RUTGERS

Edward J. Bloustein School
of Planning and Public Policy

Summer 2019 Abstract Book

Traditional Internships

Field Work Internships

Title:	The Importance of Emotional Intelligence on Patient Experience and Satisfaction
Name:	Adewumi Aderibigbe
Preceptors:	Direct Supervisor: Yaniris Garcia, Patient Experience Manager
Agency:	Trinitas Regional Medical Center, Elizabeth NJ

Purpose: To improve overall patient satisfaction by creating a survey which helps understand the need of Emotional Intelligence within the healthcare workplace and aid in further education about EQ.

Significance: Patient satisfaction is a driving force of the healthcare system. According to the NRC Health website, a positive Patient Experience increases Patient Engagement and enhances an Organization's Revenue and Reputation. In an effort to measure such, as mandated by CMS (Centers for Medicare and Medicaid Services), HCAHPS (Hospital Consumer Assessment of Healthcare Providers and System) surveys are sent to patients and feedback is obtained. Review of the feedback obtained often shows lower scores in certain dimensions related to Empathy and Emotional Intelligence. A thorough understanding of EQ by healthcare workers is an essential component of Patient Experience. It can decrease the amount of Grievances in the following categories; Attitude/Behavior, Communication, Care/treatment, and Responsiveness. Looking at Trinitas Grievances Trend Reports for Q4 2018, there were (7) grievances on Attitude/ Behavior, (9) on Care/ Treatment, (7) on Communication, and (5) on Responsiveness. For Q1 2019, the results for grievances were 9, 9, 14 and 6 (respectively) These categories can encompass attributes of Emotional Intelligence. For the quarters mentioned above, the number of Grievances within these categories were greater than other categories.

Method/Approach: Using the survey tool called Survey Monkey, 8 multiple choice questions were generated to understand the Emotional Intelligence of Trinitas employees. These questions focused on components of Emotional Intelligence such as Communication, Active Listening, Empathy, and Attitude/Behavior. The survey was created using a review of other Emotional Intelligence surveys such as Mindtools EQ survey and Memorado EQ survey. HCAHPS surveys gathered by NRC Health (National Research Corporation) were used to provide a survey's framework.

Outcomes/Results: The 8 survey multiple choice questions were as follows: 1). When interacting with patients, how often do you practice active listening? 2). How often do you recognize your emotions as you express them? 3). In your daily interactions with patients, how well do you assess discomfort? 4).When in a difficult situation, how well do you manage your emotions? 5). How well can you operate in grey area situations? 6). How well do you communicate and express yourself to your coworkers, especially in situations where teamwork is recommended but not required? 7). How familiar are you with emotional intelligence as a tool for increasing patient satisfaction? 8). What department do you work for at Trinitas Regional Medical Center? Each survey response is rated by a numerical system (1-5) with 5 indicating a higher knowledge of EQ and 1 indicating the need of EQ training.

Evaluation/Conclusion: The survey will be launched as part of next year's Mandatory Customer Service Annual Educational Program. This new initiative will be distributed to all hospital staff in an effort to improve Empathy and raise EQ awareness. The results of the survey will be reviewed to understand the needs of the hospital regarding EQ. Further recommendations will be to make specific EQ educational material for sensitive departments such as Oncology, Dialysis, Maternity and Geriatric Units.

Title: NJCAHT Human Trafficking Statewide Database Resource

Name: Nathalie Aguero

Preceptors: Diana Starace, Injury Prevention Coordinator

Agency: Robert Wood Johnson University - Trauma & Injury Prevention

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Purpose: To revise and improve the call script to communicate with prospects more effectively in order to compile a live database of statewide resources for victims and survivors of human trafficking for the New Jersey Coalition Against Human Trafficking website.

Significance: According to The International Labour Organization, there are 40.3 million victims of human trafficking worldwide. Of the victims, 75% are women and girls and 81% of all victims are forced into labor trafficking. Together, forced labor and human trafficking make up a $150 billion industry. In 2018, there were 98 reported cases of human trafficking in New Jersey. New Jersey is a key location for human trafficking because of the numerous transnational transporation and shipping ports. The Trauma and Injury Prevention department at Robert Wood Johnson University, a member organization of the New Jersey Coalition Against Human Trafficking (NJCAHT), works to help victims of human trafficking by increasing awareness and recognizing the red flags of human trafficking for healthcare professionals in all healthcare settings. Currently, there is not one repository of available resources for victims/survivors of human trafficking, making it difficult to access these services. This project is two-fold: refining the call script used to reach out to potential organizations and then compiling said resources into one directory to be published on the NJCAHT website.

Method/Approach: The previous call script was revised to include two new categories and a subset of questions to follow with special attention to questions related to accessibility. The following categories with relevant questions are now being asked: location; the type of service provided; emergency contact information; program expansion; organization services; accessibility; and queer-informed. With these questions in hand, the four interns tackled a list of 90 organizations; and each phone call took approximately 15 minutes to complete. The information collected from the call sessions was entered into an online Google form that collects and compiles all the given data.

Outcomes/Results: The directory project is under new leadership and is being revitalized. Ninety entries were inherited, 70 of which were special in that they were not duplicates of past entries or the organization was still up and running. The call script has been revised to improve the guiding of the seven categories of questions, thus becoming more robust and allowing less room for caller error. In addition, the script now addresses accessibility to services and is LGBTQ+ friendly. As new calls are being made, data will be added to the directory.

Evaluation/Conclusion: The Trauma and Injury Prevention in partner with the New Jersey Coalition Against Human Trafficking is ongoing with its mission to provide survivors and victims of human trafficking a reliable and informed online database with access to available resources such as shelters, counseling, medical care, etc. In the future, more partner organizations can be added to further support the survivors and victims of human trafficking across the state of New Jersey. In three months, the call script and log will be evaluated to assess fluidity and target problem questions.

Title: Act Now Health Education and Outreach Campaign

Name: Noor Ain

Preceptors: Direct Supervisor: Beverly Prempeh ; Project Supervisor: Stacy Hutsell

Agency: Act Now Foundation- Dementia Center

Purpose: To raise awareness of dementia among low-income communities in Northern New Jersey with dementia education and early intervention strategies.

Significance: According to the Alzheimer's Association there are approximately 5.8 million people living with dementia in the United States. It is estimated that 3% of the population living with dementia is aged younger than 65 years, with 45% population aged 75-84 years, and 36% aged 85 years and above. Age is the primary risk factor for dementia. As the population continues to age, the number of people living with dementia is expected to double in the next 40 years. The physical, emotional, and economic toll of the disease will heavily impact vulnerable populations. Low-income communities are at a higher risk of dementia due to lack of resources, proper nutrition, healthcare, and safe clean environments. As dementia has no current cure or treatment, it is important to focus on education and early prevention strategies to prepare or slow down its impact.

Methods: Act Now Foundation works with low income communities by providing services to senior centers, senior housing authorities, and other community based programs. Educational materials such as information booklets and detailed pamphlets were distributed to both seniors and caregivers. Free one-on-one memory screening were conducted for early detection of dementia where responsibilities included communicating with and organizing the seniors. Supervisors were assisted with educational seminars with a detailed review of the mental stages of dementia with brain imaging scans to provide the audience with a deeper understanding of its mental decline. Mental exercises are shown to help increase brain health and slow down memory loss. Causes and risk factors of the disease are provided as well as different ways the audience can reduce these risks. Among outreach events, enhancing the organization's social media presence and marketing materials was needed. Materials that are more easily understood by seniors were created by providing larger fonts and different images related to the material.

Outcome/Results: Community outreach received success with an increase in outreach events and seminars being provided to low-income communities. The annual Brain Health & Wellness Fair, hosted by Act Now Foundation, received a 25% increase in guests in 2019 with over 500 guests joining the festivities. Events have been booked in 12 new locations in the past month, 2 of these events are located in Central Jersey. Social Media activity has increased as well, with over 200 new subscribers being added to the ANF mailing list, 52 new followers on Facebook, 29 new followers on Instagram, and 9 new followers on Twitter.

Evaluation/Conclusion: Numbers should be reevaluated at the end of August 2019 to determine the effectiveness of this project, More outreach is needed among seniors and communities throughout New Jersey. A consistent social media presence is also needed to spread awareness, gain new clients, and recruit more volunteers. Education seminars and memory screenings must begin to include ages below 65 in order to increase effectiveness of early detection and intervention.

Title: "PrEP 2 Prevent" (Pre- Exposure Prophylaxis)

Name: Murphy Akawuaku

Preceptors: Direct Supervisor: Deloris Dockrey, Clinic Director

Agency: Hyacinth Health & Wellness Clinic

Purpose: To educate and encourage people about getting on PrEP (Pre- Exposure Prophylaxis) to decrease the spread of the HIV epidemic in New Jersey.

Significance: PrEP stands for Pre- Exposure Prophylaxis. According to the CDC, it is a way for people who do not have HIV, but who are at substantial risk of getting it, to prevent HIV infection by taking a pill every day. Having said that, there is an abundance of stigma and misconceptions about PrEp due to the lack of health literacy, candidates for PrEP, as well as the qualifications to get on PrEP or stay on PrEp. According to the AIDSVu.org, 35,452 people are living with HIV in New Jersey and only 3,803 people are on PrEP. In addition, the Program Data Review here at Hyacinth displayed that 51% of the people that was linked to a PrEP prescription was white and only 34% linked to PrEP prescription was black. These numbers are disproportionate because of the estimated diagnosis rate for HIV cases in the United States was 49% among blacks/Africans Americans. In addition, the program data also reviewed that 81% of males were linked to a PrEp prescription while only 18% were females and that is because there is a false understanding that PrEP is only for gay or bisexual men.

Method/Approach: PrEP counselors are the cornerstone of promoting and conducting a situation on a key audience that will assist individuals to finding and learning more about PrEP in context and augment the spread of prescription to those at risk of HIV. Therefore, staff members went into the community, local universities, schools or anywhere they are invited to promote health education and gathered 178 people. At the Hyacinth clinic, a "PrEP Counselor Benefit Assessment Tool for Referral to Prescriber" is distributed to clients and is the key that helps identify any gaps in awareness and decide how counselors will address those gaps. In addition to the tool packet, there are several types of counseling and "Codes of Activities" that involves information, discussion, demonstration, distribution and practice on health education and its related topics. With that, the counselors assess individuals or couples risk factors and if there are specific needs, necessary referrals and medical/social services are available.

Outcomes/Results: After the "PrEP Counselor Benefit Assessment Tool Referral to PrEP Prescriber" was completed by clients, in the final analysis, there was an increase in HIV testing, and out of the 178 seen by a counselor, 103 people were Referred to a PrEP Prescriber, 94 was Linked to a PrEP Prescriber, and 86 people was linked to a PrEP Prescription which is a strong way to stop the HIV epidemic. During this intervention, the clients were educated through the "Codes For Session Activities" which was all attached in the tool packet.

Evaluation/Conclusion: There is a lot of stigma and misunderstanding about PrEP. Having said that, the "PrEP Counselor Benefit Assessment Tool for Referral to PrEP Prescriber" has proven to steer numerous people towards a PrEP prescription and has been the gateway to promoting health education. Therefore, starting up a health campaign and teaming up with a group of Certified PrEP counselors can decrease many barriers whether it is structure, community or even individuals because they will inform and provide knowledge and assistance if needed which makes them dependable and effective.

Internship Abstract

Title: Improving Hospital Staff to Patient Communication Regarding Medications

Name: Reem Al-Turk

Preceptors: Director of Patient Experience and Lean Processing: Jill Anderson

Agency: RWJ University Hospital-Hamilton

Purpose: To assist the RWJ Meds Communication Project in improving RWJ Hamilton's medication communication scores and to ensure patients' and families are well educated regarding patient medications.

Significance: Medication communication affects many factors including medication errors. According to Kitson, Lau, Price, and Showler, medication errors are preventable, stating, "The estimated rate of preventable Adverse Drug Events, caused by medication errors, is 1.5 million per year in the United States" (Kitson et al.). Kitson et al. also describes that medication communication is one of the sources of medication error, establishing a relationship between medication communication and medication error. RWJ Hamilton works with the staff to increase the medication communication by using Care boards, medication cards, and rounding as a part of the Meds Communication Project, aiming for higher communication scores, patient satisfaction, a decrease in medication errors, and a lower pre 30-day readmission rate.

Method/Approach: A pre-assessment of rounding was done to observe if the Meds Communication Project was being executed. Tools that the Meds Communication Project uses are Care Boards and Medication Cards. The Care Board is required to be updated daily with one out of the several medications that the patient is taking. The questions that are asked during rounding pertaining to these tools are: "Do you understand your care board?", "Do you understand your medication, how it works, what it does, and the side effects?", and "Did you receive your medication card?". Based on the answers provided by the patient, the nurse leaders then go back and educate the patient and family more about the medications.

Outcomes/Results: When a patient was asked, "Do you understand your care board?" and "Do you understand your medication, how it works, what it does, and the side effects?", out of the range between 10 to 40 patients that were rounded on per day, 95% answered with a "Yes". If any patient answered with a "No", it was communicated to the nurse. When a patient was asked, "Did you receive your medication card?", 90% answered with a "No" and many claimed they did not know what that was. An example of a medication card was then shown to patients whenever patients responded with a "No". One patient that was rounded on claimed that the medication cards were "concise and easy to follow".

Evaluation/Conclusion: The success of this project is measured by the ability to increase the medication communication scores of RWJ Hamilton in the Press Ganey post discharge survey. In fact, there was a 10% increase in the scores during the time this project was executed. If this assessment was to be continued, a short term positive outcome would be that RWJ Hamilton's medication communication and patient satisfaction. To establish positive outcomes in the future for RWJ Hamilton, it is recommended that more focus should be on ensuring patients receive their medication cards.

https://docs.google.com/document/d/11ngJcc2tvlBQmYf4hs3BRNcHyVj19DbYacnznY5u0uY/edit?usp=sharing

Title: Leadership & Management Course Development

Name: Oluwadamilola Alabi

Preceptors: Dr. David Adewole, Postgraduate Program Coordinator; Supervisor: Mr. Folashayo
Adeniji, Assistant postgraduate program director

Agency: Health Policy & Management Department, College of Medicine, UCH, Ibadan.

Purpose: To improve the Leadership and Management bi-annual course by revamping course materials and by creating marketing materials to reach a diverse group of health workers apart from medical doctors.

Significance: Health care delivery and patient circumstances are constantly changing, and managers have to continue to learn new abilities and skills to keep up (WHO). Health facilities exist for the sole purpose of providing health services to patients in communities. Therefore, managers need to ensure that client satisfaction is of utmost importance. Interprofessional collaboration is encouraged amongst healthcare providers to deliver the highest quality of care. Available evidence however suggests that unlike in the developed world, healthcare professionals do not collaborate well in Nigeria because of the claim of superiority of a particular health professional over others. This has often resulted in interprofessional conflict, which is threatening to tear the health sector apart at the detriment of the patients. (Akpononu 2017)

Method/Approach: Data were analyzed that was obtained from the training that was concluded in June. There were 26 participants and 25 of them were medical doctors, only one of the participants was not. From the evaluation that the participants filled, most of them attended the leadership and management course to fulfill a requirement in order to be able to sit for a professional exam. Twenty health care workers, 10 of them are nurses, 4 of them administrators, 2 pharmacists, and 4 of them medical doctors were interviewed to know why they do not attend trainings like this to help them improve their leadership skills.

Outcomes/Results: From the questions asked, only the 4 medical doctors knew about the training, the other 16 healthcare workers do not know about the training. All 20 health care workers are willing to attend such training if it will help them to improve interprofessional collaboration amongst themselves which will in turn improve patient care. 6 out of 20 of the participants are willing to pay out of pocket, the remaining 14 believe it is the responsibility of the organization they work for to send them on such trainings.

Evaluation/Conclusion: Doctors are the largest percentage of healthcare workers that attend the leadership and management course organized because it is a requirement for them. The course will reach more people if it is announced on platforms such Nigerian Association of Nurses, on WhatsApp group, Facebook groups rather than posting posters and distributing flyers

Title: Transitions of Care, The First Thirty Days Assessment

Name: A'Adil Ali-Jenkins

Preceptors: Jazmin Cascante, APN, Program Coordinator ;
Martha Ortiz, RN Case Manager

Agency: Hackensack University Medical Center, Transitions of Care

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Purpose: To reduce the number of hospital readmissions for adult patients that are uninsured/underinsured Heart Failure (HF), Acute Myocardial Infarction (AMI) and patients with other chronic diseases (CD).

Significance: Hospital readmissions within the first 30 days upon discharge affect the healthcare system because they are costly to hospitals. Uninsured/underinsured patients are individuals with no or inadequate health insurance coverage (U.S National Library of Medicine). Underinsured patients with Medicare/Medicaid who are readmitted to the hospital within the first 30 days for the same diagnosis, Center for Medicaid and Medicare Services (CMS) does not pay hospitals for the patient's second stay. A 30-day readmission can cost hospitals on average $19,000 per stay (Centers for Medicaid and Medicare Services). High readmission rates can be attributed to patients being discharged without proper knowledge and tools to care for themselves at home. The Transitions of Care (TOC) team works as liaisons for uninsured/underinsured hospitalized and discharged patients with CD, HF and AMI.

Method/Approach: To help reduce the number of hospital readmissions, TOC follows an enrollment and discharge procedure. To find patients for the program TOC searches the hospital's daily BI list. The patient's charts are then reviewed to verify their insurance. Next TOC conducts a screening interview process with the patients at the bedside to assess their needs and encourages the patients to enroll in the program. Once the patients agree to be enrolled and followed for the first 30 days upon discharge, TOC schedules the patient's follow-up appointments at the clinic or HF center. The patients are provided with BP machines and glucometers to use at home. TOC covers all prescription costs for the first 30 days and after, TOC refers patients to the Hackensack Medical prescription discount program. The TOC team also refers patients to visiting nurse services, provides transportation to medical appointments if needed and connects patients to food and transportation resources in their communities. Once the patients are discharged the TOC team calls the patients weekly to evaluate their progress.

Outcomes/Results: The sample size for the project is 20 patients (n=20). 8/20 (40%) of the patients were HF patients and 12/20 (60%) were CD patients. 2/12 (16.6%) of the CD patients and 0/8 (0%) HF patients were readmitted to the hospital within the first 30 days.

Evaluation/Conclusion: Due to TOC expanding, it allowed the program to follow CD patients for the first time. Due to the expansion, there is no data to compare the readmissions rate for the CD patient population from the project to. The most recent readmission TOC data from March 2019 is 3.26% for HF patients. Comparing to data from the project, the readmitted rate for HF TOC patients is 0% and for patients with other chronic illnesses it is 16.6%. The project proves that the TOC process is highly effective for HF patients but not as effective for the CD patients. Although CD patients received the same care as the HF patients, CD patients were readmitted for reasons out of TOC's control. The 2 CD patients were readmitted for being non-compliant with medications, non-compliant with diet and failing to attend the follow up appointments scheduled by the TOC team.

Title: Assessing Oral Hygiene on Root Canal Patients

Name: Nida Ali

Preceptors: Dr. Samin Nawaz

Agency: Hunterdon Family Dental

Purpose: To assess root canal patients' knowledge about oral health and implement an educational pamphlet that will serve as a guide to maintain proper oral hygiene.

Significance: Tooth cavities are permanently damaged areas that appear in the hard surface of your teeth. There is no age limit to cavities. Early prevention is the best defense against cavities. In the United States, 91% of US adults have cavities. About 19% of adults who are 65 years or older have no teeth at all. If left untreated, this form of tooth decay can become infected and eventually lead to tooth loss. However, root canal treatments remove the infection from inside the tooth. This is a very costly procedure that can be avoided by practicing proper oral hygiene, including brushing twice a day, flossing daily, eating healthy foods, and visiting local dentists and dental hygienists.

Method/Approach: A patient assessment was given to 52 dental patients receiving root canals between June 3, 2019 and June 17, 2019 to assess knowledge on how to maintain proper oral health. Topics included brushing, flossing, healthy eating, dental visits, and preventative measures. An oral health pamphlet was created that highlighted the important steps to take regarding maintaining proper oral hygiene and common mistakes people make. Each patient was given this pamphlet after their appointment. Among the patients that completed the assessment and were given the pamphlet, 17 were seen again the next two weeks for their regular checkup appoints. The same assessment was given in order to determine the knowledge gained.

Outcomes/Results: Of the original sample size cohort (n=52), only 46% of patients cleaned their teeth with toothpaste and floss. Eighty-three percent of adults who were assessed practiced at least one of the positive behaviors listed. However, among these patients, only 46% knew these practices contributed to poor oral hygiene behavior. Of the sample size cohort who revisited the clinic (n=17), there was an improvement of 54% on the questions.

Evaluation/Conclusion: Having Dr. Nawaz explains the importance of the root canal treatment, precautions that should be made after, and the oral hygiene pamphlet that discusses practices that contribute to obtaining and maintaining proper oral hygiene were effective practices to ensure that these patients comprehend how their behavior can impact their oral health. Something that I would have done differently for next time would be to include a section in the assessment asking about why patients fail to complete the intended treatment. Checkups and attending scheduled appointments are vital to identify oral diseases and tooth decay. Finding common reasons as to why some patients miss or cancel their appointments can help in providing patching up broken appointments.

https://docs.google.com/document/d/1gqJWbm9_4X93wKBzZ-AVAf9tZ6QyVNQdULg6UBIEA_E/edit?usp=sharing

Title: Reducing Readmission Rates

Name: Danica Amante

Preceptors: Kimberly Ambrose, Director of Social Services

Agency: Alaris Health at Hamilton Park

Purpose: To study rates and observe the reasons for readmission among nursing home residents.

Significance: In any healthcare facility, such as hospitals or nursing homes, a patient's safety is the number one priority. The process for discharging patients begins early on in nursing homes, either the day they come in or within the first couple of days. According to a study on a skilled nursing facility readmission review process, Medicare patients discharged to a skilled nursing facility have a 25% likelihood of readmission within 30 days. To understand why readmissions are so common, the discharging process must be observed. The data on the number of readmissions and the reason for the original discharge can help to create a more thorough procedure of assessing patients before discharge.

Method/Approach: For this study, data were collected over a four-month span. This data was of the number of patients that were admitted, re-admitted, and discharged each month, from March of 2019 to June of 2019, from the facility. Important key variables that were observed were the duration of a patient's stay, the location of where they were discharged and if they were discharged with home health aid.

Outcomes/Results: Over the span of four months, the average number of admissions was ninety-seven patients, including readmissions. The highest rate of readmissions took place in May which was 36%, followed by April, March, and June with rates of 28%, 27%, and 14%, respectively. Of the patients that were admitted and discharged during the month of March, 49% were discharged to one of the local hospitals, 45% of patients were discharged home with a health aide, 3% were discharged home without health aide, and 3% were discharged to another skilled nursing facility. Of the patients that were admitted and discharged during the month of April, 41% were discharged to one of the local hospitals, 59% of patients were discharged home with a health aide. Of the patients that were admitted and discharged during the month of June, 43% were discharged to one of the local hospitals, 24% of patients were discharged home with a health aide, 10% were discharged home without health aide, and 23% were discharged to another skilled nursing facility. Whether or not patients are provided with home health aide, insurance companies often cut patients with short notice. This was observed in the social services department of the nursing home. Of the patients that were discharged with aid in March, April, May, and June, 12%, 8%, 10% and 10% were readmitted, respectively. Of the patients that were discharged without aid in March, April, May, and June, 50%, 14%, 0% and 0% were readmitted, respectively. The patients that were discharged were readmitted because they lacked a home health aide or the home health aide they received was not sufficient enough. Additionally, some patients were not readmitted due to death.

Evaluation/Conclusion: Having assessments done early can allow for proper knowledge of the patient's living situation and this can affect the patient's date of discharge. Completing initial admission assessments early on and inputting the information from the assessments in an organized document that can be used during utilization review meetings would allow for a thorough open discussion on patients' discharge plans. This process allows for social workers and other staff members to ensure a safe discharge for every patient, which can lead to lower rates of readmission.

Title: Mandela Washington Fellowship for Young African Leaders

Name: Iriana Ambrose

Preceptors: Dr. Ronald Quincy - Academic Director

Agency: Young African Leaders Initiative- YALI

Purpose: To conduct a Microsoft Excel spreadsheet calculating all of the travel expenses from the fellows, so that an expense won't be overlooked when it's time to audit.

Significance: This project is important because the Academic Director for this organization is using personal money to pay and accommodate these fellows when traveling to its mentors. In order for the A.D to be reimbursed by Rutgers University and IREX, every monetary transaction should be stamped with a receipt. Rutgers University has a "Form Repository" sheet that is available to us so that all of the spending can be accounted for.. Unfortunately, there will be times where a fellow may forget to print out a receipt and that expense will never be accounted for. Therefore, the A.D will lose out on that because there's no record of it ever happening. A lot of the fellows simply forget or simply rush when it comes to making a transaction.

Method/Approach: This project will be conducted using a Microsoft Excel spreadsheet documenting each and every expense the fellows has partake in. On the safe side, even if the fellows fail to produce a receipt, we still know the price fare to get to and from a location. To properly conduct these expenses, it will be separated by dates, and for each date, the total amount that was spent amongst the fellows will be totaled at the bottom (excel will calculate it). In theory, calculations will be conducted for that specific day, week and even month. In the past, fellows lost receipts, and expenses were simply not written down which resulted in loss of money. In the future, everything must be documented and inputted into Microsoft Excel.

Outcomes/Results: At the end of the project, an Excel sheet will be documenting all of the expenses throughout the day, weeks and months. To get a better quote, the total expense sheet for the entire duration of the program is what is needed (excel does a great job calculating it). That information will then be transferred to Rutgers. Since the program officially ends August 1st, we only have the total travel expense until July 25th. Our limitation is that, the project is still a work in progress. At the end, there will be a total amount of how much money was spent on travel expenses from the beginning of the program to the end.

Evaluation/Conclusion: To fully know if the project will work or not is to write everything down on paper and then compare the results. As stated above, it's easy to look up the price fare to and from a location. Once we get the amount for that, it does not change as time goes on. In theory, we are calculating how much the fellows are spending a day and multiply it by the number of weeks they are there for. The limitations that may occur is travel expenses that occur outside of the routine visit from seeing their mentors. In conclusion, the total amount throughout the summer is calculated. To make sure every expense is being accounted for, everything must be documented. Comparing it to the following years will also determine if the amounts differ.

Title: "Englewood Health Hub" a Mobile Health App for Patients, Visitors, and Employees

Name: Amy Badia

Preceptors: Lauren Menkes, Population Health Specialist Manager

Agency: Englewood Health

Purpose: Create an application to provide convenient and accessible information to patients, visitors, and employees at Englewood Health?

Significance: According to a study conducted by Research2Guidance from 2016 to 2017 there have been over 78,000 new additions of mobile health apps to the Apple and Google app store. Many of Englewood Health's local competitors have one or several mobile health apps for their patients. Mobile health apps will increase patient engagement by providing them with easily accessible information in the form of an app. Part of what makes Englewood Health a great place is that they also make sure to provide resources for their employees. Adding resources for employees on an app should increase workplace satisfaction and allow for access to a greater audience. Englewood Health employs 3,000 people, but only 1,500 have computer access daily. An app will grant access to the employee information from the ePortal to all employees.

Method/Approach: Firstly, it is important to identify what resources are already available to patients, visitors, and employees on the Englewood Health website that can be easily transferred onto an app. Once these items are determined, it is important to research what local competitors are offering. This will help give insight into what patients are finding useful. In order to distinguish what employees would like to have if an app, a survey was passed around a few of the departments requesting their feedback on the subject. Once all the data was collected we picked the most requested app features and compiled a list along with resources from the Englewood Health website that can be put on an app. These items were separated into groups based on their function. There were fifteen features for the patient/visitor part of the app and nine for the employee sections. Before releasing the app to the public a pilot app will be tested on a small group to get feedback on the app's performance. To increase the use of the app it will be marketed on the Englewood Health website and advertised throughout the hospital as a resource for all.

Outcomes/Results: Through analysis and brainstorming with interns a list of possible app features was compiled. For patients and visitors there could be; MyChart link, NICU Tracker, Pregnancy care/classes, support group options, Graf Center of Integrative Medicine class sign up, online dietician and nutrition information, Englewood Health Physician Network/Physician Finder, thank a team member, department directory, hospital navigation, parking availability, e-cards, gift shop catalog, bill payment, donation, FAQ. A total of 20 surveys were conducted and collected from4 different departments. Based on the feedback and what resources are available, the employee features would be: ePortal link, employee assistance hotline, weekly events calendar, notification center/broadcast employee messages, parking availability, shuttle tracker, pay stubs/time sheets (KRONOS access), and mobile pay for cafe.

Evaluation/Conclusion: This idea will be presented in front of senior leadership of Englewood Health on July 23, 2019. If determined as something useful it will be passed along to the necessary departments in order to get the project started. Once the app is released a bi-annual analysis will help give insight into the effectiveness of the app.

Title:	On-Boarding and Training Program Development
Name:	Brian Bathan
Preceptors:	Scott Naughton, Chief Operations Officer
Agency:	Skin Laser & Surgery Specialists of NY and NJ

Purpose: Evaluate current on-boarding and training protocols and create a new and improved training program for new employees.

Significance: On-boarding can be defined as the 'formal and informal practices, programs, and policies enacted or engaged in by an organization or its agents to facilitate newcomer adjustment'(Klein & Polin, 2012). On-boarding is key to getting a new employee acclimated to the job that they will be taking over. The creation of an effective on-boarding program can ultimately affect employee retention and overall organizational efficiency. If the program proves to be effective this will increase the overall productivity of the office, office revenue, and overall patient satisfaction.

Method/Approach: A comprehensive review of scholarly literature on effective on-boarding programs was conducted in order to see what methods and programs are best to be used in a private clinical practice. 6 informal interviews with current employees were conducted in order to get a perspective of the effectiveness of the practice's previous training program, one of whom actually conducts the training program that is done in the office. The call-volume statistics of the office for the month of June 2019 was also analyzed and compared to the call-volume statistics of the month of February 2019. This was completed in order to determine the effects of the loss of a call-center employee. The framework of the program consists of a tutorial on how to use the practice's scheduling and EMR system, general employee interaction within the office, a reference guide for common dermatology appointments, and a reference guide for the available cosmetic procedures.

Outcomes/Results: The onboarding program should provide sufficient instruction on how to effectively utilize the practice's scheduling system, how to interact with patients, and how to interact with other staff members. The program also aims to improve the knowledge of new employees on the available cosmetic procedures done in office, in order to increase the effectiveness of employee-patient interactions when scheduling a cosmetic consult with available providers. In turn, increasing the revenue generated by the practice as a whole.

Evaluation/Conclusion: The program will be assessed through formal surveys that should be completed after the completion of it by the new employee. The efficacy of the program will be analyzed via the call-center statistics, in the amount of calls and appointments that were taken and booked, respectively. This will show if the program was effective in both the retention of the employee and their productivity. Continuous evaluation of the program should be conducted in order to make improvements, if need be.

https://docs.google.com/document/d/1zdltE4f5EhOnFtm9a2ETbr43O5nu_ETIN_E241sgPCA/edit?usp=sharing

Title: A Comparative, Critical Analysis of the U.S. National Debt Crisis

Name: Lance E. Bean

Preceptors: **(Primary)** Alexis Auman, Senior Consultant, Director of Strategic Gov. Relations
                   (Secondary) John Tejcek, Senior Consultant, Of Counsel

Agency: The Hohlt Group, Washington D.C.

Purpose: To conduct research on the United States' current national debt crisis and formulate a comparative, critical analysis of our current debt crisis to the very similar debt crisis of 2011 for top clients (the White House administration, congressional leaders, legislators & staffers, business executives, and various media outlets).

