support for patients. Surveys were created by using the 2016 National Benchmark data reports as a point of reference for evaluating performance and level of quality to then formulate questions. Each physician completed the survey after palliative care consults. These surveys collected data that ranged from age, ethnicity, gender, illness type, reasons for using palliative care and the outcomes. The study started July of 2017 and will commence July 2018. A total of 493 surveys collected between July 2017 and December 2017 were analyzed for this project.

Outcomes/Results:
In order to understand the outcome, various factors must take place. The time between when a patient was admitted to the hospital and the time the patient was referred the Palliative Care Team created a large barrier in the effectiveness of treatment. This long delay impacted the outcome of services. Although there were recorded delays, 83% of patients reported improvement of pain when seeking care for symptom management. 58% of patients used palliative care before the stage of death in the hospital. 78% of the patients received help with deciding advance care planning (i.e., DNR, DNI, POLST, HCP). The data collected may be viewed by outsiders as negative because of high mortality rates, but those individuals fail to understand that Palliative care is a way to prevent or relieve symptoms and maintain the quality of life during treatments. Overall, to prove the value of the program 15% of the patients who overcame their illness came back for a follow up at the hospital.

Evaluation/Conclusion: More than two thirds of the patients utilized the services provided by the Palliative Care Team before discharge or expiration. Palliative care will serve as an effective approach to patients with life-threatening illnesses to help support not only them but their friends and families as well.
Title: Promoting Body-Positivity & Healthy Behaviors Through Client Needs Assessments

Name: Christie Pagano

Preceptors: Elizabeth Manessis, Licensed Medical Aesthetician & Clinical Trainer

Agency: Zeta Aesthetics NYC

Purpose: To improve patient satisfaction ratings of Zeta Aesthetics NYC through non-invasive, medical spa treatments - to contribute to body positivity and improved self-esteem.

Significance: In the United States, approximately 80% of U.S. women do not like how they look, while 34% of men are dissatisfied with their body. Additionally, over 50% of Americans are not happy with their current weight. Body image is a big problem in our society, and can lead to depression, social anxiety and eating disorders. Individuals will go through extreme measures to correct their imperfections rather than working towards improving their quality of life and overall health behaviors. Zeta Aesthetics NYC is a company that uses healthier means to change people into their better selves.

Method/Approach: To evaluate pre-post transformations and access results through quarterly surveys. Formal consultations were held prior to client treatments to execute a treatment plan and ensure results and desired outcomes were reached. Each survey indicated whether the patient was male or female, and how many treatments they have received. A five question likert scale survey was created, using the Rosenberg Self-Esteem Scale, and issued to 48 new and returning clients. The self-evaluation survey assessed areas pertaining to self-image, self-acceptance and personal satisfaction. The surveys were issued to both new and existing clients to collect information prior to and alongside ongoing treatments. Of the 415 active clients, a total of 48 people completed the survey inadvertently assessing his or her self-esteem. Of the 48 clients who completed the survey, 75% were women and 25% were men and 12% of individuals were first-time clients.

Outcomes/Results: Of the sample size cohort (n=48), 31 women felt they were more satisfied with their appearance and felt an increase in self-worth. Ten of the 12 men surveyed indicated that they felt more useful, and more inclined to feel they were good enough. All of the first-time patients indicated increases in self-esteem and body-positivity throughout the survey. Overall, all of the patients were satisfied with the course of treatment.

Evaluation/Conclusion: While the data collected was not statistically significant enough to project a promising outcome, results accumulated throughout this term suggest that body positivity and self-esteem of returning clients increased overtime with the non-invasive medical spa treatments. Ongoing surveys, consultations, and healthy follow-up outcomes will continue to serve as effective strategies to (a) promote patient satisfaction, and (b) improve body-positivity and self-esteem levels with better health outcomes. Ongoing monitoring of mental health behaviors will be undertaken to ensure continued improvement in the future.
Internship Abstract

Title: Disrupting Racial and Ethnic Disparities for Health Equity in New York

Name: Jillian Palao

Preceptors:
Director Supervisor: Erin Mitchell, Director of Engagement
Project Supervisor: Maggie Castro, Associate State Director of Community Outreach

Agency: AARP New York

Purpose: To increase awareness and capture engagements for AARP New York’s initiative of Disrupting Racial and Ethnic Disparities by implementing a tabling informational session at Rutgers University.

Significance: Diverse backgrounds of African Americans, Asian Americans/Pacific Islanders, and Hispanic/Latinos account for 62% of New York City’s population and 33% of New York State’s 50-plus population. However, major gaps exist in the areas of health, economic security, and livability for New York’s 50-plus communities of color. Studies show that racial and ethnic disparities in chronic disease exist from factors including patient non-adherence related costs, health literacy, perceived discrimination, beliefs about medication, untreated mental health and substance use disorder issues, and inadequate insurance coverage. This multi-year effort intends to create policy change so that all people ages 50 and up to choose the way they age without any limitations on access, quality, or cultural competency of care.

Method/Approach: A tabling informational event took place on March 27, 2018 at Rutgers University during a lecture entitled Place, Race and Power: Advancing Health Equity in New Jersey and Nationally led by Dr. Brian D. Smedley. The engagement event will bring awareness to AARP New York’s initiative to New Jersey as well as get college professors, students, and millennials more educated and involved in AARP. The number of community engagements through volunteer application, signed initiative petitions, and/or membership applications will be recorded and input into AARP New York’s database.

Outcomes/Results: Dr. Brian Smedley’s lecture had an attendance of approximately 45 people. Of the 45 attendees, AARP New York captured 22 direct engagements. The engagements included the name, email, and address of the attendees all of which will be input into CVENT, the official engagement and event database of AARP and counted towards the engagement numbers of the Outreach Team at AARP New York.

Evaluation/Conclusion: A process and outcome evaluation was conducted to measure the success of the tabling event. The initial steps included brainstorming ideas of where to capture engagements and contacting Bloustein School event coordinators. These two steps led to a discussion with the AARP NJ Outreach team for a potential collaboration on the event. The immediate outcome of the discussion with AARP NJ was a partnership during the tabling session. Further analysis of health disparities in New York led to the preparation of the appropriate materials for directly engaging with attendees. The short-term outcome of the above steps allowed for the successful capture of 22 direct engagements. The long-term outcome was the presence of AARP New York’s initiative in New Jersey and increased awareness of the health disparities issue that is prevalent across the nation.
Title: Social Media Marketing in the MoveWell Exercise Program

Name: Brianna Parlante

Preceptors: Jackie Loyer, Special Projects and Event Coordinator

Agency: Robert Wood Johnson Fitness & Wellness Center

Purpose: To measure the number of inquiries generated to RWJ Fitness & Wellness Center for the MoveWell exercise program using Social Media marketing tactics.

Significance: MoveWell is an exercise-based wellness program that seeks to ease discomfort for those with chronic joint pain, specifically arthritis related ailments. The goal of RWJ Fitness & Wellness Center is to market this wellness program through Social Media platforms in order to educate our audience on what MoveWell is, with an intent to boost inquiries.

Method/Approach: An eight-week Social Media campaign was implemented. The campaign focused on the hashtag #WellnessWednesday as the tie back to the MoveWell program. Every Wednesday a video was posted on Facebook and Instagram. Videos included tutorials, instructional videos, participant and clinician interviews, as well as Facebook Live streaming. The layout for this campaign began with an eight week storyboard. The video clips were then forwarded to the marketing team who reviewed, edited, and posted them as one-minute segments.

Outcomes/Results: It was concluded at the end of the eight-week Social Media campaign that there was a direct correlation from Social Media marketing to the number of inquiries received. Before the Social Media campaign was implemented, in December 2017, 0 inquiries were received. In January 2018, 4 inquiries were received. In total, these two months accumulated 4 inquiries. After the start of the campaign, the month of February 2018 received 9 total inquiries, and in March 2018 there were 6 total inquiries. The total number of inquiries to the Center after the Social Media campaign was 15. There is a difference of 11 inquiries received, from before the campaign until after its implementation, resulting in a 275% increase in inquiries to RWJ Fitness & Wellness Center. The video that retained the highest audience was a FaceBook live stream with the Physical Therapy department. The total reach was 3,840 people, and total number of views was 1,783. The video that received the least amount of engagement was the tutorial video, receiving a total of 162 views.

Evaluation/Conclusion: In order to increase inquiries, Social Media marketing will consistently boost numbers, resulting in a higher retention of sales. It was concluded that a majority of the audience that was trying to be marketed to was highly active on FaceBook. The storyboard was also an essential part of the strategic plan for this campaign. For future Social Media campaigns, I would suggest using other platforms such as Twitter, SnapChat, and even LinkedIn. Using other platforms such as these will help market to a broader audience. Videos that tend to engage with the audience, such as interviews, receive better feedback as opposed to videos such as tutorials and instructional videos.
Internship Abstract

Title: Clinical and Technical Denials Coordinator

Name: Aashna Patel

Preceptors: Direct Supervisor: Vivian Valentin, Supervisor of Technical Denials

Agency: Aergo Solutions

Purpose: To investigate patient accounts in order to find evidence to support our claims/appeals and overturn clinical and technical denials to receive payment.

Significance: A patient is given an itemized bill after a hospital stay indicating charges by date of service. These hospital bills are often “high dollar” amounts given to insurance companies in order to dispute insurance payment vs. patient responsibility. The itemized bills and total charges are not always correct. Clinicians may make a clerical error inputting medical information or may overlook a request for a hospital authorization code for treatment. Coding errors can be made when inputting inpatient services or patients could be billed for the wrong type of service. Aergo is a third-party consulting firm that’s purpose is to look into these patient accounts and verify whether the patient and insurance company were billed correctly, which involves hours of meticulous investigation.

Method/Approach: A coordinator reviews itemized bills, clinician’s notes, dates of service, medical history, demographics, primary insurance policies and contracts, and all other related patient account information before submitting an appeal. A clinician will review medical records during this time in order to find relevant procedure codes and treatment information for the dates of service in question. The coordinator uses these findings in order to create an appeal letter that gets mailed out to insurance companies disputing a claim.

Outcomes/Results: I was asked to work accounts for Trinitas Regional Medical Center and found that many Horizon NJ Health appeals had been overturned and approved for payment, yet these accounts were not closed on our client system. I verified that we had the determination letter from the insurance on file and discovered that some of these patient accounts were appealed in 2016 and payment from the insurance was still pending. I looked into all Horizon NJ Health overturns for Trinitas in the past 2 years and discovered dozens of accounts that were overlooked and never paid. Using information from my findings, I was able to create an overturn request letter template. Using this template, I inputted pertinent information for each patient and mailed out the request letters. We began to receive payment on these claims for the 2016 accounts, though the more recent accounts are still under review.

Evaluation/Conclusion: It is crucial to pay attention to detail when working on these accounts. There is usually at least one incorrect input in our client system for each patient accounts. I’ve also found that insurance companies will pinpoint any clerical error in an appeal as a way to extend the period of denial, exhausting our appeal rights and exceeding timely filing guidelines. It is therefore crucial that our appeal is correct the first time so that it can be reviewed and “properly” upheld if the denial stands, rather than losing appeal rights for minor clerical issues.
Title: Prevention of Ankle Re-Injuries in Physical Therapy Patients

Name: Kishan Patel

Preceptors: Internship Supervisor, Dr. David De La Fuente, Director Cornerstone Physical Therapy

Agency: Cornerstone Physical Therapy, Clark New Jersey

Purpose: Analyzing causation factors of ankle re-injuries among existing physical therapy patients and proposing prevention methods to decrease reinjury rate during the course of rehabilitation.

Significance: During the course of a lifetime, people often re-injure their ankles due to poor mechanics, misunderstanding of severity of injury, and untimely accidents. On a given day, more than 25,000 people will sprain their ankle. (Brody 2009) Many people with more severe cases, such as ligament tear and achilles tear. Those patients often require physical therapy, however, even after injury, many people still have poor walking mechanics, and/or improper understanding on rehabilitation.

Method/Approach: A series of comprehensive case studies if being performed at the clinic site. Patients with ankle injuries are being assessed, and questioned based on severity of injury, cause, and other factors. An observation of interactions between the physical therapy staff and the patients is being assessed to see if the patients are getting an understanding of how to properly treat and rehab their injury while not present in the clinic. In addition, safety measures are also being noted while the patients are completing their workouts. In addition, the injuries are all being graded, on levels of severity with level I being of minor injury, sprains, etc., and level III being large ligament tears to severe ankle fractures.

Outcomes/Results: The results will be given at the end of the semester. However, based on current sample size many of the patients are dealing with a grade III injury. Those injuries being severe have been handled with care, as the patients understanding of rehab and prevention of re-injury is only based on the knowledge of the physical therapist or physical therapist aide working on the patient. The patient themselves do not have a proper understanding on how to rehab their injury. This is no indicative of the clinicians themselves, however, the patients do not seem to try and figure out the best methods of rehabilitation.

Evaluation/Conclusion: The physical therapists and the physical therapy aides do an outstanding job of relaying the information that the patients need to know, however, baseline information is very limited. A brochure for these patients may decrease the re-injury rate they experience. In addition, even preventing first time injuries can be presented by the brochure with helpful information such as athletic precautions to take before engaging in sports. When making the brochure it will be important to discuss different techniques on how to rehab the injury and common mistakes to avoid during rehabilitation.
Internship Abstract

Title: Child Abuse Prevention Assessment

Name: Krishma Patel

Preceptors: Direct Supervisor: Preeti Srivastava
            Project Supervisor: Gina Stravic

Agency: Raritan Valley YMCA

Purpose: To analyze child abuse prevention strategies and provide educational trainings to improve the safety of children ages 3-5.

Significance: Children are the future of this country and it is important that they have a healthy life ahead of them. As mentioned by the CDC, more than 1,670 children died in the United States in 2015 from abuse and neglect. One in four children have experienced abuse or neglect at some point in their lives. Abuse and neglect at a young age harms the physical health of these children as well as leaving them with long term health issues. Abused children tend to have mental health issues, social development issues and show risk taking behaviors. Training the youth and the staff is a step towards preventing children from suffering with lifelong health issues that threaten their future.

Method/Approach: A review of the trainings and policies in place at the YMCA were assessed during staff meetings to evaluate the YMCA’s policies and procedures regarding child abuse prevention. The YMCA has partnered with a company known as Praesidium which provided a self-assessment for YMCAs nationally to evaluate policies and procedures for child abuse prevention. Based on the first assessment score of 64%, there were changes made to the policies and trainings that are given to the staff. The children were taught lessons on keeping themselves safe and knowing how to react in certain situations adding this to the curriculum at the YMCA. Furthermore, parents were educated about child abuse prevention and how to recognize clues that may be preventing youth from sharing any information.

Outcomes/Results: The self-assessment is taken every two years, hence the re-evaluation of the assessment to see the improved score cannot be done. However, all the changes reflected on the policies and procedures at the YMCA ensure best practices for child abuse prevention. The educational trainings provided for the children showed an increase in awareness. The goal was to see how well the children have retained the information taught to them. There were about less than 10% of children in childcare who were able to answer what to do in situations that can go wrong, which changed to about 80% of the children at the YMCA childcare program being able to recognize safety practices.

Evaluation/Conclusion: YMCA has written policies that were strengthened throughout this process to ensure safety practices that can prevent child abuse. The self-assessment was a great way to identify the loopholes in child abuse prevention at the YMCA that varies in different YMCA programs. The success of this project would be to see the YMCA score much higher on the self-assessment and the children being able to recognize threats to protect themselves, which was seen by the increased percent of children recognizing safety measures.
Title: The Ergo-Analysis of Total Knee Arthroplasty

Name: Krupa Patel

Preceptors: Internship Preceptor, Dr. Eric Gordon, Orthopedic Surgeon

Agency: Hunterdon Medical Center Flemington, NJ

Purpose: The purpose of the first project is to analyze total knee replacement surgeries in the operating room and through videos to detail the efficiency of each step in surgery and the interaction of the surgical team. The purpose of the second project is to acquire photographic measurements of knee range of motion before and after surgery as a tool to improve progress with postoperative physical therapy.

Significance: By improving surgical procedures and training the surgical team, surgeons can finish surgeries with greater efficiency and reduced operating time and be able to perform more surgeries throughout the day with greater productivity. “Approximately 700,000 knee replacement procedures are performed annually in the US. This number is projected to increase to 3.48 million procedures per year by 2030” (Martin, 2017). For patients, this will help reduce blood loss, anesthesia time, and post-operative pain. Additionally, the second project will help track the progress of patients’ ability to achieve range of motion equivalent to that achieved during surgery which will help motivate patients to work harder during therapy with clear goals to achieve.

Method/Approach: A series of total knee replacement surgeries will be observed and timed in the operating room and videos to determine how long each step takes during surgery. An excel sheet will be compiled with time recordings of each surgical procedure. Furthermore, pre & post-operative photos with angular measurement of knee motion (extension and flexion) will be taken for total knee replacement patients. A document with these photographs will be compiled to give to each patient.

Outcomes/Results: Retrospective data is still being collected for these projects. A total of ten surgeries have been observed with seven observed in the operating room and three observed through recordings of previous surgeries. Starting from exposure to closure, each surgery took an average of one hour and twenty-seven minutes to complete. Ten documents have been compiled for ten patients and surgery was performed on eleven knees each containing photographic measures of the patient's extension and flexion (in degrees) before and after surgery.

Evaluation/Conclusion: These results solidify the prediction that the surgical team needs to be furthered trained in order to become well familiarized with the equipment used in the operating room to minimize delays during the surgery. With the current data being collected, it can be concluded that by observing surgical procedures, the surgeon is effectively able to communicate with his team and determine ways to improve their training. Furthermore, obtaining and offering pre and post-operative photographs, has helped give a visual display of how much flexion and extension patients can achieve after surgery.
Title: Memory Screening - Montreal Cognitive Assessment

Name: Mayuri Patel

Preceptors: Direct Supervisor: Kaylee White, Site Manager
Project Supervisor: Steven Senko, Community Outreach and Social Media Marketing Specialist

Agency: Princeton Medical Institute

**Purpose:** To analyze and compare scores from the Montreal Cognitive Assessment (MoCA) to better detect mild-dementia in older adults and to inform individuals about current Alzheimer's studies.

**Significance:** Alzheimer’s disease is the sixth leading cause of death in the world, with nearly 5.7 million people living with the condition. This number is projected to rise to approximately 14 million by the year 2050. Mild cognitive impairment is very common among the elderly population. The prevalence continues to increase in older adults, with half of them progressing with dementia within five years (Gauthier, 2006). The MoCA assists in detecting the onset of mild cognitive impairment or early dementia within the population. The evidence provided designates, what may be, early onset of mild cognitive impairment or early dementia. It will also assist in informing individuals about the current Alzheimer’s and memory studies being conducted at PMI.

**Method/Approach:** The MoCA was administered to individuals by the Clinical Research interns. It is out of 30 points total and can be given out in approximately ten minutes. The assessment consists of seven facets that test various cognitive functions. Each sectionportrays tasks that are similar to most cognitive function tests. For example, the visuospatial/executive section consists of a cube drawing task, which analyzes the way an individual perceives visual and spatial relationships among objects. The abstraction task consists of a task which tests an individual on similarities between two objects. Overall, the MoCA is a useful tool in detecting declination in cognitive function.

**Outcomes/Results:** From February 2018 and March 2018, there were 23 subjects who expressed interest in undergoing the MoCA. Eight subjects, nearly 35%, scored below average. Below average on the MoCA assessment is identified as under 26 out of 30. Of the eight subjects, five subjects, nearly 22%, were on the verge of scoring below average. When looking over their scores, it was evident that the facet of the exam testing delayed recall was where most points were being deducted. Subjects had difficulty recalling a set of five words that were given to them in the start of the assessment. Subjects who score below average are informed of a further cognitive assessment, the Mini-Mental State Examination (MMSE), however, no subjects were interested in taking the examination.

**Evaluation/Conclusion:** Data are continuously being collected as more individuals express interest in taking the MoCA assessment. Marketing and promotional events continue to be conducted to extensively inform individuals about the current Alzheimer’s study at Princeton Medical Institute.
Title: Medical Necessity Analysis of Services Provided by Ear, Nose, and Throat Providers for 9/11 First Responders

Name: Emily Pearlman

Preceptors: Chauntel Richardson, MPH, CHES Member Services Manager

Agency: The World Trade Center Health Program, Rutgers University Environmental and Occupational Health Sciences Institute

Purpose: To analyze medical claims from the top two ENT providers used by the WTC Health Program at Rutgers to determine if medical necessity guidelines were met for standard services and sinus surgeries performed on 9/11 first responders.

Significance: Amongst first responders enrolled in the World Trade Center Health Program (WTCHP), chronic rhinosinusitis was the number one certified condition with nearly 21,894 first responders diagnosed (CDC, 2017). These diagnoses most often require a referral to an Ear, Nose, and Throat specialist who can further treat the conditions. Sinus surgery may be an option for those suffering from chronic rhinosinusitis but may be costly. Medical Necessity is accepted healthcare services and supplies provided by healthcare entities which are appropriate to the evaluation and treatment of a condition that is consistent with standard of care (American College of Medical Quality, 2010). This analysis seeks to determine if medical necessity of standard services and sinus surgeries performed by ENT external providers used by the WTC program were met based on patient diagnoses.

Method/Approach: Medical claims from 2015 to 2017 were obtained for all patients at the Rutgers Clinical Center of Excellence WTCHP who were referred to the programs top two external ENT providers. The claims were reviewed in an Excel spreadsheet to look for most common services provided by each provider. For the most performed services, CPT and ICD-10 codes were analyzed for patterns of costs and diagnoses. For sinus surgeries, professional and institutional medical claims were analyzed to calculate costs associated with the surgeries for each patient who received the procedure. Common CPT and ICD-10 codes were also noted to examine coding and cost patterns. Costs associated with services provided were compared and contrasted between the two providers.

Outcomes/Results: Analysis of standard services showed that both providers charged similar costs associated with their services and that medical necessity was proven. Medical necessity was also met for sinus surgery for all patients with the majority having chronic sinusitis (92%), deviated septum (83%), chronic rhinitis (69%), and hypertrophy of nasal turbinate (69%) diagnoses. Sinus surgery costs differed drastically between the top two providers with the highest cost (including professional and institutional charges) totaling $65,020. The provider with higher medical costs charged 20% (for professional claims) and 65% (for institutional claims) more for sinus surgery procedures than the other provider. However, the lower cost provider performed 86% of the sinus surgeries between 2015-2017.

Evaluation/Conclusion: The results of the analysis will help the WTC program identify gaps in the presence of medical necessity for sinus surgery among their patients. Additionally, the analysis can help the program identify services provided that are associated with high-costs, that may otherwise be an economic burden to patients. By assessing the need for medical necessity, it can help the program reduce high costs associated with services and ensure that patients are receiving adequate and necessary treatment for their illnesses.
Title: Evaluation of the NCJW/Essex Center for Women’s Education 2 Empowerment Program

Name: Rachel Persaud

Preceptors: Sue Wasserman, Director of Community Services

Agency: National Council of Jewish Women Essex County NJ

Purpose: To evaluate if technical training improves employment outlook in NCJW/Essex clients that take certification classes through the Education 2 Empowerment Program.

Significance: Displaced homemakers make up a very vulnerable part of the female population due to their distance from the professional workplace for a number of years. When displaced homemakers find that they are suddenly the primary source of household income, they often need to return to the workforce but are lacking the credentials to do so. In order to combat this issue locally, this project observed if Education 2 Empowerment clients in Essex County obtained jobs after participating in certification classes.

Method/Approach: This assessment involved a survey sent through Email to clients that participated in certification classes through the Education 2 Empowerment program from 2015 to 2017. The survey asked clients questions regarding their course, such as whether or not they obtained a job as a result of the course. At the end of the internship, the certification guidebook for the program will be updated to include the certification courses that helped previous clients gain fulfilling job prospects and remove the courses that were poorly rated and did not help improve job outlook. In addition, the popular areas of expertise that led to the most job prospects will be further researched to find more local opportunities to list in the certification book for future clients. The goal is to supply clients with accurate information about the courses that would be most beneficial to them.

Outcomes/Results: Out of the 25 clients that received the survey, seven clients responded. Among the responders, 42.86% obtained a job. The majority of responders (71.43%) indicated that they were “satisfied” or “very satisfied” with their course. When asked about their satisfaction with help received from NCJW/Essex Center for Women, 100% of responders indicated that they were “satisfied” or “very satisfied”. When asked if they would continue to work with the NCJW/Essex Center for Women after their experience in the Education 2 Empowerment program, 85.71% of clients responded that they would.

Evaluation/Conclusion:
The survey crafted for this project will be used to continually update the certification guide used by clients. Quickbooks was the most popular course taken by clients, and the institutions and programs that satisfied clients will be promoted in the certification guide. Although the majority of responders indicated that they were satisfied with their certification course and with NCJW/Essex Center for Women, it is probable that the most active clients are those who responded to the survey since all seven responders indicated that they utilize other services through the Center for Women.
Internship Abstract

Title: International Trends in Adolescent Nutrition: Africa

Name: Mariah Pierce

Preceptors: Project Supervisor: Amy Abruzzi Ph. D., M.P.H, M.L.S

Agency: Edward J. Bloustein School of Planning and Public Policy

Purpose: To identify and abstract relevant data from studies in preparation for a short article or update to International Trends in Adolescent Nutrition article previously published in 2000 by Professor Dona Schneider.

Significance: According to Skhiri and Traissac, et al. (2011) Adolescence consists of a period where important physiological and psychological changes occur that can lead to an unhealthy lifestyle. Adolescents in rapidly urbanizing developing countries are at increased risk of obesity and overweight, owing to a nutrition transition that occurs as part of this shift. In consequence, lifestyle changes can occur exposing adolescents both earlier and longer, and thereby increasing their risk to health problems including obesity, diabetes and some cancers. This project seeks to identify studies that evaluate the impact of nutritional transition on adolescence in African countries, including studies with research-based interventions.

Method/Approach: A literature review was conducted in Medline using the keywords adolescence or child or young adult and nutrition, beginning with review articles published from 2000 to date. A total of 267 sources were exported into Mendeley, a reference manager and academic social network program that facilitates collaboration. In Mendeley, folders were created based on the continent and the countries within each continent as well as additional folders to facilitate collaboration. PDFs were obtained for all studies conducted on African countries and an excel spreadsheet was created to gather the following information from each reference: country and study location, purpose, study design, study population, study period, prevalence, and findings. In the end 15 cross sectional studies were reviewed using this method covering the Cameroon, Cape Verde, Kenya, Morocco & Tunisia, Mozambique and South Africa.

Outcomes/Results: In addition to the data identification and summarization described above, a written summary on trends in adolescent nutrition in Africa was produced. Most studies were conducted on Cameroon or Africa. Obesity (as measured by BMI) is increasingly common in adolescents along with early life stunting (low height for age). In transitioning to urban areas, food behavior and diet changes occurred. In general, adolescent obesity was associated with diets high in animal products and starch.

Evaluation/Conclusion: There is an increase double burden of malnutrition combined with obesity in adolescents in Africa. Nutritional deficiencies, including early life stunting as well as obesity, are associated with low income and a more Westernized Diet.
Title: Total Knee Replacement: Procedure Analysis, Preoperative and Postoperative Ranges of Motion

Name: Manal Piracha

Preceptors: Project Supervisor: Eric Gordon, MD, Orthopedic Surgeon

Agency: Hunterdon Medical Center

Purpose: The purpose of this project is to measure and analyze the time it takes to perform a Total Knee Arthroplasty, through the observation of surgery in the operating room and surgical videos. The purpose of the second project is to photographically measure the extension and flexion of the knee.

Significance: One of the most commonly performed orthopedic procedures in the United States is the Total Knee Arthroplasty. According to the Osteoarthritis Research Society International, the incidence rate of Total Knee Arthroplasty (TKA) is expected to increase 69% by 2050 compared to 2012. These projections necessitate that as the number of TKA increases, the efficiency of each step in surgery and the interaction of the surgical team will need to improve.

Method/Approach: A review and analysis of 10 surgeries and their surgical procedures was completed through observation of surgery in the operating room and surgical videos. The analysis of surgery identified areas of team training that may need more development. Each step of the procedure for each surgery was carefully observed and timed. An excel sheet was compiled to gather the duration of each surgery consisting of 3 surgeries from the videos and 7 surgeries observed in the operating room. Knees were photographed before and after the total knee replacement with angular measurements of extension and flexion of the knee. Progress was tracked to assess whether patients achieved range of motion equivalent to that achieved during surgery, through feedback from the patient and physical therapist.

Outcomes/Results: 10 patients at Hunterdon Medical Center. A total of 10 total knee replacements were performed on 11 knees (one bilateral knee) and 10 documents were collected for the knee’s range of motion. The average time measured for a total knee replacement was 1 hour and 27 minutes. Observations showed that loss of time in surgery was related to inefficiency of the surgical team for reasons such as, not handing the correct surgical tool in the correct manner or slow preparation of the cement for the implants. The photographs of the patient’s pre-operative and post-operative knee received positive results based off of patient and physical therapist feedback.

Evaluation/Conclusion: Through the data that were collected from the 10 surgeries that were observed, it was shown that length of time a patient is in the operating room could be significantly reduced through open communication, organized planning, and effective strategies with the surgical team. The continued monitoring of surgical steps will decrease surgical duration, as well as reduce medical costs. Patient access to photographs of the pre-operative and post-operative knee will allow for a more efficient recovery due to the ability of understanding the capabilities of range of motion of the patient’s knee.
Title: Recommendations to the NJ Pinelands Commission Long-Term Economic Monitoring Program

Name: Emilia Piziak

Preceptors: Professor Michael Lahr, Ph.D, Directory of Rutgers Economic Advisory Service (R/ECON™)

Agency: Center for Urban Policy Research, Edward J. Bloustein School of Planning & Public Policy

Purpose: To provide research assistance to a report advising the suitability of current core indicators that assess the economic health of the New Jersey Pinelands region.

Significance: The New Jersey Pine Barrens is listed as a National Reserve under the National Parks and Recreation Act of 1978. The Pinelands is an ecologically unique area whose sensitivity to development pressures is heightened by its location in the most densely populated state of the nation. Several of its ecosystem services include recharging the Kirkwood-Cohansey aquifer and providing the habitat for over a hundred endangered or threatened species. The New Jersey Pinelands Commission, responsible for administering the Pinelands, has been evaluating the economic health of the region through a Long-Term Economic Monitoring (LTEM) Program. The Commission’s request for a reexamination of the suitability of the core indicators reflects the need for an update to the contents of the LTEM Annual Report to better assess economic health while protecting the identity of the Pinelands as an ecological reserve.