Significance: On March 2nd, The U.S. Treasury hit the deficit cap after the U.S. debt ceiling expired. As a result, the U.S. Treasury began taking "extraordinary measures" (suspending payments, enacting delays, postponing transfers, etc.) to avoid violating the U.S. government debt limit. The last time Congress dealt with government funding and a debt-ceiling increase at the same time was 2011. Further, it has been evident that party leaders and the current administration have found themselves gridlocked on spending appropriations (as each side has different budgetary priorities) thus postponing any progress on tackling the national debt. While there are similarities, it is fair to say that our current position is a bit different in the sense that it is much more complex and has the potential to yield much worse consequences for the American people (and future generations) as the national debt now totals $22.23 trillion.

Method/Approach: The selling of U.S. securities, U.S. appropriations and debt analytics, the U.S. tax codes, and U.S. debt law were collected from sources such as the U.S. Department of the Treasury, The Congressional Budget Office, The U.S. Office of Personnel Management, The Committee for a Responsible Budget, and various media outlets. The analysis includes a breakdown of our current debt crisis, information regarding our current appropriations gridlock, the similarities and differences between our current crisis and that of 2011 (including a step by step timeline of events for each), discussion pertaining to U.S. - China relations (debt dependency) and credit rating scoring, as well as a four section appendix including the active timeline, a tentative auction schedule of U.S. Treasury securities, a synopsis of U.S. sequester cuts, and a full compilation of budget news headlines since 06/01/19. To accompany these findings, a list of which foreign governments own the U.S. debt was included as well as two charts breaking down the current U.S. debt (public and intragovernmental).

Outcomes/Results: The White House and Congress gridlocked on budget appropriations and are indecisive on whether or not to raise the debt ceiling causing a stalemate in tackling the national debt. While our current debt crisis is unique due to the immense amount owed, it is evident that the current is strikingly similar to what occurred in 2011 (and may follow in the upcoming months). Additionally, China owns the largest stake in U.S. debt, owning $1.13 trillion. It will be interesting to see if Chinese President, Xi Jinping, brings up the U.S. debt obligations in order to boost leverage over the United States as we discuss trade relations.

Evaluation/Conclusion: This report has since been presented to top clients (the White House administration, congressional leaders, legislators & staffers, business executives, and various media outlets). While the issue is not yet resolved and sits in a current stalemate, it has since climbed in level of significance, all are in agreement that the national debt crisis must be dealt with immediately as risk of instability and economic backlash could follow as a consequence in the near future as it once did in 2011.

Title: A Comparative, Critical Analysis of "Tobacco to 21" Legislation

Name: Lance E. Bean

Preceptors: (Primary) Alexis Auman, Senior Consultant, Director of Strategic Gov. Relations
                    (Secondary) John Tejcek, Senior Consultant, Of Counsel

Agency: The Hohlt Group, Washington D.C.

Purpose: To conduct research on the United States' current national, teen smoking epidemic and formulate a comparative, critical analysis of states who have passed legislation raising the legal purchase age of tobacco from 18 to 21 and their respective members of Congress who cosponsor H.R. 2411 "Tobacco to 21 Act" for top clients.

Significance: While underage use of conventional tobacco products has been driven to historic lows, the use of electronic cigarettes and e-vapor products has surged since their market takeover in 2017. FDA Commissioner, Scott Gottlieb, has called this an alarming "epidemic" as his agency found that e-vapor product use increased by almost 80% among high schoolers and almost 50% among middle schoolers from 2017-2018 (1 year after market entry). Users under the age of 18 obtain tobacco and e-vapor products through "social access", also defined as obtaining products from other legal age purchasers who willingly redistribute. Approx. 80% of high school students turn the age of 18 before graduation. By raising the minimum purchase age of tobacco and e-vapor products to 21, no high school student in the U.S. will be able to legally purchase these products, adding another hurdle to help curtail social access.

Method/Approach: To conduct this critical analysis, information pertaining to the current FDA declared teen smoking "epidemic" and both state and federal legislation increasing the purchase age of tobacco products to 21 were collected from sources such as the USFDA, the USDPH, the CDC, the OSG, and various think tanks and media outlets. The information was then deciphered and compiled into a high level analysis that includes a breakdown the 19 jurisdictions (states & Wash. D.C.) that have already passed legislation that increases the purchase age of tobacco and e-vapor products. Once a list of these jurisdictions was completed, my analysis turned towards the U.S. House of Representatives bill, H.R. 2411 "Tobacco to 21". The jurisdiction list was then cross-listed with a list of all of the House Representatives from those states and note whether or not they have chosen to co-sponsor H.R. 2411 as well as notes the partisan breakdown of their state legislatures and governorships.

Outcomes/Results: The analysis found that within the 19 jurisdictions (which govern 52% of the United States population) there are 224 House Representatives, 59 of which support H.R. 2411 "Tobacco to 21 Act". This report allows lobbyists and constituents alike to strategize a plan to win over the support of the remaining Representatives of the districts that have already supported this measure locally. It is important to note that 10 co-sponsors have been added since the release of this report and now support this initiative.

Evaluation/Conclusion: This report has since been presented to top clients (the White House administration, congressional leaders, legislators & staffers) and has further been published and released by Big Tobacco Stakeholder, the Altria Group. While the issue awaits further legislation, it has since climbed in level of significance following testimony before the House Oversight Committee by public health professionals, activist groups, researchers, as well as e-vapor leader, JUUL Labs on July 24-25. Today, all are in agreement that we must immediately attempt to pass legislation to curtain the consistent rise in teen smoking, vaping, and underage age use of tobacco products.

Title: Restructuring the Adverse Childhood Experiences (ACEs) & Trauma Informed Care portion of the New Jersey Chapter, American Academy of Pediatrics' website.

Name: Lucas Bencivenga

Preceptors: Aldina Hovde, MSW, Director of Safety and Trauma Informed Care Initiatives

Agency: New Jersey Chapter, American Academy of Pediatrics (NJAAP)

Purpose: To update and restructure the Adverse Childhood Experiences (ACEs) & Trauma Informed Care webpage to present information on ACEs, child abuse and neglect.

Significance: In the late 1990s, Kaiser Permanente and the Centers for Disease Control and Prevention (CDC) conducted the largest longitudinal study to date that focused on ACEs. Over 17,000 patients from Kaiser Permanente's HMO plan were studied from 1995-1997. It was found that exposure to ACEs without a positive buffer (positive parenting, etc.) was related to long-term health issues. The ACEs & Trauma Informed Care webpage on the NJAAP's website aims to provide information on ACEs as well as other pertinent information to both caregivers and pediatric healthcare teams. This portion of the website has four parts; ACEs homepage, Resources, Webinars, and Education.

Method/Approach: Information on the Resources tab was gathered from the CDC, Department of Children and Families (DCF), American Academy of Pediatrics (AAP) national website, NJAAP's website and YouTube. For the Education tab, ACEs screening tools and resources were gathered from the AAP's quality improvement data collection website, Quality Improvement Data Aggregator (QIDA), and added to the tab. All changes were recorded on a Word document that was shared via Sharepoint. These changes were then submitted to the Director of Safety and Trauma Informed Care Initiatives for approval and then submitted to the Senior Marketing and Event Manager, who made the changes. The Resource tab of the webpage was the primary focus of the redesign. The previous information on the Resources tab was divided into 13 drop-downs with 77 hyperlinks. Upon review of these hyperlinks, it was found that many of the links were broken or contained outdated information. Content was rearranged in a more logical manner and irrelevant and outdated information was eliminated or replaced.

Outcomes/Results: The information on the ACEs homepage was updated and a few minor changes were made to add infographics. For the Education tab, ACEs screening tools and resources were gathered from the AAP's quality improvement website, QIDA, and added to the tab. The Resources tab now has 6 drop-downs: Reporting; Global Triggers of Child Abuse and Neglect; Adverse Childhood Experiences (ACEs); Child Abuse; Depression, Stress, and Anxiety; and Violence. A short description was added at the beginning of each drop-down to explain the information to follow. There are now 37 hyperlinks that lead to the intended webpage or PDF and contain the most updated versions of the information.

Evaluation/Conclusion: The ACEs & Trauma Informed Care webpage now has a logical flow for ease of navigation and all information presented is accurate and recent data from a reputable source. Each hyperlink leads the user to where it is intended to lead them.

Title: 2019 Compendium and Comparison of Regulations that Create State Medical Cannabis Laboratory Industries

Name: Alex Bi

Preceptors: Dr. Sherman Hom - Program Manager

Agency: New Jersey Department of Health Public Health and Environmental Laboratories

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Purpose: To create a compendium of US States regulations that establishes a 3rd party cannabis testing lab industry and perform comparative analyses to identify commonalities that may lead to a recommendation for best practices.

Significance: Since cannabis is illegal on the federal level, 33 states and Washington D.C. have legalized medical cannabis programs. The problem is that there is no standardization in the testing process, which could cause some products to be unsafe for public use and consumption. Twenty-nine states have enacted regulations for the creation of a 3rd party cannabis lab testing industry. In New Jersey, the NJ DOH PHEL is the only laboratory that tests medical cannabis products for potency and contaminants. Studies have shown that increased potency and contamination is linked to adverse mental health outcomes. Therefore, medical cannabis must be safe for consumption. The number of businesses submitting cannabis products for testing will increase from 6 to >50, which will overwhelm the capacity of the PHEL laboratory. Therefore, it is very important to enact regulations that will create an independent robust and constantly improving 3rd party cannabis testing lab industry.

Method/Approach: First step was a systematic examination of the regulations of all 29 states that have created a 3rd party cannabis lab industry. Second step was to input the essential information into state specific spreadsheets with important elements, such as oversight agency, accreditation, number of laboratories, proficiency testing, *etc*. Lastly, comparative analyses were performed amongst all the states in each of the important elements.

Outcomes/Results: Data Collection will be completed by August 1st. Expected outcomes indicate that only about 88% of the states have a third-party testing cannabis testing industry. Most states also show disjointed and nonuniform standards and regulations. For instance, the government agency that oversees the 3rd party labs vary from a state's Department of Health (25%), a cannabis commission (35%), Department of Commerce (10%), and others. Sampling and testing guidelines also varied from state to state. For instance, only 40% of the states had a minimum quota that was required to be tested per batch. Another 35% of the states cited that they were working towards "setting a minimum amount", while 25% had no mention of a minimum at all. There is also a lot of transparency when it comes to collection and transport of specimens. About 50% of regulations had no mention of who was responsible for the collection and transport of specimens to the labs. There are some elements that most states mandate. About 85% of the states were required to get and maintain an ISO/IEC 17025 accreditation standard with the other 15% having no required accreditation.

Evaluation/Conclusion: Evaluation and conclusion will be completed by August 5th. Currently, there is an enormous variation in the states required laboratory standards. They are nonuniform and non-specific, which cause cannabis testing laboratory directors to interpret the regulations in a variety of manners. The goal of this research is to compare and analyses lab standards to find best practices. Long term goals of this research include creating a set of standardized lab standards and regulations for all states to follow.

Title:	Hand Hygiene and Infectious Disease Intervention for Children in Somerset County
Name:	Kayla Boub
Preceptors:	Serena Collado, Director of Community Health
Agency:	Robert Wood Johnson University Hospital Somerset

Purpose: To provide proper hand hygiene education and intervention to children throughout Somerset county, in order to control and prevent the spread of infectious diseases.

Significance: Globally, 50,000 people die every day from infectious diseases. Washing hands the proper way can prevent 1 in 3 diarrheal-related illnesses and 1 in 5 respiratory infections. Children, especially, are more susceptible to respiratory and gastrointestinal infections. According to the World Health Organization and the Center for Disease Control, hand washing is one of the most cost effective and important ways to prevent the spread of infectious diseases. In a study done by Randle et. al, educational interventions were found to increase hand hygiene and reduce the transmission of infections in children. This evidence indicates the importance of proper hand-hygiene education and intervention. Teaching proper hand hygiene cuts down on excess healthcare spending on infectious diseases, and reduces antibiotic resistance.

Method/Approach: Hand hygiene education and intervention was assessed in 173 children in Somerset County in August 2019 at Piscataway Summer Camp. A preliminary test was provided that questioned the children about basic hand hygiene and infectious disease knowledge. Several activities and information on hand hygiene and disease control were given to the children to increase their education on the subject. One of the activities included the children viewing the bacteria was on their hands through the ultraviolet "Germ Bug", and then taught how to wash their hands properly. After, they washed their hands the correct way and compared the amount of bacteria on their hands to the amount before. Following the program, the children were given a posttest, which contained the same questions as the pretest. The answers were analyzed to evaluate the effectiveness of the program and their increased knowledge on the subject and material.

Outcomes/Results:
At the end of the program, 173 children in grades 1, 2, and 3, received hand hygiene and infectious disease intervention. Overall, the tests scores from the pretest to the posttest improved, and the percent correctness for each question increased. The average increase in percent correctness was 9.33%, depicting that the intervention was successful. The highest increase in percent correctness was 30%. This increase occurred on the last question that asked the children whether or not washing their hands can help them not have to go to the doctor as often. The increase in test scores for every students validates that after the intervention, students became more aware of the importance of hand hygiene and the consequences if proper hand washing techniques are not followed.

Evaluation/Conclusion:
Hand washing interventions are significant in preventing the spread of infectious diseases and improving the health of individuals. This program had a numerous amount of positive feedback, and has the potential to continue at Robert Wood Johnson. The positive results and increase in correctness on the tests reveal promising data that the intervention was well received by the children. The goal of the program was to lower the spread of infectious diseases in Somerset county through hand hygiene intervention in children. Further research still needs to be done to ensure that the children are adopting the hand hygiene techniques, and that the spread of infectious disease is lowering amongst the children. After this intervention, the childrens' overall health should increase, because they are lowering their chances of getting sick through washing their hands.

Title: JustVax Campaign

Name: Nikki Brannigan

Preceptors: Direct Supervisor:Anne Bronsveld, Senior Copywriter

Agency: Havas Health & You - H4B Catapult

Purpose: Havas Health & You presented the intern project team with a challenge to create a campaign that builds awareness of the spread of misinformation by anti-vaccine supporters while encouraging people to vaccinate their children.

Significance: Across America, the anti-vaccine message is contributing to numerous vaccine-preventable disease outbreaks that put the larger population at risk. To see the anti-vaccine movement's momentum, mumps is the ultimate disease to investigate. Mumps outbreaks began to increase in late 2015, then again between January 2016 and June 2017, totaling 9,200 cases. The increase in vaccine-preventable disease outbreaks is directly correlated to the increased amount of people following the anti-vaccine movement, hence the need for a pro-vaccine campaign.

Method/Approach: The first step of this campaign is launching a website directing people to factual information regarding vaccines, as well as personal stories of those affected by the anti-vaccine movement. Then, utilizing a map of vaccine-preventable disease outbreaks, locations were chosen to place bus stop ads, billboards, pediatrician and OB/GYN ads. Along with those ads, activation ideas consisted of: grocery cart ads, a vaccine game for iPhones connected to Facebook, and targeted Facebook ads. Specifically, for the game, it was necessary to look up demographics data to see what the typical anti-vaxxer would play in his/her free time. Reviewing this data, a "match three or more" puzzle game with a disease pathogen as the antagonist was chosen to be developed by Gameloft, a company within the Havas network.

Outcomes/Results: The presentation began with an icebreaker playing the game of telephone which the creative concept was based from. For this segment, four participants were chosen from the audience to play, with the ingoing message "vaccines are awesome" and the outgoing message of "vaccines cause autism. Next, the team presented research, insights, an anti-vaxxer persona, and the strategic platform of "spread protection" which speaks to the goal everyone has despite their views on vaccines, to protect the children. Finally, the ad campaign and activation ideas were revealed, which were based on the game of telephone by either visually showing the game, or utilizing the ingoing/outgoing message distortion for headlines, one example of this is the headline "give them easels not measles". The deliverable was qualitative, and very positive, with multiple executives commenting on how well-constructed the presentation was.

Evaluation/Conclusion: The senior executives of Havas, including the global CEO Donna Murphy, gave this campaign presentation great feedback. However, one negative aspect that an executive noted was that the strategic platform of "spread protection" was not pulled through for a select few of the ads, meaning those ads would not be as effective for the campaign. Despite this, multiple executives noted that the strategic platform was incredibly strong and how emotionally compelling the copy and ad designs were. In fact, Donna Murphy stated that she would like to make this ad campaign a reality, and congratulated the team on the combination of emotion and information.

Title: Strengthening Sickle Cell Disease Management

Name: Khalil Brown

Preceptors: Direct & Project Supervisor: Ephraim Abam, Assoc. Dir. Patient Safe Responsible

Agency: Novartis, East Hanover, NJ

Purpose: To analyze how Novartis can strengthen Sickle Cell Disease management in Africa through implementing improved treatment and access strategies, and establishing a Global SCD Registry.

Significance: Sickle Cell Disease (SCD) is a highly prevalent blood disorder globally as there is about 300,000 births annually, yet perhaps 79% on infants born with SCD occurs in Sub-Saharan Africa. The management of this crisis within Sub-Saharan Africa needs to be improved upon as access to medical care and medication is well needed along with establishing more readily available data upon the disease in Africa. We look to improve upon intervention strategies, establishing a registry, and implementing a new drug geared towards preventing vaso-occlusive crisis, the most common symptom of SCD which is going through clinical trials.

Method/Approach: In the attempt to find management tactics that would serve to help tackle SCD in Africa, the study focused upon several areas that should be implemented: Crizanmulab (Novartis SCD drug), reimagining patient access with Zipline drones, and using digital technology to establish a global registry and how digital technology is the future. In Africa, the lack of screening for SCD is well- needed as no country in Africa has maintained NBS for SCD as a national health program. Lack of access to care is an issue in the delivery of health services in Africa and the use of zipline drones helps deliver medication to remote areas who don't have the adequate transportation and time to travel. Lastly, this study will show the benefits of Crizanlizumab in tackling SCD which goal is to vaso-occlusive crises, responsible for painful episodes within the body of patients.

Outcomes/Results: Initiating NBS as a national health program allows for infants to be able to seek proper medical treatment due to them not being diagnosed by NBS as they typically present symptoms during childhood, at a mean age of two years. Digital technology allows for a Global SCD Registry to be implemented in Africa, but it establishes a better management of a patient database, while monitoring key disease parameters, and allows adverse drug event reporting. As well it takes away from the burden raised upon HCPs in delivering services as reports are automatically generated, allowing the tracking of key health data such as stock reports, real-time data, alerts, patient and treatment monitoring, and geographic and demographic data. Lastly, Crizanlizumab still in clinical trials so far has shown that more than twice as many patients treated in the Phase II avoided requiring a healthcare visit.

Evaluation/Conclusion: After reviewing tactics to improve management and access strategies to tackle SCD in Africa, all serve to be good to improve upon, but there are barriers that may be in the including political barriers, socioeconomic, and stigma of the people of Africa towards HCPs. Building upon these potential barriers is vital and the MoU established with Ghana can be a stepping stone for other countries throughout Africa to follow.

Internship Abstract

Title: Identifying Food Handling Compliance Through Geographic Clusters

Name: Carol Chacon

Preceptors: Direct Supervisor: Yojana Rubiano, Public Health Educator and Inspector
                  Project Supervisor: Janet Castro, Director of North Bergen Health Department

Agency: North Bergen Health Department

Purpose: Utilize data from health inspection reports to map and analyze geographic trends in order to identify correlations on food handling issues.

Significance: Health inspectors determine an establishment's sanitary compliance based on New Jersey's sanitary guidelines (N.J.A.C. 8:24). The health inspector concludes the inspection by giving the establishment an unsatisfactory, conditional or satisfactory certificate. It was observed that the township of West New York had a higher amount of establishments be less than satisfactory as opposed to its neighboring town, North Bergen. The North Bergen Health Department wanted to map the code violations in order to determine any trends among geographical location or type of establishment.

Method/Approach: The location of the establishments were pinned on a GIS mapping application and it was classified according to the certificate it was used. Satisfactory was represented by the color green, conditional was represented by the color yellow and unsatisfactory was represented by the color red.

Outcomes/Results: Fifty inspection reports from the township of West New York and 50 inspections from North Bergen that were conducted from January 2019 till now were analyzed and mapped. Out of the 50 establishments in West New York, 23 were given a satisfactory certificate upon the initial inspection meaning there were no observation of any violation. Twenty-two establishments were given a conditional certificate meaning the inspector observed various non-life threatening violations. There were 5 establishments that were given an unsatisfactory certificate which means the owner had to close the place and cease operation. 7 establishments as of now that were given an initial conditional certificate were then handed a satisfactory after re-inspectection. In North Bergen, 49 out of the 50 establishments were given a satisfactory certificate upon first inspection and only 1 establishment received a conditional certificate.

Evaluation/Conclusion: It is important for establishments to be in compliance with New Jersey's sanitary code to prevent the spread of foodborne illnesses and contamination. It has been observed that when an establishment is being given a certificate that is not satisfactory, the inspector educates the staff on the sanitary code and what they are doing wrong. This allows the establishment to receive a satisfactory certificate after the re-inspection. Therefore, there is a lack of knowledge regarding the N.J.A.C. 8:24 and language barrier that is preventing establishments from passing inspection. It is imperative for food handlers working in restaurants to be knowledgeable regarding the sanitary code and be compliant when they are cooking and dealing with food.

https://docs.google.com/document/d/1LDkewLpo7RTxtAygRibicBO0Amp3-NL1QS2EVfYNF5k/edit?usp=sharing

Internship Abstract

Title: Comparative Analysis of Medical Marijuana Regulations per State

Name: Grace Chu

Preceptors: Sherman Hom - Project Manager

Agency: NJ Public Health Environmental and Agricultural Laboratories

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Purpose: To update the compendium of the US States medical cannabis testing regulations qualifying conditions, and previous comparative analyses to confirm and/or identify new trends, and suggest recommendations

Significance: Since the United States government prohibits cannabis, thirty-three (33) states and Washington D.C. have legalized medical cannabis programs. Thirty of thirty-three states have enacted testing regulations. According to WebMD, medical cannabis is useful as a palliative for anxiety, seizures, pain, and other debilitating conditions. Cannabis testing is important for making sure the product is free from contamination before using. Required testing includes the determination of the cannabinoid profile (potency), and the detection of contamination, such as pathogenic microorganisms, mycotoxins (fungal toxins), heavy metals, pesticides, and chemical solvents. Each program also has a unique set of qualifying conditions for patients to qualify for the program. To organize all this information, a compendium of medical cannabis regulation for each state was listed, detailing the qualifying medical conditions needed for cannabis in each state, the testing done on each product of each cannabis, and the maximum limit (level of action).

Method/Approach: Each states' April 2019 update spreadsheet, which listed the above described information was fact checked by examining the corresponding medical cannabis program website for any changes in the list of qualifying conditions and/or required testing. Each August 2018 comparative analysis was also updated. Lastly, a review of the literature identified additional metals that each state may want to include in their required testing; especially the cannabis product in vape pen cartridges.

Outcomes/Results: Some states added additional qualifying conditions, while other states modified the required testing by adding contaminant analytes to their list. The comparison results will provide a bigger picture of the direction (stasis and/or change) the states are going in terms of medical cannabis testing and regulations.

Evaluation/Conclusion: A presentation at the NJ DOH Public Health and Environmental Laboratories will be made to interested staff as a summary and analysis of the project around mid-August. There are no evaluation tools yet that have been proposed which can be a problem for the project.

Title: Scheduling Assessment/Scheduler's Boot Camp

Name: Leslie Cornejo

Preceptors: Matasha Lawson, Medical Practice Director

Agency: AtlantiCare, Egg Harbor Township, NJ

Purpose: Evaluate the provider's schedules and assess their no-show rate and productivity while creating a scheduling "boot camp" to standardize policies and procedures.

Significance: The front desk at the OB/GYN department is currently facing scheduling conflicts and dilemmas. Some medical providers are not seeing the amount of patients they are required to see on a daily basis, while others are being overbooked. The front desk schedulers lack a formal scheduling template with guidelines that indicate how each medical provider should be scheduled according to their no-show rate and productivity.

Method/Approach: An assessment of 25 medical provider's schedules who rotate between 7 different locations was performed. An analysis was conducted to collect valuable data from April to June 2019. The analysis studied how many patients are seen per provider and their "no show" rates as well as observing common trends. A front desk evaluation was also conducted to determine the daily dilemmas the schedulers face through observation of phone calls, front desk flow, and customer service. The evaluation included one-on-one interviews with the schedulers in Egg Harbor Township and schedulers who rotate amongst locations which provided a well-rounded insight of how each office differs.

Outcomes/Results: A binder was created with the intent to organize all of the valuable and updated information that all schedulers require on a daily basis. Handouts were generated from the binders which included a variety of useful information. An agenda was presented on the first scheduler's boot camp which was held on July 16th at 7:30 a.m. alongside the departmental supervisors and the Practice Director. An assortment of topics were discussed at the meeting which resulted in positive feedback from the schedulers and clinical input was given by the Certified Nurse Midwife. They were also able to express additional concerns and insight was given regarding the present obstacles the scheduler's face.

Evaluation/Conclusion: The Scheduler's Boot Camp resulted in management focusing on solving the following issues: simplifying and standardizing the self-pay sheet along with establishing a process for the schedulers to collect payment according to CPT code, a voicemail for the nurse needs to be activated in order to prevent patients calling back multiple times, Cerner (EMR) to allow appointments to be completely modified when rescheduling appointments, ensure Cerner communicates demographic updates to PowerChart (clinical portion of EMR), and to make sure the provider of the day is effectively answering messages in a timely manner. A monthly Scheduler's Boot Camp will be taking place moving forward to discuss and address future updates, dilemmas, and concerns. The schedulers and management were engaged and provided positive feedback that will ensure a more productive and efficient work environment.

Title: Success of VA MOVE Weight Management Program

Name: Elizabeth Daniel

Preceptors: Joan Vetter, MSN

Agency: East Orange VA Medical Hospital

Purpose: To assess and analyze the outcomes of the VA MOVE Weight Management program, which directs and engages veterans to make comprehensive lifestyle changes for wellness.

Significance: Prevalence of obesity has been increasing in the U. S. population including veterans who receive care through VHA. According to Pew Research Center, 27% of veterans overall and 44% of veterans who served since Sept. 11, 2001 report problems with re-entry including difficulty finding employment, housing, increased debts from medical bills, and social interactions. Because of these issues veterans are at risk of weight gain and developing unhealthy eating habits. Some health-related consequences of overweight or obesity include heart and vascular disease, sleep apnea, cancer, osteoarthritis, and many more. The VHA developed an evidence-based weight management program called MOVE to assist veterans make comprehensive lifestyle changes to achieve improvements in their health and well-being through improved nutrition, physical activity, and behavioral changes.

Method/Approach: A retrospective analysis of VA metrics derived from Electronic Health Records (EHR) was conducted. The VA metrics included attendance through 12 consecutive visits over a 12-month period indicative of making lifestyle changes. Program analysis using a questionnaire measured veterans' satisfaction with the program.

Outcomes/Results: After reviewing the VA metrics derived from the EHR with the coordinator, the VA New Jersey Health Care System 49.5% of 12 visits or more over 12 months among participants compared to the national score of 27.2%. This is indicative that the VA NJ Health Care System is consistent with more veterans making lifestyle changes. Out of 24 veterans currently in the program, 87.5% are satisfied overall, while 95.8% would definitely recommend this program to other veterans.

Evaluation/Conclusion: There is room for improvement, however overall the data shows that the success rate of the MOVE program in East Orange is in upward trend. Veterans are overall satisfied with the program and the attendance rate for the VA NJ Health Care System is 22.3 points above the VA national rate of attendance. The program is effective at reaching out to veterans who need lifestyle changes and to overall improve health and wellness.

https://drive.google.com/file/d/1snCuuo8d7UNElH6p-2947aAu5oPDS7sA/view?usp=sharing

Title:	Examining Family, Community and Population Health Literature for Family Medicine Review
Name:	Parama Das
Preceptors:	Direct Supervisor: Alfred Tallia, MD, MPH, Professor and Chair of Family Medicine and Community Health; Project Supervisor: Dorna Edwards, Program Coordinator
Agency:	Rutgers Robert Wood Johnson Medical School, Department of Family Medicine and Community Health

Purpose: To conduct a literature review on family, community, and population health in order to update content for the ninth edition of *Swanson's Family Medicine Review.*

Significance: The goal of the ninth edition of *Swanson's Family Medicine Review* is to update content from the 2017 edition to reflect the current developments in family medicine practice. The *Swanson's Family Medicine Review* serves as an effective review tool for family physicians who are preparing for the American Board of Family Medicine exam. The review highlights areas of emphasis and contains knowledge that is required for every family physician. In order to update the review, new selected readings and references have to be added.

Method/Approach: A literature review was conducted on family medicine using various search engines such as: MEDLINE, American Academy of Family Physicians, ANNALS of Family Medicine, Journal of the American Board of Family Medicine, Journal of Family Practice, ANNALS of Internal Medicine, Journal of American Medical Association, Center for Disease Control and Prevention, Agency for Healthcare Research Quality, and Cochrane Review. The articles that were included in the review were published after 2016. The OneDrive software was used to collect and share all of the relevant articles so that they could be reviewed by the family physicians. The articles were further analyzed to ensure that the content was relevant. The topics that were searched included family, community, population health, and adult medicine.

Outcomes/Results: An initial search resulted in a total of 120 peer-reviewed articles. The articles were reviewed, those that focused on diagnosis and treatment were chosen. Eighty of the 120 articles that were chosen were included for the section regarding family, community, and population health. The other 40 articles were included in the section regarding adult medicine. The family, community, population health, and adult medicine are just a few of the twelve sections that are included in the *Swanson's Family Medicine Review.*

Evaluation/Conclusion: In the ninth edition, in order to include the latest updates in family medicine a new section entitled Hospital Medicine is being added to the review. As family medicine continues to change over the years, *Swanson's Family Medicine Review* will continue to help physicians. The physicians will familiarize themselves with concepts pertaining to family medicine practice. The field of family medicine is always evolving, and the review is only updated every three years, thus many of the new adaptations to the field of family medicine are already in place by the time the newest edition of the review is published. It would be more beneficial if the review was updated on a yearly basis.

Title: Communicating across language barriers

Name: Sultane Dorvil

Preceptors: Candice Davenport, Asst. Health Officer, Public Health Nurse Supervisor/ Health Educator

Agency: Maplewood Public Health Division

Purpose: To inform, educate, and empower the Haitian community about Public Health issues using infographics and translating consumer health materials in Creole.

Significance: New Jersey is home to the fourth-largest population of Haitians in the United States. 80% of Haitians are functionally illiterate. It is important to ensure Haitian immigrants have an opportunity for proper health and wellness while residing in the United States. It is important that the Haitian community have adequate health literacy so that they can successfully access medical information and make the appropriate decisions about their health. The literate or illiterate status of immigrants should by no means define who they are; after all immigrants to the United States have come from various racial, ethnic, political, socio-economic and religious background

Method/Approach: Based on the need and the lack of use and knowledge of services various source materials were identified to be translated into Creole. Once translated and cross referenced by another person who is fluent in Creole, identification of locations that are frequented by the Haitian community is critical. Finally, having a native Creole speaker on site to Kanowitz initially is important. Hilton Branch library in Maplewood, NJ offer Adult ESOL Classes (English for Speakers of Other Languages) since 2010. Majority of ESL class attendees are Haitian. The plan was to let the students know in Haitian Creole that the Maplewood Public Health Division will be here every Thursday for the Adult Health Clinics providing a free Blood pressure reading, pulse, and weight. The second step is to distribute brochures, pamphlets, and flyers of public health issues such as mosquitoes, ticks, rats, and the summer food service program. Extra Supermarket, laundromats, Town pharmacy, and the library, is where all the Haitians work at or frequently go to for their needs. Approaching to the employees and go into details about the flyers and brochures in Creole to let the community know the public health issues and knowing what Maplewood Public Health Divisions provides for the community.

Outcomes/Results: Having a conversation with ESOL students and the employees is an example of Auditory learners. The flyers and brochures with a straightforward message in Creole and using graphics or visuals to demonstrate a hard concept is an example of Visual learners. It was found that approaching adults in the ESOL class before ending brought results with 13 students attending the Adults health clinics. Furthermore, distributing the flyers in the Creole version of the Summer food service program increase attendance among Haitians families.