Method/Approach: A memo of recommended adjustments to the LTEM evaluation methodology was compiled from the audio recordings and attendance of Public User and Expert Panel meetings at the New Jersey Department of Environmental Protection. A determination of which core indicators to keep, change or eliminate was made by an assessment of the memo recommendations and a literature review of the economic and environmental context of the Pinelands and the fiscal factors it would be suitable to monitor. Publicly collected and frequently updated datasets were preferred.

Outcomes/Results: The four economic monitoring areas of population, real estate, economy and municipal finance were expanded to add an economic monitoring area to measure public services. Within these monitoring areas, population was refined by dropping median age and adding socio-demographic variables including crowded housing and education levels; land use indicators and tax sales were added to real estate; various employment statistics were listed to economy, and municipal finance was further defined by several indicators of fiscal stress. Recommended topics for special studies included defining ecotourism/agritourism, spending patterns, relative costs of doing business, natural capital and quality of life.

Evaluation/Conclusion: Adding datasets that are updated with greater frequency and available online to the public encourages the transition of the LTEM Annual Report into an online database. The topics recommended for special study align the purpose of the LTEM Program with significant environmental and economic developments in the Pinelands region. As a resource, the advisory report is limited to recommendations and has no involvement in ultimate implementation by the NJ Pinelands Commission.
Title: New Business Development through Social Media and Direct Outreach

Name: Emma Pizzolo

Preceptors: Mina Ra, Account Manager; Valerie Forte, Head of New Business Development

Agency: BMKD Health

Purpose: To create new business opportunities in the healthcare sector by enhancing BMKD Health’s social media presence with healthcare professionals and by directly contacting potential new clients.

Significance: As of January 2018, 69% of U.S. adults reported using at least one social media site on a daily basis. BMKD Health has active accounts on Facebook, Twitter, LinkedIn, and Instagram. While the company has a similar amount of followers as close competitors on the first three sites, they are the only ones with an Instagram account. These sites provide a great platform to promote the brand as well as engage with current and potential clients. Another method for direct contact with potential clients is through personalized emails to their business email addresses. The open rate for personalized emails is 17.6% as compared to 11.4% for unpersonalized.

Method/Approach: Two different methods were used to promote the BMKD brand to both current followers and potential new clients. The first was through actively posting relevant articles and company news on their Facebook, Twitter, Instagram, and LinkedIn accounts. The second method of brand promotion was through direct contact to professionals in the pharmaceutical and biotech sectors. Through the usage of the Pharmaceutical Marketers Directory, or the PMD, companies were selected that would potentially be a good fit. The directory was filtered down to pharmaceutical and biotech companies in the tri-state and New England areas with over 50 employees. Employees in marketing and product development departments were then contacted through personalized emails and LinkedIn connection requests.

Outcomes/Results: Through research and trial and error, it was found that the best times to post these articles were 11:00 AM and 4:00 PM. On Facebook, these posts raised engagement levels by 29%. The company gained 15 new followers through actively posting as well as sharing the page on personal accounts. Out of the 300 emails sent to prospective clients over the span of 8 weeks, we received back 10 responses. Of these responses, we arranged calls with one of them to discuss how BMKD could help their companies.

Evaluation/Conclusion: Overall, the project was fairly successful. BMKD was able to expand their following and generate leads that could turn into new accounts for the company. They were able to establish a schedule and format for posting on their social media accounts that will continue to be followed and built upon. Hopefully these new methods will continue on and lead to more activity in the future.

https://docs.google.com/document/d/1VK_e5UWZBSUfWvC6iaTvuKbW2ZmMfhB0_s92DbjAa2l/edit?usp=sharing
Internship Abstract

Title: Women’s Health & Menstrual Management for Women with Autism Spectrum Disorder

Name: Shahar Platt

Preceptors: Direct Supervisor: Percy Luk Yeung, PhD, CCRP Study Coordinator
Project Supervisor: Chi-Wei Lu, PhD, Research Coordinator

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

Purpose: To identify, record and analyze the presenting complaints, treatments, and follow-up of women with autism spectrum disorder and to propose additional services for menstrual management to improve medical care for ASD women.

Significance: 1 in 68 children were identified with autism spectrum disorder in the United States in 2012. Many children are living with ASD and they need services and support now, and as they grow into adulthood. Menstruation and reproductive health are challenging matters for women with autism spectrum disorder and for their families. Irregular bleeding, disordered behavior, communication impairments, and issues with hygiene often complicate the delicate balance in the lives of ASD women. Menstrual irregularities and management, hygiene issues, and treatment dilemmas associated with the use of hormonal medication is crucial to study to improve the quality of care ASD women receive.

Method/Approach: Initially, a literature review was conducted on various methods to improve medical care for ASD women. Online databases such as PubMed, Microsoft Academic Research, PLOS ONE, and Google Scholar were used to formulate research. Through the literature review, a number of treatment plans and common complications with menstrual management among women with ASD were identified. By investigating menstrual hygiene, dysmenorrhea, premenstrual syndrome, contraceptives, behavioral challenges, and treatments, the quality of care will improve for ASD women. An analysis of symptoms and treatment plans was conducted to assess the most effective methods to help ASD women with menstrual management. Data analysis was recorded using Excel that accumulated statistics on ASD women and their daily struggles with menstruation and reproductive health.

Outcomes/Results: The purpose of this study was to identify and compare the presenting complaints, treatments, and follow-up of adolescent girls with Down syndrome (DS), autism, and cerebral palsy (CP) presenting. Forty-four adolescents (<21 y); 13 with DS, 14 with autism, and 17 with CP who presented to the clinic from 1999 to 2006. The most frequent complaints were irregular bleeding (n=10) and mood/behavioral changes (n=6). Girls with autism were significantly (chi (2)=8.89, P=.012) more likely to have behavioral issues related to the onset of periods. Initial management for behavioral issues for the autism group included nonsteroidal anti-inflammatory drugs (NSAID), oral contraceptives, and education. So too, physicians can choose from a variety of treatments such as a levonorgestrel intrauterine device, surgical alternatives and combined contraceptives including progestin only methods, oral progestins, depot medroxyprogesterone acetate (DMPA), and implantable progestin.

Evaluation/Conclusion: The management of menstrual issues in women with ASD should be guided by the same principles that apply to the general female population. Medical care providers should work with patients, parents, and caregivers to find an acceptable course of action. Clinicians should always be concerned about the vulnerability of this population. If menstruation is limiting the patient’s ability to participate in her regular activities and are clearly affecting her life, treatment can be initiated with periodic evaluation of the need for continuation.
Internship Abstract

**Title:** Emergency Action Plan for New Bernards Township Health Department Employees

**Name:** Danielle Plenge

**Preceptor:** Lucy Forgione, Health Officer

**Agency:** Bernards Township Health Department

**Purpose:** To create and implement an emergency action self-study presentation for general preparedness, fire, power outage, gas leak, and active shooter situations directed towards new employees of the Health Department.

**Significance:** Office and workplace incidents occur all the time and not only threaten the lives of the employees but also the public, can disrupt operations, and cause physical or environmental damage. A plan that delineates and combines the current informal procedures, current Office of Emergency Management guidelines, Standard Operating Procedures, and any additional new information that can be given to all new staff members can ensure an organized response and limits the possibility of harm. It is important to revise and implement a comprehensive plan from all new and existing programs before an emergency occurs in order to limit the amount of disorganization and injury.

**Method/Approach:** A pre-test was given to the current employees of the Health Department in order to determine a baseline level of knowledge regarding each employee’s perception of the current informal and formal procedures. Next, a self-study presentation was distributed to the staff via email with instructions for four different emergencies and a section on general emergency action preparedness. After completing the presentation, the employees were instructed to take the post-test provided at the end of the presentation to determine the effectiveness of the self-study presentation and accuracy of information provided within the presentation including a section to comment on the effectiveness.

**Outcomes/Results:** The pre-test displayed that most employees were confused about an emergency meeting location due to a previously decided unwritten meeting place. This was displayed in the post-test results as 88.7% of employees selecting the accurate meeting location while 21.7% selected incorrectly. After being informed of an existing meeting location that has been used historically, the location within the presentation was updated to reflect more accurate information. The post-test responses overall displayed an understanding of the subject and showed that there was agreement on the basic aspects of the presentation and most emergency procedures.

**Evaluation/Conclusion:** After receiving feedback from preceptors, the email providing access to the pre-test, presentation, and post-test will be sent as separate emails so as to ensure the pre-test is taken prior to access to any presentation materials. It was noted that access to the materials via email communication was of an informal nature and therefore was not taken as seriously as a formal assessment should have been. In the future, communication containing a program will be made to be of a strictly formal nature to ensure timely completion of all aspects. Additionally, suggested changes by the town fire marshal and police resource officers on specific information were added to the presentation. This program will need to be continually updated and maintained in order to stay up to date on emergency.
Title: City ID Recognition

Name: Gabriele Podwin

Preceptors: Project Supervisor: Charles Bergman, Esperanza Project Director

Agency: New Brunswick Tomorrow

Purpose: To make bank accounts and credit more accessible to New Brunswick residents who have difficulty obtaining state or federal ID.

Significance: Municipal ID cards make it possible for many residents of New Brunswick to access components of economic and civic life that would not otherwise be feasible. Without a valid ID, people struggle to access simple conveniences like bank accounts and credit. Federal IDs, like driver licenses and passports, fulfill this need. However, individuals who lack social security numbers struggle to obtain such identification. It is difficult to determine the exact number of unauthorized residents living in New Brunswick, but more than 35% of the city’s population were born outside of the United States. (Hernandez 2017) Working with local banks throughout New Brunswick to recognize the municipal IDs will help such residents to open bank accounts to save their money, cash checks, and access credit, which was not an option before. Findings show that access to credit offers a positive economic impact on household finances, as well as make it much easier to fund investments that may offer future returns, like starting a small business. (Quach 2005)

Method/Approach: The municipal IDs are already formally accepted and recognized by all New Brunswick City agencies, including the police department and emergency services. The focus is now on expanding recognition to independent banks within the city limits. This was done by collecting information on such banks and financial institutes via the use of online maps. A list of 16 banks was compiled. Of those, 5 had already agreed to recognize municipal ID. The other 11 were called, and further appropriate contact information of relevant persons with a say in the matter (usually managers) was obtained. The question if the bank would adopt a new policy that accepted the IDs was then answered.

Outcomes/Results: Half of the banks (n=8) are receptive to recognizing the municipal IDs as a valid form of identification, and 2 rejected it. 2 banks were a dead end, as they are no longer present. Of the remaining 4 banks, further follow up is required to receive a definite answer.

Evaluation/Conclusion: Half of the banks (n=8) agreed to recognize municipal IDs. Further persistence with the 4 banks that have not given an answer may further increase the success rate. In order to make the ID program have the intended positive effects for residents, it is important to circulate the information of which banks accept the IDs. Additionally, knowledge of how to utilize banks and the services they offer is important for potential beneficiaries to understand in order to maximize the financial benefits.
Title: Understanding The Impact of AIDS Organization on HIV/AIDS People.

Name: Ivy Adu-Poku

Preceptors: Direct Supervisor: Deloris Dockrey, Clinical Director

Agency: Hyacinth AIDS Foundation, Newark, New Jersey.

Purpose: To create a survey to measure whether the patients find the programs valuable, gather input on the performance based on patients’ expectations and assess strategies to improve the program.

Significance: Patient satisfaction is a critical constituent of quality healthcare. Patient satisfaction impacts the productivity, clinical outcomes, organization, patient retention and altogether, the quality of care in a healthcare setting. In addition, Patient Satisfaction is an essential source of information to measure the progress, success and identify any missing gaps in a healthcare facility. This assessment aims to identify those missing gaps pertaining to the quality of care and recommend strategies to improve them at the Hyacinth AIDS Foundation Clinic.

Method/Approach: Patients received post appointment satisfaction survey questionnaires after their visit with the doctor. The survey was then evaluated for over a week period. The survey instruments were comprised of a Likert scale and numerous multiple questions which administered every aspect of care. 30 patients received the questionnaires and reacted to the survey questions. The responses were coded and entered into a Microsoft Excel Database. The average scores and responses frequencies for each survey questions were also calculated.

Outcomes/Results: Of the sample size cohort (n=30), 87% of the patients responded on getting timely appointments, care and information; 97% of the patients reported on effective communication between the providers and themselves; 93% of the patients rated well on patients’ privacy and confidentiality; 97% responded greatly on staff-patient interaction and roughly 97% of patients usually or always refer others to seek medical care at Hyacinth clinic. 70% of those surveyed were males, 20% of the patients were females and 10% were unknown. 66% of those survey were also Black or African American; 6% of the patients were white; 3% were American Indian and 6% were of other racial background.

Evaluation/Conclusion: Hyacinth AIDS foundation clinic received an overall positive feedback in this survey. 97% of patients find the clinic satisfactorily when it comes to their needs and will recommend others to seek medical care at Hyacinth clinic. However, there are some changes need to be made. Roughly, about 13% of patients were not satisfied with the waiting time when it comes to the appointments. Future plans should be dedicated to preparation prior to patients’ appointment to lessen waiting time. In addition, 6% of patients were not satisfied when it comes to privacy and confidentiality. Future plans should be dedicated to educating workers on patients’ confidentiality to improve patients’ discretion. The survey limitations include patients’ illiteracy and not having enough people to react to the survey to make strong outcome. Overall, this survey was an effective tool to identify missing gaps at Hyacinth AIDS Foundation.
Title: Revenue of Events

Name: Brittany Polmann

Preceptors: Melissa Byrd, Regional Development Representative

Agency: ALSAC St. Jude, New York, NY

Purpose: To evaluate revenue data for ALSAC events to improve fundraising opportunities.

Significance: It costs 2.4 million dollars a day to run St. Jude children’s Research Hospital. Events such as galas, dinners, and golf outings are meant to give hope to St. Jude patients and their families when you raise funds in their honor. Completing revenue reports for each event directly shows the corresponding event specialists where all of the money comes from yearly. It will decipher what needs to be focused on more proactively and what was a huge success the previous year for themselves and their event committees. Evidence-based meetings with event specialists in the office will address these assumptions made on each event to improve fundraising rates for the upcoming year.

Method/Approach: There are about ten event specialists in the New York office, each with about two or three events a year. These events each raise anywhere between $10,000 and $2,000,000. ALSAC’s data resource called SharePoint is a tool used to extract data revenue history for each event. The first step was to select three major events from this semester. Data for each event’s history were exported to separate spreadsheets. Spreadsheets were separated by the event code (event number) then by source code (event part). Event parts include: donations/ sponsorships, raffles, auction, ticket sales, etc. After spreadsheet event codes and source codes are all totaled up, they are then analyzed.

Results: This year, the total revenues were as followed: Angels for Hope (AFH) $311,285.16, Friends of St. Jude (FOSJ) $122,024.84, and Wall Street Associates (WS) $178,284.23. The total revenue for each event was then separated into (4) main categories: Sponsorship Revenue, Ticket Sales, Auction Revenue, and Raffle Revenue. According to AFH total revenue, 26% was Sponsorships, 44% Ticket Sales, 12% Auction, and 18% Raffle. According to FOSJ total revenue, 20% was Sponsorships, 53% Ticket Sales, 19% Auction, and 8% Raffle. According to WS total revenue, 43% was Sponsorships, 32% Ticket Sales, 18% Auction, and 7% Raffle. AFH and FOSJ were categorized as “Social Events,” while WS a “Professional Networking” event due to the nature, committees, and culture of each event.

Evaluation/Conclusion: Collectively for each event, Sponsorships and Ticket Sales are the constant abundances of revenue per event. Based on the type of event, the outcome varied. For Social events like AFH and FOSJ, ticket sales will always be highest. AFH ticket sales being 44% of revenue and FOSJ 53%. Sponsorships were a close second for both revenue totals. In Professional Networking events such as WS, sponsorships always take the bulk, this year at 43% versus 32% being ticket sales. This data is utilized to stay constant and promote growth from year to year in order for fundraising success. These revenue reports are the proactive measures that aid in reaching such success.
Internship Abstract

Title: Process and Operations Improvement in the Emergency Department

Name: Hayley Preston

Preceptors: Joseph McTernan, Vice President of Special Relations

Agency: Trinitas Regional Medical Center

Purpose: To observe with the purpose of improving the processes and operations flow of the newly renovated Emergency Department Fast Track area to increase efficiency and reduce patient wait times.

Significance: The source of many issues that plague an emergency department are not internal within the department, but rather a hospital wide problem. According to the white paper publication *Achieving Hospital-wide Patient Flow* by the IHI, patient flow inefficiencies are known to present themselves in the form of a problematic ED. When a hospital is not flowing efficiently, patient backup appears in the ED, as many med-surg unit admissions come from ED admissions. Further, the implementation of a fast track system, when implemented properly and adjusted accordingly, is proven to be instrumental in reducing patient back up in the main ED as it acts as an urgent care facility, treating patients with high Emergency Severity Indexes (ESI’s 4 and 5).

Method/Approach: Process maps and Spaghetti diagrams tracked the location of both patients and medical professionals in the Fast Track to discover small inefficiencies in day-to-day work. Observations of and discussions with the medical professionals gave insight to some major problems that needed to be fixed and reported as soon as possible. Once the problems were comprehensively understood, a report was sent to the Vice President to solve these problems. Various data input and analysis projects identified inefficiencies at a hospital wide level, which ultimately hindered ED productivity.

Outcomes/Results: Now that observations are complete, some changes that were suggested were able to be implemented promptly by the senior leadership team. One of the first changes was the implementation of an RN as the patient’s first point of contact as well as a registrar for the ED. Previously, a Patient Care Assistant was tasked with determining if patients should go to the main ED or Fast Track, which led to many mistakes and put the patient at risk. Because of the RN’s experience and training they are much better suited than a PCA to assign patients to either the main ED or Fast Track Unit based on their chief complaint. When patients are sent to the right unit in the ED, they are able to be assigned a more accurate ESI after being seen by a physician, meaning they will be accurately diagnosed, treated, and released or admitted in a timely manner. Secondly, the Discharge Chair (DC) unit was closed, as it was being misused as a Fast Track waiting room and ultimately led to patients not being triaged for hours.

Evaluation/Conclusion: Currently, the project is proving to be a success due to the fact that many important changes have been made in Triage, and the ED and Fast Track are already running more efficiently as a result of accurate patient unit assignment. This project is very wide spanning, and will certainly continue on for many more months, and if successful it will ultimately lead to shorter patient wait times and a seamless ED experience for Trinitas’s patients.
Internship Abstract

Title: Educating and Bringing Awareness to Parents on Human Trafficking

Name: Nathalie Proano

Preceptors: Rosario Sanchez and Diana Starace

Agency: RWJ-New Jersey Coalition Against Human Trafficking Healthcare Committee

Purpose: To educate and bring awareness to parents using an infographic that shares tips and methods to prevent human trafficking along with informing them on the topic.

Significance: In the United States, there are currently more than 60,000 reported victims of human trafficking and 50% of those are under the age of 16. 250,000 children are at risk every year in the United States for human trafficking. Parents have a huge impact on the lives of their children therefore, educating them and bringing awareness can help prevent and identify human trafficking. A common misconception of human trafficking is that it only occurs internationally, but educating parents on human trafficking can help them understand that it can happen to their own children within schools, online, neighborhoods, etc.

Method/Approach: An infographic on ways parents can prevent and identify human trafficking was created in order to educate and inform them. Social media has a huge impact on children today, so informing parents what they can do online or how they can monitor their children will aid in blocking traffickers from having any kind of contact with them. Internet safety is important when dealing with traffickers because they are currently using online relationships to recruit their victims. Communicating with children is important because if it’s not present, it can lead to insecurity issues leading their children to search for other people to talk to. Not only is this method effective for their children, but their peers as well. Parents can easily see red flags around their community in helping to save other children as well. The end of the infographic contains information of services, tools, and hotlines that can help parents wanting to know more information of human trafficking or in need of immediate help.

Outcomes/Results: Since gathering information to create an infographic with resources that can help parents prevent and identify human trafficking, the NJCAHT will be using and sharing it along with uploading it onto their website. While interning at NJCAHT, a new database with information regarding organizations was created. Information was retrieved through phone calling organizations and running a script by them. In fact, some of the organizations that were called, provided educational and awareness programs for human trafficking. This is also something to look forward to working with in the future. Since this is an ongoing project and the infographic is just being put in use, results are still pending until the PDF is available on their website.

Evaluation/Conclusion: Overall, it is important educate and bring awareness to parents who may not know anything about human trafficking because children are at such high risk in the United States.
Title: Nurse Orientation Guidelines for GetWell Network

Name: Ashley Quinones

Preceptors: Bonnie Altieri, CPN, Laura Kompany

Agency: Children’s Specialized Hospital NB

Purpose: Develop an informational guide for novice and experienced nurses at Children’s Specialized Hospital (New Brunswick) explaining the functionalities of a patient support program known as the GetWellNetwork according to staff’s preferred learning style.

Significance: The GetWellNetwork is a program utilized by all patients at Children’s Specialized. Utilizing the bedside TV, the GetWellNetwork system enables patients to access important health information on their television. Using technology in this way to achieve a more patient-centered care experience is often referred to as Interactive Patient Care (IPC). Proper orientation of the program is critical to its successful implementation and the hospital’s ability to maintain a useful exchange of knowledge between nurse and patient. The preferred learning styles of nursing staff was utilized in the creation of an orientation guide; which serves to help nurses develop more effective strategies for patient care and family teaching.

Method/Approach: A survey reviewed by the Chief Nursing Officer was administered to nursing staff at Children’s Specialized Hospital New Brunswick. The questionnaire functioned to analyze the learning preferences of nursing staff when introduced to technology-based learning material, like the GetWell Network. The VARK (Visual, Auditory, Reading/Writing, Kinesthetic) tool was utilized to categorize learning preferences. The results of this survey were then utilized to guide the creation of an orientation guide on GetWell. Through the analysis of the surveys, lessons on the aspect of GetWell that proved most difficult for learning staff to comprehend was administered in various ways according to the preferred learning styles of staff. After the lessons were implemented, a follow-up survey was conducted to see what worked and what did not.

Outcomes/Results: Based on nurse interviews, the projected popular learning styles among staff will be visual, auditory and reading and writing. Due to the intensive workload of nurses, responses at this time are limited. Prescription of education videos explained via three learning routes: through illustration displaying screenshots and directional arrows, through a written informational guide solely comprised of words, and through a recorded invoice explanation of the task.

Evaluation/Conclusion: Additional responses will further strengthen the significance of outcomes/results. If this method proves useful, we may increase the likelihood of full competency of the program among staff; through equalizing the chance to attain knowledge by all staff through the use of each preferred learning style. Further plans include collecting more data and reaching more nurses.
Title: Women’s Health Institute Educational Video Series

Name: Sristi Rai

Preceptors: Direct Supervisor: Dr. Chi-Wei Lu, Dr. Percy Yeung
Project Supervisor: Imene Beche, Research Assistant

Agency: Robert Wood Johnson Women’s Health Institute

Purpose: To create an educational video series for both patients and the general public on important women’s health topics.

Significance: In the past few decades, our population’s dependence on technology has increased exponentially. We have become more and more accustomed to performing a quick Google search in order to find out the answers to our questions. Online videos and health websites sometimes take the place of doctors in less dire situations, but it has become so easy to disseminate anything on the internet, whether or not it is credible. The purpose of these videos is to combat all of the misinformation that is out there regarding women’s health and ensure that women have accurate knowledge of their bodies, bodily processes, and any issues they may be having and are aware of the resources that are available to them.

Method/Approach: Extensive background research was performed regarding specific health topics such as maternal health awareness, transgender healthcare, pelvic pain, vaginal infections, and bladder control during menopause. The main focus was interviewing doctors that were experts in each topic to film what knowledge and advice they had to offer regarding these topics. Doctors were interviewed and filmed and that information was corroborated with published literature to ensure that the most accurate and helpful information was being delivered to the public in the most user friendly manner.

Outcomes/Results: Three doctors were interviewed on four different topics that they were experts in. Dr. Gloria Bachmann was interviewed about maternal health awareness and transgender healthcare, Dr. Juana Hutchinson-Colas was interviewed regarding bladder control during menopause, and Dr. Nancy Phillips was interviewed for vaginal infections and pelvic pain. Four videos were created for these four topics, all about three to five minutes long. These videos will be presented to the members of the WHI and then marketed on all of the WHI social media -- Facebook, YouTube, and Instagram.

Evaluation/Conclusion: Increasing the media and information content of experts on the internet is something that can prove to make great developments in public health. The general population is too dependent on information readily available to them on the internet for there to be the amount of misinformation that there is. It is important that reputable health institutions such as Robert Wood Johnson Hospital take the initiative to release information and media that people will find useful in understanding their bodies and that could combat any incorrect information that they may be receiving that will harm them in the long run. It is also highly important that they are aware of the resources that are available to them and learn about the approaches they should be taking in sensitive health conditions.
Title: The State of Women’s Health in New Jersey

Name: Amrutha Ramaswamy

Preceptors: Direct Supervisor: Elaine Zundl, Research Director

Agency: Center for Women and Work

Purpose: To analyze health insurance, access to care, and health outcomes for New Jersey women in order to provide policy recommendations.

Significance: In New Jersey, 7.25% of women are uninsured -- a number that is at its lowest thanks to the 2010 implementation of Obamacare and the later expansion of Medicaid. On a national scale, NJ women are slightly less likely to be uninsured, with the national rate around 8%. If the Federal push to repeal the Affordable Care Act is realized, 528000 New Jerseyans can stand to lose their insurance in addition to the already uninsured 650000. Alongside the women in NJ without insurance, many are underinsured or unable to access care. This severely impacts health outcomes and medical debt.

Method/Approach: To study health insurance, access to care, and health outcomes for NJ women, a literature search was performed on different aspects of these topics on both a national and New Jersey scale. This was then narrowed down to gendered studies and eventually to data on New Jersey women. Overall, over 30 publications were reviewed in these subject areas. It was noted that almost all studies on the subject utilized CPS, ACS, and IPUMS data. Using Tableau, SPSS, and Excel, this data was studied to assess which occupations were the least likely to provide insurance and how it impacted access to care. These findings were then compared with how women without insurance get care and their medical debt.

Outcomes/Results: It was found that NJ women are more likely to be insured than NJ men -- however, uninsurance disproportionately impacts women of color and low-income women. Hispanic women are 15% likely to be uninsured in comparison to their non-Hispanic counterparts at 5%. Similarly, those who are Asian American/Pacific Islander, Black, Native American, or two or more races are much more likely to be uninsured than their white counterparts at 6%. Those without income have a 25% uninsurance rate, while those who earn over $100000 are only at 3.3%. Unpaid laborers, retail workers, food service workers, and other hourly low-wage workers are the most likely to be uninsured. This manifests itself in negative health outcomes, as women without insurance are less likely to seek preventative care, having fewer options to do so. Lack of insurance also contributes to rising levels of medical debt, with 1 in 5 New Jersey adults having past-due medical debt.

Evaluation/Conclusion: A Federal repeal of ACA would drastically hurt New Jersey women. In order to improve access to care for everyone and reduce medical debt, policies will need to be enacted to provide more people with insurance, such as universal healthcare/single payer, and more funding directed towards clinics that accepted sliding-scale payment. More options for preventative care need to be offered so less medical debt is accumulated in emergency care.
Title: Examination of Evidence-Based Methods to Improve Care for Individuals with Co-Occurring Serious Mental Illness and Substance Use Disorder

Name: Zahra Afzal Rana

Preceptors: Sheree Neese-Todd, Director, Public Academic Research Partnerships

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

Purpose: To identify the technical assistance (TA) needs of state policy partners serving individuals with co-occurring serious mental illness (SMI) and substance use disorder (SUD).

Significance: Over ten million adults in the United States experience SMI in a given year[i]. Research indicates that there are systematic deficiencies in the quality of care that individuals with SMI receive and these issues contribute to preventable poorer health outcomes, such as early death and medical comorbidity. People with multiple comorbidities are at highest risk. In 2014, 7.9 million adults in America had a co-occurring SUD and mental health disorder[ii]. Co-occurring disorders are difficult to diagnose, and often individuals with co-occurring SUD and SMI are treated for only one of their disorders. The lack of treatment for both disorders further contributes to preventable poorer outcomes[iii]. Therefore, it is essential that systems serving this population receive the necessary TA and evidence on co-occurring SMI and SUD. SMINET is a federally funded multi-state consortium that consists of state Medicaid and mental health leadership currently serving individuals with serious mental illness. Recent federal and state policies seek to increase care integration across medical, psychiatric and addiction treatment sector.

Method/Approach: A literature review and examination of policies on evidence-based methods to improve care for individuals with co-occurring SMI and SUD identified a number of TA priorities areas. A survey, based on these reviews was created using Qualtrics software. State policy partners prioritized their TA needs by completing the web-based survey.

Outcomes/Results: The response rate for the survey was about 47% with 8 out of the 17 participants submitting the survey. Participants indicated an evidence briefing/webinar (85.71%) as their preferred method for receiving TA. Participants also indicated the following as high TA priority areas: an evidence briefing on the current policy landscape for treating individuals with SMI and SUD (71.43%), an evidence briefing focused on providing culturally competent care for individuals with co-occurring SMI and SUD (57.14%), and an evidence briefing detailing models and programs for structuring physical and behavioral health care integration (57%).

Evaluation/Conclusion: Feedback from survey participants will guide the Rutgers SMINET research team to provide TA that is highly prioritized by state policy partners.

https://goo.gl/vv9vxR
Internship Abstract

Title: Employment of Narcan by Police Officers

Name: Zakrya Rana

Preceptors: Sergeant Michael Loretti

Agency: Edison Police Department, Bureau of Criminal Investigation, Crime Scene Unit

Purpose: To analyze if the employment of Narcan by Police Officers decreases opioid-related deaths and/or overdoses.

Significance: With the opioid epidemic at an all time high in the United States, opiate-related overdoses and death prevention have become a Public Health priority. In recent years, Police Officers have been trained and equipped with Naloxone, more commonly known as Narcan. This is a medicinal substance which can reverse the effects of an opioid overdose thereby saving the life of an individual that has overdosed. In 2016 alone, the Center of Disease Control estimates there were an estimated 64,000 fatal opioid overdoses. Opioid overdoses are rampant and the use of Narcan by Police Officers has significantly increased.

Methods/Approach: In order to test this project, the approach taken was the use of an itemized survey to analyze Police Officers detailed in the Patrol Bureau on their use of Narcan. 15 Officers were surveyed. The survey assessed opinions on Narcan, frequency of usage, successful usages and unsuccessful usages. In addition, statistics from the Edison Police Department Bureau of Criminal Investigation BEAST database software on the use of Narcan were compiled on the basis of when Narcan-use was initiated comparatively with when it wasn’t.

Outcomes/Results: The outcomes of this project are expected to show a decrease in fatal opioid overdoses due to the use of Narcan by Police Officers. If the outcomes show there is a decrease in Opioid-related overdoses in regards to the onset of use of Narcan by Police Officers, the use of Narcan by Law Enforcement will be deemed essential. The survey revealed that all 15 officers had used Narcan multiple times in their careers, with various successful and unsuccessful attempts. 10 out of 15 officers agreed that Law Enforcement Officers should continue to use Narcan whereas 5 disagreed to their use of Narcan. Statistics revealed from July 1, 2013 to December 31, 2015 12,000 Narcan dosages determined 93.5% of individuals survived.

Evaluation/Conclusion: There is no unified database on Narcan statistics—especially with respect to the initiation of use comparatively with the past. This lead to difficulty in asserting that Law Enforcement’s use of Narcan was solely responsible for the decrease in overdoses. However, the evaluation of Officer’s experiences and attitudes in addition to the available statistics it can be concluded that Narcan use by Law Enforcement has a significant impact in decreasing fatal overdoses.
Title: Program Implementation to Reduce High Rates of Diabetes in Senior Citizens

Name: Emil Robinson

Preceptors: Melanie Ford: Resource Center Director
Jackie/Evelyn: Program Coordinator and Supervisor

Agency: New Brunswick Senior Citizen Resource Center

Purpose: To educate the senior citizens on ways to reduce high rates of diabetes and the importance of being active physically, mentally, and spiritually.

Significance: Diabetes kills more Americans every year than AIDS and breast cancer combined, and a person with diagnosed diabetes at the age of 50 dies six years earlier compared to their counterpart without diabetes. 85.2% of people with type 2 diabetes are overweight or obese so physical activity, and senior citizens with diabetes are at a greater risk for a plethora of other health complications in the future. Education acts as a catalyst to utilize resources such as knowledge that strongly influences people’s ability to reduce risks that may prevent or better control the disease once it occurs.

Method/Approach: There were bi-weekly educational programs that consist of physical and mental exercises geared toward diabetes called “Fitness Day”. The brain teasers and game show themed activities contained a common trend of detecting early signs and symptoms of diabetes, becoming familiar with common health terminology, engaging in physical activities to prevent obesity, and easy dieting handouts that they can take back home with them. The demographic was examined to key in on a specific problem, diabetes information and prevention tips were added to the program, surveys were taken before and after program sessions, data was collected, and brochures were handed out during the last session that they could take home.

Outcomes/Results: We have had four sessions already, and some of the trends found are that attendance levels decrease when the programs are in the afternoon, Mondays have been reported to be the most successful days for attendance (highest attendance number=25), and the implementation of the program since has brought up the total number of members in the center. Overall attendance has risen throughout the weeks (average attendance daily at the center=42). The seniors retained the information very well, and 93% of the participants said they would apply the things we learned to their everyday lifestyle.

Evaluation/Conclusion: Many incidences of diabetes occur due to the lack of knowledge of the subject including beginning signs, treatment and care, living and managing, and related conditions. Furthermore, dieting and physical activity served as a large part of the program, and all of the participants thought the handouts were beneficial for when they wanted to retrieve information in the comfort of their homes. The surveys can be modified and used again to track progress within the seniors in the future.

Sources: https://docs.google.com/document/d/1nQPl_KGAwG-FU6WdbZYQnN9HDGJOoL5kLBqCPnuf1Eo/edit?usp=sharing
Title: Improve the Residents Quality of Life and Satisfaction within Heath Village through Residential Daily Living Accommodation Questionnaires

Name: Kirsten Rochelle

Preceptors: Mary Ellen Bove, Administrator & Chief Operating Officer (COO)

Agency: Heath Village Retirement Community & Skilled Nursing Facility

Purpose: To develop a detailed survey for incoming and established residents that will recognize their daily living routine prior to Heath Village to help establish a familiar living schedule.

Significance: Nearly 20% of the entire elderly population is affected by depression and it is closely associated to struggling with dependency and disability (Dragaset, 2013). Additionally, 18% of adults that are 85 years and older live in nursing homes; a common complaint is the feeling of confinement and a loss of their independence (Brandburg, 2007). Residents have expressed the difficulty with the transition of living within their home to Heath Village. Serving the long-term residents with a smooth transition from the comfort of their home to the skilled nursing facility is important to creating a positive initial experience with the staff and facility. Obtaining the residents surveys will provide valuable information to Heath Village, and directly help to personalize the services provided to each of residents, thus improve the quality of life of Heath Village residents.

Method/Approach: A 25 question survey regarding hygiene, meals, activities, overall daily routine, concerns and/or requests having to do with their everyday living schedule was produced. These questionnaires allow Heath Village to establish a personal plan for each resident involving their activities of daily living (ADLs). Twenty-two long-term care residents were individually asked these questions in the privacy of their rooms. The interviews lasted between 0 to 3 hours depending on the individual resident. Their responses were thoroughly recorded on paper and transferred to a word document, as well as an excel spreadsheet. With this information, both qualitative and quantitative data was generated and analyzed.

Outcomes/Results: The questionnaires revealed a strong relationship between the residents and the Heath Village facility. More than 80% of the interviewed residents feel they have access to what they need at Heath Village. About 50% of the residents expressed feelings of being confined, restricted and lacking control of their own lives. Only 4 out of the 22 residents (18%) are not bathed or showered at the time they prefer. Additionally, 100% of the residents stated they missed their homes and would rather be there than Heath Village.

Evaluation/Conclusion: Data regarding elderly individuals and long term care facilities are limited. Heath Village is rated by CMS as a five-star nursing home facility. Perhaps if this questionnaire were conducted in a lower rated facility it would produce different results. However, the questionnaires confirmed the need for a more “modern” approach to senior living and home care. Heath Village has plans to build a new SNF that is less institutionalized in which these questionnaires will be utilized to develop a personal plan for each individual resident. Hopefully this will reduce the amount of residents that feel they live within a medical facility and more so within a new home that is better equipped for their needs.

https://docs.google.com/document/d/1VHgKmnfV0zOjLWLuWEBhtzOw2rqv1MnKR2tc6D9tTMI/edit?usp=sharing
**Title:** Community Benefit Analysis  
**Name:** Darren Rocker  
**Preceptors:** Angela Centellas, Internship Coordinator; Jennifer Barrett-Sryfi, Director of Community Programs; Aline Holmes, Senior Vice President  
**Agency:** Health Research Educational Trust, part of New Jersey Hospital Association

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**Purpose:** To conduct a scan of community benefit projects completed by hospitals in New Jersey and compile the information into a database.

**Significance:** Under the Affordable Care Act, non-profit hospitals are required to fulfill community benefit requirements to qualify for tax-exempt status. The New Jersey Hospital Association established the Community Outreach Awards program to recognize different projects that are undertaken by non-profit hospitals. There are three categories: Preventing Disease and Injury, Improving Access and Quality of Care, and Reducing Healthcare Disparities. The final product will detail important information of each project including purpose, targeted population, results, and total costs. This will allow for recommendations to hospital administrators as well as policymakers at all levels of government.

**Method/Approach:** The first step to complete this project involves looking at the various abstracts that hospitals have submitted to NJHA. Important information is identified, such as name of institution, program purpose, and outcomes/results. The information is then transferred to a spreadsheet in Microsoft Excel. With the information all compiled into one database, NJHA will be able to compare costs and results of various projects undertaken by different hospitals in New Jersey.

**Outcomes/Results:** The final product will be a database of community benefit projects undertaken by various hospitals from 2004 to 2016. Therefore, it will be difficult to define this project using qualitative or quantitative metrics. The creation of a database will allow NJHA to analyze various projects and look at how costs and results are related. Comparing the different projects will allow NJHA to determine which programs are most effective. The information of the programs will be sorted in a Microsoft Excel spreadsheet based on categories such as program purpose, targeted population, and results.

**Evaluation/Conclusion:** The spreadsheet will have tremendous use by the New Jersey Hospital Association, as information on various projects created by hospitals in New Jersey will all be compiled into one large database. This will in turn lead to conclusions based on project costs and results that can lead to policy suggestions and changes ranging from individual hospitals to all levels of government. Ideally, this database will be updated yearly to keep up with recent programs that are undertaken by hospitals. Changes such as the addition or removal of certain categories will also be possible with future updates.
Title: “Is There A Lawyer In The House?”: How access to legal services can improve health outcomes for people living with HIV/AIDS and other chronic illness

Name: Janisha R. Rodriguez

Preceptors: Gwen Orlowski, Esq. - Senior Staff Attorney; Janice Chapin, Esq. - Executive Director

Agency: Central Jersey Legal Services

Purpose: To organize a symposium in partnership with the Robert Wood Johnson Medical School addressing the benefits that access to legal services, in partnership with health care, can lead to improved health outcomes for patients living with HIV/AIDS and other chronic illnesses.

Significance: According to the National Center for Medical-Legal Partnerships, 60% of an individual's health is determined social determinants of health (SDOH) which include but are not limited to: income and health insurance, housing, education and employment, legal status, and family stability. For vulnerable populations, such as people living with HIV/AIDS, inequities rooted in public policy and law present barriers to positive health outcomes. Incorporating attorneys and social workers to the health care team allows for a more holistic patient-centered treatment that addresses both the biological and civil-legal problems of the individual. The goal is to educate and inform health consumers, providers, and RWJ Medical School clinical staff, including physicians and medical students on (1) the SDOH that affect consumers living with HIV/AIDS and other chronic disease, (2) the resources offered by legal services to tackle these barriers to health, and (3) the several legal sectors related to health outcomes, including access to Medicaid services, disability income, and SNAP benefits.

Method/Approach: Research was conducted on the SDOH related to HIV/AIDS, as well as the benefits of MLPs in order to target the specific needs of this audience. A layout of the symposium agenda included a keynote speaker, panel discussion, discussion of legal services and Medicaid eligibility, and a case-study hands-on roundtable group discussion on important health-related topics for people living with HIV/AIDS and other chronic illness. A program evaluation survey was given out to measure the content, preparedness, and overall audience satisfaction of the event using a 5-point Likert scale.

Outcomes/Results: An interactive day of concrete learning and presentation of resources was organized for an audience of health care consumers, providers, and RWJMS associates. Experts specializing in health law and policy joined as speakers for the event. These included staff and attorneys from the NJ State Department of Health, Rutgers Law School, Legal Services of New Jersey, Community Law Project, and law firms that handle related issues. An evaluation survey was collected where attendees were asked to rate the event on a 5-point Likert scale. The survey asked their opinions on questions such as “I have learned ways in which legal services can improve health outcomes.” 83% of respondents agreed or strongly agreed to all questions on the survey.

Evaluation/Conclusion: The symposium was successful in relaying important information about legal services, social determinants of health, and how incorporating a legal professional into the healthcare network can solve both the legal and medical needs of a patient.
Internship Abstract

Title: New Jersey Prehospital Triage Modernization Study

Name: Julio Rodriguez

Preceptors: Direct Supervisor: Kenneth Christensen, State of New Jersey’s EMS coordinator
Project Supervisor: Dennis Boos, Administrative Director and Training Center Coordinator

Agency: New Jersey Department of Health - OEMS ; University Hospital - CEPR

Purpose: This efficiency study will identify stakeholders and current best practices related to prehospital triage during mass casualty incidents.

Significance: Trauma is the leading cause of death for Americans ages 1 – 46. However, 20% of these deaths are preventable with optimal emergency care. In order to better increase optimal emergency care, studies on emergency management need to be conducted. Yet, it is more than unpractical to conduct a field study during an emergency situation. One solution is to keep high detailed trauma records for observation. Another solution is to create a field simulated MCI. NASEM estimates 1 in 5 deaths from traumatic injuries can be prevented in the prehospital setting. 2/5 of trauma victims are alive by the time EMS arrive yet late die by a lack of optimal emergency care (Academies). Finding the best triage system can help diminish these numbers by bettering emergency care.

Method/Approach: Paramedics and EMTs from different regions of New Jersey were invited to participate in two simulated Mass Casualty Incidents. Where they were randomized and given a 30 – minute lecture on the SALT triage system. Triage concepts on the START system were reemphasized with a 10 – minute lecture to the remainder of the personnel. After the initial training, participants completed a posttest consisting of 10 different patient scenarios which needed to be matched with the correct triage category. The Model Uniform Core Criteria for Mass Casualty (MUCC) will be used as a reference for accuracy. After the posttest the emergency personal will participate in MCI field simulation where they would triage Mass Casualty patients and be evaluated on efficiency.

Outcomes/Results: Designing the efficiency study between the two different triage systems will serve as a catalyst to create optimal prehospital emergency care during emergency large scale incidents, which can potential help save lives across the State of New Jersey.

Evaluation/Conclusion: This is a long-term project. The final study will be conducted later this year.
Title: Good Samaritan Emergency Response Act Evaluation and RWJ EMS Call Analysis

Name: Karli Rymer

Preceptors:
Direct Supervisor: Ezra Helfand, Executive Director and CEO
Project Supervisor: Mara Carlin, Coalition Coordinator & Preventionist II

Agency: Wellspring Center for Prevention

Purpose: To analyze EMS calls from RWJ New Brunswick related to alcohol and other substance incidents to find patterns of consumption behavior before and after the Good Samaritan Law was put into legislation

Significance: On May 2, 2013, Governor Christie signed the Overdose Prevention Act into law. Drug and alcohol overdose is a major public health problem and leading cause of accidental death in NJ and nationally. Almost 2,000 people died from opioid overdoses alone in NJ in 2017. The “Good Samaritan” law provides protections for the victim and those who seek help during an overdose from arrest, charge, and prosecution from obtaining, possessing, using, being under the influence of drugs, or underage use of alcohol. The analysis of emergency calls in New Brunswick will provide Wellspring with valuable information to tailor their education and prevention programs to those who need to be informed.

Method/Approach: Obtain data regarding all EMS calls into RWJ Behavioral Health Care in NB from January 2011 to December 2017 that pertain to drug, alcohol, or both, misuse and abuse. Review total number of calls per year and examine the differences before and after the implementation of the law. From the total of all calls, organize and analyze the percentage of calls made by a friend, bystander, or self-made calls. From the total number of calls, organize and analyze the percentages of calls for alcohol, drugs, alcohol and drugs, or unknown causes.

Outcomes/Results: Of the total number of calls from 2011-2017 (N=1,102), there was a steady increase from 2011 until 2014. After the peak of calls in 2014, there was a decrease in calls from 2015-2017. Of the total calls, 61.6% (n=680) were attributed to alcohol, 12.1% (n=133) to drugs, 6.3% (n=69) to alcohol and drugs, and 20% (n=220) to unknown causes. Of the total number of EMS calls, 31.8% (n=350) were reported by a family or friend, 52.3% (n=577) by the NBPD or bystander, and 15.9% (n=175) were self-reported calls. Using this information, Wellspring can tailor their education and prevention programs to specific groups about overdose and overdose prevention.

Evaluation/Conclusion: The peak of calls occurred in 2014, the year after the implementation of the law. Since then, the number of calls has dropped while the numbers of overdose and substance abuse related deaths in NJ has increased. This provides Wellspring with enough information to conclude that the law needs to be reinforced and increase efforts to market the law. Shortfalls include missing at least one month of data in each of the years except for 2011. Any report details that were unclear of caller were deemed called by a bystander. Any calls that were made by NBPD were considered bystander calls.
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Internship Abstract

**Title:** Driving Out Surgical Costs in Today’s Reimbursement Environment

**Name:** Sandra Saenz

**Preceptors:** Direct Supervisor: Gloria Lockett, Administrative Director of Perioperative Services  
Supervisor: Donna Leonard, Managing Director of Perioperative Services

**Agency:** Trinitas Regional Medical Center, Elizabeth

**Purpose:** To analyze the necessity of materials in an operating room through “Value Analysis Processes,” and to therefore show the delivery of economic value.

**Significance:** The mission of the Value Analysis process at Trinitas Regional Medical Center is to reduce cost while maintaining and improving quality of patient’s outcome, safety and services. Supply and equipment costs are the second largest expense for any hospital. As a result, the Value Analysis Committee evaluates new and emerging technology using an evidence-based approach. The operating room is the leading department in bringing revenue at the hospital, thus it is critical to analyze the necessity of materials to collectively bring down costs. The operating room bundles materials into specialized packs designed for specific surgeries. Evidence indicates some materials are constantly wasted and interventions will address which materials should be no longer included.

**Method/Approach:** A review is conducted by the Value Analysis Committee to analyze the annual comparative spending of materials used in the operating room in order to ensure savings for high cost procedures. Data provided by the review revealed the material costs of the operating room for 2017. This data will be compared to data from other departments in order to show the significant savings our Perioperative Value Analysis committee can provide. Through product observation and data collection, the analysis will further assist the Perioperative Department to identify which materials can be removed from these specialized packs used for surgery. This will in turn cut back costs on an annual basis.

**Outcomes/Results:** The Value Analysis Committee reported a total savings of $504,280 from the Perioperative Department alone, which accounts for 52% of the hospital’s total savings. Within the Perioperative Department, neuro and spine implants accounted for $263,924 of savings for 2017. Based on the number of surgeries performed in 2017, the Perioperative Department can save an additional $15,139.41 annually by removing unnecessary materials in these specialized surgery packs.

**Evaluation/Conclusion:** Hospital supply costs represents 30% of total cost per surgery case. Through product evaluation, the analysis determined which operating room materials in these specialized packs are most likely to be wasted which assisted in identifying additional savings and presenting it to the Value Analysis Committee. This process involved removing two to three items per specialized surgery pack. The annual savings constitute for $15,139.41; this translates to $75,697 within 5 years, and $151,394 within 10 years. The Value Analysis Committee will continue to monitor the usefulness of materials used to ensure maximum savings.
Internship Abstract

Title: Establishing a Technology Infrastructure in Ironbound Community Corporation

Name: Cecilia Salazar

Preceptors: Direct Supervisor: Emily Perez. Director of FSC-East, ICC

Agency: Ironbound Community Corporation

Purpose: In analyzing the extent in which the Ironbound Community Corporation, a community based nonprofit that works to ameliorate the socioeconomic, health, and educational development of impoverished children and adults, has been able to serve its target population without a properly funded technology infrastructure. I hope to raise awareness of the technological divide facing nonprofits in the face of dwindling financial resources and increases in demand for services. The overall purpose of this project is to propose policy recommendations that encourage nonprofits without a technological infrastructure to allocate funds to establish a robust technology infrastructure, as a means of improving the effectiveness and efficiency of the programs and services offered.

Significance: ICC will greatly benefit from the establishment of a cloud based storage system that will facilitate the recording and analysis data on the programs and services offered, and will help expand their outreach efforts, while simultaneously allowing them to improve and expand their programs and services. This project, however, is part of a larger picture that needs to be analyzed. According to a National Survey of Nonprofits in 2014, “only 51% of respondents stated they had or planned to ‘use, purchased, or upgrade software specifically to capture data on program impact’; ‘Only 5% of respondents listed “IT Concerns” as a top challenge for their non-profit” however a majority of the top third of the challenges recorded could be minimized through the implementation of an adequate technology infrastructure (amongst these issues were included: ‘meeting community demand for services or programs’, ‘managing or pursuing growth’, ‘marketing, outreach, and community engagement’, etc.)

Method/Approach: Observed the quality and efficiency of how programs and services are publicized and delivered to community members. Analyzed the current systems used to record interactions and information on clients/beneficiaries, which in large part took the form of intake forms collected in a file based system and a few excel sheets and google documents. Analyzed the major obstacles staff faced in providing the most effective programs and services, which included, but were not limited to, the time consuming burden of increasing paperwork with expanded services that could not be minimized by the use of inconsistent and outdated systems of data storage. Researched software systems that can be used to streamline the necessary components of organizing programs and services, and facilitate the dissemination of information and resources to target populations. Organized, proposed, and created a cloud based storage system account on Salesforce.com, one of the many Customer Relationship Management (CRM) systems available on the market for collecting, analyzing, and organizing data.

Outcomes/ Conclusion After 2 months dedicated to creating the CRM system, I will be presenting the final product to the staff members of the ICC’s East and West Family Success Centers, and leading the transition from a largely file based system to an efficient cloud based storage system.
Title: Evaluating the Success of Sexuality Education
Name: Itzel Sanchez Ovando
Preceptors: Supervisor: Stephanie Franklin, Director/Founder
Agency: The Masakhane Center

Purpose: To evaluate the success of the workshops based on the participant’s sexuality education experience.

Significance: According to SIECUS, the programs that support abstinence and safer sex (such as use of contraceptives) have a positive change on the behavior of those who are sexually active (SIECUS, 2009). Another example is that people who are educated on the proper way to use safer sex materials such as condoms were more likely to use them “at first intercourse while levels of sex stay the same” (SIECUS, 2009). The Masakhane Center does not aim to change the sexual behavior of the participants. It aims to provide factual information that helps participants make informed decisions minimizing risks for unwanted risks.

Method/Approach: A survey was created to evaluate the success of the workshops taught at East Side High School. The survey used language that was at an appropriate reading level for young adults. Topics that were taught at that particular school were All About the Body (Anatomy), Safer Sex tools, Birth Control Methods, Consent, and Sexual Violence. This survey was disseminated to two sets of groups and was collected anonymously.

Outcomes/Results: Twenty-seven students from East Side High School in Newark, NJ completed the survey. The results consisted of six statements and answers included: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree and Strongly Disagree. For the statement “I felt that the information I learned is useful to me”, 51.85% responded with agree. For “I enjoyed the workshops a lot”, 59.26% responded with agree. For “I feel like I wouldn’t have gotten this information elsewhere”, the highest percentage, 37.07%, was answered with neither agree nor disagree. For “I learned how to practice safer sex”, 48.15% responded with agree. For “I am more likely to use safer sex tool (condoms, dental dams, lube) after this class”, 51.85% responded with strongly agree. And finally for “I am able to make healthy decisions using the information acquired during this class”, 48.15% responded with agree.

Evaluation/Conclusion: Students had positive feelings regarding the program. For the statement, “I am more likely to use safer sex tools…”, 51.8% responded with strongly agree. This shows the positive impact that sex education had on students.

https://docs.google.com/document/d/1G9zYx6xBZBzsboWjfgfLgdfnn6XQY1YNXVrj8KnzXNE/edit#
Title: Stretch with the Mayor Campaign

Name: Ana Santiago

Preceptors: Direct Supervisor: Gayle Brill-Mittler, Mayor
Project Supervisor: Stacy Kaplan, Administrator

Agency: Borough of Highland Park

Purpose: To implement the winter 2018 Move with the Mayor Campaign and improve attendance rates through various marketing efforts.

Significance: Creating healthy environments for a city or municipality is not an easy task, but the benefits are life-changing for residents. Healthy cities are of so much importance that the World Health Organization decided to support a global initiative of healthy cities where its focus is getting local governments involved. Highland Park was recently awarded a grant from the Aetna Foundation to extend their annual Move with the Mayor Campaign to last through the winter. The program has been running for several years; however, attendance has been staggered. The goal is to use different marketing tactics to reach a larger group of residents by increasing class attendance, and diversifying attendees. While Highland Park’s population is 60% Caucasian, there is a growing diverse population of 14% Asian, 13% Mexican, and 9% Black or African American. Therefore, it is important to market appropriately. Focusing on increasing class attendance will allow for residents to have a greater benefit from the campaign.

Method/Approach: In order to execute this project, we found and secured a convenient location within the town that residents would be familiar with. We found a fitness facility in the town’s main street. We scheduled 10 classes to be held every Monday, from January through March. In addition, we used the RWJ network of health providers to solicit a healthcare provider to join every Move with the Mayor class and present a health care topic relevant to attendees. After completing the logistical part of the program, we focused on marketing the Move with the Mayor classes in four methods; promotions through local business, publicity at religious institutions, social media, and advertising the classes in various languages.

Outcomes/Results: After reviewing the attendance rate per class there was a gradual increase in class attendance, but the class attendance did not exceed ten participants. Only one resident attended the first class with the mayor and the healthcare provider. Due to the low participation rate, we changed the timing of the class from late morning to lunchtime. The second to last class had the most attendees, at eight participants. Overall the results showed that most of the weekly participants became “regulars”. Some of the participants were members of the fitness facility, while others had heard about the program due to our publicity campaign. Even though there was not a continuous increase in participation, residents did begin to respond to the publicity by posting “likes” on Facebook posts, and sending inquiries about the program.

Evaluation/Conclusion: While our marketing tactics reached a large audience, the results did not correlate to our increased publicity. We concluded that due to factors such as timing, parking and most importantly, poor weather, participation was sporadic and did not increase dramatically. At the same time, we recognized the potential success of our tactics, and we believe that if a program such as Move with the Mayor were to be planned in periods of warmer weather, the marketing tactics would have been more influential in soliciting participants.
Internship Abstract

Title: Conducting a South Asian Needs Assessment Survey for New Jersey Poison Control Center

Name: Charla Sarabia

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

Agency: New Jersey Poison Control Center

Purpose: To conduct a needs assessment survey that will provide data for NJ Poison Control Center and help better serve the South Asian population in New Jersey.

Significance: Each year, about 2 million people in the United States are exposed to potentially dangerous substances (AAPCC, 2016). In recent years, the New Jersey Poison Control Center has reported low call volume from the South Asian population living in New Jersey. Low utilization of services limits poison control’s ability to understand the needs of this population. While underutilization can suggest overutilization of emergency medical services, previous research suggests that low usage does not necessarily mean low incidence of poisonings but rather a lack of awareness of poison center services. In addition, minority status and language barriers are associated with low poison center use (Litovitz et al 2010). This evidence suggests that lack of awareness and other hindrances such as language may be present among South Asians in New Jersey.

Method/Approach: In order to assess the needs among South Asians living in New Jersey, online and intercept needs assessment surveys were developed and distributed to organizations serving this population including community centers. A previous needs assessment survey from NJ Poison Control Center and various research studies were reviewed to create the survey questionnaire that was comprised of 12 questions. The survey aimed to measure the level of awareness, knowledge, and potential barriers of South Asians as it relates to utilizing services of the NJ Poison Control Center. Poison prevention information packets were also given after the completion of each survey. Data was analyzed using excel.

Outcomes/Results: A total of 60 surveys were distributed. However, due to the reluctance of the target population, only 45 surveys were completed. Results found that about 76% were not aware of the NJ Poison Control Center, while 83% did not know about the services offered such as 24/7 free and confidential emergency help. About 95% of respondents reported to have never sought information and/or help related to poisonings. Respondents were asked what would they do in the event of suspected exposure/poisoning. Results found that 25% preferred to go the emergency room for help while 70% responded to call the NJ Poison Control Center instead. Lastly, respondents were also asked what would prevent them from calling the NJ Poison Control Center; responses showed that approximately 50% did not know about the Poison Control Center and 30% were not aware of the Poison Control Help line (1-800-222-1222).

Evaluation/Conclusion: The data collected from this needs assessment suggests South Asian communities in New Jersey may be unaware of or reluctant to use the services provided by the New Jersey Poison Control Center. It is recommended that the New Jersey Poison Control Center continue this project in order to collect more significant data on the priority population. Furthermore, it is suggested that Poison Control Center develop partnerships with organizations that represent the South Asian population living in New Jersey to better understand the needs of the community.
Internship Abstract
Title: Optimizing JRI Outpatient Flow
Name: Jake Sathmary
Preceptors: James Schneider, Project Manager and Andrew Mitchell, Process Improvement Analyst
Agency: John F. Kennedy Hospital

Purpose: To improve outpatient flow using a daily work schedule and evaluating the registration process on the patient intake representative (PIR) workload.

Significance: The Johnson Rehabilitation Institute (JRI) facility provides Physical and Occupational therapy services to patients suffering from injuries or disabilities. In 2017 the department had over 100k patient visits, with patients being typically scheduled for multiple appointments. Patients are arriving within 30 minute intervals and are often serviced by PIRs, whose main roles are to register patients for an initial evaluation, collect copayments, and to complete charge entries for billing purposes. As demand for services is expected to grow in the oncoming years as outpatient rehab becomes a more desired service, it is important to examine patient demand to staff utilization.

Method/Approach: 30 registrations were observed, and data were then collected for the amount of time it took to complete each one, noting the difference time required to complete registrations that were pre-registered and ones that were not. The general stress levels of the PIRs was also noted. Outpatient (OP) rehab booking information from the previous year was also analyzed to observe any trends throughout a given work day/week. To develop a workflow management an organizational whiteboard was implemented to define the tasks within any given day to help in workflow management, with an employee feedback section offering us positive or negative data based on a given hour.

Outcomes/Results: It was discovered that a registration that lacked a pre-registration step took on average 15 minutes to complete. Registrations that were pre-registered took 9 minutes on average to complete, a 6-minute improvement to the registration process. The data that was analyzed from the booking data found that there was a consistent number of patients being treated daily, however there were huge patient registration spikes found within the hours of 11AM and 1PM.

Evaluation/Conclusion: We realized that splitting the registration process into 2 steps allowed for the reallocation of workload for peak patient times and in combination with the implementation of a whiteboard and planning process, allowed a more optimal use of PIR time. This decreased the PIR’s stress levels and allowed for a faster response to patient demand during peak business hours.
Title: Effects of Aerobic Exercise on Brain Activity in a Depressed Population

Name: Manika Saxena

Preceptors: Project Supervisor: CJ Brush, Peter Ehmann, and Anthony Bocchine, PhD Lab Supervisors/PhD Candidates; Lab Supervisor: Dr. Brandon Alderman, Lab Director

Agency: Rutgers Psychophysiology Lab

Purpose: To assess the effects of exercise on a depressed population and propose exercise guidelines to help reduce depressive symptoms.

Significance: Major Depressive Disorder (MDD) is one of the most common disorders in the United States. About 20% of Americans suffer from depression at least once in their lives (Kessler & Bromet, 2013). Various forms of treatments have been created to help patients battle depression, such as medications, or therapy. However, a lot of these treatments do not stop the disorder from recurring, as people do not keep up with treatment, or medication side effects are too intolerable. Many alternative forms of therapy have been proposed to help combat depression, such as aerobic exercise. Assigning an exercise intervention to those with depression can help reduce depression rates within the population.