Evaluation/Conclusion: People that are approached with services in their native language are more likely to use Professional interpreters improve communication, promote appropriate use of resources, and significantly increase patient and clinician satisfaction. (Karliner 2007). Uneducated Haitians do not show their lack of knowledge to non-Haitians. They tend to be more comfortable with people who do not speak English and who are also Caribbean. Individuals with lower health proficiency have difficulty accessing health education in order to make an informed choice.

Title: Polycystic Ovary Syndrome and its Importance to Reproductive Health

Name: Bianca Douglas

Preceptors: Gloria Bachmann, MD

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

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Purpose: To evaluate, existing literature, pertaining to the infertility effects and Assisted Reproductive Technology treatment (ART) of Polycystic Ovary Syndrome (PCOS) amongst diagnosed patients.

Significance: Polycystic ovary syndrome or PCOS is a hormonal disorder common among women of reproductive age. Polycystic ovary syndrome affects about 10 million people in the world. The cause is unknown however, PCOS is considered a hormonal problem. PCOS is the leading cause of female infertility and it's responsible for several symptoms that can affect the body physically and emotionally. In addition to infertility, PCOS can also lead to amenorrhea, hirsutism, obesity, and ovary enlargement. The hormones involving PCOS include androgens, insulin, and progesterone. Elevated hormones result in an abnormal cycle of gonadotropin release by the pituitary gland. Symptoms of Polycystic Ovary Syndrome involve irregular or missed periods, leading to nonovulation. Lack of an ovulation period creates the possibility of developing ovarian cysts. In turn, a build-up and causes PCOS. PCOS is still a possibility without cysts, as well; Some women do not form cysts. Weight gain, fatigue, hirsutism, acne, and hair loss are a few other symptoms. With these mentioned symptoms being common ones of other types of health disorders, it is very easy to misdiagnose PCOS.

Method/Approach: A literature review comprising various PCOS studies focusing on infertility, PCOS symptoms, obesity, and ART treatment. Most of these studies are retrospective analyses and these studies reflect a series of experimentation towards both, treatment and etiology. My research methods consist of sources from a combination of Google Scholar and Pubmed articles.

Outcomes/Results: Through researching several scholarly sources, it is noted that with proper diagnosis and treatment of Polycystic ovary syndrome, symptoms can be controlled and even, eliminated. Assisted reproductive technologies (ART), such as in-vitro fertilization, frozen embryo transfer, and intrauterine insemination can be major impacts to increasing fertility in PCOS patients. In addition to ART, drugs such as metformin, can not only help improve fertility within PCOS patients but can modify the lifestyle of overweight PCOS patients, inducing weight loss before pregnancy.

Evaluation/Conclusion: While the awareness for PCOS is increasing, there are still milestones that need to be achieved in researching PCOS and infertility effects. One milestone would be figuring out direct causes to PCOS. Aside from causation being a challenge, initiatives to educate healthcare professionals on symptoms and diagnosis should be in place. Taking preventive measures to alleviate infertility effects through planning the ART process may help with family planning. Moreover, methods for making infertility treatment readily available and cost-effective for diagnosed patients should follow.

https://docs.google.com/document/d/1R6qKhFltjxq8tRtXrBuLpik_6snXIdNJ9pO7d_3QbE8/edit

Title: Profitability Analysis of Principal Diagnoses

Name: Maha Elcanam

Preceptors: James Zauner, LNHA, Administrator

Agency: Parker Life Org

Purpose: To analyze the financial data of medical conditions of short-stay patients, and determine if treatment results in a profit or loss.

Significance: The aging population in the United States is creating a greater need for long-term care services. An approximate sixty-six percent of older adults are expected to reside in long-term care facilities, such as nursing homes, by 2040 (Finkelstein et al., 2012). However, nursing homes face various threats, such as competitors and rising costs of care, that impact their ability to stay open. Weech-Maldonado et al. (2019), found that financial performance can be an indicator of the quality of care and overall performance of nursing homes.

Method/Approach: An analysis of financial data for short-stay patients receiving care at Parker at Somerset from November 2018 to April 2019 was completed. First, a list of 220 short-stay patients was narrowed down to 57 patients by determining the six most common reasons for admission. Then, revenue was calculated through the length of stay and RUG score (daily payment) for each patient. Next, expenses were calculated by reviewing therapy, pharmacy, lab work, x-ray, and supplies costs for each patient. Additionally, a daily rate between $375 to $425 for room and board was included in the determination of expenses to account for factors such as labor and other overhead. Lastly, this information was used to determine if Parker at Somerset made a profit while treating a patient or lost money.

Outcomes/Results: From November 2018 to April 2019, short-stay patients received admission for heart failure, pneumonia, sepsis, UTIs, and surgical aftercare in two categories. For all six of the conditions, Parker at Somerset patients who were sampled for analysis generated an overall profit as follows. $3,926.42 for heart failure patients, $2,338.06 for patients receiving care after joint replacements, $4,667.53 for patients with pneumonia, $7,397.58 for patients with sepsis, $1,432.89 for patients receiving care after surgery on the circulatory system, and $14,180.44 treating UTI patients.

Evaluation/Conclusion: While expenses do not outweigh revenue for the facility, there could be ways to reduce them. Many services for patients such as therapy, pharmacy, and lab-work are provided by external companies. The facility could improve its financial performance by hiring staff to provide these resources in-house, or partnering with new and potentially less expensive companies.

Title: Comparing the Effectiveness of Varying Recruitment Methodologies for a Newark-Based HIV Study

Name: Wilhelm Esguerra

Preceptors: Project Supervisor: Kristen D. Krause, MPH, Center Manager at CHIBPS

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

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Purpose: To analyze which methods of recruiting gay and bisexual men, MSM (Men who have sex with men), and Trans women between the ages of 18-25 are most effective.

Significance: Members of the LBGTQ+ community face unique risk factors concerning HIV. It is crucial to know where and how to reach these communities, especially regarding matters such as HIV prevention and treatment. There will likely be more studies exploring different areas of this topic within the same demographic, therefore establishing effective strategies now can make recruitment for studies easier in the future. The LGBTQ community is diverse and there is not one location where everyone congregates. This study was a Newark pilot of the same study conducted in NYC where it was much easier to find areas frequented by the eligible demographic. Successful recruiting helps the community, because as part of our study, participants receive a free, rapid HIV test on-site.

Method/Approach: Potential participants were asked "Where did you hear about our study?" Responses were recorded and organized in Excel into categories based on the response. These categories included: hearing of our study through a community center, an app/online source, a family/friend, at an LGBTQ+ event, at a doctor's/clinic/ or hospital, or through a street Flyer + other source.

Outcomes/Results: As of August 9, 2019, we received a total of 146 responses (N=146). Most individuals (50, 34.2%) heard of our study through a community center. The category that received the second most responses (34, 23.2%) was individuals hearing about our study through flyers+other, where "other" refers to palm cards or pamphlets about our study. These were posted throughout the city of Newark near our center. App/online received 13 (8.9%), Family/friend received 21 (14.4%), LGBTQ event received 19 (13%), and doctor's/clinic/hospital received 9 (6.2%).

Evaluation/Conclusion: A large portion of the study involved our close partnership with the African American Office of Gay Concerns, where we hosted our assessments (where participants come in to complete our study). Also nearby, was the Hyacinth Aids Foundation and other LGBTQ centers. While flyers+other received the second most responses, no single flyer location received the most participants. This made it hard to "pinpoint" optimal locations. Furthermore, we were somewhat limited by walking, transportation, and safety. From our results, it may be lucrative to expand our flyer recruitment efforts throughout a larger part of Newark and also maintain recruitment at community centers.

Title: Outreach Initiative for Childhood Vaccine Compliance

Name: Emily Esposito

Preceptors: Direct/Project Supervisor: Dianna Coles, Population Health/ HEDIS Manager

Agency: US Family Health Plan, New York City

Purpose: To analyze non-compliance rates of childhood immunizations in a vaccine-compliant population, and perform outreach to improve specific vaccine compliance for HEDIS reporting year 2019.

Significance: Full-series vaccines in early childhood prevent nearly 20 million illnesses within each US birth cohort. Evidence suggests that there was a decline in mortality rates associated with a series of illnesses such as diphtheria (100%), tetanus (99.2%) and pertussis (99.3%) due to the use of the 4-dose, childhood vaccination, DTaP. (Ventola, 2016). Hesitancy to administer full-dose, childhood vaccines (e.g., lack of time, misinformation, miseducation, number/ age of children) has led to a resurgence of many diseases. This evidence indicates a gap relating to the understanding of the importance of completing *all* full-series, childhood vaccinations in accordance with the immunization schedule for children, ages 0 - 2, recommended by the CDC. Evidence-based educational outreach will be used to address sub measure gaps within a vaccine-complaint population.

Method/Approach: A full report of HEDIS measures (reporting year 2018) was assessed to understand which vaccines for children, ages 0-2, were least/ most successful at USFHP. Data for a population of 118 members, ages 0-2, was obtained based on HEDIS measurement tools and compliance hits within USFHP. Numerator compliance was compiled, rates were calculated, and scores derived among the sub measures. All sub measures (DTap, Hep A, Hep B, HiB, Influenza, IPV, MMR, RV, PCV, and VZV) were weighed against the NCQA benchmark of 50 - 75% compliance.

Outcomes/Results: From the 2018 denominator (n=118) ages 0-2, no member was found to be excluded from the data (e.g., pre-existing medical conditions, provider recommendations). The sub measures noting the full-series vaccinations for DTap, Hep B, and RV scored the lowest within the compliant population of members (HEDIS reporting year 2018). Sixty-one members (51.7%) were compliant for the full-series of sub measure DTap, 15 members (12.7%) were compliant for the full-series of Hep B, and 52 members (44.1%) were compliant for the full-series of RV. The remaining sub measures scored in adherence with NCQA benchmarks.

Evaluation/Conclusion: To close the compliance gap for the next HEDIS reporting year 2019, targeted outreach will be conducted within a sample (n = 75) from the non-compliant population of lowest scoring sub measures (DTaP, Hep B and RV). New educational materials and letter reminders will be distributed, and follow-up phone-calls will be made in order to (1) underscore the value of these specific vaccines, especially in early childhood, and (2) highlight the ways in which primary caregivers can drive the progress of disease immunity within their families. Monitoring will continue to measure improvements in childhood vaccine compliance for HEDIS reporting year 2019, and all future HEDIS seasons at USFHP.

Title: A Training Program for Respite Workers serving Children with Developmental Disabilities

Name: Crystal Ezeuka

Preceptors: Jessique DeJesus - Client Services Admin
                   Shonda Green - Client Services Admin

Agency: Neuropath Behavioral Healthcare, Location

Purpose: Determining ways to efficiently train incoming Respite workers on how to properly engage with children with developmental disabilities.

Significance: According to the Centers for Disease Control (CDC), developmental disabilities are a group of conditions due to an impairment in physical, learning, language, or behavior areas. Developmental Disabilities occur regardless of one's: race, ethnicity, socioeconomic class, etc. Even though there are four main types of developmental disorders: nervous system disabilities, sensory related disabilities, metabolic disabilities and degenerative disorders; within these four groups there are several subsets of disabilities. This project will not only reflect the importance of Respite health workers to thoroughly learn and educate themselves of the existing developmental disabilities, but also learn the best practices when serving children before going out on their field of work. Developmental Disabilities affects 1 out of every 6 U.S. child (15%).

Methods/Approach: A fact sheet providing best practices and important information for respite workers serving children with developmental disabilities will be developed. A literature search on best practices for handling disabled children will be undertaken and a one page fact sheet will be distributed to new and current respite workers. This factsheet will be given along with the other documents given during orientation. This process included: 1) identification of success barriers within the job, 2) a literature search, 3) evaluation of the data, 4) analysis of the data, and 5) assembly of the factsheet 6) Pre-test of the factsheet 7) approval and distribution

Outcomes/Results: Upon receipt of the fact sheet, supervisor will be able to edit change before the fact sheet is distributed to all current and new Respite workers during Training orientation.

Evaluations/Conclusions
An evaluation followup given via online survey or phone call will be given to some of the current respite workers to see how helpful the factsheet was.

Title: BUILD 3.0 Health Challenge: New Brunswick Healthy Housing Initiative

Name: Alisa Fatima

Preceptors: Program Manager: Camilla Comer-Carruthers

Agency: Robert Wood Johnson Fitness and Wellness

Purpose: To analyze data from health assessments conducted in New Brunswick for the New Brunswick Health Housing Initiative and use it to apply for the BUILD 3.0 grant.

Significance: New Brunswick is a city with health issues stemming from its industrial past, aging infrastructure, and housing stock, and a population with high levels of poverty (31%) and low education levels (34%). Data collected through home assessments have demonstrated that 85% of households are tenant occupied. Approximately 85.2% of people of low income and 67.7% of moderate income reported that their households had at least one of the four housing problems classified by the U.S Department of Housing and Urban Development including: lacking complete kitchen and/or plumbing facilities, and overcrowdedness. This grant would provide the funds needed to educate these families on their tenant rights, help fix their housing issues, and create a community outreach program where houses will be regularly checked to make sure they are safe to live in.

Method/Approach: Home assessments will be done by Community Health Ambassadors (CHAs) to collect the data on unsafe housing. Once the raw data is collected, it will be translated into a report used throughout weekly meetings that will aid in the grant drafting. Community partners and hospital members will come together in these meetings to discuss what information needs to be put into the grant. SMART goals will be proposed as to how each step for healthier homes will be taken. Specifically, with the help of logic models, the inputs, activities, outputs, and outcomes, will be evaluated. The logic model will be constantly revised in order to meet the requirements for the BUILD 3.0 grant. After data analysis, budget approval, and completion of the final logic model, the final draft for the BUILD 3.0 grant proposal will be written and submitted by July, 25 2019.

Outcomes/Results: Overall, the health assessments, logic model, and grant proposal were successful. Vital issues such as asthma triggers, safety issues, and tenant landlord distrust were found and the steps to alleviate these issues were also discussed in writing. Through constant re-evaluation, meetings, and data analysis, the information in the grant proposal was deemed important. It provided a layout for how the grant would be used and how each area of concern would be targeted in order to conduct the New Brunswick Health Housing Initiative.

Evaluation/Conclusion: The conclusion for this planning phase was the submission of the grant proposal and to await the decision of the grant committee.

Title: Patient Perception on Health-Related Social Needs Risk Screening Tool

Name: Tatiana Fishchuk

Preceptors: Christopher Rogers - Program Manager

Agency: Hackensack Meridian Health - Accountable Health Community Program (AHC)

Purpose: To understand patient's perception and experience of the evaluation Accountable Health Communities (AHC) screening tool.

Significance: The Accountable Health Communities Program funded by the Centers for Medicare and Medicaid Services identifies health-related social needs of their beneficiaries through a screening tool to assess needs in five domains: housing instability, food insecurity, transportation needs, utility needs and interpersonal safety. The results from this screening tool can be used to notify a patient's treatment plan as well as make referrals to community services. Creation of HRSN Screening Tool Follow Up Survey will help to identify patient's perceptions, usability, accessibility and mode of current version of questionnaire tool.

Method/Approach: This study was exempt from Hackensack University Medical Center's IRB. A literature review conducted first. The four domains identified were: perceptions, accessibility, usability and mode. Following the Likert-scale compliance, the set of questions was created to conduct phone mode survey. The study population included 2000 Medicare/Medicaid beneficiaries obtained through Healthify's electronic database from Bergan and Hudson counties who have completed HRSN Screening Tool within the past year. Responses were recorded into Excel spreadsheets and later transferred to SPSS for further data analysis.

Outcomes/Results: Out of 23 patients that were included in my sample, 65% were Medicare beneficiaries and 35% Medicaid 60.9% were age >65. Eight (34.8%) rated the Screening Tool's ability to identify their HRSN as very good, 9 (39.1%) rated as good, 5 patients (21.7%) rated as acceptable and 1 (4.3%) stated as very poor. Ten (43.5%) found Screening Tool's questions absolutely appropriate, 11 (47.8%) found it appropriate, 1 (4.3%) said inappropriate, and 1 (4.3%) found it absolutely inappropriate. For understandability of the Screening Tool 12 (52.2%) said it was very easy to understand, 9 (39.1%) found it easy to understand and 2 (8.7%) said it was neutral.

Evaluation/Conclusion: Impact of these results signifies that the majority of patients rated Screening Tool's ability to identify their HRSN as good and found questions on the Screening Tool appropriate and easy to understand. Nonetheless, some limitations included some patients did not answer the phone and some of them didn't remember completing HRSN Screening. In conclusion, this project evidently shows that the majority of patients found usability and accessibility of the Accountable Health Communities Health-Related Social Needs Screening Tool successful.

Title:	Business Development and Network Connection Building
Name:	Emily Flores
Preceptors:	Direct Supervisor: Jacquiline Wolfson, CEO
Agency:	Shule Foundation

Purpose: To research funding opportunities; and expand information on potential partnerships

Significance: Shule is hoping to empower children living on the streets with the skills training and education they need to end the cycle of poverty within their family through several of their main project aimed at underage, at-risk youth. Currently, the budgets for the two youth geared projects are a reflection of the number of partnerships Shule is currently connected with. Therefore, procuring more partnerships and expanding our available platforms and initiative plans to provide education and other services to this population, the Shule foundation is striving to fulfill these goals.

Method/Approach: A review was conducted on the current partnerships and investment service companies involved with Shule on capabilities, services, objected, and potential long-run potential. Data from each was then recorded and organized on an excel spreadsheet to be compared. Meanwhile, new data on potential partner foundations were organized in excel, based on the criteria used to conduct the review on the existing partnerships. Additional research time was used to explore new platforms such as supplementary resources and crowdfunders to raise project budgets.

Outcomes/Results: Of the seven main partnerships, 1 was found to hold a special interest in education, health, and social development, acting as a consultant for nonprofits. 2 were agriculturally involved, lending to Shule's Miche Project. 1 Partner Program was an investment service while the rest offered other supporting services. Of potential partnerships found, 9 in total were analyzed for compatibility with the Shule Foundation. Finally, a crowdfunding service organization was chosen for its current connections to Uganda-based non-profit projects.

Evaluation/Conclusion: From the analysis of Shule's current partnerships, it was decided that partnerships geared towards consultancy and investments towards mission projects were the more desirable since they are more integral in completing the core missions of Shule. Furthermore, in accordance to what we analyzed from the potential partnership organizations, we found that those with the most potential had several factors in common: (a) services located primarily or in partnership with South Africa/Uganda, (b) interest in working with nonprofits, (c) Mission works related to youth education or health. This can be used to locate further partnerships in the future. Further evaluation and network among potential partnerships will be conducted in order to ensure long-term communications are established.

Title: Community Health Needs Intervention

Name: Olivia Foran, Student Intern

Preceptors: Dr. Rita Musanti

Agency: The Rutgers Cancer Institute of New Jersey

Purpose: To retrieve and analyze the NJ Healthcare provider's community assessment reports for content pertinent to Lung cancer care.

Significance: The American Cancer Society maintains screening recommendations and guidelines for early detection of cancer and supports that regular cancer screening increases the chance to detect disease early, when it is most likely to be treatable. Cape May and Salem County have been identified as two New Jersey counties that have higher lung cancer incidence and mortality rates. In Cape May County, the lung cancer incidence rate per 100,000 cases is 79.3 compared to New Jersey's rate of 57.3. In Salem County, the lung cancer incidence rate is 82. The alarmingly high cancer incidence and mortality rates in Salem and Cape May County suggest that the existing screening and health-related programs are not effective and need change implemented immediately.

Method/Approach: Information was collected from the New Jersey Cancer Registry, New Jersey Department of Health, Center for Disease Control and NCCN guidelines. This information was used to develop community profiles to inform health providers on available cancer screening and smoking cessation programs. These findings were used to create intervention models to engage people in health-related behaviors and to implement interventions to targeted communities.

Outcomes/Results: Information collected from the New Jersey Department of Health was compiled into community health profiles for each county. These profiles included information about community demographics, lung cancer incidence and mortality rates and available cancer health-related programs. This synthesis of information suggested that Salem and Cape May counties suffer from a lack of smoking cessation programs resources and lung cancer screening programs. In both counties, most lung cancer patients are diagnosed in the distant stage when it is more difficult to treat which indicates that people are not being regularly screened to find cancer in earlier stages.

Evaluation/Conclusion: Cape May and Salem County's elevated lung cancer incidence and mortality rates compared with the rest of the state of New Jersey indicate that there are inadequate smoking cessation programs due to the higher prevalence and incidence of lung cancer in these regions. It also indicates there is insufficient lung cancer screening programs to detect cancer in earlier stages before it spreads to distant areas in the body. Smoking cessation programs must be tailored to the specific communities to address the individual barriers involved with quitting tobacco. Cancer screening programs must be implemented and advertised by all healthcare providers.

Internship Abstract

Title: The effectiveness of summer camps in promoting healthy behavior in children.

Name: Mary Girgis

Preceptors: Direct Supervisor: Jasmin Melendez, Director of Youth Services

Agency: Puerto Rican Association For Human Development

Purpose: To implement summer programs aimed at promoting a healthy lifestyle in children.

Significance: This project plays an important role in creating a healthier future for our children. Summer programs support this movement by providing healthy food, promoting physical activity, and teaching hygiene behaviours to children. Not only does summer camps promote physical activity, but also they in turn decrease the sedentary time spent by the children. This combination of physical activity with healthy eating habits then lead to a better health including beneficial cardiovascular improvement.

Method/Approach: A post-questionnaire will be administered to the thirty kids participating at the PRADH summer camp. The forty kids range between 6-12 years old. The questionnaire will ask them questions about their physical activity and their eating habits, as well as their hygiene habits in comparison to the beginning of camp. At this camp we take the kids outside for physical activity for two hours in the morning and then an additional hour after lunch time. In addition, we provide the kids with healthy food options at breakfast time, lunch time and snack time. We also teach them hygiene habits; necessity of washing their hands and cleaning up after themselves.

Outcomes/Results: After Administering the questionnaire to the thirty kids is was discovered that all of the thirty kids had answered the question about increased physical activity saying that they participated in physical activity more than sixty minutes a day as compared to less than thirty minutes prior to camp. As for the question about how often they ate fruits per day twenty-one of them said they ate fruits more than once a day. For vegetables nineteen of them wrote that they eat vegetables more than once a day. In discussion with the kids after the survey about their thoughts on this project and the influence of the camp, many of them said that they were more physically active and enjoyed the physical activity more than spending time on electronics.

Evaluation/Conclusion: Children's enrollment in a summer camp can influence them to adopt a more healthy lifestyle choices. As a second step to this program a pre-test before camp starts can be administered to the children to get an assessment of where they were before beginning the camp. In conclusion, summer camp can influence children to lead healthier lives.

https://docs.google.com/document/d/1tbt_uZpMsFiu7EqHbiHPuxKFASxHsiKcY_8iVny4CEI/edit?usp=sharing

Title: Assessing health outcomes of patients with spinal stenosis to see which chiropractic
                  treatments work more efficiently

Name: Marissa Hamilton

Preceptors: Rachel Cortese- Physical Therapist

Agency: Northeast Spine and Sports Medicine

Purpose: To track and analyze which treatments best alleviate symptoms associated with spinal stenosis, and ultimately improve the quality of mental, physical, and emotional health of those suffering from this degenerative disease.

Significance: At Northeast Spine and Sports Medicine, the population consists of patients from the ages of eight to eighty-five. Most of the patients at our office are young athletes with different sport-related injuries. Whereas, about 35% of the population are adults who share similar complaints of low back pain and spinal stenosis. If left untreated, spinal stenosis can lead to significant and permanent nerve damage. Myelopathy symptoms may affect one's gait, balance, and fine motor skills, including dexterity and grip strength. Working to improve one's strength and range of motion can help improve pain while walking. Each of the different treatment techniques practiced at the office focuses on healing a patient with spinal stenosis. With spinal and joint manipulation, chiropractic services are the primary choice for low back pain and stenosis.

Method/Approach: Observing the patients' progress first hand, enables a better understanding of which therapy is most effective. The three most common techniques are lumbar traction, cold laser, and flexion distraction. The purpose of lumbar traction is to take the pressure off the discs, nerves, and spinal cord by relieving symptoms of numbness in the legs and feet. Cold laser therapy is used to reduce inflammation and swelling while strengthening damaged tissue. Flexion-distraction is a technique primarily aimed at increasing spinal motion by opening up the vertebral foramen which releases nerves compression. By using effective communication and developing questions pointed towards the patients' progression, will obtain the answers. As well as verbal communication, it is important to observe the patients non-verbal communication and body language. Being in communication with the therapist and chiropractor for more specific, detailed information on the progression and recovery process of the patient will be beneficial.

Outcomes/Results: The order of treatment therapies that best aid the progression of patient's health with spinal stenosis is flexion-distraction listed as number one, lumbar traction, and then cold laser. Spinal stenosis is graded by the following: mild-moderate stenosis and moderate-severe stenosis. For those with mild-moderate stenosis, the three treatment therapies work 100% of the time and patient's feel relief after every visit. Whereas, those with moderate-severe stenosis, it is harder to treat because of how progressed the disease is. Of the 35 people with spinal stenosis, about 30% have mild-moderate, while only 5% have moderate-severe.

Evaluation/Conclusion: Positive results will be associated through individual surveys and MRI scans. A decrease in symptoms with a progression of spine motion due to the openings of the vertebral foramen contributes to the successful health of the individual. With this degenerative disease, many individuals feel helpless and depressed due to the physical inabilities brought on by this disease. These therapy techniques help to improve not only one's physical health but emotional and mental health as well.

Internship Abstract

Title: How Students Justify Educational Debts While Enrolling in Medicine

Name: Sara Haque

Preceptors: H. Liesel Copeland, Assistant Dean of Admissions

Agency: Robert Wood Johnson Medical School Office of Admissions

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Purpose: To analyze the student population at Robert Wood Johnson Medical School who are considered disadvantaged in order to qualify for the SDS scholarship/funding (Scholars with Disadvantaged Students) [funding requires that the number of qualified students has to be 15% or more].

Significance: The student population project being conducted here at RWJMS is to better understand whether New Jersey's use of high school data relates to application data of need. It also gathers data on how college students with need think about educational debt. By having a better sense of both student's rationalizations and measures of need, Rutgers University can develop programs to assist future students who have financial need in deciding how much debt is manageable. Those who do borrow for medical school face big loans: the median debt of graduating students was $200,000 in 2018. At private schools, 21% of students have debt of $300,000 or more. The average four-year cost for public school students is $243,902. For private school students, the cost is $322,767. (AAMC). Medical students can take anywhere from 15-20 years to pay off their debt.

Method/Approach: To first conduct this study, an analysis had to be done to see what can make a high school qualify to be considered apart of the NJ SNAP program. Code application for the data as to high need, some need, or no need. The numbers will be compared in the three categories to the numbers that show up as needed by high school alone. After, there will be interviews conducted with the students who do have needs. Furthermore, there will be an analyzation of the trends in how medical students justify their need of loans, as well as what resources they use to manage their debt.

Outcomes/Results: A list of prerequisites is used to measure the estimates of need, whether it be if the students are first generation students, need a Pell grant, or their family received federal state assistance during their childhood. Students who qualify for two or more of these factors will then be asked to suggest methods of communicating with prospective applicants about debt and how to manage it. Of the 166 medical students (class of 2019) at RWJMS, 40 of them have qualified to be educationally and socioeconomically disadvantaged. This is about 24% of the class. Because the need was to be 15% and higher RWJMS qualifies and now will apply for the funding.

Evaluation/Conclusion: The program that Rutgers will begin with an accepted student reception where financial aid presents and can conduct a survey at the end of the reception to see if the messages make students feel better compared to the ones who only receive the standard communication pamphlets.

Title: Telehealth Impact on Heart Failure Patients

Name: Megan Harrison

Preceptors: Deana Weiser, Associate Director

Agency: Bayada Home Health Care, site location

Purpose: To evaluate the pilot telehealth program for heart failure patients with Medicare insurance in Camden County, New Jersey discharging from Cooper University Health Care.

Significance: Camden County residents who are suffering from Congestive Heart Failure (CHF) are admitted to Cooper University Health Care facilities and then being discharged. Bayada Home Health Care is partnered with Cooper to receive these clients after being discharged in order to provide these clients with home telehealth care. Cooper is only referring clients with Medicare insurance at this point.

Method/Approach: A Bayada nurse sets up the client with a telehealth device, called Vivify. This includes a pulse ox, scale, and blood pressure device. The client is required to measure their pulse, weight, and BP every day and the information is uploaded to a tablet. This information is then monitored by a Bayada nurse who is in charge of all of the client information.

Outcomes/Results: The compliance rate is at 87% out of 11 patients in the program. This means that over a 60-day episode period, 87% of the clients are providing Bayada with the information needed on a daily basis. The average age for a client is 77 years old. Given their age and unfamiliarity with the technology, the compliance is rather high. There have been no rehospitalizations, which is a major concern for both Cooper and Bayada.

Evaluation/Conclusion: This program has been very successful given the small amount of client information that has been gathered. The program has gone on since February and it is clear to see that no harm is being done by this program. Cooper granted Bayada with 20 total Vivify telehealth devices. It was a mistake for Bayada to not utilize every single one of the devices to gather more data. The device is set up well, at a fifth grade reading level available in English and Spanish, and large font. This program will be more successful if Bayada uses the full set of telehealth devices given.

Title: Updating Stallion Wealth Management's AML Policy

Name: Taylor Hawkins

Preceptors: Marc Oliver, Chief Compliance Officer

Agency: Stallion Wealth Management Inc.

Purpose: To detect various money laundering schemes through federal regulations and Stallion Wealth Management's Anti-Money Laundering policies.

Significance: The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act) of 2011 initially came in response to the 9/11 terrorist attacks. The current national (and global) AML laws are heavily predicated from the 9/11 attacks and the investigations on how the terrorist networks were financed, and the need for heightened reviews of the various forms of financial transactions and the parties involved. Through offshore accounts, layering and wire transfers to conceal the money's path, fraudulent identification documents, and shell banks, financiers were funding terrorist groups without facing any consequences. Today, these policies are enforced on all types of financial institutions including banks, and broker dealers like Stallion Wealth Management.

Method/Approach: All new changes to Anti-Money Laundering federal policy made in 2019 were recorded. The current Stallion Wealth Management Anti-Money Laundering policy was reviewed. Compared the two policies noting any missing elements.

Outcomes/Results: After extensive research of various regulatory and governmental web sources, I have found that though there have been recommendations to Congress there have been no new or newly]amended Anti-Money Laundering policies released in 2019. However, I did notice an increase in fines between the 2017-18 Fiscal Year and the 2018-19 Fiscal Year. The 2018-19 FY showed a 45% increase in the combined cost of fines given out by regulators to financial institutions. 2017-18 FY totaled $2 billion in fines, whereas 2018-19 FY totaled $2.9 billion. The majority of these fines were in response to compliance failures. One example of these compliance failures comes from Deutsche Bank. The financial institution's participation in a $10 billion money-laundering scheme with Russia. Deutsche Bank's willful blindness to its Russian clients moving large sums of money into offshore accounts gained the financial institution a record fine of $630 million. Another example comes from Morgan Stanley. The FINRA fined Morgan Stanley $10 million for their lack of an Anti-Money Laundering program which complied with Bank Secrecy Act requirements. Although there haven't been any recent changes made to AML policy on the federal level, federal regulators have used penalization to further discourage financial institutions from ignoring AML requirements under the Bank Secrecy Act and the USA PATRIOT Act.

Evaluation/Conclusion: The process of researching for this assignment was pretty difficult because there aren't just policies to consider, but also amendments to former policies. My limited time frame made it slightly difficult to find any regulatory updates because these changes are made on a minimal, and as needed basis. Although there weren't any regulatory updates made in 2019, many financial institutions were severely penalized for their negligence of current policies.