Method/Approach: Participants mostly between the ages of 18-25 were screened for depression using the Mini International Neuropsychiatric Interview (MINI) to confirm a MDD diagnosis. 33 depressed participants met criteria for the study, along with 36 nondepressed participants. The participants were randomized into 2 different groups, a low-intensity exercise group and a moderate intensity exercise group. The aerobic exercise for the moderate-intensity exercise group consisted of 45 minutes of continuous steady-state exercise performed on a treadmill 2 times a week, for 8 weeks. The participants worked between 40-60% of their max heart rate. This dose was chosen because it was consistent with the rate recommended by professionals. The low intensity exercise group participated in 30-45 minutes of stretching exercise, 2 times a week, for 8 weeks, working each part of their body, but only at 20% of their individual maximal heart rates.

Outcomes/Results: The study found that both low intensity exercise and moderate intensity exercise reduced depressive symptoms in participants. However, compared to low intensity exercise, moderate intensity exercise was associated with a greater increase in the N2 and P3 amplitude. This indicates that moderate intensity aerobic exercise may result in an increase in cognitive function, which is an enhanced neural response during the detection and resolution of conflicting stimuli.

Evaluation/Conclusion: The 8-week intervention of moderate intensity aerobic exercise was associated with improved neural processes, while also decreasing depressive symptoms in participants with MDD. Specifically, cognitive control was increased, as indicated by an increased N2 and P3 amplitude found from the EEG analysis of the Flanker Task Data. This finding can be used in further studies to be used to propose aerobic exercise as a neurobehavioral therapy for treating cognitive control and symptoms of depression.
Title: Improving Screening, Referral, and Treatment of Perinatal Mood and Anxiety Disorders in New Jersey.

Name: Christie Schweighardt

Preceptors: Direct Supervisor: Jeanette Valentine, Director of the Greater New Brunswick Community Health Collaborative, Project Lead

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

Purpose: To assess the current flaws in the New Jersey screening, referral, and treatment systems of perinatal mood and anxiety disorders in order to reduce barriers to care.

Significance: Perinatal depression, one of the most common complications of pregnancy, affects one in every 7 women. Likewise, perinatal anxiety disorder affects a significant number of women (Kendig et al. 2017). In 2006, New Jersey was the first state to require postpartum depression screening of women who recently gave birth. Despite awareness and policy efforts to ensure that women are getting screened and treated for perinatal mood disorders, most women are not initiating treatment. This research project aimed to better understand the screening, referral, and treatment process of PMAD and pinpoint the barriers within each step of the continuum of care.

Method/Approach: To guide the research team toward pinpointing barriers to care, a literature review was completed to assess where problems were present in the care continuum in New Jersey. In addition to the literature review, data were compiled from a variety of sources (New Jersey Hospital Association, New Jersey Department of Health, Central Jersey Family Health Consortium). To gain the patient and survivor perspective, the team attended perinatal mood disorder support groups. After these pieces were brought together, the team was able to create a systematic review of the New Jersey perinatal mood disorder program.

Outcomes/Results: From 2013-2016, over 90% of women in New Jersey were screened prior to discharge for perinatal mood and anxiety disorders. Although the number of ‘positive’ screens have gone down, more women are seeking treatment for perinatal mood and anxiety disorders. The Edinburgh Postnatal Depression Scale does not reflect anxiety disorders and oftentimes women are afraid to truthfully answer the questionnaire. Out of the 922 postpartum depression calls to the NJ DOH Family Health Line in 2017, 244 (26%) of callers identified as Hispanic/Latino. Women from this population are calling to be referred to a provider, but only 11 out of 21 counties have Spanish speaking providers at approved University Behavioral Health Centers for uninsured/underinsured patients.

Evaluation/Conclusion: Hospitals are screening women as required, but the Edinburgh Scale will be updated to reflect anxiety disorders. The Family Health Line is receiving calls from minority populations but do not have enough providers to refer patients to. The Department of Health will work to increase Spanish-speaking providers (potentially Promotores) and peer support groups.
Internship Abstract

Title: Depression during Ethanol Withdrawal is mediated by Lateral Habenula

Name: Sharon Sebastian

Preceptors: Dr. Jiang-Hong Ye

Agency: Rutgers New Jersey Medical School (UMDNJ)

Purpose: To determine the role of lateral habenula in ethanol withdrawal induced symptoms like depression between male and female rats.

Significance: In this lab, the hyperactivity of the lateral habenula (LHb) an epithalamic brain region has been linked to increasing ethanol withdrawal symptoms such as depression and anxiety. It has been proven that ethanol withdrawn male rats exhibit, more excitability in the LHb neurons vs. naive rats (Li, 2017). The team now aims to compare this LHb activity and ethanol withdrawal symptoms between male and female rats. As about 16 million Americans suffer from Alcohol Use Disorder (AUD) (NIH), the research on LHb can help strategize to reduce the burden of AUD in the future.

Method/Approach: Male and female rats are housed in a 12 hr light/ dark cycle, and lights go off at 11:00 am. The rats were set up with an Intermittent Access 2 Bottle Choice paradigm (IA2BC) where the rats had access to one bottle containing 20% ethanol and another bottle of water for 24hrs starting at 11:00 am on Monday, Wednesday, and Friday, and the ethanol bottle were replaced by one of the bottles of water on the remaining days of the week. The water and ethanol bottles were weighed before and after the 24hr access. The rats were weighed weekly, and ethanol consumption was determined by grams of alcohol consumed per kilogram of body weight. After establishing a stable drinking pattern, depressive behavior was tested using the forced swimming test (FST). Rats were placed in a transparent plastic cylinder containing 30 cm of water within. A pretest took place at 24hrs of ethanol withdrawal, and each rat was placed in the water for 15 mins. The test was then conducted the next day at 48 hrs of ethanol withdrawal. Each rat was placed in the water for 5 minutes, and their behaviors were recorded through video. Rats giving up to swim while in the water or going immobile indicates depressive behavior. Further LHb will be manipulated using pharmacologic and chemogentic agents to determine its contribution in this behavior.

Outcomes/Results: Data recorded indicates that after 2 hrs. of access to ethanol bottles, male rats had an average blood alcohol level (BAL) around 10 mg/dl and female rats had an average (BAL) of about 40 mg/dl. In the FST the average immobility time at 48 hrs. ethanol withdrawal in male rats was 25s and in female rats was 35s. The average latency to first immobility in male rats was 30s and for female rats was around 40s.

Evaluation/Conclusion: This is a relatively new subject, and research is still ongoing. This study will be submitted for peer review in a journal for publication.
Title: Colorectal Cancer Outreach Program

Name: Nelly Sekyere

Preceptors: Twyla Paige, Health Educator & Adrienne Garber, Nursing- Adult Health Coordinator

Agency: Middlesex County Office of Health Services

Purpose: To assess and measure the return rates of at-home screening tests for Colorectal Cancer

Significance: Colorectal Cancer, also known as “Colon Cancer” is cancer of the colon and rectum. Colorectal cancer is the second leading cancer killer of men and women in the US, following lung cancer. However, research suggest that about 90% of people live 5 or more years when colorectal cancer is found early through testing. According to the Centers for Disease Control, about 1 in 3 adults have never been screened for Colorectal Cancer. The goal of the Cancer Education and Early Detection Program (CEED) is to help screen patients who are 50 years or older for colorectal cancer. The high-sensitivity guaiac fecal occult blood test (FOBT) detects the absence or presence of blood in the stool which can be a sign of colon abnormalities.

Method/Approach: CEED patients’ data from July 1, 2015 to June 30, 2017, was analyzed to determine how many screening tests were distributed throughout the year. Patients with incomplete files were identified. Incomplete files were classified as those patients that were offered screening tests, but did not return them to the clinic. Patients were contacted by phone and asked reasons for not returning the kits. Patients who wanted new kits were mailed one. These patients were monitored to ensure that the test was completed. Staff called for a follow-up during the week to analyze their progress in completing the test. Patient response was arranged into a data set.

Outcomes/Results: Of the data analyzed, 1781 patients were seen, and 604 were offered screening tests. Out of those offered the kit, 103 patient files were incomplete. Of those patients, 31 were successfully contacted, 10 of those were sent new kits; 5 already had a colonoscopy; 6 patients asked to be called at a different time; and 10 patients acknowledged receiving the test but did not request a new one. Of the 10 sent new kits, patients were monitored and followed-up. Results showed an increase in return rate of 60% which is 30% above the national average. Of the remaining 72 unsuccessful contacts, 27 were left voicemails which were not returned; 21 patients numbers were out of service; and 24 patients’ voicemails were not set up.

Evaluation/Conclusion: Of the 10 patients sent new kits, there was a 60% return rate which is 30% above the national average. Of the 103 total of incomplete files, this project outreach yielded 6 returned FOBT tests and 5 colonoscopies, for an overall increase of 11%. It was concluded that follow up after FOBT test administration is essential in getting patients to complete screening. Ongoing monitoring and immediate follow-up biweekly in the future by CEED nurses will be implemented to ensure an increase in return rates.
Title: Prescription Drop Off Box Project
Name: Christine Sengco
Preceptors: Kathy McFadden, Associate Director
Agency: Atlantic Prevention Resources

Purpose: To educate customers on how to properly dispose of medication by visiting local pharmacies and working with pharmacists to distribute drop off box educational material to their customers.

Significance: In the last decade, admission to drug treatment programs has risen 700%. Quite often unused prescription drugs, including narcotics, found in homes can become a source of supply. Grey et al. (2015) states that permanent drug donation boxes can be an effective mechanism to remove controlled substances from community settings. Atlantic Prevention Resources works together with Join Together Atlantic County (JTAC) which is a substance misuse prevention coalition to discuss the growing prescription drug misuse in South Jersey. A way to address this problem is to educate pharmacists on the importance of teaching and providing materials to their customers, on how to dispose of medication.

Method/Approach: Funding for the project came from the DFC (Drug Free Communities) grant from the ONDCP (Office of National Drug Control Policy) and SAMHSA (Substance Abuse and Mental Health Services Administration). The educational material distributed were magnets, stickers, rack cards, and posters already designed and printed from the previous year. Researching the number of pharmacies in the Atlantic County was conducted. A press release announcing the project was created along with talking points for JTAC members to use when approaching pharmacists on distributing the material. Pharmacies were visited and educated. Materials were left for patient distribution. Pharmacists were administered a short telephone survey several weeks after distributing the material.

Outcomes/Results: There are 53 pharmacies in Atlantic County. Out of 53 pharmacies visited, 45% of the pharmacists understood the importance of distributing educational material to their customers. Twenty-four pharmacists surveyed, stated that about half of the material was given to customers. Many of them also reported that they observed an increase in their customers’ knowledge on how to dispose of medications properly.

Evaluation/Conclusion: Overall, I and other JTAC members successfully distributed educational material to all 53 pharmacies. Many pharmacists stated that a way to improve on educating patients about the proper disposal of medication is through better advertising. Some suggested using a billboard or holding an informational workshop.

Title: Advancing the Child Passenger Safety Discharge Policy at Robert Wood Johnson

Name: Mihika Shah

Preceptors: Diana Starace, Injury Prevention Coordinator

Agency: Robert Wood Johnson University Hospital, New Brunswick

**Purpose:** To help advance the Child Passenger Safety (CPS) discharge policy and ensure that all parents at the Bristol-Myers Squibb Children’s Hospital leave with proper guidelines and resources to keep their children safe in the car.

**Significance:** In the United States, motor vehicle crashes are the leading cause of unintentional traumatic injuries among children ages 3-17. CDC statistics show that between 72% to 84% of child restraints are used incorrectly. The most common mistakes involve not using the appropriate car seat based on the child’s age and weight requirements, and improper installation of the car seat. These misuses increase the child’s likelihood of being at risk of a serious injury. Creating CPS visual checklists, providing all patients and their parents with the current NJ Law, and an opportunity to watch a CPS video prior to discharge will help ensure children are riding safely in the car.

**Method/Approach:** All key safety tips were gathered from the Safe Kids Worldwide resources to form comprehensive visual checklists. The accompanying pictures were chosen carefully to make the checklists easy to follow for non-English speakers as well. Another aspect of the program is to train staff members at Robert Wood Johnson as Child Passenger Safety Champions. A training module was created using materials such as a video tutorial on car seat installation, resources on laws regarding car seats, as well as the visual checklists.

**Outcomes/Results:** The checklists were created for different types of car seats including front-facing, rear-facing, and booster seats. These checklists were then uploaded to the RWJ intranet on the Trauma & Injury Prevention department page to allow staff members to access the information. A half-day Child Passenger Safety training session was conducted for interested RNs and other Robert Wood Johnson staff.

**Evaluation/Conclusion:** The CPS trainings will be conducted in early May and the pre and post evaluations will be used to measure knowledge acquisition of staff members participating in the training. Additionally, a PowerPoint presentation will be created and uploaded to Health Stream for the purpose of mandatory annual education.
Title: “Data-Driven Physician Outreach and Engagement”
Name: Richa Shah
Preceptors: Patricia Richards, Director of CMS Innovations and Value-based Programs
Agency: Saint Peter's University Hospital

Purpose: To increase physician outreach visits and promote physician alignment with Saint Peter’s University Hospitals (SPUH) efficiency goals through the commercial gainsharing program.

Significance: As the healthcare landscape evolves from fee-for-service to value-based care, and physicians become employed by large healthcare systems, a data-driven physician engagement and alignment strategy is imperative to drive durable health system growth. The move towards value-driven care now demands that hospitals work with physicians to balance volume and appropriate utilization. In addition to drive revenue growth through referrals, health systems need to foster meaningful relationships with physicians so that physicians are encouraged to refer patients to SPUH.

Method/Approach: We are currently measuring community physician engagement by monitoring physician outreach activity and participation in a commercial gainsharing program. SPUH began utilizing Crimson Market Advantage, a data platform that brings together multiple data sources to help develop competitive physician outreach strategies to understand referral patterns and revenue leakage. We used this data to develop outreach campaigns, create physician target lists, and coordinate visits and track the initiatives in Crimson. In addition, SPUH launched a commercial gainsharing program, which allows SPUH to reward physicians who reduce inpatient resource utilization. We sought to increase participation in the program through various outreach activities from January 2018 through March 2018.

Outcomes/Results Physician Outreach visits have increased from December 2016-March 2017 Period to December 2017-March 2018 period. Our visits increased by 216% in the Dec.2017/March, going from 36 visits to 114. The month of March showed the largest difference in visits: increased from 3 visits in March 2017 to 39 visits in March 2018. The commercial gain sharing program had a dramatic increase in enrollments from the week of January 8th to the week of March 26th; in total we got 99 physicians to enroll into the program. Enrollment in the commercial gain sharing program nearly doubled from January (n=14) to February (n=21), and again from February to March (n=52).

Evaluation/Conclusion: There are many challenges in monitoring the effectiveness of physician outreach activity. We have had to rely on number of physician visits and number of commercial gainsharing enrollees to evaluate the effectiveness of outreach activities toward our strategic goals. We have seen an increase in physician outreach visits and enrollees in the commercial gainsharing program from the last couple months. We are not able to monitor the effectiveness of these outreach activities by referrals because the inflection point for impact on referrals is estimated to be a minimum of three months. Because complete claims data is also on a 3-month log, our ability to measure impact through referral volume and revenue growth is approximately 6 months from the data of the physician office visit.
Title: Rutgers Student body more involved in Relay for Life on campus

Name: Vidhi Shah

Preceptors: Direct Supervisor and Project Supervisor: Brielle Loiodice

Agency: American Cancer Society, Manasquan NJ

Purpose: To increase Rutgers University student participation in Relay for Life and to raise awareness of the American Cancer Society in order to increase donations and funds that support the mission of ACS.

Significance: Each year, the American Cancer Society (non-profit) hosts events such as Relay for Life, making strides against breast cancer, to raise money in order to eliminate cancer as a major health problem by preventing cancer, saving lives and diminishing suffering from cancer through research, education advocacy and service. They help improve access to care for both patients and for those who are seeking access to preventive services. They also promote healthy lifestyles to help prevent cancer. While also providing emotional support to the latest cancer information for those who have been touched by cancer. They do this 24 hours a day and 7 days a week. 99% of their money comes from personal donations, events such as relay for life and making strides. The other 1% comes from grants and contracts from government agencies. Hence, it is important to get more people involved in events with the ACS and also spread awareness about the organization.

Method/Approach: Making a PowerPoint presentation with the mission of the ACS, what they do, how much money they raise each year, where the money goes and how Relay for life helps cancer survivors, patients and caregivers. At Rutgers Relay for Life is hosted at the end of every year, however many students are not aware of this incredible event, hence we do not get as many participants. This presentation is supposed to help increase awareness, donations and participants. Going into freshman dorms and presenting to get more freshman involved, putting up flyers around campus as well as speaking in front of my classes to get my fellow health administration/public health classmates involved as well.

Outcomes/Results: Goal was to increase participation in Relay for Life by at least 5%. In 2017 there were 601 participants and the event raised an overall of $64,100.25, this year the event had 559 participants and the event raised $39,469.27.

Evaluation/Conclusion: The reason that this year’s Relay raised less money compared to that of the previous year was because of a loss of a really big sponsor; Schneider electric. Schneider used to donate $22,000 alone to the event every year. Unfortunately, they could not donate this year hence losing a big sum of donations. The number of participants did not increase nor really decrease compared to that of last years. Even though that is the case, a lot more organizations on campus and the student body are familiar with Relay for Life. I have gotten numerous emails from organizations and students asking about next year's Relay and how to sign up. However, at the end of the day every little bit counts, so that $39,466.27 is still going to make a big impact.
Internship Abstract

Title: The Implications of A New Stroke Bypass Protocol

Name: Nargess Sharafi

Preceptors: Direct supervisor, Judith Lane, RN & Director of Neuroscience at RWJ

Agency: Robert Wood Johnson University Medical Center

Purpose: To analyze the differences in recovery rates of stroke patients bypassing the emergency department for a CAT scan compared to patients who are admitted to the Emergency Department.

Significance: The United States is one of the leading countries for increased rates of strokes. On average, nearly 795,000 individuals in the USA suffer from a stroke resulting in ranging disabilities. This internship project reveals how bypassing the Emergency Department shows beneficial recovery rates for stroke patients. In fact, the project seeks to reveal possible positive results for overall recovery in patients who were implemented into this new stroke policy compared to those who were not. This project will seek to provide future data on stroke recovery and bypassing the Emergency Department to alternative hospitals to implement this program nationwide.

Method/Approach: Data collection for this project was completed through manually locating patients who have suffered a stroke at RWJUH using the Electronic Medical Records and the national stroke database. To determine the implications of the new stroke protocol, data was collected into numerous categories for each individual patient. These involved categories such as triage times, when CAT scans were ordered, times of ordered treatment, discharge dispositions, and 90-day progresses. Hospital EMR records were used to locate these missing sections for both patients who have followed new stroke policies, and those who used standard stroke policies.

Outcomes/Results: The retrospective study conducted used 294 patients who suffered a stroke within the RWJ area. Data reflected stroke patients, both men and women, during the years 2015 to 2017 who followed the new stroke bypass protocol and those who followed standard protocols. Of the 294 stroke patients, 201 patients were admitted to the ED, while 93 went directly to receive a CT. The stroke patient data that was collected allows for the completion of missing data, which will be statistically analyzed to determine success of patient recovery using new hospital stroke protocols. The recovery of this data deems essential to the future of bypass stroke policies.

Conclusion: The success of this project will be determined by the implementation of this program in further hospitals. Data from this project will serve as a guideline for hospitals to implement a bypass program. The use of bypass stroke protocols will allow for a change in the handling of stroke cases both by Emergency Medical Services and physicians. Also, the protocol change also offers an alternative protocol for hospitals with a busy ED and long wait time for stroke patient treatment.
Internship Abstract

Title: Decreasing Patient Complaints and Grievances trends with Daily Patient Rounding

Name: Shannel Shepherd

Preceptors: Yaniris Garcia, Patient Advocate (Customer Service Department)

Agency: Trinitas Regional Medical Center (TRMC), Elizabeth, NJ

Purpose: To analyze how the implementation of daily patient rounding increases patient satisfaction and decreases the number of documented complaints and grievances in various categories.

Significance: The fundamental goal of Trinitas Regional Medical Center is to provide the highest level of care and fulfill the patients experience. Since hospital reimbursement is paid by performance, it is imperative to ensure that patients are satisfied with their hospital experience. The implementation of patient rounds ensures that real-time feedback is provided, and any issues raised are resolved. Consequently, rounding builds a stronger relationship with patients, and empowers them to share concerns, giving Trinitas the opportunity to improve their services. Adding to the benefits of rounding, the Customer Service Department is seeking to see a decrease in the number of documented formal Complaints and Grievances.

Method/ Approach: Daily patient rounds began in January. Patients who were admitted during that time were rounded on and asked specific questions related to their care. Patients had the opportunity to share any feedback/concerns that they had before getting discharged from the facility. The concerns shared were addressed immediately and the appropriate actions were enforced to resolve their issues. Based on the severity of the concerns, a formal Complaint or a Grievance was made. Formal complaints were resolved within 24 hrs meanwhile, Grievances were issued response letters within 7 business days. The patient rounding questions targeted the highest trends for complaints and grievances which were Communication, Attitude/Behavior, and Quality of Care.

Outcomes/Results: Complaints and Grievances reports are divided in quarters, Quarter 4 (Q4) which runs from October to December, was compared to Quarter (Q1) which runs from January to March. In Q4, there were 24 complaints, and 19 grievances. The highest complaint trends recorded for Q4 were 11 (46%) for communication, 6 (25%) for attitude/behavior, and 5 (21%) for quality of care. The number of Grievances for Q4 were 12 (63%), 9 (47%), and 2 (10%) (respectively). In Q1, there were 12 complaints and 24 grievances documented. For Q1, the same trends in the categories were measured again. The results for complaints are 4 (33%) for communication, 0 (0%) for attitude/behavior, and 4 (33%) for quality of care. The results for Grievances are 13 (54%), 7 (29%), 12 (50%) (respectively).

Evaluation/Conclusion: Daily patient rounds have proven to drastically decrease the number of Complaints by 50% in Q1 in comparison to Q4. It is important to note that although, there is a decline in Q1 Complaints, the Communication, Attitude/Behavior and Quality of Care trends still remain the highest documented areas of concern. For Grievances in Q1, the decline was not very significant, there was an increase in the Communication and Quality of Care categories. Effective strategies for the long term goal of decreasing Complaints and Grievances trends include: the continuation of patient rounds along with mandatory Customer Service seminars, Employee re-education, Daily Departmental Huddles, prompt and efficient Service Recovery methods. Trinitas Regional Medical Center goal is to continue to implement these initiatives in order to increase patient satisfaction.
Internship Abstract

**Title:** RWJMS General Internal Medicine Patient Satisfaction Survey

**Name:** Zain Siddiqi

**Preceptors:** Dr. Michael Steinberg, Chief of Internal Medicine RWJMS

**Agency:** Rutgers Robert Wood Johnson Medical School, Division of General Internal Medicine

**Purpose:** To measure the satisfaction of the patients in terms of care and convenience, and analyze the efficiency and quality of healthcare services provided at the RWJMS General Internal Medicine practice.

**Significance:** Patient satisfaction is vital and effective indicator for measuring the quality of care in medical practice. Patient satisfaction brings significant effects to patient retention and clinical treatment outcomes. Moreover, it affects the efficiency, delivery, timing and overall quality of care in a healthcare facility. Patient satisfaction is an effective indicator to measure the progress and success of hospitals and staff. This study serves to identify and improve the quality of care provided at the General Internal Medicine Practice at Rutgers Robert Wood Johnson Medical School.

**Method/Approach:** A convenience sample population of patients at the General Internal Medicine practice at Robert Wood Johnson was taken to analyze the quality of care. A pre and post appointment satisfaction survey was taken and administered over a 3-week period. The survey instruments included a likert scale and multitude of multiple choice questions which would measure quality of care with doctors, medical assistants, front desk staff, and overall practice environment. The data collected was inputted into a Google spreadsheet and analyzed via various statistical tools found on Excel.

**Outcomes/Results:**
The results obtained from the patients in the pre-appointment survey (n=20), showed significant results including that 17 patients (85%) were returning patients. Out of those patients surveyed, 80% rated the patient portal at 9 or higher on the likert scale and very convenient to use. 100% of the patients in the post-appointment survey gave the interaction with the doctor a 10/10 rating. When asked to rate the overall experience at the GIM practice in the post appointment survey (n=20), 13 patients (65%) gave a rating of 10/10, and 4 patients (20%) felt the experience was a 9/10.

**Evaluation/Conclusion:**
The General Internal Medicine practice received positive feedback overall in most of the parameters assessed through this survey. From evaluation of the post-appointment surveys, the overall experience rating was very high and worth noting because it shows that the practice satisfies a large majority of their patients very highly. In terms of when the appointment was scheduled, 90% felt their appointment was at a reasonable time. Although, the telephone scheduling system was ranked only as a 10/10 from 50% of patients, this shows that improvements should be made, and more staff should be attending calls. The survey limitations include not having a large enough survey to make strong enough determinations and not being able to obtain data from the same patients in both pre and post appointment surveys. Patient satisfaction assessments are a vital and large part of improving the quality of health services at a practice.
Title: Pilot Testing Brochure for HIV Education in South Asian Community
Name: Nireesha Sidduri
Preceptors: Cindy Leon MPH, Public Health Representative
Agency: Eric B. Chandler Health Center, New Brunswick, NJ

Purpose: To explore barriers to HIV education, testing, and treatment and to create educational materials to increase health literacy within the South Asian population, specifically people over the age of 15.

Significance: According to the CDC, around 1 in 5 Asians living with HIV in the United States do not know they have it. Specifically, gay and bisexual men are those that are most affected by HIV. Shame, stigma, lack of communication, and misinformation are all barriers that prevent the South Asian population from getting tested and receiving proper medical care if they are living with HIV. Few resources exist that are geared towards this community, so understanding these barriers and developing intervention methods targeting the South Asian population are instrumental in improving the conversation about HIV.

Method/Approach: Research was conducted to explore what sociocultural barriers exist that hinder the South Asian population from getting tested. Scientific journals and HIV professionals were consulted to determine the most prominent factors for limited HIV awareness and lack of proper treatment in the South Asian community. After compiling information from these sources, an informational brochure was created to address the stigma surrounding HIV, highlight the importance of getting tested, and explain how HIV impacts the South Asian population. The instrument was pilot tested with four HIV Program Coordinators from the Chandler Clinic and eight community members from the target population during a health fair.

Outcomes/Results: Qualitative metrics were developed to assess the efficacy and clarity of the brochure, especially whether the brochure is accessible to people across all generations and subgroups. The intended and perceived objectives of the instrument were compared for feedback. Questions that were asked include the perceived message of the brochure, ease of understanding, strengths and weaknesses, and what can be improved. Community members commented that brochure used objective and non-judgmental language, framed HIV in a manner that was easy to understand and included visually appealing graphics.

Evaluation/Conclusion: The objective of the instrument was to inform the audience about HIV and how it applies to the South Asian community in an inclusive and approachable manner. Based on the feedback received, the message of the brochure was communicated accurately. After the final version of the brochure has been approved by Rutgers, it will be translated to Hindi and other South Asian languages. The brochure will be used by the South Asian Total Health Initiative (SATHI) at local health fairs as well as the Eric B. Chandler Health Center and Robert Wood Johnson University hospital.
Title: The Importance of Addiction Treatment Medications in Drug Court

Name: Ariel Simmonds

Preceptors:
Direct Supervisor: Tara Jones, Middlesex County Drug Court Supervisor
Project Supervisor: Bertha Moran, Senior Probation Officer

Agency: Middlesex County Superior Court, Drug Court Division

Purpose: To analyze positive drug tests among drug court participants who rely on suboxone, methadone, or Vivitrol with the drug court participants who attempt to be sober without assistance.

Significance: Opioid addiction treatment medications such as methadone, Vivitrol, and suboxone save lives for some individuals who were ordered to Drug Court, rather than prison. The Middlesex County Drug Court seeks to better understand the importance, usefulness, and necessity for the use of these opioid treatment options.

Method/Approach: Through the CAPS (Comprehensive Automated Probation System) system, used by members of the Drug Court team as well as authorities within the Superior Court, data was collected for fifteen individuals who were on or use methadone, suboxone, or Vivitrol. The uncontrolled group was made up of fifteen randomly selected individuals who were not taking opioid addiction treatment medications. Positive drug tests within the last six months were also noted. The history of positive or negative drug tests of those who used any addiction treatment medications before they began using it was also noted.

Outcomes/Results: Of the sample size cohort (n=30) that was divided evenly into two groups (n=15), 40% of drug court participants using medical assistance had a positive drug test in the last 6 months dating back to November 2017. 83.3% were taking the Vivitrol shot and 16.7% were on suboxone. The remaining 60% have been clean for at least the last six months. Only 20% of drug court participants not using medical assistance have been positive in the last 6 months. The remaining 80% have been clean for the last six months. Of those in the medically assisted group, 83.3% were tested positive for opiates. The remaining 16.7% were positive for benzodiazepines. Among the group that did not receive any opioid addiction treatment, 66.6% were positive for opiates. The remaining 33.3% were positive for THC, which is the chemical found in marijuana.

Evaluation/Conclusion: Individuals randomly pooled into two groups showed that more than half (60%) of people out of a group of 15 individuals have benefitted from using opioid addiction treatment medication. Vivitrol shots become less effective and individuals become more inclined to relapse or have symptoms of withdrawal right before their next shot. Also, during this period, there were holidays such as Thanksgiving, Christmas, New Years, and the Super Bowl which are all common times for people to consume alcohol or indulge in drugs and this may be a partial explanation for the 40% of those who tested positive.
Title: New Jersey Safe Schools Cyber Safety Module and Assessment

Name: Kyle X. Simmons

Preceptors: Derek Shendell, D.Env, MPH, Director of NJ Safe Schools Program (and, Associate Professor of Environmental and Occupational Health)

Agency: Rutgers School of Public Health, NJ Safe Schools Program

Purpose: To analyze the prevalence of cyber threats within New Jersey’s secondary school populations and create an educational module via the Moodle learning management system to help build protective behaviors to promote cyber safety and cyber security.