Internship Abstract

Title: Trauma Department History and Review

Name: Laurie Herrick

Preceptors: Diana Starace, Injury Prevention Coordinator
                  Tim Murphy, MSN, RN, CEN, TCRN, FAEN , PI Coordinator, Trauma & Injury Prevention

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

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Purpose: To collect and analyze documents regarding the development of the Level 1 Trauma Center at the Robert Wood Johnson University Hospital.

Significance: Trauma Centers in the United States are identified through a verification and designation process. There are different Levels (I-V) based on the resources available and the number of patients that the Trauma Center treats and admits on a yearly basis. Robert Wood Johnson University Hospital is a Level 1 Trauma Center for adults and Level 2 for pediatrics. The hospital cares for approximately 2700 trauma patients annually. All information regarding the trauma verification and designation process for Robert Wood Johnson University Hospital was not easily accessible or protected for long term preservation. Compiling all the historical documents into chronological order, making a summary outline and scanning documents into one digital database allows for information to be easily accessible for future reference.

Method/Approach: The first step was to collect data from the initial discussion of becoming a Level 1 Trauma Center to the time when the verification and designation processes were initially completed and to review the verification site visits that occur every three years. This included site visit notes, correspondence, minutes to meetings and newspaper articles. Then the data was sorted by chronological order. Next, all files were carefully reviewed for relevance in the trauma designation and verification process. All important data was used to create a summary outline. Lastly, all documents were scanned to create one file.

Outcomes/Results: All available files were sorted starting with the year 1984. Significant dates, names and events were documented and used to create a chronological summary outline. A digital database of files was created.

Evaluation/Conclusion: If any additional information is located, the summary outline should be updated and the files scanned into the database. In the future, there may be plans to reach out to physicians and administrative staff included in the outline regarding the establishment of the Trauma Center.

Title: Development of Management and Early Professional Shadow Board in IBM Security

Name: Sarah Hertz

Preceptors: Theresa Krupa, Professional Development Manager - IBM Security Services
Janak Khilani, Managing Consultant - IBM Security Services

Agency: IBM North Castle - Armonk, New York

Purpose: To better connect leaders and management to IBM Security early professionals in an attempt to get new hires utilized effectively and provide youthful insight to seasoned security professionals.

Significance: The internal culture at IBM, and particularly, in IBM Security, has shifted its focus from hiring and onboarding seasoned security professionals to having a vast array of talent. With the development of program initiatives, including the Cybersecurity Early Professional Program, IBM Security is developing a culture of diversity in terms of experience and perspective. The goal of the shadow board is to give early professionals the opportunity to influence what seasoned employees in IBM Security are doing and contribute to any decisions that are being made. The establishment and implementation of a shadow board will contribute greatly to the culture shift and better incorporate IBM's 1-3-9 values into the security profession for those recently entering the field.

Method/Approach: Interviews with new hires are conducted to evaluate the potential effectiveness of the IBM Security Share Board. New hires vary in age but have all begun a career at IBM within the last twelve months. There will be approximately thirty participants from IBM Security interviewed and evaluated in order to determine the best method for better engaging new hires with seasoned security professionals. The interviews will require respondents to answer five closed-ended questions regarding the implementation of the program, its inclusions, and how effective they perceive a Share Board to be. The anticipated responses are expected to favor the creation of a Share Board specific to IBM Security.

Outcomes/Results: The survey yielded 26 responses from early professionals in the United States. 80.8% of respondents believe that the IBM Security Shadow Board would be a successful initiative, and 84.6% of new hires would benefit from its implementation. 53.8% of IBM Security's new hires hope that the program will give them additional shadowing opportunities, and 26.9% seek a mentor/mentee relationship with seasoned security professionals. Nearly half of the respondents agree that the implementation of the IBM Security Shadow Board will give new hires the opportunity to grow substantially while also contributing to the overall success of the business unit.

Evaluation/Conclusion: The implementation of the IBM Security Shadow Board would be an initiative that greatly impacts the growth and development of new hires. A survey sent to seasoned security professionals would confirm its benefit to this class of employees. Moreover, a larger sample size that includes early professionals from other locales in North America would provide a comprehensive overview of the effectiveness of this initiative throughout this geography. New hires will be assigned a mentor from the business unit over the next month to assist in their professional growth.

Title: Research Potential for Hospital-led Housing Projects and Organize "Healthy Homes, Healthy Communities" Summit

Name: Leah Hunt

Preceptors: Ms. Sharon Barker, COO

Agency: The Housing and Community Development Network of New Jersey

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Purpose: To analyze NJ non-profit hospitals in order to aid in the determination of which are the best candidates for hospital-based housing partnerships and community development initiatives.

Significance: According to the Department of Housing and Urban Development, New Jersey had about 9,300 homeless individuals in 2018, of which 1,200 were chronically homeless. Last summer, New Jersey's Housing and Mortgage Finance Agency announced a $12 million investment to partner with hospitals that want to initiate affordable housing programs, and they are still seeking applicants. As hospital-led housing first programs in other states have proven, it costs far less to house a homeless individual for a year than it does to pay for their preventable emergency room visits. It can also be more effective in encouraging self-sufficiency than imposing sobriety or employment prerequisites on housing.

Method/Approach: Using the Community Health Needs Assessments (CHNAs) produced every three years by each non- profit hospital in New Jersey, a spreadsheet was created of the hospitals' identified needs and whether any relate to housing or community development. A map was also produced, displaying the location of each major (not psychiatric or rehabilitative) hospital in the state and color-coded the seven large-scale systems. These materials will be used to determine which hospital systems are the best candidates with which to collaborate. These maps and the information gathered have been utilized and well received at a meeting between the agency's CEO and COO and a grant officer from the Robert Wood Johnson Foundation.

Outcomes/Results: Robert Wood Johnson - Barnabas Health is an obvious candidate for a housing program, due to the system's pre-existing ties to the Network and its one-unit housing program in Somerset and plans for housing in the Newark area. Research also revealed that Jersey City Medical Center and Hoboken University Medical Center have already partnered for a pilot Housing First program and would likely be interested in expanding. Virtua seems primed for such a project because the system has implemented Housing First programs in other states. Otherwise, it is too soon to gauge the serious interest of hospital systems.

Evaluation/Conclusion: The background analysis of Community Health Needs Assessments and the creation of NJ hospital system maps will be useful tools in the determination of which hospital systems could pioneer large- scale hospital-based housing in the state and create healthier homes and communities.

Title: More Efficient Transportation Methods to and from the Hospital

Name: Alia Ibrahim

Preceptors: Patricia Richards, *Director, Director, CMS Innovations & Value-Based Programs*

Agency: Saint Peter's University Hospital

Purpose: To provide uniform and scalable transportation services to specific departments in Saint Peter's University Hospital.

Significance: About 3.6 million Americans are unable to make it to their medical appointments due to transportation barriers. That number is equal to 67% of any given population sample. Within the low income population 24%-51% state that they miss or reschedule their appointment because of unreliable transportation service. Efforts have been made by Medicare services to prevent transportation barriers to healthcare by reimbursing health care organizations for Non-emergency Medical Transportation (NEMT) expenses and yet complications still exist. On October of 2018 SPUH entered a service agreement with their current vendor. Due to several operational inefficiencies, it was decided to reevaluate and compare services to other vendors in order to provide their patients with the most reliable service.

Method/Approach: To counteract this issue, a review was done on all patient rides to date by department. This review included a comparison of cancellation rates of the current vendor to the prospective vendor and calculating the cost per ride related to reimbursement for patient visit compared to an estimated projection of prospective vendor. In addition the no show rates have been tracked for Wound Care centers in New Brunswick and Monroe and assumptions based on cancellation rates will be made.

Outcomes/Results: Of the total number of rides (n=944) in both the wound care and sports medicine departments, there were 50 unique patients. Of those rides, 892 were Lyft vehicles and 52 were wheelchair enabled vehicles. The cancellation rate for the current vendor for the aforementioned total number of rides was 26% in comparison to the prospective vendors 1.04% overall cancellation rate.

Evaluation/Conclusion: The high rate of cancellations under the current vendor, which resulted in patient and staff dissatisfaction, is due to the total lack of control the current vendor has over rideshare drivers. It is believed that this would be mitigated by partnering with a company that owns their own fleet of providers. However, this does not yet exist in the market for Non-Emergency Medical Transportation. As such, the prospective vendor seems better equipped to mitigate cancellations through a stop-gap system they created in real time to intervene in the event a problem arises.
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Title: Mandela Washington Leadership Fellowship- Program Assistant

Name: Chisomaga Emmanuel Igbokwe

Preceptors: Dr Ronald Quincy, Academic Director

Agency: Mandela Washington Fellowship Program Rutgers Leadership in Civic Engagement Institute

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Purpose: To assist and facilitate in the execution of a successful Mandela Washington leadership Fellowship, through planning, logistics and execution

Significance: The Mandela Washington fellowship program is under a bigger umbrella called YALI stands for "Young African Leaders initiative" This initiative was commissioned by Barack Obama as an investment in the next generation of African Leaders. Statistics shows that, 75 percent of the world's poorest economies are located in Africa while the 10 countries living in extreme poverty are located in the sub-Saharan Africa. (borgenproject.org) the YALI stands as an initiative to invest in the next generation of young African leaders as they pursue growth, prosperity and democratic governments with peace and security.

Method/Approach: My role/project in this case as a program assistant is to manage "database", create a pool where fellow can access all program materials and daily agendas of the program. I had a range of duties which involves making sure the program ran smoothly and there is a smooth relation between the planning aspect and executing aspect. To begin, I had to master the back-end of Sakai and how it works, so as to setup a central resource where the 25 Mandela fellows could get all necessary program materials and content, that involves; assignment, announcements, program agendas, leadership competency tests etc. the daily agenda serves to keep the fellows abreast with any change that might have occurred on the administrative side. On the administrative side, I had to update program materials used from previous years as recommended by my program director, those materials included; PowerPoint presentations, Word documents, google drives, fellow's name tags had to include their names, countries of origin, and a logo of Rutgers leadership institute MWF logo, which I did using google slides and Photoshop where. necessary. I also helped in setting the lecture halls, ordering food when necessary.

Outcomes/Results: By setting up the Sakai and google drive, I helped make sure the fellows had access to learning materials and educative tools they can pull on even while in Africa, tools such as grant writing materials, budgeting materials, financial reports tools etc. Furthermore, my work serves as a template for next year's set of fellows making it easier for the program assistants that will proceed me to streamline the process and eliminate much troubles I had to face at the beginning of the program.

Evaluation/Conclusion: In order to assess our effectiveness and impact the fellowship was making in the lives of the fellows, we conducted two leadership competencies test. The first was administered at the beginning and at the end. The results were very encouraging and showed how impactful we have been, the fellows left feeling confident and equipped with practical skills on how to run organizations and access helpful materials from the database when needed. While interning, I have acquired valuable skills and insight and technical know-how on planning a large scale program, I learned how to quickly adapt quickly to last minute changes or handling large scale assignments. Overall, the fellowship offered a tremendous opportunity to network with senior professionals and future African leaders striving to contribute to the growth of the continent.

Title: Assessing the Feasibility of Using Placebo Data from Diabetic Clinical Trials to Create Diabetic Gastroparesis Patient Profile

Name: Gabrielle Jacob

Preceptors: Direct and Project Supervisor: Jessica Abel, MPH

Agency: Allergan, Madison, NJ

Purpose: To analyze available and relevant clinical trials on diabetic patients to find any information that can be used to help create a patient or population profile of diabetic gastroparesis patients.

Significance: Diabetic gastroparesis is a condition in which there is delayed gastric emptying in the absence of stomach motility. This can cause nausea, bloating, postpradnial fullness, early satiety, vomiting, and abdominal pain. Diabetic Gastroparesis is not a well-known condition amongst healthcare practitioners. Existing treatments are only recommended for short-term symptomatic relief of DGP symptoms with limitations on duration of use due to safety concerns. Many patients with DGP continue to suffer from chronic and debilitating symptoms highlighting an unmet need for appropriate therapies to manage the symptoms of this condition.

Methods/Approach: Reliable and well-documented data on Diabetic Gastroparesis patients would most likely be found in clinical trials. A database with well-known diabetic trials called TransCelerate Study Conversion Pipeline Data was used. TransCelerate is a third party organization that can access placebo data from clinical trials. Clinical trials were filtered to only include disease areas: Diabetes Mellitus and Diabetic Neuropathy. A table was created to detail standard information from each trial; pertinent information included: study name, date, inclusion/exclusion criteria and more specific information like: placebo adverse events, Table 1 characteristics and safety outcomes.

Outcome/Results: Out of 104 clinical trials reviewed, only 21 were readily accessible to Allergan. Within those trials, no information was found that fulfilled the study criteria above.. Any indication for existing history with DGP was being search within placebo adverse events. Comorbidities were also being searched within Table 1 characteristics. Safety and Efficacy outcomes related to DGP symptoms were also being looked at. There were no diabetes trials identified that focused on primary or secondary endpoints relevant to DGP events.

Evaluation/Conclusion
Overall, none of the trials reviewed included information that would have helped create a patient profile for Diabetic Gastroparesis. Some trials even excluded the condition because it would interfere with absorption of the drug. For future research, claims data and hospital data/records may provide more information to help characterize this patient population.

Title: H.E.L.P. (Hospital Elder Life Program)

Name: Kera Jefferson

Preceptors: Direct Supervisor: McNeil Cadet, Program Development Specialist

Agency: Care One: Retirement/ Rehabilitation Center

Purpose: To aide geriatrics suffering from Delirium or Dementia by finding multiple ways to improve cognitive function among geriatrics.

Significance: According to the Centers of Disease Control and Prevention (CDC) an estimated 5.1 million Americans aged 65 or older are currently living with Alzheimer's disease, the most well-known cognitive impairment throughout the world. This number is expected to rise to 13 million by the year 2050 (CDC, 2011). Cognitive function is normally associated with children or babies, however, without proper exercise and stimulating brain activity, cognitive impairment is increased over time, which can age humans prematurely and reduce life expectancy. HELP at Care One is a program designed to improve or build cognition among geriatrics suffering from memory loss. Studies across the world have shown the decline of brain health as humans continue to age. Care One works with their patients suffering from these impairments by giving them exercises that are designed to improve their memory and brain function.

Method/Approach: Throughout the course of this program, interns are assigned 4 patients who are suffering from Dementia out of the total, (n=116). Interns are required to provide a wide range of motion exercises and therapeutic activities to each person, this is done by assisting the Care One Physical Therapist during their physical activity sessions. Majority of the exercises range from walking, step training, stretching, balance and finger dexterity. This allows blood flow to the brain which is supposed to improve memory. Interns are also encouraged to help geriatrics solve riddles, puzzles or compete in trivia. These exercises are conducted five days out of the week and during these days data is recorded, which reveal their results as a whole. Data is measured by speed, accuracy, and willingness which are scored 1 (poor) to 5 (excellent). The data is compared to other weekly results during the course of the program and determine what works best with all patients.

Outcomes/Results: Out of the 4 patients observed during the course of this program, only 2 were shown to have some significant cognitive function. Out of the total (n=116) patients who participated in this program more than 75% of people made improvements over the course of the weeks due to these exercises. The most efficient exercises out of the 8 given are trivia (42.2%), puzzle building (25.9%) and walking (19.6%). Scores could have been different if patients attended all sessions and were willing to participate. Depending on the individual, some were only willing to complete one task but not the other which leaves us with inconsistency and limitations.

Evaluation/Conclusion: It is important to be mindful that results vary from patient to patient, there is no clear indicator that an exercise will work for all individuals. During this program, there were limitations that affected the results of the study. However, HELP at Care One was able to gain clarity on their patients suffering from Delirium or Dementia. A survey will be available to patients and their family members that will give them the opportunity to voice their opinions about the program and what HELP can do to improve in the future.

Title: Developing and Implementing a postpartum transitions of care program

Name: Kenelly Jimenez

Preceptors: Jazmine Cascante, Program Coordinator; Jenny Bernard, Program Director;
Martha Ortiz, Case Manager

Agency: Hackensack University Medical Center

Purpose: Develop and execute a Transitions of care program for postpartum patients to reduce readmissions, postpartum complications and increase follow up care.

Significance: To improve patient care Center for Medicaid and Medicare (CMS) has established Delivery System Reform Incentive Payment (DSRIP) program to better care for patients and lower cost, through a payment system that is contingent on health improvement. There is increased interest throughout the state in applying this form of care to maternal health. The significance of this program was to identify the needs and barriers within maternal health, and develop a program model that can be used as a foundation in the future. Research showed that mothers who did not have insurance or had gaps in their coverage were less likely to follow the recommended guidelines for follow up. This coupled with low financial stability and lack of physical resources such as supplies for their newborn increased the likelihood of readmission or decreased follow up.

Method/Approach: The program followed a Transitions of Care model for the enrollment, discharge and follow-up. Participants, were identified daily via the maternal census. Selected patients were visited at bedside, with a screening interview conducted to determine areas of need and ensure program eligibility. Upon enrollment the patient was aided in scheduling follow up appointments based on their delivery method and if complications arose. Patients were also provided transportation to pediatric visit, and postpartum checks. If needed, patients were given information to Women Infants and Children (WIC), Supplemental Nutrition Assistance Program (SNAP) or the New Hope Foundation, transportation to these resources was also offered. After discharge, patients were called weekly to check in on their well being and that of the baby. These calls also served as a reminder to follow up appointments and to address any new needs the patients had.

Outcomes/Results: In the month of June, 15 patients were screened for enrollment. Four declined enrollment and 11 agreed to participate. Of the enrolled population, two patients were readmitted, although only 1 was due to post-delivery complications, in the month of June. In the month of July, 29 patients were screened for enrollment, out of this sample 25 agreed to participate. Their have been no readmissions for the month of July, although 1 participant reported concerns in regards to her health and was scheduled with physician for an office visit.

Evaluation/Conclusion: Due to this being the first attempt at developing the Transition of Care program with maternal patients there is a lack of data to compare its progress to. In the process of developing and executing this program it is evident that there are needs to be addressed along with barriers that hinder follow up care. Future plans for the program include collecting more data and reaching more mothers.

Internship Abstract

Title: Assessment and Improvement of Health Education for Elderly Asian Populations

Name: Helen Johns

Preceptors: Direct Supervisor**:** Rebu Chacko, CEO
                 Project Supervisor: Melissa Shah, Director of Community Relations

Agency: Divinus Pharma

Purpose: To understand the current way diabetes is taught to elderly Asian community and improve on the current resources available.

Significance: According to the Journal of Internal Medicine, diabetes education should focus on three key elements; "education and support for self-management (including reduction of lifestyle risk factors), effective drug treatment strategies for maintaining normal blood glucose and lipid levels and normal blood pressure, and effective surveillance for early detection and treatment of complications." (Mulrow, 1995) The aging population is dealing with various age-related changes. This can make things more difficult for them to learn and understand the information presented to them. (Speros, 2009) As a minority population, Asians tend to be socioeconomically disadvantaged. This provides its own challenges that affects how information is shared. (Attridge, 2014)

Method/Approach: Information about diabetes was collected for age, sex, and race differences. Initial surveys using a Likert scale was developed to assess how participants respond to the current method of instruction. Using the collected information on the disease, a presentation focused on information surrounding the Asian population, including diet and lifestyle was created. In addition, focusing on diabetes and hypertension within the community allowed for examples of lifestyle changes that are more realistic. This presentation has been given to 3 education event groups and the same initial survey was given to participants. Responses were recorded and then compiled and compared to the initial survey results.

Outcomes/Results: From the 3 community education events conducted by Divinus, 58 participants responded to the initial survey. Approximately 64% of participants were over the age of 60 and 92% of participants were of South Asian descent. 83% of participants responded that the current method of education was not enjoyable or encouraging. 10% responded that the current method was somewhat enjoyable or encouraging and 7% responded that the current method was enjoyable or encouraging. Once the personalized presentation was given to the participants, the same initial survey was re-administered. 92% of participants responded that the presentation was informative and 86% responded that this new method was enjoyable or encouraging.

Evaluation/Conclusion: Health is comprehensive and personal to each individual. Rather than generalizing aspects of a healthy life, thereby reducing aspects of cultures such as diet and recreational activities to unhealthy behaviors, we run the risk of separating health from life. The new presentations given to the communities focused on encouraging people to create healthier versions of their foods rather than just saying "eat more leafy vegetables and less sugar." The goal was to present the risks of diabetes and hypertension in a way that can be clearly communicated to the elderly population. Given the response from participants, it can be understood that a personal teaching method is better suited for an elderly population.

Title: Developing Children's Yoga and Creativity Workshop Series

Name: Claudia Jozwiak

Preceptors: Kristy Mathews MS, LPC, NCC, Mental Health Counselor

Agency: NJ Center for the Healing Arts

Purpose: To develop an adjunctive wellness service for children, incorporating yoga, mindfulness and the expressive arts, to promote the use of healthy and effective coping skills to manage stress and anxiety.

Significance: One in five American adults experience symptoms of mental illness and do not seek professional treatment. According to Mental Health America, yoga helps those who experience mental illness through stretching, breathing, relaxation and exercise. Research and community outreach informed the NJ Center for the Healing Arts that children's yoga was only offered at two yoga studios in the local area of Monmouth county. Yoga offers a wide variety of benefits for children including improved focus, coping mechanisms for managing stress and anxiety, improved self-esteem and body image, and improved emotional regulation, which in turn has made yoga an effective alternative and/or adjunctive treatment for children with ADHD, Anxiety Disorders, and other mental health conditions. The youth and families that seek services at the center often present with symptoms of Anxiety Disorders and/or ADHD, which offered evidence that a yoga and crafting workshop series would greatly benefit these children and others throughout the community. This program not only benefits the children attending but also provides the center with donations allowing it to provide mental health resources to those who otherwise wouldn't be able to afford it.

Method/Approach: Further research was done to aid in developing yoga sequences for children as well as crafts that would effectively pair with the sequences and match the goal of teaching children to move their bodies with mindful awareness while having fun in a safe and relaxing environment. The yoga and crafting workshop called "Empowering Children through Yoga and Creativity," was developed as a six-week workshop series of one hour weekly sessions from July 8- August 12 on Monday evenings at six o'clock. The first half of each session starts with mindfulness breathing and a guided meditation, then leads into a gentle yoga practice through storytelling, matching poses with different aspects of the story. The second half allows the children to express themselves by creating the craft assigned for that day, further encouraging a meditative mindset and ending with quiet time, intended to practice gratitude for the session and their creations. Parental feedback was collected after the past two workshop sessions

Outcomes/Results: Seventy-five percent of the participants from the first workshop session have come back to the second workshop session and are signed up for future dates. Parental feedback revealed that 87.5% of participants are satisfied with their experience in the workshop sessions. .

Evaluation/Conclusion: The yoga story part of the session went well, while the craft part of the session was more disorganized the first week. The following week was planned with more structure around the crafting portion, in order to keep the children calm and focused on the task at hand. Pre and post survey questions have been administered to ensure the success of the program.

https://docs.google.com/document/d/1E2PmOgR1GUZkaTLTPL2RNPFe1t2ph0LF32BA_DLoJoU/edit

5Title: Care Plans- Assessing an Individuals Health and Wellbeing.

Name: Anjleen Kaur

Preceptors: Doctor Nahas/Trudy Hogan - Nurse LPN

Agency: Doctor Nahas - Arthur Medical and Sports Associates

Purpose: To track and analyze the trends of substances used to help maintain a patient's diagnosis.

Significance: Care plans provide direction for individualized care. A care plan flows from each patient's unique list of diagnoses and is organized by the individual's specific needs. This project is important for individuals because it aims to identify what is significant to each, in order for them to achieve a healthy lifestyle and ensure that the support they receive is designed and coordinated around their desired outcomes. Care plans are a tool for patients to help resolve an ongoing problem. For example, if a patient is newly diagnosed with diabetes, medicine will be prescribed to them and then a follow up with blood work will be conducted to see if the patient is getting better or worse, and go on from there. After surveying the patients in the office who have had care plans for a long period of time, as well as patients who newly have been put on care plans, individuals seem to see a difference in their health. 2 out of 25 patients felt as though the care plan did not see a drastic change, while 23 out of 25 patients felt as if it made a difference to their lives. The two individuals whom did not see a drastic change in their lives were the age of 78 and 84. While the other 23 patients were between the ages of 22-65. The individuals whom were 78 and 84 did not feel a change in their health and were also patients in a nursing home who receive individualized care on a daily basis.

Method/Approach: The project will be conducted through a three-month period where analyzation, creation, and follow up with the care plan as well as the patient is done/required. The first step is to collect information. Which includes a head to toe assessment, conversations with the patient and their family if needed, observations (labs and vital signs), and lastly, a discussion with a healthcare provider. The second step would be to analyze. Which requires to look at all the information, address what areas of the patient needs progress in, then consider ways the patient could improve and how to consider their progression know, and lastly, write down the general issues, such as which areas need help. The third step is to think about HOW! How did one come about these issues; How did one know he or she was in pain, did he or she discuss the underlying problem, was observation done, and was one taking medicine for it? The fourth step is to translate; this is where outcomes are found that can be beneficial and support the care plan. And lastly, the fifth step is to transcribe. An intern is responsible for gathering the patients' information and asking them important questions in order to get a proper response for me to write down.

Outcomes/Results: At the end of this project a care plan will be produced for individuals that they are able to follow on a daily basis. The deliverable qualitative method will be a follow up survey asking patients a number of questions to see if they see a difference in their health and wellbeing. Additionally, lab work, imaging and other reports may be asked of an individual to measure the patients' success and or failure of the care plan.

Evaluation/Conclusion: The project is evaluated by repetitively following up with the patient to see if their health is improving. And a repeat should be done within two to three months.

Title: Breast Cancer Community Health Needs Assessment Analysis

Name: Aiman Khan

Preceptors: Dr. Rita Musanti

Agency: The Rutgers Cancer Institute of New Jersey

Purpose: To retrieve and analyze breast cancer screening rates in a high-risk population from community health needs assessments and make appropriate recommendations

Significance: Regular cancer screening increases the chance to detect the disease early, when it is most likely to be curable. According to the American Cancer Society, there are 53,400 new cases of female breast cancer in New Jersey in 2019 and 15,860 estimated deaths. Although both Camden and Burlington counties do have either stable or falling incidence and mortality rates for female breast cancer, the incidence and mortality rates are still very high in those two counties- higher than both New Jersey and the United States. The common themes that prevent people from going to get screened is lack of bilingual healthcare professionals and providers, issues with childcare and parking expenses, and patient's inability to take off of work for doctor appointments and regular screenings.

Method/Approach: Data was retrieved from NJ Cancer Registry, New Jersey Department of Health, New Jersey State Health Assessment Data, and Community Health Needs Assessments on female breast cancer in Camden and Burlington counties. Data was transferred from these sources to Microsoft Excel and made into easy to read charts/graphs.

Outcomes/Results: In Camden county, 77.9% of women ages 50-74 reported having a mammogram in the past two years (years 2015-2017) and in Burlington county, 79.4% of women ages 50-74 reported having a mammogram in the past two years (years 2015-2017). The percentages for both counties are under the Healthy People 2020 target of 81% and considering the incidence and mortality rates in these counties, they definitely need to be higher. This information was used to put together community profiles to inform health providers on what breast cancer screenings are available, to engage people in healthy behaviors, and provide recommendations to improve new and existing programs.

Evaluation/Conclusion: Camden and Burlington County's high female breast cancer incidence and mortality rates compared with the United States and the rest of the state of New Jersey's indicate that there are inadequate breast cancer screening programs due to the higher prevalence and incidence of breast cancer in these regions. If detected earlier on, there is a much higher survival rate which is why screenings and therefore potential early detection is so important. Cancer screening programs must be implemented and advertised by all healthcare providers.

Title:	Expanding healthcare services in medically underserved communities through a provider recruitment program
Name:	Yunus Khan
Preceptors:	Senior Recruiter: Sonali Kashyap
Agency:	Synapse Solutions , Location

Purpose: To analyze and identify healthcare deserts across the United States and propose solutions for improving the availability of quality medical services.

Significance: Due to the changing healthcare climate across the United States, lack of funding as well as the lack of proper attention to rural healthcare is resulting in medical deserts throughout the country. Medical deserts are defined as regions where healthcare is limited or non-existent. The National Rural Health Association reports that 77% of rural counties are considered as "Primary Care Health Professional Shortage areas" and 9% of them have no physicians at all (NHRA 2019). Additionally, there are reports of critical shortages of OB/GYN providers, mental health professionals, and other medical specialists in rural areas, leaving many women and children without proper care (Ashrafzedha 2017). This evidence suggests a critical need for healthcare funding and access to healthcare professionals in rural America.

Method/Approach: Using the job descriptions and employment information, a spreadsheet that could potentially predict a healthcare desert was created. The spreadsheet is a useful tool because it contains information about employment locations, expected salaries, COLA (cost of living adjustment), and number of positions available. A report on health service access and use among older adults in North Carolina comparing urban and rural residents was a better tool for identifying potential deserts (Blazer, Landerman, Fillenbawm, Homer 1995). In this study, the researchers compared percentage of rural population to Population per active physician, Population per active primary care physician, Population per active registered nurse, and number of General hospital beds.

Outcomes/Results: Residents of rural counties were less likely to obtain health care at a hospital. Reports of having a usual provider (a measure of continuity of care) appeared to vary by county rather than by specific urban vs rural residence. The data showed that there was on average 1000 people per active physician, 2000 people per active primary care physician, and 300 people per active nurse. These numbers are much lower for urban nonrural areas, depicting a potential healthcare desert.

Evaluation/Conclusion: Residents of rural counties in North Carolina displayed worse health outcomes compared to those living in the urban counterparts of the same state. The Durham county (Urban) mean for self-rated poor health condition was a 2.3, compared to a self-rated poor health condition of 2.5 from the combined data of all rural counties of North Carolina. The reason behind why the rural counties of North Carolina have a lower health outcomes compared to the urban localities is due to the lack of access to care. Table 3 shows that 9.8% of rural people reported that they did not make a hospital visit due to lack of transportation compared to 5.8% in urban. This evidence suggests that a lack of health services has a significant impact on the health outcomes for populations. In order to improve the health outcomes of people living in healthcare deserts such as rural North Carolina, it is important for the areas to increase funding in order to hire additional healthcare employees such as nurses, physicians, and first responders.

https://docs.google.com/document/d/1IP3lGgNb2EySt9Co-g3gaFRAs6Rdzgcb98lshbZ5cJE/edit

Title: Patient Acceptability of Social Risk Screening

Name: Nari Kim

Preceptors: Direct/Project Supervisor - Christopher Rogers

Agency: Hackensack Meridian Health - Accountable Health Communities (AHC) Program

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Purpose: To measure the patients' perceptions of their experience with the current "social health screening" in inpatient and outpatient settings, and the emergency department.

Significance: Health related social needs (HRSN) impact the healthcare of patients in many ways. According to Solomon and Kanter of the Permanente Journal (2018), about 70% of health outcomes result from HRSNs. To combat HRSNs, social health screenings, which are short questionnaires, are given to patients. With thousands of patients being screened for HRSNs within the Bergen and Hudson county, the patient's perceptions of the health related social needs screening is crucial to address any issues and improvements with the current screening tool. At Hackensack Meridian Health, Accountable Health Communities navigators are determined to measure patient satisfaction through questionnaires. By designing patient satisfaction questionnaires, it gives the Accountable Health Communities workers insight on how effective the current version of the HRSN screening tool is.

Method/Approach: This study was exempt from Hackensack University Medical Center's IRB. A literature review was first conducted to identify patient's perceptions of the social determinants of health screening and support/working with the community health workers. Using the scholarly articles that were published within the past 10 years, survey questions about patient perceptions were formulated and peer-reviewed. After compiling the final set of questions into a survey, about 500 Medicare and Medicaid patients were chosen to partake in the study. Surveys were administered over the phone over the next few weeks. Responses to the survey were then recorded into an Excel spreadsheet and analyzed using SPSS.

Outcomes/Results: Out of 23 patients that were included in my sample, 82.6% were female and 17.4% were male. 17.4% of the 23 patients were 64 years old or younger while 82.6% were 65 years old or older. The majority of patients had Medicare while some patients had Medicaid. Six people with Medicare reported that their health was poor while eight patients reported their health fair to good. About 70% of patients with Medicare stated that they felt comfortable with the screening location and settings. Additionally, about 57% of patients with Medicare were comfortable or very comfortable with the privacy of the setting in which they completed the screening. Overall, 87% of patients were either satisfied or very satisfied with the screening tool process while 13% were dissatisfied or very dissatisfied. At the end of the project, any improvements that can be made to the screening tool would be sent to the Centers for Medicare and Medicaid Services as a research paper.

Evaluation/Conclusion: Over half of the patients in the sample were satisfied with the current screening tool. This signifies that most patients felt comfortable with the current screening tool's location, setting, and privacy. However, some limitations were that some patients did not recall taking the screening while others opted out of taking the survey. Other patients did not answer the phone. In the future, the patient satisfaction surveys should take place as soon as possible after the screening.

Title: The Evaluation of Home Health Aide Staffing and Elderly Health

Name: Marlena Kotowska

Preceptors: Office Director: Michelle Henriques

Agency: E&S Home Care Solutions

Purpose: To analyze the effectiveness of providing home health aide services and finding possible areas of improvement.

Significance: As the worldwide population ages, healthcare in the United States will face many challenges in meeting the needs of the geratric population. Between 2005 and 2030, the population of individuals in the United States aged 65 and older is predicted to double. Such a drastic change will put the healthcare industry under train. Because there is a big shift of healthcare from institutional healthcare to community- and home-based care, the demand for home health aides has increased by 20-25%. The lack of population growth within women aged 25-54 years old, the primary home health aide demographic, underscores the need for the most effective staffing and education techniques. Therefore, evaluating the weaknesses of the agency's staffing techniques will improve the efficiency of covering the services and improve the health and satisfaction of the clients.

Method/Approach: A retrospective review of all the open shifts and covered shifts for each client was reviewed in order to evaluate the amount of hours each week the clients went without services. Data from each week starting with July 1, 2019 was exported to Excel and illustrated on bar and line graphs to see a trend on a weekly basis. The reasons for which the hours were not filled were annotated to research and implement possible solutions.

Outcomes/Results: The data gathered throughout the weeks was analyzed to evaluate the effectiveness of the agency in providing services. Out of all the days at E&S Home Care Solutions (n=34), an average of 35% of open cases were filled by home caregivers. Therefore, 65% of cases were not staffed. That equates to 214 hours of services, 75 hours of those covered and 139 hours without any services. However, the coverage of cases suffered for many reasons including aide transportation, language barriers and deficient staffing in the office and in home health aides.

Evaluation/Conclusion: There is a deficient staffing of caregivers. Behind the data however, several factors combine to provide the mathematical results. In many instances, the coverage of cases is beyond the agency's control. Emergency callouts by aides make it impossible to find somebody to cover her/him. Additionally, because it is the summer season, a lot of aides that work for the agency were on vacation and unavailable for any work. At the same time, many caregivers' opted to stay home with their kids during the summer season instead of working. Moreover, language barriers, transportation and manual verification of clock-ins and clock-out all make it difficult and inefficient to provide services for clients. In order to function adequately, the agency requires at least two case coordinators at all times to maintain sufficient staffing. Furthermore, payroll should be solely dependent on electronic clock-ins. Manual verification of timesheets is time-consuming and inefficient. Although most of the aides are females aged 25-54, the agency should put more of an effort into hiring and educating males and younger populations into becoming CHHAs. Staffing events could be potential sources of new hires. The evaluation should be continued in the fall to analyze the improvements and areas of weakness.

Title: *Welcome Home* Resource Packets

Name: Ryan Kreutzberg

Preceptors: Jill Lombardozzi, Supervisor

Agency: Soldier On

Purpose: To synthesize *Welcome Home* packets for recently housed veterans and homeless veterans.

Significance: Soldier On focuses on two types of case management regarding homeless veterans: prevention cases and rapid-rehousing cases. Prevention cases involve people with an imminent risk of homelessness, which involves assessing income and other eligibility for social services, financial assistance in paying arrears and court fees, negotiating with landlords, job searches, food resources, health resources and housing search assistance. Rapid-rehousing cases involve people who are actively street homeless, and involves an assessment of income and social services eligibility; a search for emergency shelters, temporary short-term/medium term housing; an assessment of barriers restricting a person from housing, including negative landlord references, poor credit, and disabilities including mental illness; and assistance in choosing and obtaining affordable housing. In both types of case management, it is up to the case manager to utilize the network of resources to best serve the clientele. Yet, the goal is to have the client be self sufficient when they are housed. These *Welcome Home* resource packets include location specific information regarding local food pantries, emergency shelters, health care facilities, day programs, disability services, financial services, and government offices. These *Welcome Home* packets are made specifically for veterans, since Soldier On serves the homeless veteran population in New Jersey. Chronic homelessness is defined by HUD as being homeless for more than a year or being homeless more than four times in three years. According to NJ 2-1-1, one in four individuals experiencing homelessness had chronic patterns of homelessness in 2018. The goal of the *Welcome Home* packets are to provide resources that can be utilized by clients on their own to prevent crises to arise that can lead to them becoming homeless again, and to lower the risk of chronic homelessness.

Method/Approach: To facilitate their transition into stable housing, *Welcome Home* resource packets were synthesized to consolidate resources specific to the location for the client so they may be more self sufficient once they are discharged by their case manager from the program. To curate the *Welcome Home* packets, it was necessary to rely heavily on the network of case managers at Soldier On and thorough research on the internet. Some organizations only have a few number of offices located in New Jersey, such as Veterans Service Organizations (VSOs) and VA Medical Centers. The goal is to be specific to the location of the veteran, so the resources are accessible and relevant.

Outcomes/Results: Three *Welcome Home* packets have been created thus far for sites: one for Asbury Park NJ, one for Newark NJ, and one specifically for a boarding house in Jackson NJ. These sites span Monmouth County, Essex County, and Ocean County respectively, therefore they all have county specific resources listed for each site that are specific to the county.

Evaluation/Conclusion: After discharge, case managers can still communicate with clients, however it is the clients responsibility to seek out resources on their own. These *Welcome Home* resource packets will facilitate the process of garnering resources for Veterans and allow them to be self sufficient. To evaluate the usefulness of these packets, a satisfaction survey will be provided with the packets at Pushkin's House.

Title:	Effects of Unfair Scheduling Practices on Low-Wage Women in the New Jersey Workforce
Name:	Celine LaBelle
Preceptors:	Project Supervisor: Elaine Zundl, Research Director
Agency:	Center for Women and Work - Rutgers University

Purpose: To support the development of focus group that will analyze how unfair scheduling practices affect low-wage women workers in New Jersey. This study focuses on the industries of food service, retail, and logistic work, and will offer appropriate fair scheduling policy recommendations for the future.

Significance: Nearly 34% of New Jersey's female-headed families live below the federal poverty level, compared to 11 percent for all families nationwide.[1] More women than ever are participating in New Jersey's workforce, and they remain the majority (64 percent) of low-paid workers.[2] Unpredictable and unstable work hours can create economic vulnerability and poor work-life balance. For example, planning for childcare and for the future (i.e. savings, monthly bills) can prove difficult when there is little to no routine or surety. This instability makes it nearly impossible to determine if an individual qualifies for any public assistance programs because subsidized childcare and SNAP programs require that an individual's income remain within a tight range. New Jersey's high cost of living and the current push for a $15 minimum wage can have important implications for implementing any fair scheduling policies.

Method/Approach: This project will qualitatively assess how women experience and are impacted by unpredictable and precarious work arrangements in New Jersey. This project includes a review of existing research as well as original data collection using focus groups. Each focus group will include 6-8 women in the industries of food service, retail, and logistic work who have been employed within the past four months, and who have not set or had influence over others' work schedules (i.e. in the capacity as a manager or supervisor). For food service and logistic workers, two groups will convene, one in English and one in Spanish. For retail workers, only one English-speaking group will convene.

Outcomes/Results: Recordings from focus groups will be transcribed and used for analysis of new insights into unfair scheduling practices. Analysis will be conducted using NVivo software. Data insights will be coded into themes, clusters, and categories using grounded theory. Information collected from these focus groups will be used to inform grassroots worker organizations who have an interest in learning more about this subject. At this time, participants are being recruited for focus groups scheduled for late August 2019. In fall of 2019, deliverables will include a final report.

Evaluation/Conclusion: Qualitative research is important in "recording the complexity of situational contexts and interrelations as they naturally occur." [3] Our indicators of success include our ability to identify and recruit a sufficient number of participants, to follow our planned data collection process, to offer new insights to the impact of unfair scheduling practices on women in NJ, and to inform advocacy groups and increase awareness in NJ and elsewhere of these insights.

Internship Abstract

Title:	Prevalence of zoonotic diseases among pregnant women.
Name:	Ume Laila
Preceptors:	Gloria Bachmann, MD
Agency:	Women Health Institute.

Purpose: To understand and identify the prevalence of zoonotic diseases in pregnant women.
Significance: Data suggests that approximately 75% of contemporary emerging infectious diseases are caused by zoonotic diseases. Infectious agents can be transmitted through domestic animals, exotic animals, and even household animals such as cats and dogs. Study posted in *Zoonoses Public health*, notes that animals such as dogs, and cats can be a reservoir for infections, including Campylobacter and toxoplasmosis.. The 2017-2018 National Pet Owners Survey recorded that about 68% of the households in the United States owns a pet. The increasing prevalence of pet cats and dogs and the close relationship between these animals and humans, can present exposure risk. Pregnant women appear to be at a higher risk of contracting infection compared to non-pregnant women, due to pregnancy changes in gonadal hormone levels. Additionally, changes in progesterone levels can suppress maternal immune system due to altered levels of T-cells, again making pregnant women more susceptible to contracting an infection.

Methods: Data was obtained through Ovid, Ebcohost, Pubmed, and google scholar. Keywords that were used to identify the relationship between Zoonotic diseases and its effect on pregnant women were: "pregnant women", "immunosuppressed", "domestic animals", "global threat" "zoonotic diseases." "household pets", and "prevalence."

Results: Five studies in total were found. These studies confirmed a link between disease spread from pets to pregnant women. However, rates varied by region. A study conducted in Egypt identified that pet dogs had 13.8% prevalence rate of enteric parasites thus resulting in higher spread of infection to humans. Prevalence rate of G. duodenalis was 11% in China. It was noted that infection was significantly higher in young dogs compared to adult dogs. Ehrlichia.canis has been molecularly detected in dogs from northern and southern Portugal, prevalence was ranged from 4.1%-16.4% A cross sectional study conducted in southern Ontario, Canada found that Salmonella, Giardia and Campylobacter spp. were present in 1.2%, 6.4% and 43.0% of fecal samples of dogs. In Pakistan, toxoplasma gondii was found in pregnant women.

Conclusion: There appears to be a risk of infection from pets to humans. This risk increases with pregnancy. More research in this area is suggested as noted by the scant number of papers addressing this. As well, education on risks should be offered to all pregnant women.

Title: Preparation and Participation in the "Matter of Balance" Coaches Training Seminar

Name: Marvin Lazemetaj

Preceptors: Diana Starace

Agency: Trauma and Injury Prevention Program, Robert Wood Johnson University Hospital

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Purpose: To plan, coordinate and participate in the "Matter of Balance" Coaches training program on August 13th and 14th, 2019.

Significance: A Matter of Balance (MOB) was developed at MaineHealth. It is an evidenced-based, award-winning program designed to help older adults reduce the fear of falling and to increase physical activity. Statistics show that more than one in three people age 65 years or older will experience a fall each year. Data collected by the RWJ Trauma and Injury Prevention department shows that, from January 2016- July 2019, Robert Wood Johnson University Hospital New Brunswick has admitted 1186 patients over 65 years old due to falls at home. The MOB program was designed to benefit anyone concerned about falling, who has had a fall in the past, or restricts their activities due to the fear of falling. In a series of eight two-hour sessions for a small group of 8-12 participants, a certified coach will teach participants to think about the fear of falling as being controllable. It also sets realistic goals to increase activity and work on changing their environment to reduce their risk. Overcoming this fear can help senior citizens stay active, maintain physical health, and prevent future falls.

Method/Approach: In preparation for the coaches training being held on August 13th-14th, a registration survey monkey was created along with printed flyer promotions to recruit participants. Training manuals were printed and assembled containing the necessary resources for all participants attending the coaches training session. In addition to being certified in the Matter of Balance program, coaches must commit to teaching at least two MOB classes within the next year with a partner coach. After completion of the MOB coaches training, the responsibilities of a coach include; Preparing for each class by reviewing the Matter of Balance manual and materials, encouraging interactive discussion about the concepts and skills presented, and presenting the class according to the directions, training and materials provided by the Master Trainer in order to maintain program efficacy.

Outcomes/Results: Because our Coaches Training will not be completed until 8/14, our outcomes are being forecasted. After the coaches training the number of attendees will be measured, and suitable locations will be identified to conduct the "Matter of Balance" program for seniors in eight sessions. MOB evaluations will be utilized to assess the overall effectiveness of the class coaches as well as the program itself. Maine Health is looking to identify whether the participants have gained any confidence, knowledge or experience that has lessened their overall fear of falls upon conclusion of the program.

Evaluation/Conclusion: An evaluation will be reported following coaches training and the commencement of classes. Each eight session class with a have a post evaluation report to discuss the overall efficacy of the program. This data will then be analyzed and recorded by MaineHealth

Internship Abstract

Title: Building Partnership Support for Live Well-Vivir Bien New Brunswick

Name: Regine Legrand

Preceptors: Manuel J. Castaneda, Director of Community Health

Agency: New Brunswick Tomorrow (NBT)

Purpose: To increase the level of participation from Live Well Vivir Bien New Brunswick's community health partners to strengthen efforts that expand the campaign's reach into the New Brunswick Community.

Significance: Live Well- Vivir Bien New Brunswick (Live Well NB) is a city-wide campaign that aims to promote health and wellness throughout the New Brunswick community. Live Well NB has collaborated with 68 local partners and organizations to deliver health- related services and activities to New Brunswick residents. As Live Well is looking to amplify its reach and become more interactive, it is important to strengthen partner relations. By improving Live Well NB's partnership participation, the campaign will seek to increase promotional efforts and expand its reach into the community. It will also look to further enrich the amount of information and services available on the mobile app and website.

Method/Approach: A survey was distributed to all 68 community partners and organizations through SurveyMonkey. SurveyMonkey is an online survey tool that allows for prompt feedback, response calculations, and facilitated partner participation. The survey was distributed to Live Well NB's partner organizations comprising of 10 closed-ended questions and multiple-response items. The survey questions were centered on how community partners are using the app, what they want to see from Live Well NB, and how their organization could contribute into developing the app.

Outcomes/Results: The results produced by SurveyMonkey provide feedback and insight for Live Well NB on how to go about improving partner participation and extending its reach into the New Brunswick community. Out of the 68 partner organizations, 53 survey invitations were sent out, producing a total of 27 respondents, and 50.9% response rate. The survey had statistical power with the response rate meeting 50%. Survey data from questions five, six, and nine were highlighted to provide recommendations for the campaign. The results from the survey project can be generalized across all partner organizations and serve as a basis on how to develop the mobile app in hopes of becoming more interactive with New Brunswick residents.

Evaluation/Conclusion: This evaluative project provides recommendations to improve partner participation and the mobile app for the campaign moving forward. It is suggested that Live Well NB initiate opportunities that allow partner organizations to become more inclusive in reaching the New Brunswick community and enhancing the mobile app. Additionally, different modes of social interaction should be incorporated on the mobile app for user experience. Lastly, Live Well NB should participate in community outreach at partner's organizations to help expand the reach into the city of New Brunswick while building partner participation for the campaign.

Title: Hydration Information Senior Community Outreach Education Project

Name: Cindy Lira, Intern

Preceptors: Margaret Drozd, MSN, RN, APRN-BC, Director of Community Health Services

Agency: Saint Peter's University Hospital Community Health Services

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Purpose: To increase the knowledge about the need for adequate hydration within the senior community when visiting designated senior health screening sites.

Significance: Dehydration is a major health concern in the elderly due to the negative health consequences that can occur in this population. This includes a drop in blood pressure, fainting, seizure, reduced kidney function, etc., which results in numerous preventable hospitalizations each year. (Picetti, D., 2017). Older adults are especially susceptible to dehydration due to a decrease in thirst sensation and the reduced ability of the kidneys. (Reyes-Ortiz, C. A. (1997). Through increased hydration health literacy in this population most at risk for dehydration, it could help lower these rates of preventable hospitalization and improve the overall health of the community.

Method/Approach: After conferring with nursing staff that this was a valid need in the community, a tri-fold poster board was created that outlined important facts about hydration. Then, a brief pre and posttest containing three questions regarding hydration health literacy was created. These questions included; signs & symptoms of dehydration, recommended daily water intake, and tips on how to remain hydrated. Information on behavioral changes needed for proper hydration and the measures on how to do this was also provided. Data collection took place at designated health screening sites with the CHS team. This included Monroe Senior Center, Bethel United African Church, North Brunswick Library and Edison Public Library. The pretest was administered to participants, and a brief presentation was given, then followed by a posttest. The correct answers regarding the pretest questions were discussed while utilizing the poster board as an educational tool, and a posttest with those same questions was administered afterwards to measure an increase in knowledge.

Outcomes/Results: The pre and posttest was administered at 4 different sites, with a sample size of 46 participants in total. For the number of participants that answered 3 out of 3 questions correctly, there was an increase from 13% (pretest) to 67% (posttest). The number of participants that answered 2 out of 3 questions also increased from 20% (pretest) to 45% (posttest). There was one participant that answered 1 out of 3 questions correctly in the pretest, and there was no change in the posttest. A limitation to this project was having 5 incomplete tests, where the participants either lost interest in completing the posttest, or were short on time and were unable to. Overall, we can confirm that the participants have an increase in knowledge for hydration after this presentation.

Evaluation/Conclusion: By tracking the pre and post test results and compiling the data into pie charts, we can confirm that the participants' had an increase in knowledge regarding hydration through a verbal and visual poster demonstration. This project will be sustained through CHS retention of the poster and future scheduling at sites to educate and increase hydration knowledge in the community.

Title: Community Resource Board

Name: Tania Londono Castrillon

Preceptors: Shannon St. Pierre, Community Relations Manager

Agency: International Institute of New England

Purpose: To create a community resource board that includes internal and external basic resources designed to connect IINE's immigrant and refugee clients to services available in Manchester, New Hampshire.

Significance: A refugee is defined as someone who has been forced to flee his or her country because of persecution, war or violence. They have a well-founded fear of persecution for reasons of race, religion, nationality, political opinion or membership in a particular social group and cannot return home. In 2018, 25 million refugees and asylum seekers were forcibly displaced as a result of persecution, conflict, violence, or human rights violations. The International Institute of New England (IINE) in Manchester, NH is a resettlement agency that guides immigrants and refugees through education, employment, resettlement, and pathways to citizenship. In the last three years, it has resettled 466 clients. For the fiscal year, a total of 140 clients are expected. NH as a state has resettled approximately 7,500 refugees since the early 1980's according to DHHS. Clients must adjust to a new language, legal, health, transportation, housing, and economic system. Challenges may include resettlement, acculturation, isolation, and trauma. Lack of access to resources is a resettlement stressor. A Community Resource Board allows clients and visitors to fill the gaps in knowledge they need to be productive in their new environment.

Method: Categories were determined and a written outline created. Meetings were held with the program manager and education staff. Organizations and applicable staff were contacted (e.g for "youth services," the youth coordinator). Feedback meant more cohesive and valuable categories, resources, and category names into different languages and images (e.g for "food," an apple). A visual draft was created. The final outline was completed. Relevant brochures, applications, and supplies were obtained for the applicable categories. The resource board with resources pinned on was constructed on a 6x4 ft cork board.

Outcomes: The community resource board will be displayed in our waiting room so visitors and clients can visually receive information on available resources. This includes the final categories of: IINE's available services, housing, education, DHHS benefits, support services, youth, food, legal, and transportation resources available in the local Manchester, New Hampshire area.

Evaluation: Each individual deserves to know which basic and necessary services are available to them. New Americans face additional challenges that make this harder to obtain. The goal is that clients and visitors are connected to needed services. This tackles one of the core stressors of resettlement for refugees, lack of access to resources.

Sources:https://docs.google.com/document/d/1PEknCl6vfpS-aeFrPZMMOP-8UDZVZEPs2TDd2yydfiA/edit?usp=sharing

Title: Potential Patient Impact Factor Analysis in Endometriosis

Name: Samantha Lyubarsky

Preceptors: Steve Bender

Agency: GoFactorX

Purpose: To determine the number of patient treatments for endometriosis.

Significance: Endometriosis is a disorder in which tissue that normally lines the uterus grows outside the uterus. Endometriosis an incurable but manageable gynecological condition that affects 1 in 10 women in the U.S. The results from the analysis will help inform future recommendations for continuing medical education by showing how effective the topics were in attracting the intended target audience and how effective the distribution channel performed in attracting active treaters of endometriosis as compared to the average clinician in the database.

Method/Approach: AbbVie provided educational grant support for the continuing medical education (CME) initiative. EndoSHARE included a series of live *Women's Health Annual Visits* conferences and two online activities. A Microsoft Excel spreadsheet that included the names and addresses of all CME participants (n=1,686) was used for analysis. The national provider identifier (NPI) registry was searched to find the NPI numbers for the 1,686 clinicians who completed an educational activity. Combined, there were 1,686 participants of the CME activities who stated they would commit to a positive practice change in accordance with the curriculum that was presented during the CME activities or that their practice patterns were already consistent with the curriculum. Through an analysis of ICD-10 codes and prescription data, the actual number of endometriosis patient treatments managed annually for each CME participant was determined. This allowed the agency to determine the annual number of endometriosis patient treatments that will potentially be impacted by these CME interventions. Through an analysis of National Provider Identifiers (NPI) numbers, we were able to identify 1,893 (50%) of the 2,881 CME activity participants in the medical claims database.

Outcomes/Results: Based on an analysis of the medical claims database, we were able to identify 47 (out of 1,893) providers who currently (last 12 months) managed 459 validated endometriosis patient treatments or an average of 9.76 endometriosis patient treatments per provider. For the *online* activities, we found 29 providers and those providers currently managed 304 validated endometriosis patient treatments or an average of 10.48 validated endometriosis patient treatments. For the live activities, we found 18 providers and those providers currently managed 155 validated endometriosis patient treatments or an average of 8.6 validated endometriosis patient treatments.

Evaluation/Conclusion: The average U.S. based active primary care provider currently manages 37.25 (1,858,266 patient treatments/49,889 providers) endometriosis patient treatments annually. By identifying another 1,303 NPI numbers for the participants who didn't supply them on their activity evaluation, the study increased Factorx's NPI matches by 115.82% (1,125/2,428). While the average primary care provider manages less than one endometriosis patient treatment per year it seems that a small segment of the participants of this CME initiative was much more involved in the care of endometriosis patients.

Title: Process Review of No Authorization Denials

Name: Paige MacDowell

Preceptors: Mary Kelso, Director of Access Management

Agency: Robert Wood Johnson University Hospital New Brunswick (RWJUH-NB)

Purpose: To analyze performance improvement data to change the organization's policies in order to achieve best practice for scheduling, financial clearance and escalation for the operating room (OR) scheduled cases.

Significance: Denials represents lost revenue as an allowance write-off. For the month of June 2019, RWJUH-NB experienced $36,000 lost in revenue due to no authorization administrative denials. From the mid-month report for July 2019, $35,000 was posted for the same reason. In order to mitigate no authorization denials, financial clearance best practice states that accounts should be authorized and cleared five to seven days prior to the date of service (DOS). Around 90% of denials can be prevented and two-thirds of those denials can be successfully appealed. Performance improvement precautions will not only reduce the number of denials but increase interdepartmental coordination and reduce redundancy within patient access processes.

Method/Approach: As part of an ongoing performance improvement plan, a proactive review of patient procedure accounts (n=759) was analyzed from date of scheduling to date of final authorization to assess the timeline of financial clearance. The data was separated into two categories: best practice financial clearance and a tight window of financial clearance. Analysis of the date the patient was scheduled, the date of first access to the account and final authorization were all taken into consideration. Investigative protocols in Pre-Admission Testing (PAT), Same-Day Adult and Pediatric surgery registering was completed. Acquiring correct Current Procedural Terminology (CPT) codes, proper patient demographics and insurance information and most importantly, retrieving an authorization for the procedure were some aspects of the processes taken into consideration.

Outcomes/Results: Of the sample size (n=759), 101 accounts were accessed three days or less before the DOS; 26 of those were scheduled two months or more before the DOS. Seventy accounts were scheduled and cleared in a best practice window. The rest of the accounts, however, were scheduled one month or less before the DOS and cleared four days or less before the DOS. As for PAT and both Same-Day surgery registrations, there was no stable protocol for procedures that were not authorized. Since PAT occurs within 30 days prior to the DOS, PAT registrars could "stop the line" and obtain an authorization number or reschedule the patient to make sure proper financial clearance is performed. A patient arriving at the OR on the DOS without an authorization number significantly increases the opportunity for denial.

Evaluation/Conclusion: A large number of accounts were not financially cleared in a comfortable enough window before the date of service (DOS). Most denials occurred due to preventable causes that start with redundancy, and non-specificity in communication between departments: Patient Access and the OR. Ongoing performance improvement protocols include centralizing and standardizing patient access functions, improving interdepartmental coordination, fostering accountability and reducing redundancy. Improvements in training and changing employee responsibilities is just the starting point for not only reducing payer denials but providing patients with better quality service.

Internship Abstract

Title:	Examination of Interventions Addressing Barriers to Smoking Cessation for Individuals Living with Schizophrenia Spectrum Disorders
Name:	Denise Maldonado
Preceptors:	Noreen Myers-Wright, Project Coordinator
Agency:	Hackensack Meridian Health New Jersey Tobacco Quit Center, Cancer Disparities Center, John Theurer Cancer Center

Purpose: To examine interventions addressing barriers to smoking cessation in individuals living with schizophrenia spectrum disorders.

Significance: The rate of smoking prevalence among individuals living with schizophrenia spectrum disorders (SSD) is estimated to be 58% to 90%, much higher than the general public [1]. Smokers living with SSD tend to have greater frequency of heavy smoking, high nicotine dependence, and lower smoking cessation rates [2]. Low access to smoking cessation treatment for smokers struggling with SSD contributes to the low rates of smoking cessation and the disparity in expected lifespan for those with this disorder.

Method/Approach: Literature search was completed limiting results to research conducted between 2014 to 2019. Use of online search engines included, Ovid PsychiatryOnline, Pubmed, and Medline. Periodical Indexes included, PsychInfo JSTOR, PsychArticles accessed through Rutgers University Libraries online Catalogue. Search terms included, smoking cessation schizophrenia, smoking reduction schizophrenia, smoking cessation interventions schizophrenia, and smoking cessation schizophrenia spectrum disorders.

Outcomes/Results: Thirty-three journal articles were reviewed. The literature demonstrated the interventions integrating smoking cessation for people living with SSD with other treatments. Results were narrowed to two multi-component interventions. The researchers at the University of Newcastle, Callaghan, Australia conducted a two-arm Randomized Control Trial (RCT) from July 2009 and April 2011. This study examined Cardiovascular Disease Risk (CVD), smoking cessation, and other risk behavior outcomes among smokers with psychotic disorders. All participants received a 90-minute face-to-face intervention session and 24 weeks' supply of Nicotine Replacement Therapy (NRT). Significant reductions in CVD and smoking were detected in both intervention arms without significant differences between groups [3] .Wilson et al, from Duke University School of Medicine conducted a cohort study from 2015 and 2017.The intervention included mobile contingency management (financial compensation for smoking abstinence), pharmacotherapy for smoking cessation, CBT, and the Stay Quit app for relapse prevention. Qualitative findings from cohort two included the addition of a $100 bonus for biochemically verified abstinence, a messaging feature that enable therapists to send messages to participants for pharmacotherapy adherence, the removal of the Stay Quit app, and increased the dose of nicotine in NRT. Methodology changes resulted in improved treatment adherence 63% from 40%, and a 38% abstinence [4].

Evaluation/Conclusion: Findings suggest multi-component interventions are more likely to address social, psychological, genetic, and neurobiological vulnerabilities that make it difficult for individuals with SSD to quit smoking. Further research may be needed to increase sustained abstinence rates for this population.

Title: Assessing Oral Health Gaps in Children with Special Needs

Name: Sanjana Mamidi

Preceptors: Director: Juliana David (Oral Health Program)

Agency: New Jersey American Academy of Pediatrics (NJAAP)

Purpose: To identify gaps that exist in oral health for children with special needs and to identify resources available to educate families with special needs children on oral care.

Significance: According to the 2016 National Survey of Children's Health Report, 16.7% of children with special health care needs have one or more oral health problems. HRSA defines children with special health care needs as children who are at increased risk for chronic physical, developmental, or behavioral conditions and require health services of a type beyond those required by children generally. The oral health program at NJAAP received a grant from Horizon Foundation for NJ to link children with special health care needs to overall dental wellness in New Jersey. Two of the grant deliverables were: 1. A parent survey to identify oral health gaps in children with special needs 2. A mapping of resources survey to identify pediatric oral health champions available to provide education to the community and facilitate linkages to those services.

Method/Approach: The parent survey questions were extracted from the 2009-2010 CDC National Survey of Children with Special Health Care needs and adapted to New Jersey. The mapping of resources survey questions were drafted using other sample mapping of resources surveys. The dissemination of these surveys were through three key organizations who focus on providing outreach to special health care needs children and adults. These organizations were the Statewide Parent Advocacy Network (SPAN), The Arc of New Jersey, and the NJ Council on Developmental Disabilities (NJCDD). NJAAP was able to distribute the surveys via email with a SurveyMonkey web link after an oral health workshop was conducted to parent members of the partner organizations. NJAAP also distributed the mapping of resources survey by reaching out to various healthcare professionals.

Outcomes/Results: A total of 30 parents attended the two parent presentations that were conducted during the month of June with SPAN, on the status of oral health for children with special healthcare needs. The preliminary results indicate that 90% of the thirteen respondent parents report receiving education regarding solely brushing and flossing, but not on topics such as the different food and drink recommendations. NJAAP is taking a proactive approach to address these gaps through the mapping of resources survey. Preliminary results from the mapping of resources survey show that out of the nine respondents, 89% of them are willing to provide oral health education to all audiences.

Evaluation/Conclusion: NJAAP's outreach efforts will be successful when additional responses are collected before the end of this grant period. After collecting additional survey responses for both surveys, a database that provides strategic linkages between organizations in the community seeking oral health educational services and healthcare professionals, will be created and shared on the NJAAP website. In addition, information regarding gaps related to system issues will be provided to state agencies such as NJDOH and NJDMAHS along with policy recommendations. In the near future, NJAAP will be able to address these gaps in oral care by building connections with additional special needs organizations such as Special Olympics. Overall, these surveys and the database are essential resources in addressing oral health gaps for all children

Title: An Assessment of Barriers to Oral Healthcare for Pediatric Dental Patients

Name: Aaisha Mapkar

Preceptors: Direct Supervisor: Dr. Meetu Soni
Project Supervisor: Jenaya Malave

Agency: The Smile Express

Purpose: To assess the potential barriers to oral healthcare among pediatric dental patients that have incomplete treatment plans.

Significance: Oral health status is often affected by many possible factors, including socioeconomic status and general attitudes towards dental care. A child's oral health must be assessed periodically in order to determine diagnoses such as dental caries and common chronic childhood diseases. Regular six month checkups of pediatric dental patients are vital to preventive dentistry; the hygienist and dentist can, thus, consistently assess the patient for proper hygiene and identify oral diseases and tooth decay. Once treatments are scheduled, it is the parents' responsibility to bring in the patient to complete treatment plans. Often, however, patients never complete the intended treatment and this lack of intervention will eventually lead to severely impaired oral function. The Smile Express seeks to track missed and cancelled dental treatment plans in order to identify the most common reasons for broken appointments.