Significance: Cyberbullying poses psychosocial stressors on victims that increase the likelihood of workplace violence and maladaptive physiological outcomes in the victims as well (Kopecky & Szotkowski, 2016). From 1999 to 2017, internet use in America increased from 52% to 88% of the population (Pew Research Center, 2017). With an increased usage of the internet, threats associated with interacting with an online environment occur as well. In 2016, the U.S. Centers for Disease Control and Prevention (CDC) reported 16% of U.S. high schoolers reported being victims of at least one form of cyberbullying (2016). In 2017, 24% of Americans reported suffering from mental or emotional stress due to some form of online harassment (Pew Research Center, 2017). CDC admits it is unclear how many people are victims of cyberbullying, due to inconsistencies in definitions, poor response rates in surveys, and an overall lack of understanding of the topic (2016).

Method/Approach: A literature review was completed to establish a basis of definitions regarding cyber safety, cite related legislation, assess prevalence of internet use, prevalence of cyber threats, and their effects. PowerPoint slides were created using secondary data as a framework for the course. These slides were reviewed internally by the New Jersey Safe Schools staff and adapted into a course format using the Moodle learning management system. A post-course evaluation designed by the NJ Safe Schools Program was added into Moodle to measure satisfaction with the course. The course was then beta-tested within the Rutgers School of Public Health by four graduate students. Course evaluation data from the beta-test was re-coded by condensing Likert scales from the answer categories of “very satisfied, satisfied, neutral, dissatisfied, and very dissatisfied” to “satisfied, neutral, and dissatisfied” to better present the results collected.

Outcomes/Results: Of the sample size cohort (N=4), 75% of beta testers felt the course completely met course objectives and 25% felt the course partially met course objectives. Of the respondents that beta-tested the course, 75% were very satisfied and satisfied and 25% were neutral towards the course content. Upon completion of the course, 75% of respondents said they would recommend the course to others and 25% were neutral about recommending it. Respondents admitted in the free response section that “definitions are all clear and concise,” “the course is understandable and well organized,” and “course objectives were clearly stated.”

Evaluation/Conclusion: Beta-test allowed for a re-review of cited data. Pilot testing will be conducted in late spring 2018 with teacher/supervisor volunteers throughout New Jersey. Future plans include adding a primer in the beginning of the course to help users get a sense of the greater implications cybersecurity/safety can have for their health.
Internship Abstract

Title: Memory Retention for Seniors

Name: Tori Simon

Preceptors: Melanie Ford, Director

Agency: New Brunswick Senior Citizen Resource Center

Purpose: To educate seniors about ways to improve memory retention, and the importance of exercising the brain daily.

Significance: Memory loss is a common issue among older adults. This is due to the fact that the hippocampus, which is a region of the brain that is involved in the formation and retrieval of memories, often deteriorates with age. Older people often experience decreased blood flow to the brain, which can impair memory and lead to changes in cognitive skills. However, the brain is capable of producing new brain cells at any age, so significant memory loss is not an inevitable result of aging. There are many ways to improve cognition, prevent memory loss, and protect the hippocampus.

Method/Approach: An educational program was conducted with the seniors on the topic of memory. The presentation was based on what memory is (short and long term), ways to improve memory retention/ways to prevent memory loss, and brain-boosting foods. Prior to the start of the program, a survey was conducted to see how many of the seniors participate in lifestyle choices already and to determine if they were previously exposed to what the best choices were to benefit the brain. All attendees were given a pamphlet with an overview of what was discussed during the presentation and a list of foods to help increase memory retention and also foods to avoid, so they can take it with them to the supermarket. They also all received four brain teasers to do on their own time.

Outcomes/Results: Of the sample size cohort (n=37), 21 seniors (57%) partake in a brain teaser at least once a week, with 7 (19%) of those 21 (57%) doing 1 a day or more than 1 a day. 16 (43%) of the participants do a brain teaser once a month or less often. However, 28 (76%) of the participants said they would do them more often if they were given the opportunity. 23 (62%) of participants do not eat brain enhancing foods, and 19 (51%) of the participants do not even know of any brain enhancing foods. On average, the participants rated their memory a 6.9 out of 10.

Evaluation/Conclusion: Based on the results, the people that did brain teasers at least once daily (19%) rated their memory an average of a 8.43 out of 10. People that did brain teasers weekly (38%) rated their memory an average of a 6.93 out of 10. People that did brain teasers monthly or less often (43%) rated their memory an average of a 5.88 out of 10. This shows that brain exercises are very important to help maintain a person’s memory. Based on the surveys given out of after the presentation, I learned that all 29 (100%) participants of the presentation now know about brain enhancing foods. 26 (90%) of participants say they will now do brain teasers more often and 28 (97%) of participants will change their diet to include more memory enhancing foods. All 29 (100%) of program participants say they will make daily lifestyle changes to help improve their memory.
Internship Abstract

Title: Creation of database for residential underground storage tanks undergoing remediation

Name: Kathleen Smith

Preceptors: Project supervisor: Gary Rojek
Division Head: Mickey Gross

Agency: Middlesex County Environmental Health Division

Purpose: To create a database for residential underground heating oil storage tanks in Middlesex county by using an excel spreadsheet which provides information for open public records act (OPRA) request.

Significance: The New Jersey Department of Environmental Protection (NJDEP) distribute information concerning the remediation of residential heating oil tanks regarding local residents of the work in progress at the site. The Middlesex County Environmental Health Division has received numerous documents concerning these sites along with environmental site remediation reports from contractors working under NJDEP regulations documenting the cleanup of the contaminated sites in the County. These sites need to be documented and tracked for environmental issues along with OPRA request.

Method/Approach: Middlesex County consist of 25 towns, each of which have their own spreadsheet in the database. In order to organize and keep track of these documents, an excel spreadsheet was created. Each column has a significant purpose. Data includes block and lot #’s tax id, program interest #’s, addresses, communication #’s, and the outcome of the remediation. Approximately 3,000 files were manually entered as of date.

Outcomes/Results: The database was created in January 2018, from having 0% data information of residential UST’s to an increase of 100% in March 2018 from where paper files are now been converted to online data. An reduction in time loss from manual search through paper files to online entry. This database has saved countless hours any has been extremely beneficial in hours searching for UST OPRA request.

Evaluation/Conclusion: Incoming data will continue to be put in the database as information is being created and requested. Incoming interns/employees will continue this project.
Title: Gene-RADAR Training Clinical Study Assessment

Name: Shannon Spitzer

Preceptors: Kaylee White, Clinical Research Coordinator

Agency: Princeton Medical Institute (PMI)

Purpose: To analyze and perform gene-RADAR screenings and to implement methods to reduce or prevent loss to follow up at the post 120-day data follow up.

Significance: It has been estimated that more than 770,000 people are injured or die each year in hospitals from adverse drug events (ADEs), costing millions of dollars in healthcare costs each year. The field of genomic medicine presents one potential solution to reduce health care costs associated with ADEs and poor response to pharmacotherapy. Specifically, the field of pharmacogenetics involves using a patient’s genetic makeup in combination with other clinical information to create a personalized medication regimen with greater efficacy and safety for the individual patient. (Moadddeb, Haga, 2013)

Method/Approach: A review of the gene-RADAR clinical study at Princeton Medical Institute (PMI) from January 2017 to January 2018 found that 39% of the records were incomplete and ineligible for the study because of loss to follow up at the 120-day data collection close out or from a contaminated collection without a buccal reswab. Furthermore, PMI was not reaching its goal of 20 gene-RADAR screenings per month. This was due to lack of trained clinical assistants or interns that could perform screenings and follow up with patients to close out the report.

Outcomes/Results: Twenty-four patients were screened in 2017. Of those screened in 2017, 39% were ineligible for the study; 60% of the 39% (five cases) were because of loss to follow up. To mitigate issues that cause loss to follow up, a calendar, updated logging system, and a digital reminder system were put in place. A trained intern was worked with a study coordinator to increase gene-RADAR screens in 2018 and decrease loss to follow up at the 120-day close out. Thirty-two patients have been screened from January 1, 2018 to March 22, 2018. In order to have enough people trained the gene-RADAR process, a comprehensive training manual detailing data and biological collection was created. A pilot test of the training manual is scheduled for April 24, 2018.

Evaluation/Conclusion: Certifying and training future interns and assistants at PMI on how to properly perform gene-RADAR screenings and follow ups can effectively reduce the number of patients that are lost to follow up at the 120-day mark and assist in reaching the 20 screenings per month. To do so, a detailed training manual will be offered. In addition, an overarching reminder system that alerts all necessary staff at PMI of an upcoming follow up has been initiated with a chapter in the manual to train staff on all aspects of the process.
Title: Expanding Access to New Jersey’s Electoral Process Through Voter Registration Modernization Policies

Name: Julia Stadlinger

Preceptor: Phoenix Rice-Johnson, Research & Program Associate - Democracy Program

Agency: The Brennan Center for Justice at New York University School of Law

Purpose: To conduct a long form-analysis of voter registration modernization policies and identify policies that make it easier for young adults (ages 18-25) in New Jersey to exercise their right to vote.

Significance: In the 2014 midterm elections, New Jersey ranked among the top 10 worst performing states for voter participation among all age groups. Of the nine million people eligible to vote in New Jersey, only 30.4% showed up to the polls. For young people, the voter turnout rate was even worse. 29% of young people in New Jersey were not registered to vote during the 2014 midterm elections. Identifying the barriers embedded in New Jersey’s outdated voter registration system and urging policymakers to implement modernized voter registration policies will help counteract New Jersey’s low youth voter registration and voter turnout rates.

Method/Approach: A long-form policy analysis of current voter registration procedures and voter turnout statistics in New Jersey was conducted by reviewing state legislation and U.S. Census Bureau reports. Following the initial data collection, a literature review of Brennan Center reports and analyses was conducted to identify the most effective voter registration modernization policies for expanding voting accessibility for young people in New Jersey. U.S. Census Bureau reports provided data on youth voter registration rates and turnout rates in New Jersey, as well as transient modeling of the geographic mobility of young adults in the United States. The consulted Brennan Center works consisted of data on the impacts of Automatic Voter Registration (AVR) that is portable in states that have already implemented these voter registration modernization policies.

Outcomes/Results: In the first 6 months after Oregon implemented AVR, the Oregon DMV registered four times the number of new voters than before the passage of AVR. If New Jersey implements AVR, 1.6 million New Jerseyans will be added to the voter rolls. Automatic Voter Registration that is portable increased young people’s access to the polls because they have the highest migration rate out of the entire population. 18 to 24-year-olds make up 20.8% of all movers nationwide. Migration increases and peaks between the ages of 18 and 24 and starts to decline at age 25.

Evaluation/Conclusion: This long-form policy analysis will add to existing Brennan Center research and can be evaluated to assist lawmakers in creating a policy agenda that includes legislation that will increase youth voter registration and participation rates by expanding voting access for young adults in New Jersey.
Internship Abstract

Title: Emergency Medical Services (EMS)-Emergency Department (ED) Patient Handoff Time Reduction

Name: Meghan Szymansky

Preceptors: Zachary Pannone, Process Improvement Analyst

Agency: Hackensack Meridian Health JFK Medical Center

Purpose: To improve EMS to ED patient handoff time to increase our compliance to a 20-minute standard by 18 percentage points from 47% to 65% in 90 days.

Significance: It has been stated by EMS that JFK patient handoff times exceed other hospitals in the area. JFK meets the 20-minute standard 47% of the time, as opposed to other hospitals which meet the 20 minute standard 62% of the time.

Method/Approach: Using a Lean Six Sigma approach, the patient handoff workflow between the EMS and the ED was observed, and door to door times were recorded whenever an EMS squad arrived.

Outcomes/Results: The average recorded patient handoff time was twelve minutes. Upon arrival, often times, EMS would be waiting to give report to the charge nurse, causing bottleneck at the main entrance initially delaying the patient handoff process. After giving initial report, EMS would then have to transfer the patient to their room and give a second report to the assigned nurse. Once the second report was given, EMS would proceed to pack up and leave for their next call. After observations, a meeting took place between the project management team, EMS, and the nursing staff. During this meeting, observations were revealed and concerns from each party were addressed. The steps going forward consisted of creating a “landing strip” at the ED main entrance. A standard would be created, to specify what patient information EMS should be giving during report. Most importantly, EMS would now only have to give report only once to the patients assigned nurse.

Evaluation/Conclusion: Once these three implementations are in place, the patient handoff process will be more streamlined and efficient. The “landing strip” will seek to reduce congestion at the main entrance of the ED. A set standard of patient information only given once will allow EMS to get in and out of the ED faster for better response times.
Title: Evaluating the relationship between Alzheimer’s Disease and risk factors to expand recruitment efforts.

Name: Madeline Taggart

Preceptors: Kaylee White, Clinical Research Coordinator, Site Manager

Agency: Princeton Medical Institute

Purpose: To evaluate the potential study population and search for connections between Alzheimer’s disease and several risk factors.

Significance: Alzheimer’s Disease affects about 44 million people worldwide. There is an established causation between Alzheimer’s disease and diabetes. One of the indications of diabetes is hypertension, which is linked to lack of exercise and being overweight (Alzheimer’s Association, 2007). Heredity factors can also cause predisposition for Alzheimer’s disease. By understanding prospective patients reasons for expressing interest in AD studies, we can use this information for target marketing and to improve existing recruitment efforts for an incoming Alzheimer’s disease research study. It is essential that patients are enrolled and meeting the criteria in order to keep the study running.

Method/Approach: Princeton Medical Institute offers memory pre-screenings to determine if a patient is eligible to participate in a study. During the visit, family, social, and medical history are reported. Patients also indicate if they have any other medical conditions before completing a series of evaluations that test their cognitive function. Data was collected from a sample of people who were recently pre-screened for AD.

Outcomes/Results: Out of 44 subjects (n=44), it was observed that 19% of patients indicated that they have diabetes. 25% of patients reported that they have hypertension. 45% indicated that they have a family history of cognitive impairment issues. Overall, a large portion of the sample had a family history of Alzheimer’s disease, contributing to a higher perception of risk, and higher participation rates. Family engagement and support serve as a main reason for participation in studies. In fact, many patients attend the pre-screen visit with their partner.

Evaluation/Conclusion: These findings have been used to create two new marketing fliers and additional educational material. These fliers have been distributed throughout Rutgers and several other locations where PMI could reach concerned family members. Health education lectures and outreach events also served as effective strategies to (a) conduct more memory pre-screenings, (b) increase the rate of people interested in joining a study, and (b) educate the public/raise awareness and c) attempt to form more relationships within the community.

Title: Improving the Efficiency of the American Red Cross New Jersey Region After Historic Hurricane Season

Name: Aaron Taylor

Preceptor: Lisa McGee

Agency: American Red Cross - New Jersey Region

Purpose: To connect with volunteers in order to determine the active workforce and improve the efficiency of the Red Cross volunteer program.

Significance: After each hurricane season, the Red Cross experiences an influx of 700-1000 volunteers. Although, the extra help is much needed and appreciated, these volunteers typically do not continue their work after hurricane season ends. The Red Cross struggles after hurricane season because of this and would be more efficient if the call roster was full of active volunteers only.

Method/Approach: Volunteers were contacted via phone and email to assess their activity status. Volunteers that were contacted were typically inactive for 60 days. If volunteers did not respond to this contact, or if they indicated they were no longer an active volunteer, they were inactivated in the online volunteer management system, Volunteer Connection. However, prior to inactivation, volunteers were made aware of other volunteer programs such as blood drive services and hospital services. Additionally, a survey was sent to all staff including current active volunteers. The survey assessed engagement specifically for sheltering operations. Furthermore, a switch was made to cut a typical disaster volunteer shift from 8 hours to 4 hours as it would be more enticing to volunteers.

Outcomes/Results: Over 800 volunteers were removed from Volunteer Connection. Before this project, the roster for ‘active’ volunteers was approximately 1985. Now that number is now reduced to 1138. The disaster team has improved efficiency in responding to disaster. Efficiency has improved by about 57.3%. The survey collected about 300 responses out of 5000 invitations over the period of a week. Of these responses, 57.7% have indicated that they wish to volunteer for sheltering services and 63% of which have previously volunteered in a sheltering program. Volunteer distribution among the counties in New Jersey (among those who completed the survey) were relatively even. The least common shelter role that volunteers were trained for was disaster mental health at 8.33% while the most common role was shelter registration at 53.13%.

Evaluation/Conclusion: The team was successful in improving the efficiency of the organization. The reduction of the roster on Volunteer Connection has created a new list of people that are more likely to respond to an emergency. Furthermore, the results of the survey have targeted volunteers that would benefit from further engagement. This project will be beneficial to replicate in the future and is currently still in progress due to the survey still being live.
Internship Abstract

**Title**: The Role of Rutgers in a Student’s Post-Graduate Life

**Name**: Ananyasri Thiriveedhi

**Preceptors**: Direct Supervisor: Mark Cruz, Health Education Specialist

**Agency**: RU H.O.P.E (RU Health Outreach, Promotion, and Education)

**Purpose**: To analyze Rutgers undergraduates’ financial knowledge, to examine their level of readiness to be financially independent after graduation, and to provide effective educational interventions to improve these skills.

**Significance**: The effect of unemployment on mental health is severe. Not being employed leads to mental health issues such as “distress, depression, anxiety, psychosomatic symptoms, subjective well-being, and self-esteem”. These symptoms are also correlated with students being unaware of how to handle finances and money after college (Kartsen 2009). Therefore, it is important that Rutgers undergraduate students know how to secure a job and know how to handle their finances after graduation.

**Method/Approach**: A survey was completed by 50 undergraduate students of Rutgers University at New Brunswick. The students who completed the survey all have had experience with Rutgers career services’ resources. The survey had 8 questions that addressed how confident students were in their knowledge about financial readiness and career seeking capabilities in relation to Rutgers. The survey questions were open-ended, multiple choice, and rating scale based. I also scheduled a resume-building workshop through career services for undergraduate students. I collected the students’ feedback through a satisfaction survey that will consisted of 1 multiple choice question and 1 open-ended question.

**Outcomes/Results**: Of the sample size cohort (n=50), 44 students (88%) believe that Rutgers did not prepare them to be financially independent after graduation. On a scale of 1 to 5, (5-extremely knowledgeable, 1-no knowledge), the average knowledge the students who took my survey have regarding taxes is 1.82, regarding job seeking abilities is 2.50, regarding life insurance is 1.62, and about building credit is 2.62. Additionally, 40 students (80%) do not have an outlined budget that they follow and the main topics that students replied about wanting to learn more about are investments and mortgage. The satisfaction survey revealed that four students (50%), out of a total of 8 students, felt that the career services presenter was unenthusiastic and that 6 students (75%) would recommend the presentation to another student.

**Evaluation/Conclusion**: More than half (n = 50, 88%) of Rutgers undergraduate students felt unprepared for their post-graduate life in terms of job-seeking capabilities and finances. This can be resolved through some interventions, such as, the implementation of career services workshops with interactive and enthusiastic presentations in Rutgers student organizations and classes. Other interventions include, offering extra credit in classes regarding finances and job-seeking tips, adding a mandatory core class dedicated to post-graduate life to students’ curriculum, and restructuring Rutgers career services.
Title: Health Promotion Placemats for Mercer County Adults 65 and up

Name: Pamela Torres

Preceptors: Jeffrey Grosser, HO, MHS, REHS

Agency: Princeton Health Department

Purpose: To create a series of placemats for the Princeton senior center and other Mercer County establishments surrounding various health promotion topics that impact that age bracket of 65 and up.

Significance: Adults in the 65 and up range are often a population that is neglected when it comes to health promotion as it is often believed that it is not necessary to try and change their behaviors because it is already too late to make an impact on them (Golinowska et al. 2016). However, it has been shown that a healthy lifestyle at all life stages can help reduce chances of disease and increase life expectancy (Golinowska et al. 2016). One of the Healthy People 2020 goals focuses on the health of the older adult population, showing the need for a targeted approach to aid seniors in improving their health (Healthy People 2020, 2018).

Method/Approach: Utilizing government and non-profit websites, research was conducted surrounding a variety of health issues facing the older population. The facts gathered on the different topics were condensed and organized into smaller, easier to understand pieces of information. Using the website Canva, the information was displayed in a colorful format with various illustrations to enforce the concepts presented. The placemats were the proofread by a public health nurse who offered suggestions and edits to modify the design and information presented in order to best be suited for the population.

Outcomes/Results: Twelve different health promotional placemats were created to be rotated throughout the year, many coinciding with health promotion months (for example an anti-smoking placemat will be circulated in November to coincide with the Great American Smokeout). The placemats will be used at the Princeton Senior Resource Center, a senior center devoted to promoting healthy aging in the older adult population of the area. Beyond this, the placemats will be circulated through the Greater Mercer Public Health Partnership (GMPHP), a coalition of organizations in Mercer County focused on improving the health of the community. The placemats will be available for the partners of GMPHP to use in their own organizations or health departments as well. The placemats will also be available to be used at Mercer County nutrition sites as part of the Nutrition Project for the Elderly which provide healthy meals to the elderly population at the cost of a donation.

Evaluation/Conclusion: In order to evaluate the effect of the placemats, it is necessary to gauge the effectiveness via the target population of older adults who visit the Princeton Senior Resource Center. A survey could be a good option in order to get opinions on the placemats to see if they are being read and to gauge the knowledge and gaps in knowledge of the population. A focus group could also be an option as it would be a more in depth discussion of the content of the placemats and the usefulness of them.

Citations: https://docs.google.com/document/d/1V9sMshpk3LflMkJhNV30ehIyuV8dxQnMJokD3FuardI/edit?usp=sharing
Title: Douglass Residential College Women’s Health and Wellness Summit

Name: Kimberly Tran

Preceptors: Edie Prescod

Agency: Douglass Residential College at Rutgers University

Purpose: To create and plan a detailed event that revolves around Women’s Health to raise awareness and promote healthy living amongst women.

Significance: Currently at Rutgers University there are not many events that are put in place to showcase the importance of health and wellness. By not having these type of events on campus, the importance of healthy living are not highlighted. The best way to raise awareness on health and wellness is to educate people on proper care and practices to maximize their health status. By educating people it causes them to Event lead a healthier lifestyle and make health choices that would less likely hurt their health status later on in life. Hosting a health and wellness summit at the Douglass Residential College will raise awareness on the importance of women’s health among Rutgers affiliates along with the public who will attend. This is important because with health there are always advances and changes that people need to be aware of. The summit focuses specifically on women to ensure it correlates with the mission of the Douglass College.

Method/Approach: The first step of this project was to conduct research on how other health summits have been held in the past. Once the research was done the detailed planning of the event was to follow. Leading up to getting approval by the Dean to move forward with the event. The various research that was made was based on sponsorships, attendance, significance of food and location, etc. Once the research was done the next steps were to plan the details of the event. This included putting together a proposal, budget, looking for potential keynote speakers and collaborators, choosing what will be on the menu, planning for accommodations for the keynote speaker, choosing the significance of having different levels of sponsorship, and many other aspects.

Outcomes/Results: Through the following approach I was able to plan the event based on 10 previous health related events that I have researched. From the 10 all of them had sponsors and collaborators come and display their products or subject of focus, so that is something I found would be beneficial to incorporate into our summit. Also, when researching sponsorships and the different levels of it, I was able to compose a sponsorship packet that used those references as a guideline. The keynote speakers were chosen based on researching women nutrition and mental health speakers and from a list of 50+ there have been 4 possible speakers chosen on the bases of their specialty and how applicable their expertise were to the general audience.

Evaluation/Conclusion: Reviewing on the internship it taught a lot of valuable skills. Although the planning aspect was not active because the event was not approved by the Dean at the time, the significance of having all aspect in line and ready was to make things more efficient for the event department once the event was approved. Moving forward with the event contacting potential guests and sponsors will be detrimental to the event because the funding for the event will be highly dependent on sponsorship.
Title: Communication Methods and Impacts on Food Drive Outcomes

Name: Mansi Trikha

Preceptors: Directors Katherine Quintana and Kara Sendell

Agency: Move For Hunger, Asbury Park, New Jersey

Purpose: To find the most efficient method of contact to potential volunteers that influences the potential volunteers to hold food drives.

Significance: Nearly 1 in 10 people and 3 out of every 20 children in the state of New Jersey are food insecure (Feeding America, 2015). Food insecurity is defined as a household’s inability to feed every person in a household in order to maintain a healthy life (Feeding America, 2015). For a non-profit organization, it is important to see which measures are most efficient to get potential volunteers involved with holding food drives.

Method/Approach: SalesForce is an interactive database that can be used to log emails, calls, and other forms of contact with potential volunteers. In a one-month period (March), all potential volunteers were counted for (n= 17). and each potential volunteer’s number of interactions throughout the period were added up. These interactions were separated into number of phone calls made to the potential volunteer and number of emails sent to them. Then, the final outcome for each potential volunteer (whether a food drive was successfully held or not) was accounted for. A successful food drive received a numeric value of 1 while an incomplete food drive received a numeric value of 0. Using SPSS to run a bivariate analysis, all sets of data were entered to determine which method of contact yielded the strongest, most positive correlation.

Outcomes/Results: After counting all potential volunteers and entering all data into SPSS, a bivariate analysis was run on two pairs of data: number of emails and food drive outcome and number of phone calls and food drive outcome. The Pearson’s R for number of emails and food drive outcome was calculated to be .740, with a statistically significant p-value of .001. This was indicative of a strong, positive correlation between number of emails sent to potential volunteers and them holding a successful food drive. Conversely, a second bivariate analysis was run on the second pair of data and the Pearson’s R for number of phone calls and food drive outcome was calculated to be -.017, with a statistically insignificant p-value of .948. This was indicative of a strong, but weak correlation. However, the p-value was .948, which indicates statistical insignificance.

Evaluation/Conclusion: The most efficient method of contact which yields the desired result (a successful food drive) for Move for Hunger is emailing the potential volunteers. Potential volunteers with higher volumes of email communication are more likely to go forth and hold a food drive from beginning to end. Following up with the potential volunteers via email on a regular basis can encourage food drive completion and can influence the potential volunteers to move forward with their food drives.

References:
Internship Abstract

Title: Enhancing Patient Education on Choosing Appropriate Vaginal Products

Name: Ranelle Tulloch

Preceptors: Nancy Phillips, MD, Obstetrician/Gynecologist, Associate Professor
Percy Yeung Ph.D

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

Purpose: To create a brochure on vaginal moisturizers and lubricants in order to help women with vulvovaginal symptoms choose the products most appropriate for their individual needs.

Significance: Vulvovaginal atrophy, which occurs due to decreased estrogen levels in the vagina or vulva tissue, is a common medical condition in postmenopausal women. It is estimated that out of the 64 million postmenopausal women in the US, 50% will experience one or more symptoms of vaginal atrophy. These symptoms include: pain during sex (dyspareunia), vaginal dryness, or vaginal irritation (Wysocki et. al, 2014). They have the ability to negatively impact a woman’s quality of life, especially sexual relationships, self-esteem, ability to exercise and even clothing options. Both the American College of Obstetrics and Gynecology and The North American Menopause Society recommend vaginal moisturizers and lubricants as first line therapy for vulvovaginal atrophy (Shifren, Gass, 2014) (ACOG, 2016). However, due to a plethora of products sold both over-the-counter and online, women need education and guidance on choosing the most appropriate product for their needs.

Method/Approach: A literature review was conducted using multiple scientific sources, such as PubMed and Ovid on vaginal lubricants and moisturizers. This search revealed that various characteristics of the products, including ingredients, compatibility with condoms, contribution to irritative or infectious symptoms are important factors for consideration in product choice. The creation of an informative brochure would enhance patient’s understanding of how to appropriately choose and use these products as a treatment method for their symptoms.

Outcomes/Results: A patient brochure was created from information obtained in the literature search, summarizing the various lubricant properties. The brochure is focused on vaginal moisturizers and lubricants. Its goal is to assist patients in choosing the most appropriate product to suit their health needs. Review by preceptors resulted in approval for widespread distribution, for women suffering from vaginal dryness, premenopausal and menopausal women.

Evaluation/Conclusion: The educational patient brochure will be printed and distributed to women with symptoms related to vaginal dryness. It is anticipated that this will improve patient education and treatment. By having knowledge of the products to treat this issue, women will be more likely to use vaginal lubricants and moisturizers and understand how to use them properly. Future evaluation will be based on patient feedback. This information is anticipated to be collected informally for now, but may be considered to be collected in a more formal manner in the future.
Title: Oral Healthcare Initiative

Name: Saumya Uppal

Preceptors: Juliana David, M. Ed. Psych

Agency: NJ Chapter, American Academy of Pediatrics (NJAAP)

Purpose: To review the effectiveness of NJAAP’s oral health initiatives and assist in the implementation of the Dental Care Coordinator Program

Significance: Dental caries, a preventable disease, is the most common chronic disease among children. It is 5 times more common than asthma and 4 times more common than early childhood obesity nationally (American Academy of Pediatric Dentistry). Healthy People 2020 identified barriers which limit both preventive interventions and treatments such as: limited access and availability to dental procedures, lack of awareness, cost, and fear of dental services. Lack of timely preventive oral health care has adversely affected children and families, where children miss approximately 51 million school hours each year and parents lose about 164 million work hours (American Journal of Public Health). Over the years, New Jersey has consistently received an ‘F’ grade for their oral health services (Pew Report). While there has been improvement in pediatric oral health status, more efforts are needed. NJAAP initiated the development of a pilot Dental Care Coordinator Program to bridge the gaps in preventative dental care and referrals.

Method/Approach: The American Academy of Pediatrics supports the following oral health care best practice: “disease prevention is the most cost-effective way and best long-term solution to oral health problems.” NJAAP established educational trainings, utilizing a patient-centered care model: Educating Physicians in the Community (EPIC), among pediatricians and other healthcare providers (HCPs). The trainings consist of caries risk assessment, fluoride varnish application, and dental referrals by age 1. Efforts to build medical-dental collaboration through the Dental Care Coordinator Program have been initiated to enhance prevention and improve referrals to dental homes. The evaluation component consists of pre- and post-tests to assess the HCPs’ knowledge gain.

Outcomes/Results: The analysis of the pre- and post-tests, taken by HCPs, indicated a knowledge gain of 53% to 97% on how dental caries are transmitted. These surveys also revealed significant knowledge gain among HCPs of 71% to 94% regarding the frequency of brushing and 64% to 82% for parental supervision in brushing.

Evaluation/Conclusion: The educational trainings were well received by the HCPs and they were open to integrate oral health care into routine well visits and improve referrals. NJAAP hopes to expand the Dental Care Coordinator Program statewide to continue promoting oral health integration.
Title: Yay for Safe Kids Day!

Name: Radha Vakkalagadda

Preceptors: Diana Starace, Injury Prevention Coordinator

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

Purpose: To plan a Safe Kids Day (at Rutgers Day) that is dedicated to creating awareness and fundraising for the Safe Kids Middlesex Coalition at Robert Wood Johnson (RWJ), while motivating families to protect kids from preventable injuries.