Method/Approach: The software, OpenDental, utilized in the office was used to access a list of patients who had unfinished/pending treatment plans. A survey was developed in order to send out to these patients; it listed various possible reasons for not returning to the office to complete treatment. The office typically notes the phone number, address, and email address of every patient, and it was determined that the best way to send the survey to patients would be via email. The survey was made available in both English and Spanish in order to be accessible by a large majority of the patients at the practice, and included one multiple choice question which asked the patients to choose the option which best describes why they had not returned to complete pending treatment, and educated them about the negative effects of postponing treatments plans.

Outcomes/Results: Of the sample size cohort (n = 200), 21% of parents responded that they forgot about the scheduled treatment plan, 16% said the office is too far for them, 11% responded that they found another dentist, 32% responded that they had no time to come to the office, and 21% responded that their child is too scared to visit the dentist. While there were other answer choices available, such as "the office does not accept your insurance," "wait time in the office is too long", and "treatment cost is too expensive", none of these answer choices were selected by the sample size cohort.

Evaluation/Conclusion: Based on the results, a majority of parents within the sample cited reasons such as forgetting about scheduled treatment and not having the time to visit the office to complete their child's care plan; these trivial causes behind lack of visitation can be avertible through an emphasis on the importance of prevention and intervention in dentistry. Dental health education in the public school systems and family physician's offices is imperative to improving the frequency of dental check-ups, cleanings, oral disease diagnosis, and treatments.

Title: Bariatric Surgery Analysis

Name: Samantha Mascola

Preceptors: Direct Supervisor: Joseph Wojiteck, Assistant Patient Experience Director; Project
Supervisor: Alina De Almedia, Registered Dietician/ Bariatric Surgical Clinical Reviewer

Agency: Clara Maass Medical Center

Purpose: To analyze the overall health rate for bariatric surgery patients one-year post operatively at Clara Maass Medical Center.

Significance: An estimated 160 million Americans are either obese or overweight. An individual is considered morbidly obese if he or she is 100 pounds over his or her ideal body weight, has a body mass index (a tool used to determine is someone's weight is proportional to his or her height) of 40 or more, or is 35 or more and experiencing obesity comorbidies such as hypertension or diabetes. Bariatric surgery helps individuals who are obese lose weight. At Clara Maass, surgeons perform robotic gastric sleeve surgeries to help morbid obese patients become healthier. By obtaining bariatric surgery, patients should be able to eliminate comorbidities as well as lose weight. This study studied the impact of bariatric surgery.

Method/Approach: Records of all surgeries in the past year were obtained from the Clinical Reviewer. A retrospective review was used to develop a study to determine if patients became healthier after their bariatric surgery. Comorbidities were measured before and one-year post operation. Patients who were on medication to control hypertension/diabetes or obstructive sleep apnea were also studied pre and one-year post operation.

Outcomes/Results: Of the sample size cohort (n=60), 50 were female (80%) and 10 male (20%). Of the 50 women, 42 of them (84%) had a BMI lower than 40 one-year post operation. Of the 10 men, 4 (40%) of them had a BMI lower than 40 one-year post operation. Of the 50 women, 25 of them (50%) had fewer comorbidities and/or lowered the number of medications taken daily one-year post operation. Of the 10 men, 6 of them (60%) had fewer comorbidities and/0r lowered the number of medications taken daily one-year post operation.

Evaluation/Conclusion: Of the 8 women who did not lower their BMI under the obese range, 2 women suffered from severe depression and anxiety (25%) which might have contributed the most their unsuccessfulness, the other 6 women (75%) suffered from hypertension, high cholesterol, and diabetes. Of the 6 men that were unable to lower their BMI under the obese range, 3 were noncompliant and did not follow up for one year, 2 suffered from hypertension and hyperlipidemia, and 1 had a substance abuse problem. Telephone counseling, appointment reminders, and encouraging patients to attend support groups may serve as effective strategies to (a) enhance initial and long-term adherence to follow-up diagnostics and (b) improve bariatric surgery success and create healthier people. Ongoing monitoring of bariatric patients will be taken to ensure continued improvement in the future.

Title: Clifton Tobacco Age-of-Sale Enforcement Program

Name: Garrell Middleton

Preceptors: Antonino Intili Jr., Senior Registered Environmental Health Specialist

Agency: Clifton Health Department

Purpose: Ensure that age requirements for selling tobacco and related products are enforced due to a recent increase of underage smoking within the City of Clifton.

Significance: New Jersey law prohibits the sale of tobacco to individuals under the age of 21 years. According to the Campaign for Tobacco-Free Kids, 21,300 (4.7%) of high school students smoke. Smoking kills more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined. In New Jersey, 11,800 people die annually from tobacco smoking.

Method/Approach: The health department has procured two college student workers between 18-20 years of age who will participate in the program. The student workers will pair with health department inspectors who will visit retail establishments that sell tobacco within the City of Clifton. The student workers will go inside and attempt to purchase tobacco products using money provided by the health department. Student workers will return to the health inspector who will be waiting outside and advise if the transaction was completed. The health inspector will then go inside the store, without the student, to request to speak with the owner if available, and advise them of the results of the inspection. If store illegally sold to student(s), a notice of violation and summons will be issued by the health inspectors.

Outcomes/Results: The program commenced on July 11, 2019 and is expected to end on August 29, 2019. As of August 1, 2019, we have visited 25 tobacco retailers within the City of Clifton and 7 of those retailers sold tobacco products to our student workers. These preliminary results equates to 28% of tobacco retailers selling products to under aged consumers.

Evaluation/Conclusion: Having a 28 % rate of tobacco retailers selling to underage consumers suggests there is a problem. The 7 retailers will be issued a summons under NJ Criminal Code 2C:33-13.1 for selling tobacco to a person under 21 years of age. The 18 retailers that followed the law and not in violation will receive a certificate from the Clifton Health Department. Conducting random inspections and enforcing the law will help to ensure that tobacco retailers are not selling products to under aged consumers. Specifically it will potentially curb the problem of under aged e-cigarette consumption within Clifton High School.

Title: Website Checklist, More Profit?

Name: Samantha Mohr

Preceptors: Rita Belarista

Agency: Cen-Med Enterprises

Purpose: To plan and execute a checklist for the companies website that allows for improvement and easier use for current and prospecting customers/businesses.

Significance: Business-to-business (also known as B2B marketing) involves the sale of one company's product or service to another company. The significance of this checklist is to improve the design and increase profit. There is an implication to thinking of your B2B website as your business' digital shop front – it is the easiest way for you to get your business' products and services in front of interested clients. This is important to Cen-Med because of their target audience, other company's purchasing their products for use.

Method/Approach:
When looking at a website that sells products there should be 5 criteria: purpose, reliability, authority, currency, and accuracy. Purpose questions include: Is the purpose of the resource clearly stated? Is the site organized and focused? Is the target audience or intended users clearly indicated? The Reliability: Is the author affiliated with a known, respectable institution? Is response time fast? Authority: includes author qualifications, credentials, or personal background that gives them authority to present information. Currency: Refers to how the current information is presented and how often is the website updated or maintained. Checklist items include: are links maintained on the site? Has the site been under construction for some time? Is the site easily browsable or searchable? Accuracy questions were: Is the information comparable to other sites on the same topic? Is a bibliography or reference list included?

Outcomes/Results: After evaluating Cen-Med website and the checklist I had created there are many updates that need to be made to the current website to increase profit. We want to focus on reliable customers while also drawing attention towards new customers.

Evaluation/Conclusion: Having a website allows for around the clock sales, accessible 24/7 increasing company sales. When comparing Cen-Med to other companies in the same market, there are many differences. The main goal of Cen-Med is to produce reliable products and gain the trust of current customers while also attracting new customers. There needs to be a clear message of who Cen-Med is and what their goals, purpose, and reasoning for why they are in this market.

Title: Transitions of care program

Name: Ashley Morales

Preceptors: Jazmin Cascante APN

Agency: Hackensack University Medical Center

Purpose: Reduce the rate of readmissions of heart failure and chronically ill patients who have medicaid, medicare or are uninsured within the first 30 days.

Significance: After the Affordable Care Act required the Centers for Medicare & Medicaid Services (CMS) to penalize hospitals for excess readmission rates, hospitals have experienced $1.9 billion in penalties. The goal of this program is to improve the quality of care upon discharge. This can change by lowering the rates of readmissions. Transitions of Care works to prevent those readmissions within the uninsured, medicaid or medicare populations with heart failure, as well patients with chronic diseases. Many of these patients lack knowledge about their medical condition and what they should be doing when they are discharged. It is important for them to understand the severity of their condition. Patients need to be educated on how to maintain their health at home and not at the hospital.

Method/Approach: The program helps reduce readmissions rates by educating patients on their condition, referring them to a visiting nurse service and providing them with blood pressure/glucometer machines at no cost. The program also refers patients to a discount medication program, a social worker if needed, and Meds to Beds, which is when a pharmacist goes to their bedside to educate the patient about the medications they will be taking. The team also makes their follow appointments and coordinates the transportation to their appointments. The method that is used is through a quantitative approach. The first step is receiving a business intelligence list with patients that may qualify for the program. The team chooses those that are attributed or who are insured, medicaid/medicare with heart failure. From those picked, someone from the teams goes to the patient's bedside to screen the patient with a questionnaire to identify their needs. If the patient is in need, the program encourages the patient to enroll. Once that is completed, a folder is provided with a list of resources. The equipment is also given upon discharge, as well as the referral to Meds to Beds, the social worker, and the visiting nurse service. Once officially discharged, the team begins to coordinate transportation and make follow up appointments and phone calls to the patients for the next 30 days.

Outcomes/Results: Out of the 20 patients that were followed (n=20), 9 patients had heart failure and 11 patients had other chronic diseases. 0 patients were readmitted within the first 30 days with heart failure. That is a 0% readmission rate. 2 patients with chronic illnesses were readmitted making it an 18% readmission rate.

Evaluation/Conclusion: The readmission rate since the program has started in 2015 has gone from 13.22% decreasing to 3.26% in March of 2019. Transitions of Care numbers are specifically heart failure patients, while the results of patients seen throughout the internship came from both chronically ill and heart failure patients. Due to the expansion of the program, it was possible to start following these two populations. Comparing the overall data with heart failure patients is shows that the interventions have been a success. One thing that can be improved are the interventions for the populations of other chronic diseases. After the 30 days patients receive a satisfactory questionnaire.

Title: Improving Escuela Los Faros

Name: Stanley Moy

Preceptors: Major Matthew Mallalieu, Firing Effects Coordination Cell officer in charge

Agency: Special Purpose Marine Air-Ground Task Force - Southern Command 2019 (SPMAGTF-SC19)

Purpose: To reduce health and safety risks and enhancing learning facilities at Escuela Los Faros.

Significance: After multiple site visits conducted by FECC Marines and engineers at Escuela Los Faros, they discovered that the side building has a weak foundation, a leaking roof, a bat infestation, the main building has no running water, no functioning bathrooms, and the electrical issues within the site. Additionally, upon the interview of the school nurse and members from the Ministry of Health, they revealed that most staff and students get sick from contaminated water and are affected by the local environment.

Method/Approach: To conduct this project, there were be site visits and key leader engagements. This was done between June 2019 and August 2019. During key leader engagements, negotiations occurred between the civil affairs Marines and the local leaders to decide what can be accomplished within our time in Guatemala and SPMAGTF's budget. Once the negotiations have concluded, engineering Marines will arrive and start construction of the engineering projects. Throughout the entire period, communication strategy, Marines documented the entire process and forwarded storyboards to the commanders of U.S. Marine Corps Forces, South and U.S. Southern Command.

Outcomes/Results: During negotiations the SPMAGTF discovered that Escuela Los Faros has received no assistance from the Guatemalan Ministry of Education. Additionally, there was a disconnect between the negotiations with the government officials from Ocos and the local leaders of Ocos. Eventually after a town hall, all parties agreed, and the project was approved by Headquarters Marine Corps. Escuela Los Faros has received a new kitchen, a new cistern and plumbing. Due to extreme weather and supply issues with local contractors' construction of the building has slowed down.

Evaluation/Conclusion: Construction is ongoing and will be completed no later than September 27, 2019. After the evaluation is completed there will be an establishing and satisfaction survey. This survey will set a baseline and allow for future SPMAGTFs to analyze the changes over time and the effectiveness of this project.

Title: Revenue Cycle

Name: Steve Nebedum

Preceptors: Grace Odediran

Agency: RWJMS Neurosurgery Department

Purpose: To see how cash revenue is generated in a startup medical clinic

Significance: The neurology department in RWJ was created to have a strong presence of neurosurgery in New Jersey. The new startup neurosurgery department in New Brunswick became its own entity in January 2019. The goal of my internship is to understand the successful implementation of an efficient revenue cycle of a health care entity. Patients = \$\$\$. The revenue cycle will be incorporated into the training modules for new employees. This would include the processes implemented for the calling center and front desk. Also, to see how billing and authorization works so that patients are able to be seen by the doctors without complications.

Method/Approach: The method that we have been using for this project has been observing the different segments of the operation that result in revenue generation. The call center will be reviewed to see how the employees first interact with the new patients and returning patients to schedule an appointment. The front desk will also be observed to see how they would receive the patients that come in and make sure that their documentations are correct so they would be able to see the doctor that they are coming for. Billing and authorization is another key part of the revenue cycle that includes making sure that the patients insurance are acceptable to the medical school. This would essentially all come together as a part of the revenue cycle that would imply that everything in the clinic is connected.

Outcomes/Results: A PowerPoint presentation is being prepared to show the staff. The presentation would be used for future new onboarding training for whomever RWJ Neurology department may hire. We will do a presentation on each of the positions and explain how they are important to the revenue cycle. Employees would be able to understand the value that their work contributes to the success of the medical clinic. The results should benefit the employees engagement in their respective positions and to understand that the bottom-line needs to be satisfied in order to run a successful clinic.

Evaluation/Conclusion: Proposing a satisfaction survey of the PowerPoint presentation. Ask various questions i.e. how did the presentation benefit your outlook on the medical center? How will you look to improve your performance towards the success of the center? etc. There will be 5 questions to answer as feedback for the improvement of the training presentation.

Title: Increasing Patient Return and Educating Patients on the Importance of Prevention

Name: Alexandra Nosova

Preceptors: Natalya Livshits, Office Manager

Agency: Aesthetic Dentistry of Jersey Shore

Purpose: To educate patients on the importance of consistent dental visits as well as evaluate the most efficient way to increase patient return.

Significance: Dental offices often experience appointment cancelations, with some patients never following up to reschedule. Patients who miss appointments are not only at a greater risk of damaging their oral health but their overall health. In 2006, The ADA stated that "researchers have found that periodontitis (the advanced form of periodontal disease that can cause tooth loss) is linked with other health problems, such as cardiovascular disease, stroke, and bacterial pneumonia".' Patients miss appointments because of financial insecurity, transportation problems, fear, or forgetfulness. The office uses multiple methods to remind patients about their appointments. Despite those efforts, patients with minor teeth problems often do not see the importance of keeping up with their bi-annual hygiene visits and develop major dental problems later on.

Method/Approach: A paper questionnaire was given out to patients between the ages of 18 and 87 at the end of their visit asking them to check off the best ways for them to stay reminded of their appointment. Patients could check up to four responses: text message reminders, phone call the day before, phone call the morning of, or appointment card given the day the appointment is made. A brochure was presented to all new patients about the importance of oral hygiene and the consequences of allowing minor issues to go untreated. To express the seriousness of dental neglect, patients were shown estimated costs of dental procedures that could result from the acceleration of minor complications. For example, patients were told the estimated cost of a composite filling compared to a root canal, a procedure easily avoided by filling the cavity when it is small. Dental assistants were given a short script of what to say and how to present information to patients when acting as a liaison between the dentist and the front desk.

Outcomes/Results: Out of a sample size cohort (n=50), 78% of people over the age of fifty prefer three or all of the appointment reminders. 77% of patients fifty years or younger prefer one or two reminders, mainly the text message reminders. The presentation further educates patients about the financial burden that accompanies missed appointments and festering untreated dental problems.

Evaluation/Conclusion: Patients who received the brochure/presentation were given a satisfaction survey at the end of their visit. 100% of patients were satisfied or extremely satisfied with the information learned on oral health and 88% reported that they are less likely to miss appointments with the knowledge. The incentive was successful, as the sample group saw a decrease in cancelations. The data showed that older patients may need more reminders so they can set up arrangements to get to their appointments. Presentation recipients got a better understanding of the importance to adhere to bi-annual check-ups and treatment plans. Giving new patients the questionnaire as part of their welcome forms can help the office better understand how to reach all future patients. Repeated future surveys will serve to enforce the validity of our findings, as well as serve to increase awareness in any changes in patient contact preferences over time. https://www.ada.org/~/media/ADA/Publications/Files/patient_61.as

Title: Patient Perceptions on Health-Related Social Needs Screening Tool

Name: Sarah Nunn

Preceptors: Direct Supervisor: Christopher Rogers, Project Manager

Agency: Hackensack Meridian Health - Accountable Health Community Program

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Purpose: To help improve the current AHC (Accountable Health Communities program) health related social needs screening tool through a follow up survey measuring patients' perceptions and experience.

Significance: The project proposed is a survey created to understand the patients' perceptions of the accountable health communities screening tool. The accountable health communities screening tool was funded by Medicare and Medicaid and serves as a tool to measure patients' health-related social needs (food insecurity, housing instability, transportation, utility assistance, and interpersonal safety) in order to connect them to resources in the community. The project is designed to collect data on how the patients felt about the screening process through a follow-up survey so that the original screening tool can be improved in order to help as many patients as possible and make them feel as comfortable as possible.

Method/Approach: This project was exempt from Hackensack University Medical Center's IRB. To begin the project and produce a survey a literature review had to be conducted by all of the interns. Following the literature review four domains for the survey were established: usability, perceptions, accessibility, and mode. Each of these domains would contain a few questions that included likert-scale answer options. The population studied was 2000 Medicaid and Medicare beneficiaries within Bergen and Hudson county that had completed the health-related social needs screening tool in the prior 12 months. These beneficiaries were called and the follow-up survey was conducted through the phone with corresponding answers recorded on excel. After data collection, SPSS was used to analyze the data.

Outcomes/Results: Out of the 23 patients whose data collected, 35% were aged 64 or less while 65% were aged 65 or older. Out of the 23 patients 30% were Medicaid beneficiaries and 70% were Medicare beneficiaries. 30% of the patients found the Screening Tool "Very Easy to Understand", 57% found it "Easy to Understand", 9% found it "Neutral", and 4% found it "Difficult to Understand". When measuring comfortability 9% found the screening location "Very Comfortable", 78% found it "Comfortable", 4% found it "Neutral", 4% found it "Uncomfortable", and 4% found it "Very Uncomfortable". When measuring the screening tool's ability to identify health-related social needs 13% found it "Very Good", 65% found it "Good", 13% found it "Acceptable", 4% found it "Poor", and 4% found it "Very Poor."

Evaluation/Conclusion: According to the results a majority of the patients surveyed felt comfortable with the screening tool and felt it was easy to understand. They also felt that it was a good way to measure their health-related social needs. This indicates the screening tool has an effective capability to serve its purpose in determining health-related social needs within the community and was a successful project. There were some restrictions such as patients forgetting they took the screening tool or not wanting to participate.

Internship Abstract

Title: Mandela Washington Fellowship Program - Washington DC Site Visit

Name: Chiamaka Onuoha

Preceptors: Dr. Ronald Quincy, Academic Director

Agency: Mandela Washington Fellowship Program Rutgers Leadership in Civic Engagement Institute

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Purpose: To plan a successful educational site visit to Washington DC for the 25 Mandela Fellows in the Leadership in Civic Engagement Institute.

Significance: Working under the Academic Director for the Mandela Washington Fellowship Program, Leadership in Civic Engagement Institute means putting together daily programs that entail Fellows learning from prominent leaders in various fields. This Institute of the Fellowship includes academic sessions, leadership training, site visits, community service activities, cultural and social activities, and networking opportunities that will expand the Fellows' current knowledge about U.S. approaches to Leadership in Civic Engagement. The Fellows will become better acquainted with the qualities, skills and methods leaders need to carry out their visions in their home countries. One of the programs include the site visit to Washington DC for 4 days.

Method/Approach: This particular project was important for learning about program planning, coordinating, and executing. Before drafting invitation letters for DC guest speakers for 2019, first look through a list of last year's guest speakers, research possible new ones, and look to see if any email invitation letters had already been sent out. After gathering all this information, a chart was created in order to keep track of speakers, invites, and responses. Then the necessary email invites were drafted, edited, and approved by Dr. Quincy, the Academic Director. As letters were being approved, they were sent out and all changes were marked in the chart created in the beginning. In addition to the edition of the chart, the daily agendas for the 4 days the Fellows spent in Washington DC were edited as needed according to updates based on responses to the email invites that were sent out. Lastly, continued email correspondence between the confirmed guest speakers and the Fellowship team was maintained up until the scheduled date and time of the meeting.

Outcomes/Results: All 11 speakers were met with. There was a delay on the third day when getting to one of the speakers due to attempting to get the Fellows lunch. The Fellows said they gained knowledge on conflict resolution, grant writing, and sustainable approaches to civic leadership; although some did express the fact that some sessions were not as beneficial as others.

Evaluation/Conclusion: There are multiple ways that the program can be evaluated, including asking the Fellows if they got something beneficial out of the speakers and networking that they can apply to their own work when they go back to Africa. This can be done in 5 focus groups made up of 5 Fellows each. Other ways include giving the Academic director an evaluation form and administering satisfaction surveys which will include a question about whether any speakers should not be met with the next year. If a majority of the speakers are voted to not be brought back then one can conclude that what they had to offer wasn't beneficial so the purpose of the site visit was not fully realized. One limitation would be the fact that all the Fellows are looking for different things; therefore, what's not beneficial to one could have been imperative to another.

Title: Transgender Infertility Education Video

Name: Dhana Osei-Tutu

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

Agency: Women's Health Institute (WHI) (RWJMS)

Purpose: To create a video that would allow transgender patients to make informed decisions when beginning gender hormone therapy due to infertility risks by using imagination.

Significance: In the United States, there are currently 150,000 individuals from the ages of 13 to 17 that identify as transgender. t Currently, Doctors begin hormone therapy for transitioning individuals at the age of 16. Since Doctors are beginning to administer hormone therapy to even younger patients, it is imperative that younger patients receive proper consultations about the complications and risks that can occur when beginning gender hormone therapy. Infertility is a known risk when starting the therapy. With proper consultation, patients can take steps for oocyte or sperm preservation.

Method/Approach: Extensive research was conducted in order to review the current consultation process. It was discovered that various scholarly articles presented little data about the consultation process or resulted in low amount of patients proceeding in oocyte or sperm preservation. It was determined that in order to education young patients on infertility risks and preservation, the topic of families needed to discussed by utilizing the concept of imagination. Next, a script was created which illustrated a potential scenario or conversation physicians can have with these younger patients regarding the risks. Finally, the script was transformed into a video through the use of PowToons.

Outcomes/Results: As a result, a dynamic script that displays all types of family building methods and different types of families was developed. The script displays the pros and cons of each method. With that, a video was produced through PowToons.

Evaluation/Conclusion: Historically, family building options were once not available to trans individuals. This video will benefit Robert Wood Johnson Medical School by giving physicians a method to discussing infertility risks and the concept of having a family in the future with trans patients. In order to evaluate the effectiveness of this video, patient surveys must be conducted to measure if the video was able to give them new or useful information about family building.

Title: A Literature Review on Swanson's Family Medicine

Name: Ebunoluwa Osuntuyi

Preceptors: Alfred Tallia, MD, MPH, Professor and Chair of Family Medicine and Community Health, Robert Wood Johnson Medical School
Project Supervisor: Dorna Edwards, Program Coordinator

Agency: Rutgers Robert Wood Johnson Medical School, Department of Family Medicine and Community Health

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Purpose: To update the literature review sources in order to contribute to the ninth Edition of *Swanson's Family Medicine Review.*

Significance: *Swanson's Family Medicine Review* efficiently summarizes all the latest updates in primary care and family medicine practice. This is a preparatory review book for residents preparing for the American Board of Family Medicine (ABFM) exam. This review book allows family physicians to stay up-to-date in the area of treatment and management with enhanced discussions throughout the text. The Family Medicine Review book is updated every three years; new advancements and medicines are added to the new edition. The goal of the literature review search is to provide up-to-date medical information to the end of each chapter, and find ways to improve the new edition.

Method/Approach: A plethora of search engines were used to conduct the literature reviews. Some of which were: ANNALS of Internal Medicine, Journal of Family Practice, American Academy of Family Physicians, Journal of the American Board of Family Medicine, Cochrane Library, Centers for Disease Control and Prevention, The New England Journal of Medicine, etc. The review articles found were dated from 2016 to current 2019. According to relevance to the topic discussed in that specific chapter, each article was individually reviewed for management, treatments, and preventions. Articles that were not significant or relevant were discarded.

Outcomes/Results: A total of 100 review articles were identified from Geriatric and Adult Medicine. After the articles were reviewed for relevance, 80 full text article reviews were selected. Of the 80 articles, 10 were excluded because they were not generalizable for the entire geriatric or adult population. The five areas of criteria were: causation, prevention, management, generalization, and new treatments.

Evaluation/Conclusion: The ninth Edition of *Swanson's Family Medicine Review* will include a new chapter section titled Hospital Medicine. This is due to new developments in technologies and treatments. As family medicine continues to expand with the always advancing medical field, *Swanson's Family Medicine Review* will continue to implement new content. After looking through over 100 article reviews, the success of this project was the specific five areas of criteria mentioned in the outcomes/results above. For future evaluations, specific criteria should be used, also the review articles should be dated from the previous five years because many treatments, preventions, and causations were still the same.

Title: 2019 Rent Control Survey of Municipalities

Name: Ethan Pardun

Preceptor: Direct and Project Supervisor: Christopher Wheeler, Chief Data Officer

Agency: New Jersey Department of Community Affairs

Purpose: To find and record public data relating to individual municipalities' rent control ordinances and their specific provisions or lack thereof and to organize the data for future publication.

Significance: New Jersey is notorious for being one of the most expensive states to live in due, in no small part, to the price of housing. As market-rate housing continues to appreciate in value, renters of homes are being financially squeezed. This dynamic implicates a vast number of New Jersey residents and if left unabated, may lead to disastrous consequences for people across the state, as well as the broader economy of the region and beyond. A number of municipalities have therefore tasked themselves with providing rent control ordinances aimed at slowing the rise of rental costs, while simultaneously mediating between the conflicting interests of the involved stakeholders (i.e.: renters, landlords, real estate investors, local citizens).

Method/Approach: Using publicly available data from online sources, an electronic spreadsheet was updated to reflect the current rent control ordinances of 120 of New Jersey's 565 municipalities, as well as any changes made to these ordinances since the publication of the previous rent control survey in 2009. Searches of municipal codes of ordinances were conducted in order to find information relating to the following categories: 1) Rent Increase Limit, 2) Minimum number of units-in-structure for ordinance to be applicable, 3) Exempt units, 4) Vacancy Decontrol policy, 5) Verification (is ordinance still in effect?), and 6) Changes made since the 2009 survey.

Outcomes/Results: Of the 123 municipalities in focus, 116 (94.3%, or 21% of the State's total municipalities) were verified as having some form of a rent control ordinance in place. These communities account for over 60% of New Jersey's rental housing stock. The 116 verified ordinances represent one fewer than were in place in 2009, with Roselle, Hazlet, Lindenwold, and Spring Lake Heights repealing or letting their ordinances expire, and Freehold Township, Neptune Township, and Shrewsbury Township (all in Monmouth County) enacting new ordinances. All of the municipalities for which a rent control ordinance was either verified or seemingly still in effect had their data updated to include either changes in rent control policy or information that was omitted from the 2009 survey data.

Evaluation/Conclusion: It is made clear by the share of observed municipalities for which rent control ordinances were still in effect that many New Jersey municipal governments view rent control policies as being a necessary function of their governments. While many of the municipalities made changes to their rent control policies, such as raising or lowering the maximum allowable increase in rent or tightening or loosening their policies on units for which their ordinances are applicable, very few repealed their rent control ordinances outright. Future follow-up surveys should be carried out in order to observe any changes in rent control policies and identify potential trends among New Jersey municipalities.

Title:	Improving Bariatric Patient Wellness and Communication
Name:	Michelle Park
Preceptors:	Marlene Thompson, Director of PACU and Bariatrics
Agency:	Robert Wood Johnson Barnabas Health

Purpose: To propose a program that improves bariatric patient satisfaction survey scores and return rates.

Significance: Patient satisfaction surveys are assessments that measure and evaluate healthcare services and quality of care. Surveys are often not filled out or returned back to the hospital. The lack of survey returns negatively affects the hospital's performance improvement research, which then affects the quality of care that patients receive. The Bariatric Unit of Robert Wood Johnson Barnabas Health currently distributes surveys via email post operation and has observed a low survey return rate over the course of this year from January to June. In order to improve return rates, there needs to be a more efficient method of communication between patients and providers. By implementing an app program that releases surveys quickly and sends individualized reminders for follow-up, patients may be more likely to submit surveys.

Method/Approach: This quality improvement project utilized a plan of action, which included the following: evaluation of current data collection methods, research on alternative methods using literary reviews, discussion with the Bariatric team and informatics on the program, report of the program during meeting minutes, education for bariatric staff and patients on the program, and improvement of the program after evaluation.

Outcomes/Results: Surveys in the Bariatric Unit were collected via email with a link to Survey Monkey after bariatric surgery. The current survey system manually follows up via email within two weeks of the patient's surgery. Using statistical analysis and aggregation of data collected from email responses, the survey return rate of the period from January to June 2019 was 17.5%. After evaluating the system, it is evident that the current data collection method is hindering high volume of survey returns and potential of reliable survey scores. Alternative systems that are web-based, mobile-friendly, by telephone, and in-person were researched. Studies showed that web-based systems were in decline as mobile-friendly systems, such as apps, were increasingly used in healthcare. Telephone surveys were two to four times more costly than web-based/mobile surveys and in-person surveys were the least preferable due to subject bias. During the June Bariatric meeting, the topic of survey return rate and scores was discussed along with ideas on improvement. The proposal of partnering with an app-based program called FollowMyHealth was noted and would be further discussed at the next meeting.

Evaluation/Conclusion: The Bariatric Unit is planning on utilizing the app-based program, FollowMyHealth, and releasing it within the next year for their patients. The mobile-friendly app directly sends surveys during hospital stay, reminds patients to follow-up, and follows up with patients within one to two business days if there are discrepancies with their responses. This technology is expected to exponentially increase survey return rates and improve survey scores as it simplifies the process of submitting surveys and in turn, improves the patient experience.

[References](#)

Title:	Increasing Employee Retention Rates in Long Term Care Facilities
Name:	Madhavi Patel
Preceptors:	Lori MacIsaac - Director of Talent Management
Agency:	Parker Life Org

Purpose: To analyze data from Parker employee records for retention analysis in Long-Term Care.

Significance: Nursing homes are becoming more common yet there is high turnover in the U.S. for clinical positions such as CNAs (27.7% in 2018), RNs (16.8% in 2018), etc. These high rates are usually due to finding other jobs with higher pay, not being able to work all necessary shifts, or violating organizational policies. The population is aging and if there are fewer healthcare workers available, the quality of care decreases, and the organization is no longer person-centered. By analyzing why employees choose to stay or leave it is possible to increase employee retention rates in long-term care organizations.

Method/Approach: At Parker, ADP (a program for payroll services) is used to track the reasons why employees leave. Some of these reasons included, "Left for Another Job, Remove Per Diem, Unable to Work". One method that was used to see why some employees left was the exit interview. When employees are leaving the organization, the manager interviews that employee and asks them various questions regarding what they liked/disliked about their role, how it could be improved and more. By reviewing exit interviews, it was possible to see what employees thought about their roles in the organization before leaving. I was able to use all this information to categorize the reasons for the turnover of each position.

Outcomes/Results: While conducting this analysis, there was a lot of information (some not included due to confidentiality). The biggest reason for employee turnover in this organization was the Removal of Per Diem Employees. This nursing home hires per diem employees who are required to work a minimum of 3 days a month. However, many of these per diem employees were not able to commit to this responsibility. The removal of per diem employees' group of terminations accounts for 23% of employee turnover at Parker Life. The next biggest reason for employee turnover included Leaving for Another Job (16%), Resigning (10%), Violating Home's Policy (9%), Personal (7%), Job Abandonment (7%), Performance (6%), Retirement (6%), Quit without Notice (5%), Career Change (3%), Unable to work (3%) and Attendance/Refuse to Return/Left for School/Misconduct/Eliminated Position (1% each). Although the highest turnover positions are CNA, RN, and LPN it's important to note that they are the most demanded positions in the organization and have the most employees in these roles compared to other positions.

Evaluation/Conclusion: Nursing homes, such as Parker, have a hard time with employee retention because healthcare employees are more likely than those in other industries to leave for other jobs (16%). It's important for employees in these positions to communicate with their managers rather than not talking about their issues and just leaving. It seems that it is hard to find loyalty in employees in long-term care organizations because many of them leave for jobs that offer more hours or pay. The resident needs to come first when working in a nursing home and it's impossible to provide proper care if there are employee turnover problems. Managers and the HR team can find more ways to encourage their clinical employees to talk about their problems so they can be addressed and possibly solved (using anonymous surveys). Ongoing monitoring of employee turnover and retention will be undertaken to ensure continued improvement in the future.

Title: Performance Evaluation of Employees

Name: Manisha Patel

Preceptors: Director of Human Resources: Dawn Moynihan

Agency: HealthEC, LLC

Purpose: To create employee appraisal forms to evaluate every employee at HealthEC to ensure they are meeting their performance goals.

Significance: An employee appraisal is a performance management process that can have a significant impact on an organization's culture, staff morale, and employee engagement levels. An annual performance review can hold an employee responsible for meeting targets and achieving SMART goals that were agreed the prior year. Thus, the employee has the time to organize resources to meet targets and given a chance to provide the executives with information to indicate if the results and goals have been achieved. While performing job expectations, it is also expected that employees adhere to company policies and competencies. All of this ties into salary increases, promotions and bonuses, new challenges and clear objectives, continued progression and development, a culture of trust and openness, support and training, and overall transparency.

Method/Approach: Not all employees at HealthEC are compliant with what is included in company policies. The goal is to help prepare the first formalized employee performance appraisal process for the organization. The employee will have to complete a Self-Evaluation form and Key Performance Indicator form. The reporting manager will then assess and give feedback to both forms. This process will be a result of ongoing discussions and feedback between the reporting manager and employee for mid-year and year-end reviews. The performance management approach ensures that outcomes are clear and consistent.

Outcomes/Results: HealthEC has a total of 57 employees at the Edison office, 31 of which, were hired within the previous fiscal year. Every employee was sent self-evaluations forms to complete and hand to the Director of Human Resources, to be evaluated by their reporting manager. As of today, 15 employees received an evaluation, and 7 employees are still in the process of evaluation. These statistics do not include the CEO and three employees whose increases are based on commission. The 15 employees either received a change of title, promotion, and/or a salary increase of 4% or higher retroactive to July 1st. The forms will be sent out company-wide to use for the next review performance. In addition, surveys will be sent out to monitor the completion of forms.

Evaluation/Conclusion: HealthEC is in the growth stage of its business lifecycle. At the start of the internship, there was no formal performance review process, and for a growing population health management company, it is essential to be able to measure sustainable success. With the growing number of employees, there is now a process of appraisals which will help keep track of the employees' performance. Giving the employees the feedback they need will help them continue to display their strengths and to improve on their weaknesses.

Internship Abstract

Title: Preliminary Analysis of Implementing Medical Scribes in Academic Outpatient Facilities

Name: Savan Patel

Preceptors: Direct Supervisor: Neil Silver, MPA, Senior Director of Administration

Agency: Rutgers - Robert Wood Johnson Medical School, Department of Pediatrics

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Purpose: To measure the impact of implementing medical scribes in six different outpatient specialties at Rutgers - Robert Wood Johnson Medical School.

Significance: Medical scribes have been implemented in various health settings for years. Initially they were used predominantly in emergency departments, to help chart medical information for patient visits. Now, scribes are employed in a multitude of facilities. Benefits of implementing a scribe include: increasing patient access to care, saving time per patient visit, decreasing the number of non-billable encounters, and managing seasonal fluctuations without additional providers. Although scribes have been implemented in outpatient facilities for some years, the majority of studies have focused on only one specialty. This study seeks to measure the impact scribes have across different specialties at RWJMS.

Method/Approach: Medical scribes for the pilot were trained and provided by Scribe America. Variables measured were: coding levels of different patient encounters, wRVUs (work Relative Value Units), amount of time taken to complete the average patient panel, the average number of patients seen per session, total amount billed during this period, number of unsigned documents during this period, and physician satisfaction through surveys during this period. Data was compared to previous years for the same time periods, to eliminate any seasonal influence.

Outcomes/Results: This study began on June 1ˢᵗ 2019, and will run for four months, which is outside the scope of this course. Data collection was intended to be analyzed in 30-day intervals but the study faced challenges with physicians preferring medical student documentation, and a low survey response rate. Based on prior studies, we expect procedural outpatient specialties such as Adult GI and OB/GYN, which implement the use of medical scribes, as more likely to increase revenue, patient satisfaction, and reduce physician burnout than non-procedural specialties such as family medicine or pediatric primary care.

Evaluation/Conclusion: Due to a 2018 policy revision by the Centers for Medicare & Medicaid Services (CMS), medical student documentation no longer requires physicians to completely rewrite charts. Thus, physicians prefer student documentation to scribe documentation, as students are kept up to date on medical terminology. Scribes also have a high rate of turnover, which results in a lack of continuity for physicians. With improvements in AI scribes, telemedicine, and streamlined electronic medical record systems, the need for scribes in academic environments may need to be reassessed in further studies.

Title: Medical Revenue Cycle

Name: Mike Payano

Preceptors: Direct Supervisor: Grace Odediran, Business Manager

Agency: Robert Wood Johnson Medical School Neurosurgery Department

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Purpose: To gain an understanding of the revenue cycle for a startup medical center.

Significance: The Neurosurgery department is a startup clinic that came to be in 2018. It was a part of another department but then became separated into its own area for a stronger neurosurgery presence around the country. In creating the Neurosurgery Department different aspects of the clinic were developed, implemented, improved on, to create a smooth and efficient running organization. The focus of this study is the implementation of the revenue cycle. This encompasses all aspects of customer service, patient interactions, charges and billing, and financial reporting. The study of the revenue cycle and its presentation will be incorporated into training materials used by management to train new employees.

Method/Approach: Clinical rotations will be held in the Call Center, front desk, and office space to observe and gain hands on experience with healthcare office management. Analysis of Financial reporting, that show different metrics that are used for performance measurements (Charges, RVU's, Profit and loss), will take place for data on the 2018-2019 fiscal year. Calls will be monitored in the Call center to see interactions with patients. Observation of the front desk will provide information on patient charges and interactions. Billing and insurance authorization will be observed in the office space to grasp different key points on ways patient pay and receive treatment. The data from these different locations and financial statements will come together to form a revenue cycle specific to the department's business needs.

Outcomes/Results: A training PowerPoint detailing the Neurosurgery Department Revenue Cycle will be prepared with details on each of the different segments of the cycle. It will be tailored to the staff and doctors within the department with the idea of educating them about the role in insuring a successful and profitable revenue cycle. The goal is to document the process of improvement, development and implementation, and how to successfully setup a medical center. This information may constantly be used and updated for training.

Evaluation/Conclusion: The PowerPoint will be presented at a staff meeting, which will also be an information sharing meeting for all employees to update them on changes and improvements in the clinics operation. Highlighted will be areas of improvements that have resulted in increased collections and profit for the clinic. Surveys will then be distributed at the end to measure the knowledge that the staff gained. The survey will contain 5 questions and will be made in the form of a Likert scale for simplicity.

Title: Guiding the Gatekeeper

Name: Sabrina Perez

Preceptors: Cecilia Coleman MPA BSN RN CCM

Agency: Blue Cross Blue Shield Association

Purpose: To develop a guide to streamline of Utilization Management activities amongst all plans and to verify that member notification distributed is in compliance with federal law and accreditation standards.

Significance: Utilization Management is a key component in any health insurance agency. In an effort to promote quality, affordable health care and appropriate administration of benefits, health plans complete pre-service and post-service clinical reviews. If requests are not approved based on the benefit provisions, the health plans offer alternatives available and allow opportunity for reconsideration. Their role is to review requests for services and apply coverage for the benefit provisions based on the contract terms, definitions, and limitations. The Blue Cross Blue Shield Association provides a procedure manual for benefit administration to all plans. While the manual address different operations areas for health plans, the plans themselves are allowed to develop their own local process due to a variety of systems. The procedure manual provides the basics for administering benefits the association is making efforts to transition utilization management into a national program. The guide would provide assistance on daily activities for utilization management teams and lead to a more unison form of performing daily activities.

Method/Approach: A comprehensive review and analysis was done of the current procedure manual focusing on the clinical review section. All information that was considered essential was pulled out and then organized in a logical manner. Research was done on Blue Cross Blue Shield Association benefits and an existing case management guide to maintain format requirements. There was also research done to find guides that were aesthetically pleasing and "easy on the eyes" to engage readers and maintain their attention. Researcher was done on the affordable care act and the accrediting bodies of the health plan National Committee of Quality Assurance (NCQA) compliance requirements for member notification letters. Both requirements were placed in a table to review any similarities and differences to develop new member notification letters.

Outcomes/Results: Although the guide will not be complete until the near future, a framework has been set up by extracting important information for the administrative procedure manual. The checklist for the letters that notify patient of plan decisions has been created including all affordable care act requirements and NCQA standards. The letters have been reviewed using this checklist and will be forwarded to the legal and accreditation department for approval.

Evaluation/Conclusion: The Blue Cross Blue Shield Association often provides the framework and information plans need to be in accordance with contract obligations. The guide focuses solely on utilization management functions and allows for the information distrusted to be consistent amongst all plans. Successful implementation will result in more consistency for the members across Plan boundaries when receiving services.

Internship Abstract

Title:	The Impact Medical Scribes Have on Physician Workload
Name:	Brenna Quinn
Preceptors:	Lauren Hartigan - COO of Scribe Partners
Agency:	Scribe Partners

Purpose: To assist (or to help) doctors increase patient interaction time through scribes and reducing the amount of EMR mistakes for insurance purposes.

Significance: The average Dermatologist sees around 30-40 patients per day. Although the Electronic Medical Record(EMR) is essential for patient wellbeing, it has also created additional burdens for providers. While providers are trying to record accurate information and give an extensive physical examination, they are being hindered by excessive documentation. The use of medical scribes has proven to lower physician documentation time, improve efficiency and patient-physician interaction. According to the study, "Association of Medical Scribes in Primary Care With Physician Workflow and Patient Experience", 57% of physicians spent less time typing on computers while inpatient visits when accompanied by a scribe. Furthermore, almost half reported the doctors spent more time than usual speaking with patients (AMA, 2018). Patient interaction is essential for medical offices.

Method/Approach: A group of medical scribes (3) was assigned to one physician. At the start of this project, the physician began by visiting an average of 42 patients per day. The objective for adding medical scribes to the physician's team was for her to see more patients, improve patient interactions and improve the accuracy of EMRs. Over the course of two months, this method was assessed through 1)inpatient number, 2)accuracy of EMR, and 3)patient-physician interaction. Inpatient number will be evaluated by an increase or decrease. Accuracy of EMR will be evaluated through the number of times the physician must go back to edit a scribe note. Lastly, patient-physician interaction will be scored through satisfactory or unsatisfactory.

Outcomes/Results: After implementing medical scribes to the physician's team, the inpatient number (42) increased to an average of 62 patients. The accuracy of each EMR improved with the provider spending less than 15 minutes on reviewing the note post-visit. Through understanding, each EMR reflected how the physician transcribes insurance codes and descriptions on her own. Additionally, patient-physician interaction was enhanced. This was evaluated through patient satisfaction after each visit. Through tally marks, a majority of patients referred to the physician as a friend or a "very good doctor to work with" after the visit.

Evaluation/Conclusion: Through process evaluations, the implementation of medical scribes was evaluated as beneficial. With accuracy in transcribing during patient examinations, the provider was able to have an upsurge of inpatients and a decreased amount of time spent editing notes. Furthermore, patient-physician interaction was improved. While in examination rooms, the physician was able to develop a friendly relationship rather than only focusing on the note. Whilst this occurred, the scribe would jot down favorable facts unique to that patient. This level of communication allowed each patient to feel prioritized, amongst the many patients the physician sees. Thus, the implementation of medical scribes was proven to be influential.

https://docs.google.com/document/d/1t5Jm9gALpVVSS5Uhys4nLIfykVB17w_GHkl6XEp_2bc/edit?usp=sharing

Internship Abstract

Title: S-YEP Programs Benefits, Needs, and Effectiveness

Name: Farah Randelia

Preceptors: Mariam Merced, Director; Yesenia Medina-Hernandez, Program Coordinator; Leidy Cuas, Lead Youth Development Specialist at School Based Youth Services Program

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

Purpose: To analyze the effectiveness of a grant based summer youth program in the New Brunswick population aimed to enrich the lives of low-income youth.

Significance: New Brunswick youth are at a disadvantage when looking for summer jobs. Even if they want to help their families by adding to the net household income, they are often competing against adults for the same jobs. By creating summer programs like S-YEP "Summer Youth Employment Program" these youth are able to earn a summer income for the duration of the program, as well as participate in weekly workshop sessions that will enrich their lives.

Method/Approach: A fifteen question evaluation was handed out to the students that inquire about the experiences they have had throughout their summer employment positions. Questions focused on certain aspects of the summer youth employment program that assesses the changes in students' preparedness to find a job in the future. Questions ranked on a 1-5 Likert scale. There were also two open ended questions asking to list skills learned in the program and to explain, as well as what can be done to improve the job shadowing experience. A new evaluation was generated this year in order to better assess the program, and will be used in future years.

Outcomes/Results: Overall, it was found that of the sample size (n=26), 23 (88.5%) participants would strongly recommend the program to other students in the future. 18 (69.2%) participants strongly agreed that the program was beneficial to them, and the other 8 (30.8%) participants agreed that the program was beneficial to them. 13 (50%) students agreed that the Friday workshops were helpful, and 10 (38.5%) of them strongly agreed.

Evaluation/Conclusion: Students felt as though this program was effective and worthwhile. Multiple surveys included networking, public speaking, and organization as skills learned through this experience. Some felt that more relevant job locations could be explored by this program that better fit their interests, but still expressed overall satisfaction with the program. To further prove the effectiveness of the program, follow ups with students in the fall semester to see whether or not they have a job could go to show the benefits of the program.

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Title: Trends of Substance Abuse in Tri- County

Name: George Rasare

Preceptors: Katie Wheelan, LSW - Crisis Intervention Specialist
               Brooke Renkens, MA - Mobile Response Director

Agency: Catholic harities

Purpose: To track the trends and analyze the substance use and abuse in the youth between 12-21 years in the New Jersey counties of Somerset, Hunterdon and Warren.

Significance: In the past, Catholic Charities struggled to identify youth who were using substances. It was suspected that substance use in adolescent may be as a predictor of future substance abuse in adults. The problems were: there was no correct tool for data collection, the agency only focused on the mental health, the questions were closed ended, and there was no time frame for the completion of the project. CRAFFT, the assessment tool designed to screen for substance-related risks and problems in youth was introduced recently by the agency to address these concerns and help in further assessment and therapeutic intervention.

Method/Approach: Data was collected from the youth within the Tri- County area involved in drug use or abuse. The CRAFFT tool, which has parts A and B of the assessment questions, was used. Part A asked if the youth had (a) drank any alcohol; (b) smoked marijuana or hashish; (c) used anything else to get high, for the last 12 months. Part B questions were: (1) Whether or not the youth had ridden in a CAR driven by someone (including self) who was high or had been using alcohol or drugs? (2) Used alcohol or drugs to RELAX, felt better about self, or fitted in? (3) Used alcohol or drugs while ALONE? (4) FORGOT past things done while using alcohol or drugs? (5) FRIENDS and family had told self to cut down drinking or drug use? (6) Got into TROUBLE while using alcohol or drugs? The key words of part B were: CAR, RELAX, ALONE, FORGET, FRIENDS and TROUBLE. Answering "Yes" in part A prompted to ask all questions in part B. "No" to part A prompted only the CAR question. These questions helped in identifying youth who needed further assessment and therapeutic intervention. Further, the questions helped in calculating percentages of substance use among the youth per county.

Outcomes/Results: Starting May 2019, a total of 174 youth from the Tri-County area have been screened by the Crisis Intervention Specialists; and have been exported to a spreadsheet. 100 from Somerset, 41 from Hunterdon, and 33 from Warren. Although Somerset county tops the list of the screened cases, Hunterdon County has the highest cases of substance use at 63%, followed by Warren at 61%, and Somerset at 29%. Further results show that High School students have the highest % of youth involved in substance use; followed by Middle School students.

Evaluation/Conclusion: While the CRAFFT tool provides useful information on the habits of youth alcohol and drug use, more data needs to be collected for effective results. The record shows that the data collection for the new system started in May 2019, but historically, summer periods have lower cases of response as compared to Fall and Spring which can be due to many youth going on vacation. Therefore, a better projection for better results is 6 months from the starting point of (May 1st, 2019). It is anticipated that Hunterdon County will still have a higher % of substance use due to the fact that it lacks recreational facilities/activities which might prevent the youth from idleness.

Title: Gloucester and Atlantic Counties Needs Analysis for Breast Cancer

Name: Mildred J. Rivera

Preceptors: Dr. Rita Musanti

Agency: Rutgers Cancer Institute of New Jersey

Purpose: To retrieve and analyze breast cancer screening rates in Atlantic and Gloucester County to propose recommendations for breast cancer programs in each county.

Significance: Atlantic and Gloucester County has one of the highest mortalities and incidence rates of breast cancer in females. In 2016, Atlantic County had 37 deaths due to breast cancer and Gloucester had 42 deaths. With screening and early prevention, it was found that African American women and Latina women are more likely to have breast cancer. This is due to their genetics as well as their socioeconomic factors. Many of them of them do not have health insurance, lack education, have language barriers, or have low income. The high mortality and incidence rates suggest that breast screening programs are not effective and need to be improved.

Method/Approach: The data were collected from the New Jersey Department of Health through the NJ State Cancer Registry. The registry provides data from patients who have been diagnosed with cancer. The Center for Disease Control and Prevention (CDC), also provides statistical data of people who have cancer. The community needs assessments were retrieved from local county hospitals. They provided data on demographics and screenings in each county. The data collected was used to create community profiles to identify which communities have the highest mortality rates and why.

Outcomes/Results: In 2016, 45% of age-appropriate women received a mammogram in Atlantic County, which is fewer than the Healthy People 2020 target of 81% of the population. In 2016, 76.9% of age-appropriate women received a mammogram in Gloucester County, which still does not meet the Healthy People 2020 target. Atlantic County has been identified to have higher poverty rates and uninsured rate, which concludes why they have a lower screening rate. In both counties, patients are diagnosed at a later stage when it becomes more difficult to treat. Breast screening programs must be exposed to people in order to decrease mortality rates.

Evaluation/Conclusion: In order to identify if breast screening programs are effective, there must be surveys conducted. These surveys would include when and where women have received their mammograms. It must also include if they followed up after their mammograms. Breast cancer screening programs must be accessible to residents. They should be educational and affordable. If a patient does not have health insurance or cannot afford a mammogram, the program must inform them of the free screenings that are available. The prograFolms must be accommodated to the demographics of the community. Breast screenings are crucial in order to detect cancer at an early stage.

Title: The 2019 Make Yourself Primary (CARE) Workbook

Name: Lyndra Sahou

Preceptors: Direct/Project Supervisor: Dr. Arnice Jackson, CEO

Agency: The Color of Health

Purpose: The primary goal of the 2019 COH Patient's Health Workbook is to increase health literacy among people of color and improve patient-doctor communication.

Significance: The 2019 COH Patient's Health Workbook is the first comprehensive guide for primary care doctor visits in New York City for adults and children. Communicating well with your doctor is an important part of getting good medical care. This workbook will help prepare patients for a medical appointment, discuss sensitive topics, manage patients' medications, and provide community health resources. Good doctor-patient communication has the potential to help regulate patients' emotions, facilitate comprehension of medical information, and allow for better identification of patients' needs, perceptions, and expectations. A study by Beckman and Frankel found that physicians interrupted patients' initial statements 77% during an appointment, which makes the average time of interruption by the physician about 18 seconds. Therefore, this workbook will highlight ways to communicate concerns and expectations to optimize the time given to speak during appointments.

Method/Approach: For this project, a needs assessment for the Jamaica Queen community was prepared. Many of their community health concerns were due to insufficient health education. Furthermore, a qualitative method approach and secondary research was used to synthesize information on wellness checks for ages 0-64 years old, including the CDC recommended immunizations and vaccinations. The information was then compiled into a workbook, written at a 7th-grade reading level. Canva, an online graphic design tool, was used to construct the workbook. When finalized, the workbook will be distributed electronically through PDF on the Color of Health website. The working copy of the workbook consists of 10 full-size pages.

Outcomes/Results: The workbook consists of the objective for the workbook, tips for talking with providers, wellness check information, women's health information, men's health information, and community resources.

Evaluation/Conclusion: The workbook will be published by September 1, 2019. Though the success of the workbook cannot be determined yet, the content material of this PDF workbook addresses three main concerns in patient-provider communication, which are optimizing time with provider, health literacy and expectations for the appointment. Using a colorful workbook with a plain reading level to provide the health information improves understanding amongst vulnerable populations, such as older adults, racial and ethnic minorities, people with less than a high school degree or GED certificate, low-income levels, non-native speakers of English, and compromised health status.

Title:	Analyzing Data on Environmental Health Complaints in the city of East Orange
Name:	Mamadi Sajawu
Preceptors:	Karen LaRussa
Agency:	Department of Health and Human Services, East Orange NJ

Purpose: To identify common environmental health issues in the City of East Orange investigated by the Health Department of East Orange and suggest possible solutions to the problems.

Significance: Healthy People 2020 reported that "globally, 23% of all deaths and 26% of deaths among children under age 5 are due to preventable environmental factors". The National Environmental Health Association (NEHA), defines environmental health as "the science and practice of preventing human injury and illness and promoting well-being by identifying and evaluating environmental sources and hazardous agents and limiting exposure to hazardous physical, chemical, and biological agents" (2019). Environmental health is at the core of disease prevention and control. According to the American Public Health Association (APHA) "environmental health is a key part of any comprehensive public health system" (2019). Investigation of environmental health complaints is a key component amongst the routine activities of the department of health. Common complaints in an urban setting includes bed bugs, rodents, sewage, mold and unsanitary conditions.

Method/Approach: : The East Orange Health Department records environmental health complaints using the MILS software. Data on the MILS from 2015 to 2017 were analyzed. The commonest complaints were bedbug, and rodent infestations, sewage backup, presence of mold and unsanitary conditions (trash, clutter, garbage). A year to year comparison of the complaints was done to determine the prevalence of environmental issues and outcomes. A suggestion of possible solutions are drawn upon the results.

Outcomes/Results: In 2015, a total of 302 complaints were investigated, 166 were closed and 136 cases remained open/pending. Of these, there were 54 cases of bedbugs, 57 of rodents, 10 of sewage, 38 of mold and 25 of unsanitary conditions. In 2016, 293 complaints were investigated, 180 cases were closed and 113 remained open/pending. Of these, 47 bedbugs, 40 rodents, 8 sewage backups, 48 mold and 22 unsanitary conditions were reported. In 2017, 326 complaints were investigated, 223 cases were closed, and 103 cases remained open /pending. Of these complaints, 23 were bedbugs, 145 rodents, 11 sewage backups, 68 mold and 16 unsanitary conditions.

Evaluation/Conclusion: Of the five environmental complaints in 2015 (n=184), there was a prevalence of rodents (31%), bedbug (29%), mold (20%), unsanitary conditions (14%), and sewage backup (5). In 2016 (n =165), mold (29%), bedbugs (28%), rodents (24%), unsanitary conditions (13%) and sewage (5%). In 2017 (n=263), rodents (55%), mold (26%), bedbugs (9%), unsanitary conditions (6%) and sewage (4%). Resources should be allocated to address these environmental challenges. Strict follow-ups will also help to solve the open/pending cases. Analysis of pending cases show the following: 2015(45%), 2016 (39%), and 2017 (32%). The importance of inspection follow-up, enforcement and resource allocation to control environmental health issues is emphasized.

Reference:https://docs.google.com/document/d/1Quc_XlRgdh4YWytyFuC9LbCVvItEgp8CMmGvljupdtw/edit?usp=sharing

Title:	Community Health Improvement Coalition 2020 Nutrition & Physical Activity Social Media Campaign
Name:	Christian Sartain
Preceptors:	Sarah Perramant, MPH
Agency:	Warren County Health Department

Purpose: To design a social media campaign to be utilized by the Nutrition and Physical Activity Workgroup of the Community Health Improvement Coalition of Warren County, NJ for the year 2020

Significance: Exercise is recommended by doctors to combat chronic diseases and their symptoms, such as non insulin dependent diabetes, hypertension, coronary heart disease, osteoporosis, obesity, mental health, colon cancer, stroke, and fatigue. Similarly, there is evidence that certain nutrients (e.g., vitamins C and E, β-carotene and calcium) may reduce the risk of certain cancers, coronary heart disease, osteoporosis, hypertension and cataracts. As the internet becomes increasingly utilized as a source of news and information, it is more important than ever to digitize health information. This is even more important in rural areas, such as Warren County. NJ, where remaining connected to society is often easier said than done. The primary objective of this project is to increase social media engagement with local residents and distribute health information via those channels in Warren County, New Jersey.

Method/Approach: Data was collected from each partner of the Nutrition and Physical Activity Workgroup of the Community Health Improvement Coalition at an initial brainstorming session in the form of fact sheets, websites, infographics, and scholarly articles. This information was scanned thoroughly and then sorted into categorized documents on Google Drive. The Google Drive was broken up into the following sections: Exercise and Outdoor, Events, Recipes. Upon completion of the written portion, images and animated gifs were inserted into much of the content to create a more contemporary feel. Finally, additional information relating to exercise and nutrition was gathered and added to the campaign in the form of a "miscellaneous" folder to increase health literacy of those inhabiting Warren County, NJ.

Outcomes/Results: The campaign was designed to provide the Nutrition and Physical Activity Workgroup with enough social media content for the 2020 calendar year. This will be delivered in the form of 4 recipe posts per month for a total of 48 posts, 2 exercise and outdoor posts per month for a total of 24 posts, 1 biography post per month for a total of 12 posts, 1-3 miscellaneous posts for a total of 12-36 posts, and 1-10 event posts per month for a total of 24-60 posts. As each partner of the coalition grows their following on social media platforms, this information will become accessible to a larger audience. As individuals become more educated on these topics, the Health Belief Model suggests their odds of making health-conscious decisions will increase.

Evaluation/Conclusion: By viewing the total impressions on each social media post, the workgroup will gain helpful insight into the amount of people viewing each post and how much time is being spent viewing it. This information can be cross-referenced with data regarding chronic disease related incidence rates and obesity rates to infer how much change, if any, can be attributed to the social media campaign. Surveys can also be delivered via social media to accounts that follow Community Health Improvement Coalition partners to provide helpful feedback on this project.

Title:	**Sustainable Jersey Initiative**
Name:	Arti Shah
Preceptors:	Carol Wagner: Health Officer/Director of Human & Health Services
Agency:	Fair Lawn Health Department

Purpose: To assist in the Sustainable Jersey certification process by compiling documentation and narrating steps to earn the points for the action: Brownfields.

Significance: Sustainable development has become an important Public Health goal as it is imperative to build communities that can meet the needs of current and future generations. Additionally, an integral part of human health and well being is creating environments that are free of air/water pollution and promote physical activity. Sustainable Jersey is a non-profit organization that encourages municipalities to reduce waste, greenhouse gases, and improve environmental equity. Initiatives of Sustainable Jersey such as Brownfield Inventory and Prioritization can greatly benefit residents by creating a positive atmosphere for residents. Remediating Brownfields has shown to increase public green space, improve the local economy, and reduce environmental contamination.

Method/Approach: To complete and earn the points for the action of Brownfields a list of contaminated sites in Fair Lawn were obtained from the NJDEP DataMiner website by a Fair Lawn Environmental Commission member. Once the sites were identified, they were verified by conducting drive by site visits and using google maps. Any properties that had an underground storage tank of heating oils or have already completed remediation were taken off the list. The remaining 5 properties were prioritized using the criteria: determining public health risks/environmental hazards, redevelopment potential, and historical preservation importance.

Outcomes/Results: There were originally 43 properties identified on the NJDEP DataMiner website but after conducting the verification process, five sites remained on the list. These final five properties were presented to the Open Space Committee for verification on June 17, 2019. The Board of the Open Space Committee which includes the mayor and several council members assisted in finalizing the priority list of the properties and discussed future reuse plans.

Evaluation/Conclusion: Completing these actions were able to earn the town of Fair Lawn 15 points towards their silver certification. Remediating and creating reuse plans for these properties eliminate any health risks caused by contamination from the Brownfield. It also results in many beneficial impacts for Fair Lawn residents such as creating jobs, increasing property value, improving overall quality of environment, etc. This action allows Fair Lawn to be one step closer in creating a sustainable community for current and future residents.

References: https://docs.google.com/document/d/16jMaeYcCd8Z5PLK-Wh58CD6UOg9hm3X-kLZfDwFMDhk/edit

Internship Abstract

Title: Completion of The National Survey of Employer-Sponsored Health Plans

Name: Farhan Shariar

Preceptors: Andrew Menge, Senior Associate

Agency: Mercer Health & Benefits LLC.

Purpose: To use client financial, claims, and census reports to help with the completion of The National Survey of Employer-Sponsored Health Plans which is the nation's largest, most authoritative annual survey on the topic of health benefits.

Significance: With the rising costs of healthcare in America, health insurance has become a necessity for the average American. Health insurance provides financial assurance for a large portion of the population who would not be able to afford care without it. Of 272 million people in the United States under 65 and thus un-eligible for Medicare coverage, approximately 56% are covered via their employer offered health plans. Mercer's Health and Benefits line of business helps clients which are the employers navigate through the healthcare group benefits marketplace as well as providing support to bring them into compliance with federal and state healthcare benefits regulations. The National Survey of Employer-Sponsored Health Plans is one resource that the firm uses in order to provide these services to clients. The survey collects information on a wide range of issues concerning employer health plans, including costs, strategic planning, plan provisions, and scope and limitations of coverage and uses this data for benchmarking purposes in order to give clients a comparison on how health plans are structured broken down by industry, geography, and population size.

Method/Approach: A random sample of all U.S. employers with ten or more employees - including state and local governments - is surveyed. All state governments are included; a random sample of county and local governments is drawn from the Census of Governments. An invitation to participate is sent to all employers in the sample with 500 or more employees. Employers are also given the option of completing the survey electronically through a Web site. Mercer will also offer to complete the survey for the employer in order to get a higher response rate. The survey is mainly comprised of employer demographics, health plan financials and designs which is all information Mercer has access thus it is easy for Mercer associates to complete the survey for their clients with their permission of course.

Outcomes/Results: For the Morristown office I was requested to complete the survey for about 15 of the clients by specific members of the client teams. Several financial and census files were used in order to complete the survey and all were successfully submitted by the proposed deadline. Throughout Mercer overall there were 1,800 received responses from employers with the New Jersey (Morristown/Princeton) office being responsible for about 70 of those responses. The data will be analyzed through the next few months with results expected to be released in October of this year.