Significance: Preventable injuries are the number one killer of children and teens in the United States. According to the CDC, an average of 12,175 children from the ages of 0 and 19 die each year from unintentional injuries such as falls, burns, and road traffic. Additionally, unintentional injuries account for about 9.2 million children visiting the emergency department. Providing parents and kids with safety tips and resources can have a significant impact on this number.

Method: Every year, the RWJ Safe Kids Middlesex County Coalition (SKMC) participates in Rutgers Day as part of the Robert Wood Johnson Barnabas Health (RWJBH) booth. Planning for this event included participating in various Safe Kids Worldwide webinars, such as fundraising and event planning and recruiting and scheduling volunteers to help with the booth. A social media plan was created to promote the event to people locally and around the state and to help fundraise for future SKMC programs. A fundraising page created by Safe Kids Worldwide was used to promote and track how much money was donated. Flyers and posts were created using Microsoft Word and Canva to promote the event internally throughout the RWJBH health system and on various social media platforms such as Instagram and Facebook. Additionally, the event was promoted via paid ads and posts on social media sites through collaboration with the RWJ Marketing and Communications Department.

Outcomes: Safe Kids Day at Rutgers Day is on April 28, so the data regarding reach at the event is not currently available. 30 people from the community and various departments at RWJBH have signed up to volunteer at the booth. In 2017, the RWJBH booth reached about 500 families and countless individuals and fundraised about $80. With the marketing and social media plan in place, this Safe Kids Day event is expected to reach more than 500 families and fundraise about $500.

Conclusion: Safe Kids Day at Rutgers Day will be a success if more than 500 families is reached at the booth and more than $500 is donated on the SKMC fundraising page. Safe Kids Day is an event where kids and parents participate in fun activities while also learning about safety. Outreach events like this are a means to provide important educational information to members of the community and present opportunities to get questions answered about childhood safety. They are important because they raise awareness about important topics and help fundraise for future injury prevention and safety programs that would further benefit communities.
Title: Reducing the Incidence of Blindness in Diabetic Patients

Name: Kiara Valentino

Preceptors: Sandra Festa, Executive Director AtlantiCare Health Services-Mission Health Care

Agency: William L. Gormley AtlantiCare HealthPlex

Purpose: To provide diabetic patients with on site retinal exams that will detect diabetic retinopathy and macular edema, which is the leading causes of blindness.

Significance: AtlantiCare Enhanced Care Center has 900 patients with diabetes. The care center’s project mission is to end preventable blindness caused by diabetic retinopathy and macular edema. Diabetic retinopathy and macular edema are leading causes of blindness in all adults under 75. However, with early interventions over 90 percent of vision loss is preventable. The earlier these two leading causes of blindness are detected, the greater the number of available treatment options and potential better health outcomes. Currently, retinal exam rates are as low as 40 percent in this practice. This statistical data proves the need to screen diabetic patients to prevent further impairment in vision.

Method/Approach: A TopCon camera performs patented screenings that detect potential pathologies such as diabetic retinopathy and macular edema. It is a fully automated fundus retinal camera that captures non-mydriatic images of the eye and utilizes image enhancement software to increase clarity and screening accuracy. Once, the examination is completed, the captured images of the client’s retinas are then submitted to Atlanticare’s partnering corporation IRIS (Intelligent Retinal Imaging Systems) to be evaluated and graded for severity of disease and prognosis. Test results are then returned to the ordering provider at the Enhanced Care Center to follow up with needed treatment for the diabetic client.

Outcomes/Results: Based on the results of the examination, a plan of care is reviewed with each diabetic patient. The patient will be called periodically by their health coach to ensure they adhere to their plan of care. In addition, data had been collected from February 20, 2018, through April 3, 2018, which revealed a total of 139 exams completed: 14 positive diabetic retinopathy, 16 other suspected disease, 3 macular edema, 72 normal, 34 not gradable.

Evaluation/Conclusion: The retinal screenings allows the care center to increase eye exam compliance and assist in referral to an ophthalmologist for patients to receive appropriate care when needed. If clients do not have access to a specialist due to lack of insurance coverage, these clients are referred out to the New Jersey Commission for the Blind and Vision Impaired. These screenings permitted the care center to find other unspecified eye diseases to help manage such as glaucoma and macular degeneration and to give annual eye exams to patients who did not receive one. Future plans consist of increasing compliance among diabetic patients, evaluating progress, and expand retinal exams into other offices in need.
Title: Wastewater Management Plan

Name: Marcela Vasquez Calderon

Preceptors: Direct and Project Supervisor: Mirah Becker

Agency: Middlesex County Department of Planning

Purpose: To update and assure compliance of the final proposal of the Wastewater Management Plan of the Middlesex County for submission to the NJDEP.

Significance: The Wastewater Management Plan describes the current practices for treatment, disposal, and collection of the wastewater in the Middlesex County. It is broken down by the different factors that impact the wastewater management and how it related to the 25 municipalities within the county. It offers a detailed management plan of the already existing wastewater and also of the projected plans and the capacity of the Middlesex County. Those projections are important because they offer an estimate of how many houses or other structures can be built in order to keep a healthy amount of wastewater in the soil, among other factors that are important for the public and environmental health. For example, the nitrate dilution levels need to be under the accepted maximum, 9 mg/l, in order to be a healthy amount. The plan also gets the county thinking about the improvements that can be made, including advanced technology.

Method/Approach: The already existing Plan is revised to update all data to the most current. Some data remain the same while other data need to be changed to match the new statistics or circumstances. In general, most of the text remains the same, what changes is the numerical data that specifies the levels of nitrate in the soil or other measures. The GIS experts do all of the calculations and everyone else is in charge of entering the data and writing the narrative portions of the plan. It is important to double check every single entry and correct the whole document so that it reflects the relevant information. A detailed review of the document, which includes reviewing the document for consistency, ensuring that the Plan is readable, the formatting is correct, and assuring that everything is accurate, is conducted.

Outcomes/Results: Calculations are still being done, along with revising all the data that has already been finalized. The New Jersey Department of Environmental Protection will review our plan and provide comments. Once the draft is finalized the staff will take the Plan to all the municipalities and explain how the plan affects them. Many municipalities are not in compliance with the nitrate dilution standard and as such will need to figure out ways to lower the nitrate in their soils. Strategies for doing this are presented, but nothing is forced on the town. Implementation follows Plan adoption. The Plan includes a Septic Management for the county.

Evaluation/Conclusion: The Wastewater Management Plan is now almost done, after a long time working on it. Several sections of the plan are already revised and finalized, while others still need some work with calculations. We have created charts that are automatically updated when a change is made, this makes the maintenance of the management plan much easier. The document now flows well and is easy to read, it also meets all of the requirements set forth by the NJDEP.
Title: Improving Patient Outcomes in Knee Replacement Surgery

Name: Carlos Velez

Preceptors: Kyla Pascual, RN, ONC, Joint Care Coordinator

Agency: Robert Wood Johnson University Hospital

Purpose: To assess patient outcomes after implementing a device called the ON-Q pump to enhance patient pain management and comfort after knee replacement surgery.

Significance: Controlling patient’s pain after surgery is an important part of the recovery process. When patient’s pain is controlled, they will have more of a comfortable recovery and be able to move around sooner, have a better appetite and return to their normal day to day activities. Traditionally, the most common way to treat and relieve pain after surgery has been with narcotics such as a morphine injection or oral opioids. These drugs affect the entire body and the more opioids consumed contributes to post-operative complications and increased length of stay. In 2016, U.S. studies have shown a significant rise in the use of narcotics where over 50,000 deaths occurred from drug overdose and 30,000 of those deaths are attributed to opioids. Implementing the non-narcotic pain relief ON-Q pump, medication is administered directly to the surgical incision site in which it reduces the needs for opioids to significantly improve patient care, reduce complications, and reduce length of stay.

Method/Approach: The initial step of this project was to collect data from September, October, and November of 2017 and data from January, February, and March of 2018 to evaluate narcotic use and length of stay of knee replacement surgery patients. In 2017, orthopedic surgery patients have used the traditional way to control patient pain by administering narcotics. In 2018, the ON-Q pump was implemented for use in knee replacement patients where their narcotic use, pain management and length of stay was being monitored. Analyzing 2017 and 2018 knee replacement patient data, it was translated into an Excel spreadsheet in order to calculate the average length of stay and narcotic use into morphine equivalent. Once the data was collected the information can give the organization an insight into whether or not the ON-Q is effective on knee replacement patient after surgery.

Outcomes/Results: As for September, October, and November of 2017, a total of 74 patients were admitted to the orthopedic unit with an average length of stay of 2.66 days and 55.64 mg of narcotic use without the ON-Q pump. As for January, February, and March of 2018, a total of 50 patients were admitted to the orthopedic unit with an average length of stay of 2.18 days and 36.38 mg of narcotic use with the ON-Q pump.

Evaluation/Conclusion: In comparison with the 2017 and 2018 data, patients who use the ON-Q on average go home 0.48 days sooner and administered nearly half the amount of narcotics than without the ON-Q. Overall the ON-Q pump not only reduces pain and narcotic use, but allows patients to engage in physical movement and therapy resulting in outstanding patient outcomes post knee replacement surgery.
Title: HIV/AIDS Among Injection Drug Users in Newark New Jersey

Name: Samantha Vickers-Hymowitz

Preceptors: Dr. Ann Dey, Senior Research Program Manager

Agency: HIV Prevention Community Planning Support and Development Initiative

Purpose: To transcribe and interpret focus group results conducted by the HIV Prevention CPSDI among Injection Drug Users (IDUs) in New Jersey.

Significance: In the 1960’s, the addiction to opioids began with the use of heroin, but today, prescription opiates are over prescribed making them easier to access and sell. In 2015, New Jersey wrote approximately 4.9 million opiate prescriptions. As prescription opiates have a higher street value than heroin, there have been increased numbers of needle use, especially among young people who are injecting drugs. With this increase in opioid use in New Jersey, it is important that we not only work to reduce the numbers of deaths from opioid use, but also reduce the risk of spreading of HIV/AIDS. In 2014, 29.7 percent of males and 31.9 percent of females living with HIV/AIDS in New Jersey were attributed to injection drug use. These numbers are increasing annually.

Method: Under the advisement of the New Jersey Department of Health Division of HIV, STD, and TB Services (NJDHSS, DHSTS), the HIV Prevention CPSDI and the North Jersey Community Research Initiative (NJCRI) conducted the National HIV Behavioral Surveillance (NHBS) created by the CDC in order to learn more about local IDU populations. Four focus groups of IDU populations were conducted: two in Hudson County, one in Essex County, and one in Union County. An auto recording the groups were taken during the duration of each focus group. A transcription was made with the information as a written document following the group. Once all the focus groups were transcribed and the information was organized, the most important information for the next phase of the project was determined as well as the similarities between the focus groups that provide the greatest amount of information holistically.

Results: There were approximately 30 people who participated in the focus groups who were asked 25 questions. Of these questions, there were six questions selected that were deemed most significant to the second phase of the study. Some of the questions asked for information regarding where the IDUs purchase drugs, use their drugs, the types of drugs they are using, and best days and times to conduct a survey.

Conclusion: The responses to the questions were used to determine the placement of HIV/Hepatitis C testing and survey administration vehicles for the second phase of the study. By knowing where IDUs buy their drugs, the types of drugs they use, and where they use them provides information of the area as well as locations to place the testing vehicles within these areas. The times of the day and days of the week also help to find people to partake in a survey that would increase the numbers of those participating and therefore allows the CDC to better monitor HIV incidence in the area.

Sources: https://docs.google.com/document/d/1HGtoB8Wfl9rbDffhzoMjJo8Ztwr0bW_6_Ko29nLnkEolQ/edit?usp=sharing
Internship Abstract

Title: Increasing Millennial Involvement in Disrupting Aging

Name: Sinthuja Vigneswaran

Preceptors: Direct Supervisor: Stacey Kratz, Associate State Director- Digital Strategy

Agency: AARP

Purpose: To create and utilize marketing materials that identify the effects of ageism that exist in the 50 plus population in New York and address the actions needed to eliminate negative preconceived notions on aging.

Significance: Ageism is an issue that takes place in many different settings such as the workplace, media, and even in educational institutions. The population in the United States is continuing to age with life expectancy now reaching an average age of 78. However, while life expectancy has increased age discrimination still remains to be an issue. In the past year, the Equal Employment Opportunity Commission has received 20,857 charges of age discrimination. While the Age Discrimination in Employment Act has made it illegal for employees to be discriminated against based on age, changes still need to be made more than just at the workplace. Disrupting Aging is an AARP movement that is currently ongoing. It relies on members of the community and local leaders to support the cause and become “Age Disruptors” who take down the barrier between age and opportunities.

Method/Approach: In order to contribute to this cause, information and qualitative data was recorded from an AARP sponsored panel event called Black Women Who Lead, where notable Black women in the community such as Hazel Dukes from NAACP and Arva Rice from the New York Urban League speak on being success women leaders by embracing their age and ethnicity. Pictures, videos, and notes were taken at this event to capture community involvement and advocacy for this movement and recommendations for eliminating negative notions surrounding aging. A strong marketing strategy to raise awareness for this movement was important and after careful research, information was gathered to create a blog post.

Outcomes/Results: The written piece was created and published on AARP New York’s website. This piece captures the effects and impacts of aging from a millennial standpoint. Details of the event spoke on the importance of embracing age and overcoming the obstacles linked to ageism to become successful and notable members of the community. This piece utilized this information to market Disrupting Aging and increase millennial involvement.

Evaluation/Conclusion: In order to study how successful this marketing post would be for this movement, engagement metrics were analyzed and compared with a previous Disrupting Movement article. For the month of April, the Millennial article received 417 hits and the previous article received 525 hits. Engagement metrics will be continuously tracked for this post and used to increase involvement amongst baby boomers and millennials for the ongoing Disrupt Aging movement in New York.

Sources: https://docs.google.com/document/d/11_NdHbxQggXz9ATYHdnTGqQX9SdByrbrQ3REev-Fj6g/edit?usp=sharing
Title: Improving Patient Outcomes Through Continuing Medical Education

Name: Alexa Vintimilla

Preceptors: Stephanie Neumann, Manager of Educational Strategy

Agency: Physicians’ Education Resource (PER)

Purpose: To measure knowledge, competence, and performance among physicians after participation in the continuing medical education (CME) activity “Making Critical Decisions in EGFR Mutant Lung Cancers: How to Apply Evidence to Decide What to Do When the Patient is There in Front of You”.

Significance: This continuing medical education initiative provides an unbiased academic review of recent clinical advancements in the field of non-small cell lung cancer (NSCLC). Using this information, physicians can earn their CME credits while also learning how to apply novel treatment options to their clinical practice to ultimately improve patient outcomes.

Method/Approach: Learning outcomes for this online activity were measured by asking learners pre and post activity questions. Location and specialty of each learner were also assessed in order to identify educational gaps and where they exist. This data was compiled and analyzed to measure whether or not the online activity was successful in increasing knowledge among learners.

Outcomes/Results: Learners from this activity showed improved knowledge and understanding on the latest clinical data in EGFR-mutant lung cancers. Before the activity, 80% of learners answered correctly on the pre-test question regarding tissue and genomic testing for EGFR-mutant NSCLC. After the activity, 100% of learners answered this question correctly. This shows that learners showed improvement in knowledge regarding the role of diagnostic testing for the treatment and management of EGFR-mutant lung cancer. The majority of learners were from the United States. In total, 92 physicians engaged in this activity.

Evaluation/Conclusion: The majority of learners were from the United States, which shows that there is a need for education in EGFR-mutant lung cancers for physicians practicing in the US. The increase in learner knowledge shows that this continuing medical education program was effective in teaching physicians on the latest advancements in EGFR-mutant NSCLC. With the knowledge gained from this CME initiative, physicians can provide the best possible care to their patients with EGFR-mutant NSCLC. Each of the 92 physicians who participated in this activity see 20 patients a month on average, which shows that this CME initiative had a potential patient impact of 1,840 cancer patients. For future initiatives, marketing efforts should be improved to drive higher attendance to the CME activity and ultimately improve the lives of more cancer patients.
Title: Facilitating an Efficient PrEP Risk Assessment Process

Name: Mohamed Vizam

Preceptors: Derrick Gibbs

Agency: Hyacinth AIDS Foundation

Purpose: To facilitate a faster PrEP application process by automating the data input to make risk assessments quicker.

Significance: PrEP is a daily pill used by HIV negatives to prevent HIV. This pill has a 92-99% success rate with preventing the virus. However, there are currently very few providers that prescribe PrEP to their patients, which causes there to be a very high demand with a very low supply. However, an issue comes from the client side as well. According to interviews with Hyacinth staff, clients drop out of the PrEP program because of the long application processing times, and the long risk assessment times. Thus, creating this efficient data input channel will allow staff to review application in a much more organized way, and will save time with data input.

Method/Approach: First, my supervisor had to approve this project, so a demo created using the agency’s general intake form. After his approval, a discussion was held with the network administrator for the agency and discuss with him which online form would be the most secure and would work with the agency’s system. From that discussion we decided to use Microsoft Forms to create the applications. And these responses would automatically populate into a Microsoft Excel Spreadsheet. After creating these online forms, a training session was scheduled for all my branch’s staff on how to effectively use this new service. The staff were provided with an instruction sheet and FAQ sheet with images of the buttons that the staff needs click on to do certain tasks. The staff will be implementing this online form soon.

Outcomes/Results: The staff has just started using this software; however, the fact that the staff saves so much time with data input allows them to focus on other tasks, such as HIV testing and doing outreach in the field. In order to evaluate this project, the PrEP Client retention numbers will be reviewed in September.

Evaluation/Conclusion: Through these Microsoft forms, the process of approving PrEP for clients will be more efficient, and this will hopefully cause an increase in client retention and will give more people access to a drug that can stop the spread of this deadly virus.
Title: Middlesex County Special Needs Database Development

Name: Jahnavi Vyas

Preceptors: Carrie Johnson (Coordinator, LINCS)

Agency: Middlesex County Office of Health Services

Purpose: To establish and increase partnerships with organizations serving Special Needs populations in Middlesex County through registered enrollment in Local Information Network & Communication System (LINCS) program.

Significance: One of the primary responsibilities of the Middlesex County Office of Health Services is to protect the health and safety of more than 800,000 of its residents, of which more than 130,000 are disabled. To do so, an Emergency Notification System is developed (NJ-LINCS), which is a part of a larger national and state communication system. The office aims to relay pertinent health information to such vulnerable population, their facilities, and staff, to ensure that they are fully informed of emergency situations, health-related activities, educational opportunities, and other programs.

Method/Approach: A database of 76 organizations was created after research from government websites, on Special Needs facilities in the County. It was classified by the type of service provided; developmental, behavioral, physical, sensory and cognitive disabilities. It was further categorized into integrated or individually operated. Each organization was sent information by mail detailing the goal of the LINCS program, with an application to enroll in the system. They also received additional tools in the packet about access and functional needs guidelines. Their responses to the LINCS invitation were recorded in the County database. Furthermore, a subset of 10 organizations that were unresponsive was contacted via phone to better apprehend their thoughts on the program.

Outcomes/Results: The initial database was condensed to 53 contacts after removing the facilities that either did not meet the criteria or were closed. Over a 1-month period, 3 organizations registered and 1 requested more brochures. Three mail correspondences were returned, indicating discrepancy in the address. Of the 10 subset responses, 5 positively responded, requesting an electronic form of the letter. There were 5 neutral responses, where voicemails were sent to 4, awaiting further consideration, and the remaining 1 requested more time after acknowledging the receipt. No negative responses were recorded. The process is continuous, and responses will be accepted beyond the measurement scope of this project.

Evaluation/Conclusion: After reviewing the initial response rate (7.5%), it appeared that there is not a high desire for such organizations to be part of this communication system. However, the phone survey positively guided the project path. It was found that many facilities were unaware of the receipt since the mails were not addressed to a specific official. A higher response rate (50%) was recorded on phone, deriving that mail isn’t enough, or isn’t the best way of communication. It is recommended that future outreach or program recruitments be conducted in more than one communication method.
Title: Evaluating Community Knowledge on Parkinson’s Disease In New Jersey

Name: Addison Walkowiak

Preceptors: Cheylena Williams, APDA Program Coordinator NJ

Agency: American Parkinson Disease Association

Purpose: To promote, engage and evaluate community knowledge on Parkinson’s Disease in the state of New Jersey.

Significance: Every nine minutes someone is diagnosed with Parkinson’s Disease and the distinct symptoms of Parkinson’s can be mishandled in emergency situations. The symptoms of this neurological disease such as shaking and difficulty forming sentences aligns with those who are under the influence of drugs. Parkinson’s patients endure heightened symptoms while under stress which can be misunderstood by first responders. By promoting and engaging the community in various events to raise awareness for Parkinson's Disease, the community, along with medical personnel and first responders will be informed of the proper ways to interact and care for those suffering from this progressive disease.

Method/Approach: There were 10 educational events selected in the State of New Jersey in which 10-100 participants were invited to. These informative presentations were designed for nurses, physicians, clinical care technicians, first responders and caretakers of Parkinson's Disease patients. Qualitative questions included medication, supportive resources, signs and symptoms of Parkinson's. Quantitative questions included knowledge about Parkinson's Disease. Pre and post tests were handed out before and after the presentation. This data was analyzed in Excel.

Outcomes/Results: Of the 264 participants, 122 (46%) were caregivers and 142 (54%) were medical professional. 71% of caregivers knew the type of doctor (Movement Disorder Specialist) who specializes in Parkinson's Disease before the educational presentation. 100% of caregivers knew the correct physician after the presentation. Only 56 (46%) caregivers knew about the available resources, compared to 122 (100%) after the focus groups. The level of Parkinson's expertise on a scale of 1-10 increased from 5.5 before to 7.9 after the presentation. The health care professionals were given a slightly different pre and post test. Only 75% of these professionals could recall 3 prominent signs and symptoms of Parkinson’s compared to 100% after the presentation. The health care staff and emergency responders level of understanding on Parkinson's increased from 6.9 out of 10 before the presentation to 8.4 out of 10 afterwards. Finally, only 47% of health care professionals knew about the medication needs for those with Parkinson’s, compared to 98% after the focus group was completed.

Evaluation/Conclusion: From the pre-test to the post-test there was a clear increase in knowledge for Parkinson’s Disease. This concluded that a significant portion of medical professionals and caregivers are unaware of the signs, symptoms and needs for these patients. The two hour focus group provided participants with the baseline knowledge to improve quality of care for these individuals.
Internship Abstract

Title: Medical Reserve Corps Recruitment

Name: Nicole Wallace

Preceptors: Project Supervisor: Lori Karabinchak, MRC Coordinator

Agency: Middlesex County Office of Health Services

Purpose: To increase Medical Reserve Corps Membership (MRC) through a series of outreach methods and determine the most effective means of recruitment.

Significance: As result to the lessons learned from the disaster of 9/11, the MRC Program was established. According to the Office of Civilian Volunteer Medical Reserve Corps (n.d.), “the mission of the MRC is to improve the health and safety of communities across the country by organizing and utilizing public health, medical and other volunteers.” The MRC was formed to help alleviate the burden on the local healthcare system by organizing in advance, a local group of pre-qualified, trained healthcare and support workers that can help handle patient surge conditions during a public health emergency.

Method/Approach: Target audience focuses on emergency personnel and college students. A flyer was created and distributed to 8 local county fire houses and rescue squads, as well as in different student centers on each Rutgers campus. Informational brochures were also dispersed at various table displays on campus. Public announcements were made at a variety of different courses being taught at Rutgers, New Brunswick. A 7-question survey was also distributed statewide to other MRC units seeking best practices used for recruitment and greatest challenges faced by each unit.

Outcomes/Results: Recruitment occurred between the period of January 3rd to April 6th. 74 brochures/flyers were distributed, and 1 table display was held during month 1 and seven new members were obtained. Over 60 brochures/flyers were distributed month 2 and two new members were obtained. For month 3, 2 table displays were held, 6 class announcements were given, and 40 brochures/flyers were distributed. Three new members were obtained.

Evaluation/Conclusion: Flyer/Brochure distribution, Table displays and Public announcements will continue to serve as an effective means of recruitment for the MRC. 12 new and approved members were obtained throughout this process, yielding a 5.2% increase for the 3 months of recruitment. Distribution of brochures was the most effective means of recruitment. This method ensures the information stays with the prospect and serves as not only an informational tool, but a reminder and guideline to register. Prospect interest for volunteering was not difficult to acquire but rather actually following through with the application process and retaining volunteers was the biggest barrier. This was also found true through the responses in the survey. Results were obtained from 18 MRC coordinators who utilized flyer/brochure distribution, table displays and public announcements as the top 3 methods for recruitment. Time, membership involvement, and money were listed as the top 3 challenges faced when recruiting volunteers.
Title: Grassroots Education on the OFF Fossil Fuels Act for New Jersey

Name: Christina Wang

Preceptors: Direct Supervisor: Matthew Smith, Senior Organizer

Agency: Food and Water Watch Non-profit Organization

Purpose: To educate and brief communities about the OFF Fossil Fuels Act in order to promote the usage of clean renewable energy and its positive impact on our health and the environment.

Significance: Climate change is a crisis that many people view as insignificant, when in reality, it’s rather urgent. In order to salvage the remaining resources we have left on the planet, it’s crucial that we start shifting away from polluting fossil fuels and transition to 100 percent clean, renewable energy. By prolonging the use of fossil fuels, there will be negative impacts on our access to safe food and clean water supplies, because both food and water are vulnerable to certain impacts of the climate. Food and Water Watch aims to educate individuals on how to stand up to corporations that prioritize profit over people. They advocate for a democracy that benefits the lives’ of others as well as the environment. With these events and methods of outreach, the projected goal for both Rutgers and Ramapo was 100 attendees.

Method/Approach: From January 14, 2018 - April 22, 2018, college students and community members were invited to attend educational forums held at Rutgers University and Ramapo College. Outreach included event pages via Facebook, promotion of the event via confirmed cosponsors, and phone banking. For each event, over 1000 people were contacted via telephone, and over 100 people were contacted through a texting software. Emails were sent to 15 out of 60 potential cosponsors, and fliers were distributed to 7 out of 50 events.

Outcomes/Results: The event at Rutgers University on February 28, 2018 ran successfully. With 22 cosponsors, it boosted the final number of attendees to 79, 30 of which were students. Five of those attendees signed up to be volunteers. The event at Ramapo College on March 27, 2018 consisted of 105 attendees, 34 of which were students. Sixteen attendees also signed up to be volunteers. The forums served as a way to inform members of the community about the dangers of fossil fuels, as well as recruit a total of 21 new advocates to volunteer with Food and Water Watch.

Evaluation/Conclusion: Although the projected goal for the Rutgers event was 100 members, it fell short by around 20. Surveys were sent out to attendees, however, only 10 replied with little or no comments. Due to the inclement weather late March, the Ramapo event was moved, however, the number of attendees still exceeded the expected amount by 20. Improvements for both of these events regarded the parking and location of the venue. Perhaps in the future, directional signs may be posted to help attendees find the venue. The important takeaway from these events was the educational tool that this forum served as. By hosting these events, community members and students were educated on the effects of fossil fuels and climate change when they otherwise would not have known about its consequences.
Title: Child Nutrition Eligibility Campaign

Name: Veronica Wask

Preceptors: Gemma Brennan, EdD, Coalition Coach

Agency: Toms River Family Health and Support Coalition

Purpose: To apply new, effective program implementation in four target elementary schools in Toms River regarding Free and Reduced Price Lunch (FPRL) applications.

Significance: In the 2016-2017 school year, two out of twelve elementary schools in Toms River had over 50% of students qualify for free and reduced price lunch through the collection of the federal FPRL applications. South Toms River Elementary had 61.85% of students qualify for FRPL, while Walnut Street Elementary was the other school that had 49.69% of students qualify for the FRPL program. Schools that have more than 50% of its student populations qualify for free and reduced lunch are eligible to receive programs like summer food service programs and afterschool snack and meal programs, as well as increase overall student performance. Based on demographics and census information, more families do qualify and more students should be receiving free and reduced lunch.

Method/Approach: A retrospective view taken by coalition members concluded that while Citta Elementary, East Dover Elementary, Pine Beach Elementary, and Washington Township Elementary schools should have 50% of students be eligible for FRPL, their current numbers show only 30% of students qualify. Four goals to increase the rate of return on applications include: 1) reducing the stigma around the application, 2) ensuring that all persons filling out application know that their citizenship status will not be disclosed, 3) that the application and questions about the application are available in Spanish as well as English, and 4) making the application online and easily accessible.

Outcomes/Results: By the 2018-2019 school year, the number of FRPL applications should increase and have more children qualify. Using qualitative measures, such as exploring methods used elsewhere, selecting target schools, and utilizing expert interviews from Toms River school administration and coalition personnel, the outcomes are expected to be positive for the upcoming school year and reach more vulnerable children and parents than ever. The effective program implementations further the first goals of the Nutritious Food Connections aspect of the Toms River Family Health and Support Coalition.

Evaluation/Conclusion: With the four goals developed, the return of the FRPL applications for the 2018-2019 school year should increase. The success of this project will be evaluated by looking at numbers. With 2017 Percent Economically Disadvantaged rates showing that the four target schools have 31.08% and 37.67% students qualify for the FRPL program, success of the implemented programs will be determined if the target schools reach student eligibility rates greater than 50%.
Title: Patient Satisfaction and Leadership Rounds
Name: Alexandra Wickel
Preceptors: Direct Supervisor: Yaniris Garcia BS, Patient Advocate
Agency: Trinitas Regional Medical Center, Elizabeth NJ

Purpose: To analyze how patient satisfaction scores can be positively impacted by the implementation of the New Admission Leadership Rounding initiative.

Significance: Patient satisfaction is strongly correlated with quality of care and increased patient outcomes. When patient satisfaction scores are elevated, they result in increased patient safety within the hospital setting, lowered need for health care utilization as well as, increased revenue for the facility. Today, waiting for information to slowly trickle through the chain of command is inefficient, resulting in poor communication competency and unsatisfied patients. To provide excellent quality care, administrators and clinical support staff need to be aware of real-time patient feedback. The execution of the Newly Admitted Leadership Rounding Initiative consists of surveying patients based on their hospital experience. Real-time feedback enables more efficient care outcomes and improves communication at all levels of the organization, demonstrating to patients that leaders are invested in their care. The collection of this crucial data is key to improvement efforts all across the organization.

Method/Approach: The implementation of the Newly Admitted Leadership Rounds Initiative consisted of clinical and administrative staff members who were required to visit 2 patient rooms within the hospital’s inpatient units. In this face-to-face interaction, staff members were able to compile patient satisfaction data by surveying patient encounters on the following categories; cleanliness, communication, dietary, responsiveness, and overall hospital experience. This visit also allowed staff members to encourage patients to respond to the patient satisfaction survey and highlighted why it was important for our organizational improvement. Lastly, all leaders were required to fill out a Newly Admitted Leadership Rounds survey in order to ensure feedback was recorded for data purposes. Any negative feedback shared with the leaders was referred to the clinical support staff for further follow-up.

Outcomes/Results: Through the implementation of leadership rounds, we witnessed major improvements in every category. 46 of the responses for responsiveness exceeded expectations, 49 of the responses for dietary exceeded expectations, 30 of the responses for communication met expectations, 57 of the responses for cleanliness exceeded expectations, and 42 of the responses for overall experience met expectations. When examining the data by weeks there was a clear improvement in each category.

Evaluation/Conclusion: Over a one month observation, the implementation of leadership rounds has improved patient experience as a whole. Specific improvement processes including communication, responsiveness, dietary, cleanliness, and overall hospital experience have increased patient satisfaction. Limitations of the scores included patients that were absent at the time of rounding and/or had dietary restrictions as well as cognitive limitations.
Internship Abstract

Title: Sexual Health and Peer Mental Health Educator Quality Assurance

Name: Shirley Wong

Preceptors: Direct Supervisor: Francesca Maresca, Director of H.O.P.E

Agency: Rutgers Health Services: Health Outreach, Promotion and Education (H.O.P.E)

Purpose: To assess how the Sexual Health Advocates and Peer Mental Health Educators are adhering to workshop standards and to suggest recommendation for future training based on evaluation of results.

Significance: The mission of HOPE is to foster and cultivate health and wellness at Rutgers University through outreach and education. According to UNICEF (2012), peer educators can help raise awareness, provide accurate information, and assist their classmates to develop skills to change behavior. Therefore, HOPE coordinates a large and active peer education program. Students are trained to facilitate interactive outreach and workshops on issues that directly impact students’ lives. A qualitative evaluation of the Sexual Health Advocates and Peer Mental Health Educators will enhance the quality of program and future training for peer educators.

Method/Approach: Prior to the qualitative evaluation, an already existing checklist was provided by HOPE to assess how the Sexual Health Advocates are adhering to workshops requirements. An audit checklist was also devised to use in peer mental health workshops. It entailed creating a general checklist (introductions, timelines, answering questions, etc.) and specific checklist for the existing workshops. These checklists were utilized after every workshop to assess how well the peer educators (sexual health and peer mental health) met the required elements of a workshop. Recommendation for peer educator future training were suggested after the qualitative evaluation.

Outcomes/Results: Due to the time constraints, the qualitative evaluation of peer advocates was done based on 5 mental health workshop (Got Stress, and Time Management) and 4 sexual health workshops (Relationship, Beauty & Body Image, and SITs). Although data collection is ongoing, peer advocate performance thus far indicates that 100% both the Sexual Health Advocates and Peer Mental Health Educators are adhering to workshop general requirements.

Evaluation/Conclusion: Although this is a quality assurance project, it is a one-of-a-kind evaluation that can help the Sexual Health Advocates and Peer Mental Health Educators Coordinator enhance the quality of the programs and future training for peer educators. However, there were shortfalls in the process. Because data collection (workshops attended) has taken more time than expected, the evaluation is being finished on part of the workshops. The Sexual Health Advocates and Peer Mental Health Educators thus far have met all the standards.
Title: Proper Hand Hygiene Compliance

Name: Deanna Wallace

Preceptors: Direct Supervisor: Nicola Smith RN, BSN, HACP Clinical Nurse Supervisor

Agency: Hackensack Meridian Urgent Care

Purpose: To take baseline measurements of hand hygiene.

Significance: According to the CDC, practicing hand hygiene is a simple yet effective way to prevent infections. Cleaning your hands can prevent the spread of germs, including those that are resistant to antibiotics and are becoming difficult, if not impossible, to treat. On average, healthcare providers clean their hands less than half of the times they should. Improving hand hygiene helps to improve nosocomial infections and patient safety to become a high reliable organization. Hand hygiene is recommended with soap and water or alcohol hand rub before and after contact with patients or their contaminated environment.

Method/Approach: Employees were notified that ongoing monitoring was taking place. Data were collected during January, February, and March from all four urgent care facilities including Brick, Jackson, Long Beach Island, and Toms River. Ten random employees per location per month were monitored. Hand hygiene before and after patient contact was observed. Proper hand washing techniques were analyzed. Alcohol-based hand sanitizers are the most effective products for reducing the number of germs on the hands of healthcare providers. Antiseptic soaps and detergents are the next most effective and non-antimicrobial soaps are the least effective.

Outcomes/Results: When monitoring hand hygiene after patient care in Toms River for the three months we saw January with (60%), February (85%), and March (100%) of the observed actions complied with proper hand washing procedures. Jackson compliance rates for the three months were (70%) in January, (90%) in February, and (100%) in March. Brick compliance rates were (70%) in January, (80%) in February, and (100%) in March. Long Beach Island compliance rates were (100%) in January, (80%) in February, and (100%) in March.

Evaluation/Conclusion: Educating team members will serve as effective strategies to enhance better hand hygiene and improve compliance rates. Ongoing monitoring of hand hygiene compliance will be undertaken to ensure continued improvement and efficiency in the future. Developing and presenting educational materials to clinical team members should increase compliance. As shown, compliance rates have increased dramatically from month to month. Ongoing monthly monitoring will help with compliance rates. The quality improvement project was selected to improve clinical practice and assist with the accreditation process.
Title: Student Engagement- Assessment of Activities and Interests Related to Global Health

Name: Gloria Wowolo

Preceptors: Direct Supervisor: Richard Marlink, MD, Director
Project Supervisor: Angela Senger-Mersich, MS, Coordinator for Partnerships

Agency: Rutgers Global Health Institute, New Brunswick

Purpose: To gain a better understanding of student interest in global health, existing needs and barriers to being or becoming involved in global health.

Significance: The Rutgers Global Health Institute is a university-wide initiative that is being established in order to support, coordinate, and grow global health research, education and service across schools and professions. In order to do so effectively, this study was developed with the intent of identifying student interest, activities, and needs related to global health. With over 69,000 students at Rutgers, conducting focus groups allowed the Rutgers Global Health Institute to garner insights directly from students at all three campus locations. The knowledge gained will be used to support students in their global health education, research and service activities.

Method/Approach: Over a three-week timeframe from January 26 to February 16, focus groups were conducted to gather information from students regarding their current engagement in global health, barriers experienced, and needs to enhance and expand involvement in global health. Five focus groups were held, including three sessions held at the New Brunswick campus, one session at the Newark campus, and one session at the Camden campus. Information was transcribed during the sessions and evaluated within two weeks of a completed session.

Outcomes/Results: Of the 101 students invited to participate, 54 students responded to the invitation, and 36 students in total participated in the five focus groups. Twenty-eight of those students were from the New Brunswick campus, five from Newark, and three from Camden. During the sessions, 25% of participants noted family connections as being the foundation of their interest in global health. Twenty-eight percent of students were interested in participating in future programs that are based in sustainable partnerships through various organizations locally and globally. Many participants noted a desire for cross-sectional opportunities and courses in order to get a better understanding of global health. Faculty support was mentioned as being instrumental to students’ ability to engage in global health work. The most common hindrance to students participating in global health research and service programs was the lack of information on how to find and get involved in these activities.

Evaluation/Conclusion: The information gained from the focus groups has informed the development of an IRB approved university wide student survey to collect data on global health from the broader student population. Additionally, the Rutgers Global Health Institute website was launched in March with plans to include information about student engagement opportunities in the near future.
Title: Marketing Strategic Plan at Enable, Inc.

Name: Alyssa Wu

Preceptors: Direct Supervisor: Angela Ricigliano, Director of Human Resources; Robyn Steinman, Chief Operating Officer; Project Supervisor: Amy Toma, Administrative Assistant

Agency: Enable, Inc.

Purpose: To research, create, and implement a social media proposal plan to enhance Enable, Inc.’s marketing strategies.

Significance: The aim of any organization is to improve marketing strategies and practices to promote businesses. Social media consists of content intended to be shared, however, it has characteristics unlike traditional media. Dave Evans explains that when social media is applied to business, the conversation about mutual interest is applied to a marketplace. For a strong social implementation, it is important to also include consumers into this conversation and recognize their opinions (Evans, 2012). The research and methods explained in this book apply to businesses and organizations who utilize social media marketing.

Method/Approach: An assessment of Enable’s marketing strategies were reviewed through the company’s social media platforms for the past fiscal year. After comparing data, a strategic plan was conducted to improve marketing strategies, mainly through Facebook and Enable’s website. However, a change to switch to a proper business page for Facebook was made, and thus, was re-created from scratch. The data and content from the old page was referenced to determine which types of posts were useful. The data came from engagement, such as reactions, comments, and shares, that are desired to market the company on this platform. The drafted social media proposal consists of goals, strategies, and measurable outcomes for new marketing ideas. After the changes were implemented, a review was conducted to see what worked and what did not.

Outcomes/Results: The goal for the new Facebook page was to retain the same number of people who followed the old page, which was 475 individuals, and to get them and new users to follow the new page. As of April 9, 2018, there were 39 likes on the new Facebook page. The observed data from the old Facebook page was used to determine the types of posts for the new page. The engagement and reactions for posts on Facebook depend on the content, and therefore are varied. The patterns need to be observed, and different tactics need to be continually applied to improve the company’s marketing strategies overall.

Evaluation/Conclusion: Ongoing observation is required in order to make improvements since social media changes often; to keep up, companies need to learn to adapt to change. The posts that have more engagement and reaction are those that contain stories about people or content that causes people to feel emotion. As Enable continues their marketing, the quality of content, rather than quantity of engagement, will be the main focus going onwards.
Internship Abstract

Title: Review of Professional Billing
Name: Jane Yap Student
Preceptors: Grant Knaggs, Chief Strategy Officer
Agency: Trinitas Regional Medical Center

Purpose: To audit NES revenue cycle to ensure that revenue is maximized for professional billing in Emergency Room

Significance: Healthcare facilities in the United States stand to lose about $364 million in reimbursements. A large portion of this stems from incorrect insurance information which leads to a very disarranged billing cycle. 73% of providers report that it takes one month or longer to collect from patients. This evidence indicates that there is a problem in the billing process. Since insurance is the main source of payment for most medical treatments, the billing process is vital to the existence and financial health of a medical practice or facility. It is crucial to have accurate and current patient insurance information, data of birth, address, etc. in order for a hospital to be reimbursed properly. A careful review of the billing process will locate the source of the problem and maximize reimbursement.

Method/Approach: When patients visit the Emergency Room, two bills are generated. One is a facility fee which is also referred to as the technical bill. The second bill is for physician services. An audit was conducted from February 20th to February 28th to analyze NES patient payment files for the month of October, 2017. Copies of patient financial data from both NES and TRMC were printed and each patient from both files were manually identified and matched. Patient information, including insurance type and amount paid for service, were compared on both files. Focus of audit was to review bills that had not been paid or had zero payment. NES file contained 18,494 claims in total, of which 9,232 had zero payment. There were 64,000 total visits to the hospital.

Outcomes/Results: Focusing on the month of October, 1410 claims were reviewed with having a zero balance on NES files. Of the sample size cohort (n=1410), 378 or 26.8% had a revenue on TRMC records or technical bills. There is an estimated value of $37,800 for these 378 claims. NES files stated almost 50% of their claims have had zero payment. 50% of 64,000 visits with a 26.8% revenue on TRMC records with $100 per visit has an annual estimated impact of $857,600.

Evaluation/Conclusion: There is an estimated amount of $857,600 in claims that NES should have billed and collected revenue from. There needs to be a review of NES process to ensure that all claims are billed and collected. Using a Pilot system of changing interface or giving NES access to TRMC “flipper information” for 2 weeks will serve as effective strategies for (a) making sure that patient information can be transferred efficiently without error across NES and TRMC software programs, and (b) eliminating discrepancies in patient information. Ongoing monitoring of NES billing process will be undertaken to ensure continued improvement in the future.
Title: HIV Recruitment Research Assessment

Name: Roma Yi

Preceptors: Direct Supervisor: Staci Barton MPH, Project Director of CHIBPS
Project Supervisor: Staci Barton MPH, Project Director of CHIBPS

Agency: NYU Center for Health Identity Behavior and Prevention Studies

Purpose: To follow and analyze the most effective mechanisms of research participant recruitment outreach among gay, HIV+ individuals from the ages of 50-69 using various recruitment methods.

Significance: In the social sciences, human research subjects have been notoriously hard to reach out to for studies and this effort becomes more difficult if the pool of participants needed are marginalized. Gay men who are HIV-positive and above the age of 50 are a tiny subset within the general population because of the high mortality rate of HIV within the late 1970’s and 80’s. These individuals offer rich medical and historical data and it is the prerogative of the Center for Health, Identity, Behavior and Prevention Studies (CHIBPS) to recruit and gather as much data from these select individuals. The Agency of Health Research and Quality (AHRQ) notes, “A survey of research studies found that 34% recruited less than 75% of their planned sample, and this reduction in the sample size leads to reductions in the statistical power of the study” (AHRQ, 2018). By synthesizing a chart based on data received from participants, senior researchers at CHIBPS can utilize the most effective recruitment methods for older HIV-positive individuals in the future.

Method/Approach: Excel spreadsheet data was recorded and analyzed from a preliminary questionnaire given to 346 participants in the initial recruitment phase. As a part of the eligibility screener, participants were asked, “Where did you hear about this study?” and the answer selections included: Family/Friends, Dating Apps/Online, Community Centers/Clinics or Other. Each answer was recorded, and Excel formulas were used to see which answer was the most common among all methods. This research analysis was most quantitative in nature.

Outcomes/Results: Of all participants (n=346), the most commonly answered method was “Friend” at 20.2% (n=70). Other popular answers included “Community Center” at 13.2% (n=46), “Dating Apps” at 13.5% (n=47), and “Doctor” at 9.0% (n=32). Additional answer selections included “CHIBPS”, “Staff”, “Hospital”, and “Clinic”. Of those eligible for the study (n=196), “Community Center” was the most reported answer (n=47) at 23.9%, then “Friend” (n=31) at 15.8%.

Evaluation/Conclusion: Based on the final answers, researchers can then move towards more effective ways of recruitment and outreach within the older gay and HIV+ community. These results show friend relations were the most popular method, but community centers were the most effective recruitment method and could be because of the specific qualification of this study. Limitations of the study included participants who were not eligible for the study based on sexual orientation and age.
Purpose: To help standardize patient care on oxygen therapy with the aid of an oxygen therapy booklet.

Significance: Long term oxygen therapy is necessary for survival for approximately one million Medicare patients each year. Long term oxygen therapy may help improve quality of life and cognitive function on a daily basis. Oxygen is prescribed if a patient’s bodily oxygen levels fall at 88% or below. Current patient education on oxygen therapy fails to provide adequate patient knowledge on their medical status and necessary oxygen supply including, insurance coverage, oxygen flow rate, equipment selection, and ongoing medical visits. After initial diagnosis and prescription of medical oxygen, many patients follow up with questions and concerns over email.

Method/Approach: Patients contact the nurse practitioner whenever they have questions or concerns regarding their oxygen prescription. In order to analyze the significance of patients’ concern, it was necessary to determine how many patients contact the nurse practitioner and what they asked her. Patients inquiries were recorded over email, and this data was recorded on a spreadsheet and categorized on the topic of question on: 1. Oxygen, (this includes their prescription, equipment, and supply), 2. Any issues regarding a portable oxygen concentrator (POC), and 3. Any issues regarding their Bilevel Positive Airway Pressure (BIPAP)/Continuous Positive Airway Pressure (CPAP) prescription. The data were separated over questions per month from June 2017 (creation of oxygen support team) to March 2018.

Outcomes/Results: 385 total patient questions were recorded. Of the total amount of patient questions (n=385), 112 (29.09%) had questions regarding a POC, 209 (54.29%) had questions regarding their oxygen in general, and 64 (16.62%) had questions regarding BIPAP/CPAP equipment. These results show that patient concern over oxygen therapy has been significant. More than half of the patients (54.29%), had questions about their general oxygen, meaning patients had various questions on topics that they need to be educated on to decrease confusion.

Evaluation/Conclusion: The oxygen support group was created in order for patients to know who they can turn to whenever they any worry. The oxygen support group meets monthly, and anyone is free to sign up. All potential patient questions and matters are covered during these meetings to educate patients on their disease. Not all patients are able to travel to these meetings, so the idea of the oxygen therapy booklet was established so that patients can have a physical guide that can answer their questions and provide information about their equipment and what to do in an emergency.
Internship Abstract

**Title:** Improving Community Outreach Through Electronic Communication

**Name:** Julianna Zweig

**Preceptors:** Katherine Soto, Business Coordinator, NJCEED at Carol G. Simon Cancer Center
Gilbert Baez, Manager Outpatient Oncology Services at Carol G. Simon Cancer Center

**Agency:** NJCEED at Carol G. Simon Cancer Center, Morristown Medical Center

**Purpose:** Create an electronic method to keep community organizations updated and educated on the NJCEED program so that they will refer members of the community.

**Significance:** Cancer screenings have been shown to find cancer early and reduce mortality. Approximately 6.3% of the population in Morris County is uninsured and not likely to pay out of pocket for cancer screenings. The NJCEED program offers free cancer screenings to uninsured individuals. However, many people who fall into this category do not know about the program and do not access the services that are offered. To increase awareness of the program in the community and the number of referrals to NJCEED, it is important to keep community agencies educated about the program. By doing so, they are more likely to refer community members to the program.

**Method/Approach:** To find out what form of communication community agencies would like in order to keep updated, around 30 organizations are called and eight questions are asked. These questions are a mixture of open ended and multiple choice questions. The questions that are asked are to see what organizations would like to see in the updates as well as how aware they are of NJCEED. After the responses are collected and the most popular method of communication is identified, a template will be created in the most desirable method. The NJCEED team will evaluate the process by following up with the participants of the survey to see if they are satisfied and believe the updates are useful.

**Outcomes/Results:**
Out of the 30 organizations called, not all responded to the survey. The majority of those surveyed were interested in receiving regular updates from NJCEED. 69% wanted to hear from NJCEED monthly, 92% wanted to read the information by email, 77% wanted a brief update, and 54% already recommended NJCEED to community members. Based on these numbers, it was concluded that NJCEED will use a brief update sent out by email monthly to reach various community organizations. A template will be created in this form.

**Evaluation/Conclusion:**
With brief updates being the preferred method of community organizations, NJCEED will start sending them out within the month. NJCEED tracks how patients are referred to and enrolled in the program. Therefore, this method of communication will be proven to work if more patients are referred to NJCEED through various community organizations.
Title: “It Takes a Village”: Building a Supportive and Connected Community Via Subcommittee Planning

Name: Zoë Zylowski

Preceptor: Direct Supervisor - Kimberly Cowart, Director of Community Development

Agency: Somerset County Department of Human Services

Purpose: To create two new Continuum of Care (CoC) subcommittees that will foster improved communication between service providers and community members and improve the County’s response to the unmet needs of underserved and high barrier populations.

Significance: According to the Somerset County Priority Populations Plan, there are a number of unmet needs observed within the County. The Homelessness Trust Fund Plan also states the importance of raising awareness of critical supports that would help increase early crisis prevention. To this end, and in response to a statewide decline in the number of people participating in the Point in Time Count and associated outreach events, it is vital to connect community members to services effectively.

Method/Approach: Objectives and responsibilities for two new CoC subcommittees were formulated from a preliminary literature review, observations made during community events, and discussion at interagency meetings. A proposal to create the “Unmet Needs and Underserved Populations” and “Community Engagement” subcommittees was approved by a CoC vote. The former subcommittee was designed to undertake literature reviews and needs assessments to determine priority populations and identify their unmet needs, and the latter to pursue new initiatives that would help satisfy those needs. Therefore, the project’s initial step was to carry out a literature review and expert interviews to choose three priority populations. Research was then conducted to catalogue existing resources and identify gaps and flaws in current service provision. Once a list of action steps was compiled for each population, the Community Engagement subcommittee began planning to execute them.

Outcomes: Subcommittee projects have included updating and compiling information on local resources for ease of access to service providers and clients, advocating for modifications to general assistance programs that would benefit students, partnering with the human certificate program at the state college, increasing visibility of second chance job postings, and holding outreach events designed to raise public awareness of available services.

Evaluation: A survey is to be administered at each outreach event that asks attendees whether it was their first time encountering the services presented at the event, and whether the information they received was presented clearly. The survey also asks attendees about their needs that are unable to be met by current service providers, and to make suggestions for the improvement of future events. The first set of surveys yielded a majority of positive results, as well as helpful suggestions such as advertising timelines and increasing the number of service providers in attendance. It is the goal of this project that the creation of new projects will be ongoing, and that surveys will be incorporated into projects wherever possible.
Internship Abstract

Field Work Internships
Internship Abstract

Name: Saskieya T. Anderson

Position: Session Assistant I, Student Intern

Preceptor: Direct Supervisor: Meredith Sabia, Clinical Practice Supervisor
Project Supervisor: Stephanie Furman, Clinical Practice Supervisor

Agency: Sidney Kimmel Center for Prostate and Urologic Cancers, Memorial Sloan Kettering Cancer Center

Work Duties: As a student intern at the Memorial Sloan Kettering, Sidney Kimmel Center, I collaborate with other MSK employees to ensure that each physician practice session is well prepared, organized and that each patient visit occurs with satisfaction. My task is to greet and orient patients and their families to the clinic area and office visits processes. I am responsible for coordinating all appropriate lab appointments and re-dating lab tests in accordance with the clinical team. I am also tasked with accurately submitting administrative and clinical paperwork such as outside medical records and specimens.

Techniques: On the concourse level of the Sidney Kimmel Center, there is an average of over 200 patients visits daily and at times it gets overwhelming when a line of patients is waiting to be checked in. By pre-printing and organizing clinic resources and supplies before the start of the clinic day, my team and I are able to minimize the time it takes patients to check in. Having the patient’s paperwork and labels already printed, not only lessens the time of the check-in process, it enhances the overall MSK patient care experience and adds to the “warm welcome.”

People Skills: Collaborating with the administrative and clinical team allows me to obtain as much information necessary to address the needs of the patients. For instance, when a physician’s scheduled appointments have been pushed back, I coordinate with the session assistants in the clinic area to update the patients on their wait time or make them aware of the delay before they check in. This demonstrates a sense of compassion and transparency which many patients tend to appreciate. It generates trust which is vital in a clinical setting.

Results: By appropriately check in patients for their appointments, releasing lab tests and addressing patients’ needs I feel accomplished in my role as a session assistant. Being able to connect with patients during this emotional and personal period of their lives is truly a privilege.

Lessons Learned: My role at Memorial Sloan Kettering has taught me that there are no small parts and my role has a major impact on our patients. While our mission is to win the battle against cancer, I have learned that reducing the impact cancer may have on the daily lives of our patients’ and their families is a major part of the battle. No special tools or skills are needed to do this, it just entails the act of being genuine and empathetic towards patients. Placing yourself in the patient's situation, assessing their needs and expressing your willingness to help them through the process during their visit to MSK, is essential in achieving a positive patient experience. Overall, teamwork and effective communication have aided in my responsibility to provide exceptional care and assure that our patients are always the priority.
Name: Gillian Blewett

Position: Session Assistant I

Preceptor: Direct Supervisor: Margot Lachaud-Richard, Clinical Practice Supervisor
Project Supervisor: Allison Melega, Clinical Practice Supervisor

Agency: Memorial Sloan Kettering Cancer Center

Work Duties:
- Provide a warm welcome to patients and their family members
- Check in patients for the Bone Marrow Transplant appointments
- Redirect patients for other services, such as Leukemia, Chemotherapy, Hematology, and Radiation Oncology
- Release orders to the correct phlebotomist lab
- Enter patient into the Lab Queue for both labs and vitals
- Handle the distribution of research requisition forms
- Communicate effectively with the clinical team in order to best serve the patients’ needs
- Pre-print for the following clinic day, including consent forms, release of medical record forms, and a home medication list
- Print patient specific labels and requisition forms for lab work
- Provide urine kits to patients with urinalysis lab orders

Techniques:
This internship is not a job where you can just show up physically and get work done. As a session assistant, we must be mentally and physically present in order to best assist the patient’s needs. From the moment that the patient arrives, I am responsible for greeting them with a warm welcome in order to ease the stress of the upcoming appointment and to maintain normalcy in any way.

People Skills:
The role of a Session Assistant is to provide the utmost respect and comfortability to patients, while also maintaining all of the work tasks expected. The other day, a patient approached me and informed me she was not feeling well. She stated she had an appointment with Radiation Oncology, which is the farthest clinical suite to get to from the elevators I am stationed at. I instructed her to take a seat while I contact a nurse and get her a ginger ale and pack of saltines while she waits. She was so thankful for my help and was able to make it to her appointment on time, after we got her a wheelchair.

Results:
As this internship did not consist of any results-driven information, the best results were received from my managers during our weekly meetings and Standing Meeting. They emphasized my proficiency with all tasks and my superb attention to detail. I also received a shoutout from my coworkers on an email chain.

Lessons Learned:
I have learned that it takes more than doctors to aid in a patients’ needs. It takes nurses, social workers, clinical care coordinators, phlebotomists, and even session assistants at MSK to run a fluid appointment.
Internship Abstract

Name: Dolly Casas

Position: Physician Office Assistant Intern

Preceptor: Direct Supervisor: Bennett Charlie Stein, Administrative Coordinator
          Project Supervisor: Virviane Myers, Physician Office Assistant

Agency: Memorial Sloan Kettering Cancer Center

Work Duties: One of my major duties is to interact with doctors and patients. I have to assist patients on a daily basis by scheduling appointments, ordering labs, and being the direct point of contact. As a Physician Office Assistant intern, I have to help full time employees by rescheduling and confirming appointments and also prepare a pre-clinic summary for the doctor. Working as a team at Memorial Sloan Kettering, it is essential for this position because you have provide the patients with high quality care. Finally, it is important to barcode any outside medical records and send them to Electronic Medical Records.

Techniques: Ensuring patient privacy is essential for me. I constantly have to speak with patients in regards to their future appointments or when a order is placed. I have to first look at their information in the computer and follow any instructions when making a call. Many patients do not want to tell their family about their diagnosis and it is important to keep that privacy. I always have to remember to check their information prior doing any activity. Once checking their information, I tried to greet them appropriately and treating every patient with respect to make their day with happiness. I listen to any concerns and information that needs to be passed down to the doctor and the clinic team.

People Skills: Communication skills and being an active listener are very important as a Physician Office Assistant. I have to take the right information and be able to use my medical terminology skills to transfer that information to the clinical team. Also, empathy is essential to this position because you will receive calls from patients in regards to their diagnosis and their side effects. It is important to have the ability to understand what the other person is going through and assist them with anything they need.

Results: I had the opportunity to cover many offices when the Primary Physician Office Assistant was out and I had positive results by prioritizing tasks. When covering offices you will receive many phone calls and making knowledgeable decisions is very important. You will receive emergency calls, refill of prescriptions, canceling appointments, and more. Last week, I received great feedback about my work and I concluded that I am making successful progress.

Lessons Learned: Every day, I learn something new at my internship. I have grown as a person and a professional. I am able to collaborate and adjust to multiple departments in the hospital by assisting everyone around me. Teamwork is very significant when working at Memorial Sloan Kettering Cancer Center.
Internship Abstract

Name: Christina Clarke

Position: Session Assistant

Preceptor: Shana Ellsbury & Alexis Folz

Agency: Memorial Sloan Kettering Cancer Center

Work Duties: My role as a Session Assistant (SA) at MSK includes greeting and checking-in patients, orienting patients and their families to the clinic environment, releasing lab orders, and notifying a patient when they are ready to be seen. The SA serves as a resource for all patients to assist with any questions or with anything he or she may need during their visit. The main goal of my position is to serve as the liaison between the clinic and patient to create an experience that is well-organized, well-prepared, and runs efficiently to ensure the patient leaves satisfied.

Techniques: The main technique that is emphasized to maintain focus on the patient experience is the “warm welcome”. This entails greeting every patient and their families with a warm, friendly, and caring demeanor. This is further accomplished through tools such as MSK’s Real Time Locating System (RTLS) and Mobile SA, which are techniques used daily at the 64th Street Outpatient Facility. It is the SA’s responsibility to assign a patient a Versus Badge during check-in which are used to locate the patient in the waiting room and throughout their visit. This allows us to more accurately update patients on wait times, create a more personal experience, and improve auditory privacy. Through Mobile SA, the SAs complete the warm welcome on a mobile tablet, helping to eliminate the barrier between us and the patients by creating a more comfortable and personal experience.

People Skills: A patient’s visit is comprised of several different components and successful collaboration among team members is essential to providing the best patient experience. The SAs who work in the clinic communicate with one another using the internal messaging system allowing quick communication to resolve any questions about a patient’s visit. For example, if I see a patient has no lab orders entered for their visit, I would flag the SA II of the corresponding physician to ask if this is an error or not so that they can address the issue with the clinicians. We work as a team to double check each other’s work to improve the quality of care during a patient’s visit.

Results: The most action-oriented aspect of my role is successfully completing the first step of a patient’s visit which is the “warm welcome”, checking-patients in for their appointments, and releasing their lab orders for the specified day. I feel most accomplished at the end of the day when I know I have succeeded in positively impacting a patient’s day and visit even if it was in a small, insignificant way.

Lessons Learned: During this internship, I developed as a professional by taking on responsibilities of an SA with positivity and eagerness to improve and learn. Working with others - both colleagues and patients – has increased my confidence, interpersonal skills, and ability to work as a part of a team. I am better equipped in multi-tasking and handling stressful situations with composure. By asking questions to my team members, listening to constructive feedback, and taking advantage of any opportunity presented to me to learn something new, I have showed my willingness to learn.
Internship Abstract

Name: Justin Drozdowski

Position: Session Assistant Intern

Preceptor: Adenike Roberts

Agency: Memorial Sloan Kettering Cancer Center

**Work Duties:** For two of my three-day work week I am in the pre-surgical clinic at Memorial Sloan Kettering Cancer Center’s 60th Street outpatient facility. When in this role I am in charge of checking patients in, dealing with all patient requests, and ensuring that the clinic runs and operates smoothly. For the third day of my week I am at the kiosk pre-printing for various clinics and acting in a capacity to help patients who are lost and need assistance.

**Techniques:** When I am at work there are so many different things going on at once it is critical that I stay focused. To deal with the various things that go along with different patient check-ins (pre-surgical testing, lab work, cytology, x-rays, and ultrasounds) I have made shortcut notes for myself which ensure that if I feel overwhelmed I can quickly make sure that I am doing the right thing. I have also become confident in asking patients to wait until I am done checking in the previous patient before I begin to assist them, something I once thought was unprofessional.

**People Skills:** My interpersonal skills have also been one of my unique selling points. I am not shy in any situation and am excellent at reading people’s body language to figure out what they are feeling. One example of this is when I saw a patient and her family visibly upset in the waiting room. As there was no line of patients I approached her and asked if I could help. It had turned out that they were taking her father into surgery (unexpectedly) later that week and they were very overwhelmed. I expressed my concern and had her come to my desk, where I helped her organize her schedule and make sure that she had everything she needed to get through all of the appointments that week. Now whenever she and her father come in they approach and say hi and we all catch up.

**Results:** When I am in the pre-surgical clinic I am at the front desk by myself. It is also the busiest clinic in our building, and I check in upwards of 120 patients per day. I feel accomplished everyday when I leave, knowing I was able to handle such hard work loads and manage so many different interactions. I am often told by coworkers that my position is one of the hardest, and for that I feel so much better for making it through every day.

**Lessons Learned:** I came into this internship with a great sense of professionalism form my summer internship at Conde Nast, where I learned how the corporate world operates. I have used things from this, such as email etiquette and proper office attire to make myself stand out at MSKCC. I believe that it is critical not only to appear professional in person, but that the way you present yourself via email is equally important. I strive to always present myself in the best light.
Internship Abstract

Name: Yasmin Farzaie
Position: Session Assistant Intern
Preceptor: Katherine Girardi
Agency: Memorial Sloan Kettering

Work Duties: Session assistants act as a liaison for patients and physicians and other clinicians. We check patients in, and do our best to make sure every patient, as well as their friends of family members are comfortable in the office and waiting room. We also print all of the documents needed for the visit and call physicians at the time of their patient’s arrival. It is important to fulfill our duties at the best of our abilities since we manage the first couple of minutes of every Memorial Sloan patient, and leave the initial impression on all patients.

Techniques: One technique I have learned is to manage my time as diligently as possible so that I am on top of every single task ahead of time, and do not fall behind on anything. This not only will help me in the healthcare field as a professional, but this skill will also be helpful in my personal life. Also, I have learned to always ask questions when I am in need of information so I can improve my knowledge and quality of care.

People Skills: Memorial Sloan has taught me how to be sensitive about one’s health status. Most of the patients I see have either had breast cancer in the past, or are currently being treated for it, therefore it is crucial every session assistant on my floor takes this into consideration. During one particular incident, I noticed a patient who was physically ill while approaching the front desk. She was having shortness of breath and needed the support of another person to walk. In turn, instead of making her stand at the front desk, and checking her in as I would do with anyone else, I asked her to take a seat, to ensure her comfort. After she sat down comfortably, I asked her for her name and date of birth so I could check her in successfully. She was thankful knowing her comfort was a priority for the Memorial Sloan Kettering staff.

Results: Realizing that not everyone has the same capabilities reminds me that different people have different needs and therefore in the healthcare field, cultural competence is important. I am proud of myself for learning this during this experience.

Lessons Learned: I have developed a lot during this semester as an intern here at Memorial Sloan Kettering. Besides the fact that I have obviously now spent a lot more time around working professionals than I have ever done so before, I now have a better handle on time management since I am juggling 4 classes along with a job that requires me to be completely indulged in it for three days out of the week. I have learned self awareness by recognizing my energy is something the patients feed off, and so it is important for me to realize my own being and expressions when I am in a face to face interaction with patients.
Name: Ashley Ferraro

Position: Multiple Myeloma Physician Office Assistant

Preceptor: Administrative Coordinator Charlie Stein and Mentor Afia Sultana

Agency: Memorial Sloan Kettering Cancer Center

Work Duties: As a physician office assistant I function as the primary contact for the practice between the clinical team and patients. I ensure patient requests and questions are met. I also complete tasks given by the doctor, which may include scheduling, updating medical records, and sending information to other offices.

Techniques: As a fast pace position getting lost in the work is common. To ensure the patients receive my full attention I organize myself earlier in the morning before extra work comes in. This helps me feel less stressed about work that is pending or on hold and I can stay focused on my tasks.

People Skills: The patients I speak with are very sick they do not want to be treated differently because of it. With all calls I receive I keep a calm, welcoming, and caring tone.

Results: Being a physician office assistant can become overwhelming with the amount of individual tasks given each day. As an intern I did not believe I could handle such a situation. Now there have been multiple days I cover office assistants who are out sick for a day or two, which means I receive all of their work. After my first day in the full position it surprised me to realize I had completed a full day coverage without any difficulty.

Lessons Learned: One of the biggest lessons learned is how to effectively communicate with patients and other individuals within a team. At Memorial Sloan Kettering no one works alone, but rather within a team. Working on teams can be difficult for some people, but at Memorial Sloan everyone is patient and eager to help. Effectively asking questions when stuck on a situation is the best option and someone will always be there to help. Being an intern, I may not always have the answer, yet other times I have learned I should speak up because it is not about me it is about the patients.
Name: Victoria Kostantakis

Position: Student Temporary - Session Assistant

Preceptor: Manager - Corinne Clauss, Project Leader - Terron Brown

Agency: Memorial Sloan Kettering, Main Campus

Work Duties: The duties of a Session Assistant at MSK include assisting patient check while greeting patients with a warm welcome and thoughtful sendoff. I work cohesively with a team of clinicians and session assistants to ensure patients have a satisfactory visit by accommodating their requests. Other duties include releasing lab orders in CIS, updating the phlebotomy queue, distributing patient paperwork, and effectively communicating with colleagues, orienting patients to the suite, setting the expectations for the visit, and answering any questions the patient has.

Techniques: Throughout this internship, I maintained focus on the patient experience by starting every patient interaction with a friendly welcome and a smile. I also used my resources in a didactic way. These resources were my coworkers, supervisors, standing meetings, or cheat sheets that I made so that I wouldn’t miss any steps during patient check in that would otherwise cause dissatisfaction. Referring to post-it notes that I kept around the frame of my computer helped me facilitate patient check in. Reviewing those notes after work ended was pertinent in the learning process.

People Skills: Throughout my internship I had the privilege of connecting with multiple patients. One example that stuck with me was when an elderly patient came in for a visit with his daughter who had to leave for work before the patient finished all of his appointments. Apprehensive and tearful, she arranged for her father to be placed in a cab with a note that included his address and her phone number. She made the SAI aware, but also asked that I keep a close eye, as her father suffers from dementia. The daughter was thankful for our help and the tissue box I gave her. I kept in contact with my colleagues to ensure that this man got home safe. We were also in contact with security who made sure he got into the cab. After all of his visits and multiple phone calls, the gentleman was able to find his way into the cab and hopefully home!

Results: My role as a session assistant relied heavily on being action oriented and troubleshooting. MSK patients come in from all over the world often requesting that several days worth of visits are combined into one to mitigate travel. Responding to that type of request was a team effort. There was a lot of communication involved starting at the front desk that eventually got back to the clinician. Remaining transparent with the patient throughout the process was imperative. They deserve to be aware of their treatment plan every step of the way. By the end of the day I felt most accomplished when I knew I had a positive impact on a person’s experience at MSK whether it be the patient, family, or a friend. I found it especially humbling when a patient expressed their gratitude or referred to me by my first name.

Lessons Learned: During this internship I was immersed in professionalism that I was previously not exposed to at other jobs or in the classroom. I was able to gauge what the transition from college to a professional place of work will be like after graduation. At the same time, I learned how to balance professionalism with camaraderie between myself and my colleagues. I have expanded my professional network by naturally getting to know my coworkers and supervisors. My ability to nimbly learn was reflected by my ability to flexibly adjust to new roles on the job.
Internship Abstract

Name: Tomi Lee Lissy

Position: Student Temporary: Session Assistant

Preceptor: Allison Melega, Clinical Practice Supervisor, MSK Westchester

Agency: Memorial Sloan Kettering: Breast Cancer and Imaging Center (BAIC)

Work Duties: As a Session Assistant my role is to serve as a liaison between the patient, family and clinical team during office visits. My main duties involve welcoming patients and caregivers to the outpatient visit by checking them in and providing instructions on pre-visit paperwork and procedures. I am responsible for navigating both clinical systems Cadence and CIS, ensuring that the front desk area is stocked with supplies, and acting as a resource for all patient and visitor inquiries.

Techniques: Memorial Sloan Kettering focuses on the patient experience by encouraging all employees to treat every person as an individual. In order to keep focus and ensure that all patients have a positive experience I utilized my organizational and prioritizing skills along with my ability to multitask. Moreover, I strived to be thoughtful and responsive. Providing each patient with an exceptional visit is the overall goal each day. I emphasized making personal connections with each patient through genuine conversation and interaction.

People Skills: On a daily basis there are approximately between 140-200 patient visits on the fourth floor of the BAIC. Collaboration and interpersonal skills are essential when handling a high volume of patients. Patients constantly have various inquiries including: wait times, scheduling appointments, and receiving different results. When handling wait times I collaborate with the SAIs via phone call or email in order to provide the patient with an accurate answer. I cooperatively work alongside the SAIs and direct patients when they need to be scheduled for their next appointments. One particular SA taught me the protocol on giving patients their results. Overall, my collaboration with both the SAIs and SAIIIs has taught me the importance of teamwork at Memorial Sloan Kettering.

Results: At the front desk I have to administer pre-visit paperwork for new visits, home medication lists to all patients, and update pharmacy and external provider information when prompted. When there are upwards of 200 patients throughout the day it can be very overwhelming. I feel the most successful when I handle the check in line efficiently without any mistakes. When a patient asks a question and I help guide them in the right direction I also gain a sense of accomplishment. Ultimately nothing makes me happier than when I am able to connect with both new and old patients.

Lessons Learned: During my time at MSK, I have developed both professionally and as an individual. This opportunity has successfully taught me the nuances of patient interaction and self awareness. But most importantly, I have learned that cancer affects everyone differently and it is important to act with compassion and support as this person goes through the most difficult time in their life. Each employee at MSK can have an impact on the patient even if it’s not in the clinic.
Name: Bridget McVeigh
Position: Physician Office Assistant Spring Support Intern
Preceptor: Charlie Stein
Agency: Memorial Sloan Kettering Cancer Center

Work Duties: A few of my duties are being the liaison between the physician and their patients, scheduling patient appointments, and being the patients’ direct contact regarding the plan of care. I help assist full time Physician Office Assistants with rescheduling chemotherapy appointments and preparing for clinic days including confirmation calls and the pre-clinic summaries.

Techniques: Memorial Sloan Kettering is known for their excellent outcomes regarding patient experience during their stay as well as after they've left the hospital. I stay focused on the patient experience by remembering that I am an important part of the patient's plan of care, and fight against cancer. The patients are sick and rely on me to give them the correct information and answer any questions they may have. Even though it can be very sad to watch some of these patients struggle through the fight against this awful disease, a technique I use to get through each day is writing a positive quote on a sticky note and putting it on my computer each morning. It's something so simple, but also helpful in times of frustration or even if I just need some quick words of wisdom!

People Skills: Successful collaboration is really exemplified when the doctors and their POAs come together to discuss and recognize every individual patient. Every week, the doctors and their POA's have a meeting to touch base on each patient that will be seen in clinic that coming week, or any updates on these patients who are discussed. The outcome results in an efficient plan of care for the upcoming clinics, where the doctors and POA's are on the same page. Specifically, I feel very included and informed in these meetings and enjoy how much the doctors depend on our position, even though they are the ones who directly treat and advise the patients.

Results: A task that really makes me feel accomplished at the end of the day is completing a Doctor's pre-clinic summary. For this assignment, I call each patient who is scheduled to be seen on a specific clinic day, to confirm their appointment and remind them of any fasting or special instructions for the appointment. After this step, I use a template to outline how many patients will be seen, what kind of appointment it is, and other details that are sent to the clinical team in preparation for the clinic with that doctor.

Lessons Learned: I have developed as a professional during this internship by being given opportunities to challenge myself and achieve reachable goals. I have demonstrated self awareness by recognizing when I make a mistake, and accepting constructive criticism when given the opportunity.
Internship Abstract

Name: Nessreen Mestari

Position: Session Assistant Support

Preceptor: Allison Melega, Clinical Practice Supervisor

Agency: Memorial Sloan Kettering Breast Cancer and Imaging Center

Work Duties: As a Session Assistant Support I am the first face that the patient sees upon walking into the floor, so it is my duty to greet patients and take pride in the institution’s “warm welcome” philosophy rather than just a routine “check in”. This also takes into account “behind the scenes” administrative work to prepare for patient visits which includes organizing appointment medical records and coordinating new visit paperwork.

Techniques: To maintain focus on the patient experience, I practiced laws of attraction. Whatever you put out in the universe comes back. When patients are having a rough day and they are rude at the front desk, those are especially the ones that I take more time to make conversation with because they could be having a rough day due to exhaustion or some bad news. I believe by smiling and being excited for each new patient’s arrival they feel special and welcomed in a place that can be scary at times. My job is to be there for the patient’s and with each ding of the elevator doors opening, I’m ready to greet someone new with a smile and hopefully encounter a familiar face.

People Skills: At Memorial Sloan Kettering it is so important that the staff are cohesive and come across as united front working together to serve the mission of bringing excellence in patient care. It takes a multitude of layers and positions to ensure patients are satisfied with their visit and leave smile despite the seriousness of their treatment. Being on the chemotherapy floor, the complaint most often received is wait time when the unit could be running upwards of two hours behind. In my position I serve as a liaison between patients and their clinical team to ensure information is effectively communicated corresponding to their care, treatment schedule, and wait times. Through utilizing my connections with Session Assistant IIs, the designated Chemo Info Point Person, and my supervisors I am able to remain transparent with patients which allows them to feel more in control of their decisions and options.

Results: I have felt most successful when I have been able to handle high volumes of patients without any support on busy days or on days when other session assistant must rotate and cover lunches. These are the days that prove to be the most challenging to remain calm and remember the warm welcome when it seems that patients are all arriving at once, but at the end of the day when all check ins are done correctly it is a huge accomplishment to say I was able to handle a two-person job on my own.

Lessons Learned: I’ve learned that confidence in speaking really comes with knowledge and experience. One performs better when they have done the research, are well aware of the results, and have practiced numerous times. I have gained confidence as I’ve picked up on estimating wait times, knowing the procedures and protocols a little better, and knowing who to ask for help when necessary.
Name: Nicole Pagliuca
Position: Session Assistant I
Preceptor: Dottye Miller
Agency: Memorial Sloan Kettering Cancer Center, Monmouth Campus

**Work Duties:** While interning at Memorial Sloan Kettering Cancer Center (MSK) I interacted with patients from a variety of departments. On a daily basis, I would check in patients for labs, surgical oncology, medical oncology, social work, psychology, physical therapy, treatment, and radiation. I was also responsible for sending their bloodwork to the lab, queueing them for lab appointments, rooming patients in, delivering patient materials to the Physician Office Assistants, making announcements for the Medical Emergency Response Team when necessary, and pre-printing paperwork for the next day’s patients.

**Techniques:** My main responsibility was to practice the “warm welcome” technique and ensure that patients felt a positive response after coming here. I learned that the importance of taking diligent notes applies to more than just the classroom. Learning the Health Information System was crucial to my success here, and I am looking forward to using this in my future career endeavors. Another important technique to learn was figuring out who to contact.

**People Skills:** The importance of listening to patients cannot be underestimated. The complaints and concerns that these patients have are valid, and many of them have some great ideas to make the experience better. Empathizing with patients is crucial to excel at MSK. The patients here are going through some of the scariest experiences of their lives, and it is important for them to know we, as a company, are on their team. Once I mastered listening to the patients and empathizing with them, it was importance to always act on their requests. This way, the patients knows that they have been heard, and we are doing everything we can to address their concerns or complaints. Cancer treatment is a long process, and it can be very confusing at times. If patients know what to expect, they may be a little less anxious about the process.

**Results:** Midway through this internship, I knew I wanted to pursue a career at MSK. It is a great environment, and I look forward to coming into work in the morning. I have formed great relationships with my peers and the patients here. There is a lot of room for growth here at MSK, and I am excited to see where the rest of my journey here takes me.

**Lessons Learned:** One of the most important lessons I learned here was to never be afraid to ask for help. I also learned to appreciate what I have, and the people I have around me. Cancer can affect anyone and can change a life forever. I also learned that this position truly does change lives. A smile and person to person contact can never be underestimated, and patients love to see familiar faces when they come in to MSK.
Internship Abstract

Name: Johanna Roehrich
Position: Physician Office Assistant
Preceptor: Emily Quinn and Charlie Stein
Agency: Memorial Sloan Kettering Cancer Center

Success Factors Discussed: Resiliency, Self-Awareness, and Nimble Learning.

Work Duties: My main tasks include; answering phone calls ranging from symptom reports to scheduling inquiries, re-scheduling clinic appointments, and communicating to patients’ appointment arrival time and any questions they may have regarding appointments. I also make phone calls to patients with information regarding their upcoming appointments and make sure they are aware of location and time.

Techniques: Keeping a calm and collected Demeanor. It is important to stay calm even when I am unsure of an answer. I have learned that while on the phone with patients, it is necessary to be relaxed and confident when answering questions and giving information. Being comfortable in uncomfortable situations was also a big learning experience for me. Resiliency played a role in this technique, in that I did not let something that was difficult keep me from doing my task at hand.

People Skills: Throughout my internship, I have worked with many different Physician Office Assistants. Adjusting to different POA’s styles and how they handle their offices was difficult at first, but in the long run very effective. Being able to work with up to four different people each day was very valuable, in that I got to meet so many people within MSK, but also each person had something unique to offer and taught me something new.

Results: The main success that I have experienced has been gaining knowledge about medical terminology that I did not know previously. This includes names of medications and treatment options. Another success has been learning how to triage phone calls and asking the right questions when taking symptom or pain messages to be sent to the clinical team.

Lessons Learned: How to conduct myself when difficult topics come up, patients/family members emotional states being comfortable in uncomfortable conversations. One of MSK’s competencies is resiliency. Being able to bounce back from a wrong turn. If I did not know an answer to a patient question, I would always double check before giving any information, to ensure that the patient was getting the correct information. it has come with its challenges. One challenge that I faced was receiving a call from a family member that their loved one has passed away. It was shocking to me and hard to respond to. Although I feel good about how I reacted and responded, it was the hardest thing I had to do. I have learned that in this field, compassion and empathy are necessary. Another example of self-awareness I had during my internship was using a telephone translator while communicating with a patient. It was an experience that was new to me. Learning how to adjust and communicate in this way was a learning experience.
Internship Abstract

Name: CaroleAnne Rubin
Position: Session Assistant I Intern
Preceptor: Stephanie Furman
Agency: Memorial Sloan Kettering Cancer Center

Work Duties: As a Session Assistant I intern, I am responsible for providing each patient with MSKCC’s “Warm Welcome” by checking in patients to their appointments as well as providing accurate updates on wait times for physicians and chemotherapy treatments. I act as a liaison between the patient and clinical team in order to make each visit as seamless as possible.

Techniques: I sought to strive for effective communication with each patient, specifically regarding their scheduled treatment times and the status of their treatment in the chemotherapy pharmacy. On average, the treatment suite on the floor in which I intern, treats 70 patients a day. This high volume of patients checking in for treatment results in significant wait times, averaging 1 to 1.5 hours and many patients begin to inquire about their treatment as the wait times progress. To meet the concerns of each patient, I shadowed in the pharmacy to better understand the process and complexities behind chemotherapy pharmaceuticals, as each drug consists of its own unique and timely process.

People Skills: In order to build relationships with patients, I encourage patients to continue to follow up with me throughout their wait for treatment. The “Warm Welcome” does not stop at check in, it is practiced throughout the duration of each patient’s time on site. One patient in particular, came to me concerned about getting into treatment in time because he had to make class that day. As a student, I empathized with the patient’s concerns and advocated for him by relaying this concern to the chemotherapy suite’s Session Assistant and together, we ensured the patient received his treatment in order for him to get back to his daily obligations.

Results: Gaining knowledge in the pharmacy and by walking a patient through the time frame of their scheduled treatment, provided the patient with a more thoughtful and transparent experience. In being acquainted with patients, I keep an eye on the status of their treatment in the pharmacy so that way when they come to ask about it, I can provide them with the most updated and accurate information possible. By preparing myself and by keeping patients in mind despite other duties, this strategy has eased their concerns and they do not feel as though they have been forgotten about.

Lessons Learned: Each patient and their appointments are unique to them and they must be addressed in such a manner. I have been afforded the opportunity to work through difficult patient experiences that require the entire team of session assistants to guide me, as well as the chance to know patients on a first name basis who have encouraged and identified my growth as an intern. While each day is different, I have gained a tremendous amount of insight and knowledge into how I can best meet each patient’s needs as well as how to work with my colleagues and mentors.
Name: Yahaira Santos
Position: Session Assistant
Preceptor: Terron Browne, Clinical Practice Super
Agency: Memorial Sloan Kettering Cancer Center

Work Duties: My role as a session assistant is to check patients in upon entering my floor. Checking patients in typically includes releasing any lab work that they need to have done that day, ensuring that if they have a mediport it is accessed, and checking them in for their physicians appointment.

Techniques: Maintaining focus while on the job was extremely important in my role. The floor that I was placed on was the busiest floor in my location, therefore there was always a lot going on. A technique that helped me stay focused was making sure that the patient that I was checking in did not leave until I was completely done checking them in. I found that if I let patients have a seat before I finished checking them in other patients would come up to me with questions and I would get distracted. This also helped minimize the amount of mistakes that I made because it ensured that everything for the patient that I was checking in was completely done.

People Skills: Throughout my internship I had various interactions with not only patients, but also with my colleagues. In the beginning of my internship I was hesitant to ask any questions because I did not want to disturb anyone, however my colleagues encouraged me to ask questions because they said it was the only way that I would learn. Teamwork played a huge role in my internship because in order for everything in the clinic to run smoothly it was crucial for everyone to work together to make it happen. We were all able to work together to make the patients experience as positive as possible.

Results: I believe that my role as a session assistant was action oriented as a whole, however there were various instances where more attention to detail needed to be paid. Those were the moments that made me feel accomplished at the end of the day. One example would be when a patient wanted Vitamin D added into their labs for that day. No one in the clinic answered my calls therefore I took it upon myself to go to the doctors clinic to let the session assistant 2 know what the patient wanted added for that day. I then relayed what the session assistant 2 told me back to the patient and she was extremely grateful that I went out of my way to help her. It is moments like these which are most action oriented, but also make me feel most accomplished.

Lessons Learned: Throughout my internship I have developed as a professional in various ways. One of my goals in the beginning of my internship was to become more confident when I spoke to patients and my coworkers. I learned that asking questions is not a bad thing, and that doing so is better than staying quiet and ultimately messing up. Throughout my session assistant role I learned that the patient experience includes not only ensuring that they are checked in correctly, but that the person who is checking them in is empathetic and makes them feel welcome.
Internship Abstract

Name: Yestin Suriel
Position: Session Assistant I
Preceptor: Practice Leader: Sonya Matthews
Clinical Practice Manager: Gillian Roxas
Agency: Memorial Sloan Kettering Cancer Center

Work Duties: At Memorial Sloan Kettering Cancer Center, we provide remarkable care throughout the pursuit of Memorial Sloan Kettering’s warm welcome initiative. As a session assistant, we act as a liaison for the clinical team, patients and visitors as while in the facility and have them well informed of their schedule for the day. Greeting and checking in our patients and visitors using the warm welcome approach as they arrive to the facility for their appointments are also key parts to our role.

Techniques: Ensuring patients are having a positive experience was how I made sure that I was staying focused on the overall experience. Always having a warm and welcoming demeanor and asking, “how is your day going so far?” are ways that I connected with patients and it not only made their visit at MSK much easier but it also brighten their day. Giving patients wait time estimates for their physician or treatment visits are also ways that I kept the patient experience in mind. Looking back and double checking with the Session Assistant II in the clinic are ways that I was able to keep the patient experience in mind and without losing focus.

People Skills: Being able to connect with fellow colleagues at Memorial Sloan Kettering one of the most rewarding parts of my internship, however, what has been the most fulfilling is the connections I have made with the patients. Being an extrovert has helped me establish meaningful relationships with patients at 53rd street. My relationship with one patient in particular stands out to me. They have been coming to MSK for over three months and we see each other every other week. Over time, we have developed a more personal relationship and even discovered we share a birthday. Connecting with this patient and many others helps to reduce their anxiety during one of the most difficult times of their lives.

Results: When a patient is new to MSK, the check-in process can be very extensive and overwhelming. Being action oriented during these visits by completing all of the tasks required, helps me reduce the burden on the patient. When I am successful in my role, it is reflected by the smooth flow of the clinics and the smiles on the patients faces.

Lessons Learned: Organizing, planning, and prioritizing work-related tasks are some of the ways that I have grown professionally. This internship has allowed me to greatly improve my decision making and problem-solving skills. Daily, I am challenge with difficult situations where I must take the initiative to solve the problem on my own. This has helped me build confidence in my my ability to manage ambiguity.
Name: Jennifer Tapia

Position: Student Intern Session Assistant I

Preceptor: Clinical Practice Supervisor - Danielle Ruffini. Practice Leader: John Sireci
Project Coordinator: Roman Maluchnik

Agency: Memorial Sloan Kettering Cancer Center

Work Duties: I ensure a warm welcome to each patient and their family upon arrival. I am responsible for the patient to be fully checked into all appointments on the floor, labs to be released, providing all necessary paperwork such as the home medication list, and physician and pharmacy information for the proper clinic. I serve as the liaison between patients and the respective clinical team. I must maintain communication with the clinical team, in order to provide patients with any information regarding unexpected delays. As a Memorial Sloan employee I must incorporate its success factors in the workday.

Techniques: An essential practice in Memorial Sloan is to always put the needs of the patient first, to ensure that the patient has a positive experience during their visit. Part of the self success factor is situational adaptability, with such a high patient volume it is necessary to be able to adapt to the environment and though teamwork minimize the wait time for patients at the front desk. Another key aspect is to be attentive to detail. It is very easy to miss a lab, an appointment, or print the wrong form.

People Skills: At this position it is essential to look out for social queues and be cautious with one’s tone of voice and choice of words this can easily make the patient’s experience a positive or negative one. One must be able to access an individual and adapt to better cater towards their needs. By just asking the patient how their day is going it can really make a difference in their day. The connections you build with the patients at the warm welcome is what makes the job meaningful and rewarding, especially when they thank you and call you by your name as they head out towards the elevator sometimes hours after your initial interaction.

Results: I am able to efficiently check in patients into their various appointments, release lab work, provide paperwork, answer patient concerns such as wait times, locations, available services, and communicate effectively with the required clinic team. I have built relationships not only with my peers in the floor but also with patients as well.

Lessons Learned: I have learned that my position is much more impactful to the patient’s experience than what I had expected. My position has taught me how to prioritize tasks, communicate effectively with my fellow colleagues and patients in order to provide the best patient experience. Being resilient was an important aspect in my time as a session assistant I, I learned the severity of my mistakes and was able to come up with new ways to ensure it would not happen again. I demonstrated self-awareness when taking feedback from both my colleagues and supervisors and applying it. It has also taught me how to be emotionally strong when a patient is emotionally unstable, and to provide that person comfort by assuring them that they are in good hands with exceptional doctors at Memorial Sloan.
Internship Abstract

Honors Research
Internship Abstract

Title: Justice Without Borders: Obligations of Nation-States to Non-Citizens and the Human Right to Health

Name: Jacob Wasserman

Advisor: Francis Barchi, Ph.D.

Background and Specific Aims: It has been forty years since the signing of the Declaration of Alma-Ata, where the nation-states of the world came together to agree that health is a fundamental human right. In the United Nations’ pursuit of the 2030 Agenda for Sustainable Development, the inclusion of Goal 3.8 for universal health coverage (UHC) (i.e., that all people have a right to health services where they are, when they need them), brings about the need for consideration as to how nation-states guarantee that right. But, missing from the global conversation on pursuing health for all is the consideration of what the nation-state owes people within its borders. Through reading scholarly literature and consulting with academic researchers in the fields of moral philosophy and health care systems, I examined the role of the state in realizing the right to health care services, with specific attention to the tension between the nation-state’s contract with its citizens and its obligation to uphold the tenets of international treaties and covenants to which it is a signatory by providing healthcare to non-citizens within its borders. The aims of this paper are to assess this tension by addressing the considerations of what a nation-state owes its citizens, what a nation-state owes people within its borders who are not citizens, and what the nation-state’s obligations to the universal human right to health are in a world defined by borders and resource scarcity.

Obligations of the Nation-State to Citizens: Borrowing from Nussbaum (2004), I argue that it is the social contract between the nation-state and its citizens that creates the obligation for the nation-state to provide certain goods, protections, and services to its citizens. In order to provide for the basic needs and capabilities of its citizens, a nation-state must protect their health and well-being through accessibility to basic health services.

Obligations of the Nation-State to Non-Citizens: As previously established, if the nation-state’s obligations are produced by the social contract of citizenship, then it would follow that any nation-state has no obligation to anyone in its borders who is not a citizen. But, in protecting the health and well-being of its citizens, the nation-state has a duty to eliminate public health threats created by infectious diseases from non-citizens within its borders. Therefore, in order to fulfill the obligations of its social contract to its citizens, a nation-state may have to extend health services in some capacity to non-citizens within its borders.

Obligations of the Nation-State to the Human Right to Health: By entering into international agreements like the Tokyo Declaration, which aims to accelerate progress on UHC, and the 2030 Agenda for Sustainable Development, nation-states effectively sign a global social contract to fulfill universal human rights. As such, it becomes evident that the nation-state would then have an obligation to provide for the health and well-being of any individual within its borders along the grounds of their humanity, rather than any rights claim held by citizenship. Despite this recognition, practical barriers for the nation-state to provide health care to non-citizens still exist throughout the world and may require new constructs and models about global health governance in order to realize the human right to health.