Evaluation/Conclusion: Mercer does several annual surveys which have been used by not only Mercer associates but companies and researchers all over the world, The National Survey of Employer-Sponsored Health Plans is one of those surveys. The results of the 2019 survey will be used all through the next year in order to provide accurate benchmarking and demographic comparisons for health benefit data.

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Title: Evaluating the New Jersey Comprehensive Medicaid Waiver

Name: Joshua St Rose

Preceptors: Program Preceptor: Natalie Tuseth; Program Mentors: Dr. Sujoy Chakravarty, PhD, Associate Professor, Kristen Lloyd, MPH, Senior Research Scientist

Agency: Institute for Health, Healthcare Policy and Aging Research

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Purpose: To create an organized report, highlighting major New Jersey Medicaid changes related to behavioral health services.

Significance: Nationally based studies estimate that during a one-year period, nearly a third of the US population meets criteria for one or more mental health disorders and a quarter of the US population meets the criteria for substance use disorders. Studies have also observed trends between mental health and substance use issues with patients that already suffer from chronic medical illnesses. The disparities between medical services and behavioral health services creates an environment where vital areas health are neglected and negative health outcomes are exacerbated.

Method/Approach: A series of literature reviews were conducted to create a decade long timeline of New Jersey Medicaid changes. Medicaid policy statements were reviewed to identify which behavioral services were being made available and which populations had access to aid. This information was then mapped on to the timeline and used as a background base for the Medicaid evaluation.

Outcomes/Results: A comprehensive report was constructed in Microsoft Word using government statement messages, policy briefings, health provider procedure notifications and state department newsletters. This 7-page document highlights the different cost reimbursement mechanisms used, services added after each expansion and populations given access different plans in New Jersey between 2008 and 2018.

Evaluation/Conclusion: This report will act as a contextual tool as part of a larger Medicaid project at the institute. Compiled information related to managed care for behavioral services will also be used to create target variables for a New Jersey Medicaid evaluation.

Title: Developing Sexual Health Education Curriculum for the 65plus Population

Name: Karysa Swackenberg

Preceptors: Direct Supervisor: Dr. Alison Thomas-Cottingham, Principal Investigator

Agency: Sabre88, LLC

Purpose: To develop a peer-led education program for the 65 and older population to raise awareness on the topics of sexual health and aging.

Significance: There were 82,938 cases of gonorrhea, syphilis and chlamydia reported among Americans 65 and older, according to the 2017 CDC report. That is a 20 percent increase from 2015. Forty-three percent of the senior population in the United States are still sexually active. New Jersey does not currently offer sexual health education through the government's Division of Aging Services (DOAS) for its aging adults. Discover65Plus is a health initiative created by Dr. Alison Thomas-Cottingham, to promote seniors to be proactive about their sexual wellbeing, educate about safe sex techniques, and decrease the rates of STIs in this population. Evidence-based, peer-led workshops were created for the 65 and older population residing in New Jersey covering sexual health topics with the purpose to decrease STI rates, and advocate for seniors to access sexual health resources.

Method/Approach: Research showed the most common sexual health issues that aging adults experience are cognitive and physical impairments (43%), STIs/ other intercourse induced problems (24%) and medications interfering with sexual intercourse (33%) (AARP). In order for aging adults to learn new content most efficiently, Widener University concluded that seniors need font size no smaller than 16 on sheets, teachers must limit technology use and cannot instruct for more than 45 minutes. A four-week course was thus developed around sexual health truths.

Outcomes/Results: A four-week sexual health education course was developed with guidance from the research. Each participating senior receives a binder with fact sheets, resource cards, and activity guides for the workshops. All weeks begin with an introduction of participants in the workshop, an icebreaker to open up dialogue with intent to get to know one another better, and lastly stating ground rules for to ensure what is discussed is confidential. Week one begins with an initial assessment taken from the Ageing Sexual Knowledge and Attitudes Scale (ASKAS) that allows us to have a baseline of the groups knowledge. A myth vs. fact interactive activity using PowerPoint slides, is facilitated to refute common intercourse misconceptions. Video clips from "Human Growth" are viewed and fact sheets are distributed. Throughout the four weeks, content is taught to provide a full. The assessment is given again at the end of the course to gauge learning.

Evaluation/Conclusion: Discover65plus's plan is to promote and distribute its education services through its established partnerships with the state of New Jersey's aging and senior services department, county governments, and private senior centers. A large section of state grants and government budgets are allocated to assist in seniors continued education. The four-week series looks to see achievements in lowering STI rates, encouraging aging adults to stay sexually active, and provide resources for seniors to seek medical attention and further sex education if desired.

Title: Assessing different recruiting techniques and employee onboarding

Name: Tierra Taylor

Preceptors: Horace Lee Allen

Agency: Eclipse Maintenance and Restoration

Purpose: To analyze which recruiting and onboarding techniques yield a larger pool of quality applicants and lower employee turnover.

Significance: Finding and training the right employees is crucial for any company to succeed in today's economy. Frequent voluntary employee turnover can have a negative impact on employee morale, productivity, and company revenue. According to the Bureau of Labor Statistics, turnover is highest in industries such as trade and utilities, construction, retail, customer service, hospitality, and service. Replacing a salaried individual can cost six to nine months of salary. The cost of hiring a new employee include advertising, interviewing, screening, and hiring. You also lose productivity from that vacant spot.

Method/Approach: An assessment of current trends within the organization was conducted. I took note of the average employee turnover rate, how many applicants applied to job postings, and employees' feelings about the current training methods. I then implemented changes that would improve the quality of job training and using a new recruiting tool on indeed to attract more qualified applicants, as well as branch out to other job boards.

Outcomes/Results: According to the assessment, the average time employees spent at Eclipse was seven months. This means that employee retention was low. Eclipse also received a low number of quality applicants. Lastly, the employees agreed that they would enjoy their job and feel more confident if they had better/longer job training to prepare them. After implementing changes to the training, the employees reported in their feedback survey that they felt more comfortable and more prepared for what is expected on the job. Also, after trying the new recruitment tool that suggests jobs to qualified applicants, I found that the number of qualified applicants improved by 50%.

Evaluation/Conclusion: According to the feedback survey that was provided by the employees, the employees felt that the new job training that they received provided them with hands on experience, as well as a better understanding as to what's to be expected of them. Eclipse also had a larger pool of quality applicants to choose from during the interviewing process.

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Title: Evaluating Increasing Dental Implant Rates in a Family Dentistry Setting

Name: Priya Thakar

Preceptors: Direct Supervisor: Dr. Derek Fine

Agency: Aesthetic Family Dentistry PA

Significance: According to American Association of Endodontists, about 15 million root canals are performed every year and 5 million implants are performed yearly across the United States according to American Dental Association. While people have been familiar with the process of root canal for ages, dental implants are considered fairly recent and they are gaining popularity. While saving one's own tooth is a top priority for every patient, many individuals are starting to lean toward an implant to avoid failures with a root canal. Pye and Lockhart, et al. (2009) found that implants are becoming increasingly common because they have a high success rate even after being placed in contaminated surgical field.

Method/Approach: A cohort study of patients treated at the dental clinic was conducted. One hundred and twenty five subjects were treated between 7/1/2017-7/29/2019 from ages ranging 23-89. The subjects either opted straight for an implant or inserted implants after a failed root canal. There were various subjects with failed root canal that was performed in the past, however, only one failed implant was reported. The implant was rejected by the patient's body due to the individual being highly sensitive. Many patients with a history of failed root canal chose to get implants instead of following the traditional root canal route for their treatment.

Outcomes/Results: Of the sample size cohort (n=125), 85 patients (68%) opted for an implant rather than getting a root canal and 40 patients (32%) replaced their failed root canal with an implant. While the data about the exact time when the patients had root canal is not available, due to being treated at different places, some root canals were reported to have failed over a long period of time while some failed within a few years of being treated.

Evaluation/Conclusion: A huge number of patients, 68% opted straight for an implant to avoid various complications with root canal failures down the road. By using the data to educate future candidates regarding the pros and cons of opting for implants and root canals can help the patients make an educated decision. While the detailed data for the circumstances under which the root canals were performed is not available, keeping track of this data can help predict success or failure of the future root canals.

https://www.sciencedirect.com/science/article/pii/S019567010900084X

Title: Grant Research for PRADH's Programs Benefiting the Community

Name: Sumy Tharakan

Preceptors: Executive Director/ CEO: Kim Ruiz

Agency: PRAHD (Puerto Rican Association for Human Development, Inc.)

Purpose: To analyze the impact of funding specifically to the Housing Program and how it may increase the number of participants in the program's services all through grants awarded to the Puerto Rican Association for Human Development.

Significance: PRAHD understands that additional services are needed to address the housing needs of the 7.9% of Middlesex County's residents, 17.9% of Perth Amboy residents alone, that are low to moderate-income individuals. PRAHD's housing-oriented work was a direct response to a community petition to establish a housing center. Many face obstacles to homeownership due to lack of information, access to qualified resources, and a wide array of financial challenges. In 2018, workshops, including First Time Homebuyer/ Post Purchase/ Foreclosure Prevention, consisted of 120 individuals while Counseling services, including Rental Housing Counseling/ Rental Workshops/ American Dream Down Payment, aided roughly 155 individuals. Not only does the program provide clients with housing resources but also educate them on their personal finances and advise clients on how to best achieve their housing goals.

Method/Approach: In 2018, PRAHD has decided to separate the Multi-Service Center and the Housing Program, two programs that were once joined together, but now are thriving on their own. Since the split, the money once used to fund both programs was divided amongst services within each program. Discussing with the accounting department how the money is distributed within programs will provide more information on the necessity of grants. Additionally, researching the Housing Program's past clients, will provide an understanding of their past successes and failures to determine the impact the funds had/ will have on the Housing program.

Outcomes/Results: In 2018 PRAHD's Housing Program addressed the concern of approximately 300 unduplicated individuals. Since the split with the Multi-Service Center, the short-staffed, Housing Division has decreased in the number of clients this program is able to handle. PRAHD projects to serve these clients through workshops in Foreclosure Prevention (10), Financial Empowerment (100), and First Time Homebuyers (230). Additionally, PRAHD will provide rental assistance to an estimated 35 unduplicated individuals through Security Deposit/ Forward Rent (15), and Back Rent (20). The impact this program is making is seen through the number of clients they are able to serve through the funding they receive from grants. For only two women running this program, they have successfully changed the lives of 275 unduplicated individuals this past year.

Evaluation/Conclusion: This program benefits low-and moderate-income populations by providing them with access to competent housing counseling that results in saving the client's home/ making their financial burden easier. Through critically examining information about the program's characteristics, activities, and outcomes, evaluating the impact the funding has made in the Housing Program will be further discussed once more research is derived from program directors/ accounting staff.

Title:	Credentialing Verification Process
Name:	Madaline Torto
Preceptors:	Brenda Arrietta, Credentialing Department Manager Kattia Martinez Credentialing Department Supervisor
Agency:	Trinitas Regional Medical Center

Purpose: To process 21 applications for Medical Staff privileges to present to the Credentials Committee, the Medical Executive Committee and the Board of Trustees for final approval of provisional privileges at Trinitas Regional Medical Center for the month of September.

Significance: The TRMC Credentialing Department consists of a team of three. They are responsible for assuring that the hospital remains in compliance with state and federal regulations, accreditation bodies (i.e. The Joint Commission) as dictated by the Medical Staff Bylaws and Rules and Regulations. TRMC must obtain and evaluate documentation before allowing a practitioner to treat patients. The credentialing department currently has a total of 602 medical staff members that they monitor. The hospital is subject to unexpected site surveys from Joint Commission and the Department of Health. This process helps to ensure quality patient care and support patient safety goals.

Method/Approach: The Credentialing process evaluates a medical practitioner's training, certification and ability to provide quality patient care through data collected with the application such as number and type of patient contacts, criminal background check, verifications from peers, supervisors, colleagues, other facilities where the practitioner has worked and state and federal databases. TRMC uses the MSOW database to maintain their electronic credential files. MSOW generates letters that can either be faxed or emailed to the appropriate person for work verifications and hospital affiliations. It can also web crawl some online databases to verify the current status of state licensure. An application normally takes 45-90 days to be completed after it has been received by the Credentialing Department.

Outcomes/Results: As of 08/02/2019 there are a total of 21 applications to be completed and presented at the next Credentials Committee meeting in September. These applications are worked on daily. Once the application is completed and signed off on by the Chairman of the Department and the Chief of the Division, the application can then be presented for approval by the Credentials Committee. After approval from the Credentials Committee, the application must be approved by the Medical Executive Committee and the Medical Organizational Committee. If any of these committees feel that the applicant being presented does not meet the minimum qualifications/requirements, the application will be denied. Out of 21applications there are 9 that are about 85% completed and will be presented in September.

Evaluation/Conclusion: A total of 21 applications are going through the verification process. Due to the absence of a meeting in August, TRMC will utilize temporary privileges for those applications that are completed. Temporary privileges are only given to a completed, uncomplicated application for a timeframe not to exceed 120 days. Only about 6 or 7 will be granted temporary privileges in August. These applications will be also be presented in the next month including along with any that are completed. The remaining will continue to be worked on a daily basis. Once completed they will be presented at the next Credentials Committee meeting in October.

Internship Abstract

Title: The Effect of Personal Call Reminders on No-Show Rates in the Clinic

Name: Caitlin Uriarte

Preceptor: Direct Supervisor: Mariely Taveras, Practice Manager

Agency: Weill Cornell Medicine- Division of Pulmonary and Critical Care Medicine

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Purpose: To follow up with patients about their upcoming appointments at the outpatient clinic by personally calling them to confirm their appointment so their status is recorded and updated into Epic Systems for providers to refer back to.

Significance: Patients missing their appointment is very common, and can be detrimental to the clinic as well as the health of patients. This is a widespread problem occurring in the United States and other countries with rates ranging from 5% to 55% (Samuels et al., 2015). According to Samuels et al. (2015), "From the clinic perspective, missed visits have negative impacts including increased medical care costs, loss of revenue, wasteful use of health care manpower, decreased productivity, and disruption of patient care and physician–patient relationships."

Method/Approach: Access to Epic Systems was granted with the completion of a HIPAA course and trainings. Scripts were created for personal call reminders. Scripts and findings were presented at a meeting with the Director of Clinical Operations. Epic Systems was the healthcare software that was used to record every call history and outcome. Notes were inputted into Epic Systems to specify every outcome with the following statements: canceled, confirmed, left a message, invalid number, and more. The quantitative data of monthly no show-rates was calculated and analyzed on a database called Cognos Analytics. The main focus of the personal call reminders was to confirm doctors' appointments and pulmonary function test appointments for the outpatient clinic located on 425 East 61st Street on the 4th floor.

Outcomes/Results: Intervention of personal call reminders began beginning of June 2019. According to Cognos Analytics results, July of 2019 had the lowest no-show rates for doctors' appointments at 12.12% (91 visits) and pulmonary function test appointments at 9.54% (27 visits) compared to January, February, March, April, May, and June of 2019. June of 2019 had the third lowest no-show rates for doctors' appointments at 13.75% (111 visits). June of 2019 had the second lowest no-show rates for pulmonary function test appointments at 11.07% (32 visits). The highest no-show rate for doctors' appointments is 17.94% (143 visits) for February 2019. The highest no-show rate for pulmonary function tests is 14.78% (43 visits) for March of 2019.

Evaluation/Conclusion: Results show that there was an impact on the no-show rates. Overall, the no-show rates decreased. Implementation of a follow up phone call to no-show patients can gather information regarding missed appointments. The importance of attending scheduled appointments was emphasized to patients. It was common for patients to ask questions, and voice their concerns through personal call reminders.

Title: Bullying Prevention and Awareness in Summer Enrichment Program

Name: Jasmin Vals

Preceptors: Direct Supervisor: Opal Montes, Site Director
Project Supervisor: Alicia Laikhram, Volunteer and Community Partnership
Coordinator

Agency: Prevention Links-Bayway Family Success Center

Purpose: To educate children participating in the Summer enrichment program, on bullying awareness by instilling preventative behavior and promoting positive behavior patterns.

Significance: According to the CDC, nearly 12% of public schools report that bullying happens at least once a week. This raises great concern because children who were victims of bullying have been consistently found to be at higher risk for common somatic problems such as colds, or psychosomatic problems such as headaches, stomach aches or sleeping problems, and are more likely to take up smoking (Wolke & Lereya 2015). In order to prevent self-harm and reduce mental or somatic health problems, it is imperative for health practitioners to address bullying (Wolke & Lereya 2015).

Method/Approach: For the first four weeks of the summer program, four lesson plans were developed to bring awareness to n=21 children in age groups 7-9 and 10-12. The lesson plans define bullying, online bullying, bystander and where to seek help. Before the workshops began, a survey was conducted to understand their exposure to bullyings and their knowledge on bullying prevention and awareness. At the end of the four weeks, another survey will be distributed to test if their knowledge has increased.

Outcomes/Results: Of the sample size cohort (n=21), 17 students (81%) state that bullying is a problem in their community. Also, 5 students (24%) say that they "Ignored,"bullying when they saw it. In addition, 8 students (33%), respond to being bullied "Sometimes." Of those students that were bullied, 5 students (19%) answer that it had been "Socially," and 19% were bullied "Physically." Moreover, when asked who they should reach out for help, 7 students (38%) state "I don't know." In the last survey, 21 students (100%) state that they had learned a great deal in the workshop. Also, 12 students (57%) record they would "speak up against bullying." 19 students (90%) successfully identify online bullying and 18 students (86%) can identify the three types of bullying behaviors as well. Lastly, 19 students can identify a bystander and 20 students (95%) record that they would ask an adult for help if they witnessed bullying.

Evaluation/Conclusion: The first survey exemplifies that bullying is a problem in the community of Elizabeth. However, the students in the summer enrichment program were poorly educated about bullying prevention and awareness. After the four lesson plans, the students were able to identify the types of bullying and their distinctive behaviors. They were also able to identify where they can seek help and all of them stated their knowledge had increased after their participation in the program.

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Title: Inventory Control

Name: Diana Vega

Preceptors: Project Supervisor: Linna Garcia, Office Manager

Agency: Advanced Cosmetic and Laser Dentistry

Purpose: To develop and implement procedures for ensuring adequate inventory levels.

Significance: Inventory control and supplies ordering are essential practices of every dental office. Every year practices throw away hundreds to thousands of dollars of inventory because items have expired while sitting unused in their operatories or storage rooms. At the same time, both oversupply and undersupply can also increase overhead costs and cut into practice profits. It is important for dental practices to implement ordering protocols and systems to ensure the appropriate quantities of supplies are consistently available for use.

Method/Approach: In the first two weeks the storage room was cleaned and all expired supplies were disposed. During the following week, the remaining supplies were organized by specialities labeled on bins and shelves. After all supplies were organized an inventory system was implemented named "The tag system". This system maintains ordering regularity by utilizing designated minimum inventory and order quantities. A tag was created for every product identifying the minimum inventory amount and the reorder quantities on the back of the tag. When the product with the tag is used, the team member must place the tag on the reorder box and by the end of the week the assigned member has to place the order. By doing this, the practice's supplies and inventory can be easily and consistently monitored and maintained. Lastly, after talking to different supply vendors to find better deals on products, the practice signed up with a new company which has better prices and free shipping.

Outcomes/Results: After the implementation of the inventory control and ordering system, the practice has been able to reduce their supply overhead and inventory to 30% compared to the month of June. In addition to reduced overhead, the storage space was organized and the excess of material waste was reduced.

Evaluation/Conclusion: Disorganized inventory control and ordering systems can lead to unnecessary practice overhead, wasted supplies and loss of profit. Implementing a good inventory system can improve profit margins, and facilitates a more convenient and efficient ordering protocol. After the implementation of this new tag system the assigned member can compare costs, uses, and advantages of each item to determine if they are both or all necessary. A systematic approach to inventory and ordering ensures that each product is appropriately tracked and monitored so that cost-effectiveness and availability are maintained.

Internship Abstract

Title: Competitive Analysis of Precision Access Institute Learning Management System

Name: Renuka Venkatesh

Preceptors: Ashley George, Associate Director, Quality Assurance

Agency: Precision for Value

Purpose: To support the Value Transformation Practice and Quality Assurance teams at Precision for Value conduct a competitive analysis of existing healthcare LMS (learning management systems) with a focus on managed care markets to help inform content, features, and development of the Precision Access Institute training platform.

Significance: Precision for Value, a healthcare marketing, and advertising agency, is launching a learning management system, entitled Precision Access Institute. The Phase I launch will offer 28 educational training modules to brand, field, and payer marketing teams at pharmaceutical companies, to enhance their managed care acumen and ultimately their engagements with customers (ie, health plans and other healthcare and access decision makers). Since Precision for Value is looking to launch Precision Access Institute by late 2019, it is imperative to understand the competitive landscape. Precision Access Institute will further differentiate Precision for Value from competing healthcare marketing and advertising companies.

Method/Approach: To conduct this competitive analysis, information on pricing models, learning extensions, promotional strategies as well as content from specific managed care modules were pulled from company websites. This information was then compiled into a high-level overview in the form of a table where each competitor was ranked on a scale from 1-5, 1 being the most competitive to 5 being the least competitive. To accompany these findings, a SWOT analysis was also created to showcase Precision Access Institute's current position. This information was used to illustrate the LMS landscape and the challenges and opportunities Precision Access Institute would face when launched in the marketplace.

Outcomes/Results: The high level overview table shows that top competitors have extensive managed care module content, live training for clients, and heavy promotional outreach through LinkedIn and Facebook. According to the SWOT analysis, strengths include Precision For Value's team of former payers and access decision makers and an upcoming podcast subscription to Precision exclusive content. Weaknesses include lack of gamification features, and simulation/role plays in module content. Opportunities for the Precision Access Institute include a partnership with a major LMS institute as well as chances to promote at industry conferences and summits. Threats include competitors conducting live trainings for clients, and an extensive library of managed care focused modules.

Evaluation/Conclusion: The Value Transformation Practice and Quality Assurance teams next steps are to inquire about pricing models from competing firms/agencies, relay the possibility of including xAPI capabilities in the system, as well as explore the logistics of hiring a third party customer support vendor. Inquiring about pricing models is vital in order to understand how subscription plans are structured and how competitors are pricing their LMS. xAPI compliant models support mobile learning, which would enhance Precision Access Institute's learning capabilities. Customer support as an extension of Precision Access Institute's services will help ensure clients stay subscribed to the system long term.

Title: Opioid Addiction Education Community Outreach Evaluation

Name: Leah Wasserman

Preceptors: Direct Supervisor/ Project Supervisor: Margaret Drozd, MSN, RN, APRN-BC, Director Community Health Services

Agency: Community Health Services, Saint Peter's University Hospital, New Brunswick

Purpose: To expand reach about opioid addiction educational presentations given to school-aged children in Middlesex County from 2017 to 2019 in order to identify gaps in coverage and develop strategies to measure impact in this population.

Significance: In the US in 2017 there were 70,237 deaths due to drug overdoses, New Jersey being 1 of the 23 states with significant increases between 2016-2017 (CDC, 2018). As of June 2019, it is suspected that there have already been 1,387 drug-related deaths in NJ alone (NJ Health, 2019). The number of deaths due to overdoses greatly increased from 23.3 deaths to 30.0 deaths out of 100,000 people from 2016 to 2017 (NIH, 2019). The majority of deaths due to drug overdose happens between the ages of 25-34 (2017) at 28 percent (KFF, 2017). With 10 percent of the deaths happening between the ages of 0-24, it is important that Saint Peter's Opioid Task Force members continue to speak about this epidemic in schools where students can learn more about addiction and its deadly effects and review prevention strategies (KFF, 2017).

Method/Approach: Over the past 2.5 years Saint Peter's Opioid Task Force members have presented throughout Middlesex County to 7,000 students in middle school and high school at 26 locations. The presentation consisted of a lecture with a power point presentation and a Q&A session. The presenters were an APN, a community member who lost her daughter to addiction and a police chief. A school contact list that was utilized for this community outreach was updated, along with developing a survey for students and faculty to complete in order to measure impact. The survey was designed to elicit feedback from students and faculty to see if and how the presentation was perceived in order to measure impact and improve it. In addition to the survey designed for the students, a feedback evaluation for the staff was also created to see if and how the presentation was affecting their students.

Outcomes/Results: An updated contact list of Middlesex County school leaders was created which will help to increase community outreach to give even more presentations to teach school aged children about opioid addiction. The survey was created for students to gauge whether they have increased knowledge about opioid addiction and if the presentation was helpful. Lastly, a feedback evaluation was created for the staff members at the schools in order to weigh how much impact the message from the presentation has on the participating students.

Evaluation/Conclusion: Through updating the contact list, schools were identified that did not have presentations and a plan for outreach to those schools was developed. A plan to administer and utilize the student and faculty surveys to obtain feedback about the presentations was developed. The limitation to the project was that there was no educational presentations during this semester so the survey tools were not able to be utilized. Future plans include utilizing these surveys for future opioid addiction presentations scheduled in the fall.

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Internship Abstract

Title:	Improving the Efficiency of Knee Replacement Surgeries
Name:	Yiqin Zhou
Preceptors:	Eric Gordon, MD
Agency:	Hunterdon Medical Center

Purpose: To observe the surgeon and his team during surgery and examine processes to improve the overall efficiency of the Total Knee Replacement Surgery.

Significance: In America, there are about 4.7 million people who have undergone a Total Knee Replacement surgery. That is about 700,000 Total Knee Replacement (TKA) surgeries per year. With the large volume of surgeries performed each year, it is important to constantly improve the efficiency of these surgeries in order to reduce overall operating time. Currently, in the procedures observed, about seven surgical trays with instruments and different sizes of knee implants that account for 90% of the general population's knees are set up. It takes time and material resources to clean, sterilize, prep, and assemble these trays for each procedure. If the surgical team can somewhat accurately estimate the size of the implant that the patient needs, then a number of trays can be eliminated from the surgical table. They would only need to prepare trays that has the patient's size and a size up and down, just for precaution.

Method/Approach: A series of eight TKA surgeries were observed in the operating room in order to get a good understanding of the procedure. This internship focused on trying to minimize the volume of surgical trays used during surgery. The intern analyzed and organized data collected from the surgeon's previous eighty-three TKA surgeries, which included the patients' sex, height, weight, femur implant size, and tibia implant size. (The tibia size is represented as numbers on the chart; they correspond to actual tibia sizes of A to I). The data was organized in scatter plots, and a trendline was generated. Based on the data, the intern analyzed if height and weight was a good indication to predict the patient's femur and tibia implant size.

Outcomes/Results: The data of a total of eighty-three previous TKA surgeries were organized into charts based on height/weight versus the sizes of femurs/tibias, and they were further categorized by sex. In the eighty-three TKA patients, fifty-nine patients were females and twenty-four were males. Based on the data provided, most female patients had femur sizes between six and eight based on their height and weight, and the average tibia sizes were D and E. For males, the average femur size based on height and weight was between 8 and 10. The average tibia size was between E and G, which corresponded to the numbers five and seven on the scatter chart. Standard deviation in both sex groups were high.

Evaluation/Conclusion: A high standard deviation may imply a poor correlation between height/weight and implant size, and therefore limited in its use to reduce tray volume. This study only observes eighty-three cases, so further TKA cases have to be examined. The research will go on, and with more data, there will be better data outcomes.

Field Work Internships

Title: Sustainability Recycling Project

Name: Bryan Eng

Preceptors: Direct Supervisor: Von Chaney, Director of Logistics, Facilities, and Support Services

Agency: Memorial Sloan and Kettering Cancer Center

Purpose: To analyze the amount of medical waste being recycled and suggesting steps to ensure that the facility is maximizing its collection of medical waste.

Significance: In the United States of America, hospitals produce 5 million tons of waste annually. Hospitals also spend significant resources to properly dispose of medical waste (Kleber, 2018). By implementing and enforcing effective recycling programs, hospitals can achieve a reduction in weight and cost of medical waste. Having a recycling program for medical waste is a benefit for the hospital and the environment.

Method/Approach: An analysis will be performed to compare the number of items that the hospital has used and the number that has been recycled. Data on the number of items that the hospital has used will be collected using its inventory system known as HELIOS. Also, the hospital will be sent a report detailing the number of items collected by the recycling company. The Green Team, the committee set up by the hospital for sustainability and environment projects, has decided to analyze data between January to May. All items used by the hospital that can be recycled will be categorized by their tag number. A comparison will be completed using each item's tag number with the report. Items will low rates of being recycled will be subject to review. Solutions will be proposed to increase recycling in these items.

Outcomes/Results: The analysis revealed in the collection report six items that are frequently reported to be collected. These six items were selected because they shared unique identification numbers in HELIOS. A total of 2941 items were determined to have been used by HELIOS. However, the amount collected for recycling only amounted to 2521, only 86%. Some 420 items, 14%, were not collected for recycling. Also, several items eligible for rebate were not collected. While $16,861 in rebates were collected, an additional of $1,409 in potential rebate was not collected. The total potential rebate that could have been earned would have amounted to $18,271

Evaluation/Conclusion: While the facility managed to achieve an impressive collection rate of 86%, many items were not collected. More importantly, were items that were eligible for the rebate but not collected. There is an area for improvement in the area of collecting medical waste for recycling. Also, the metrics used for this analysis can be used to build a running dashboard. The dashboard will provide real-time measurement of medical waste recycling.

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Name: Michael Fazio

Position: Summer Support Intern; Office Coordinator

Preceptor: Jennifer Mair, Alexis Ayanru, Amanda Badal - Office Coordinators

Agency: Memorial Sloan Kettering Cancer Center

Work Duties: I provide full coverage for an office coordinator that is out for a few months because of a knee surgery. Providing full coverage means that I am performing the actual full time job of an Office Coordinator, rather than just helping an office coordinator with extra work that they have. I am the only intern in the summer support program that has taken over full coverage of a doctor's clinic. This includes all administrative activities of the office; scheduling/confirming patient appointments, taking patient calls, preparing patient charts, keeping up and organizing Dr. Marchetti's schedule, communicating with other nurses/office coordinators/care coordinators to provide the best and most efficient care process, pre clinic summaries, doctors time sheets, requesting and submitting patient information such as pathology slides and outside records, and filing electronic medical records.

Techniques: I write down everything to stay organized. I keep a calendar and a checklist of everything I need to do and a daily plan of everything I need to do each day. I wrote up scripts to speak with patients and I have templates for every situation to communicate with staff properly. I document everything so that I do not lose track of my tasks.

People Skills: Talking to patients in this position can be difficult, as they are going through such a difficult time. So, I learned how to talk to delicate people and comfort those who need it. A lot of these patients are going through the hardest time of their lives, and a lot of them are in a very fragile state. I have learned to comfort these patients and make a difficult process much easier. An example of this is connecting a patient with a nurse when they are worried about a treatment or have questions about the care process. Another way to comfort patients is going above and beyond when finding a time that works best with a patient for an appointment.

Results: I learned to organize everything that is going on. I need to remember pending issues, orders I am waiting on, appointments that are pending approval, prescriptions that need to be approved, and in order to do all of this I needed to be extremely organized. I began keeping a planner and writing down everything going on in order to keep track of everything. I became better at communicating overall, this job requires constant communication between positions within the hospital and it taught me how to communicate effectively and efficiently. I have a system I use every time with a checklist to make sure I complete all aspects of the process. I have also improved my time management. I have a set list of things I need to complete each day, so I plan a calendar that allocates all of my time effectively so that I can get everything done in a timely manner.

Lessons Learned: I learned that it is always better to be thorough when completing tasks. I ask enough questions to be sure that I know about all aspects of a situation, that way I reduce the risk of missing an important fact or making a mistake. I learned that planning all tasks down to the tee helps reduce stress, avoid mistakes, and manage my time. I go into every day with a set plan and I know exactly what I need to do and how I need to do it. By doing this, I became comfortable in my position and I really felt like I knew what to do at all times. I also learned that just a little customer service can go a long way with a patient that just needs to hear something positive.

Position: Summer Support Program - Care Coordinator

Name: Sumer Keady

Preceptors: Jane Peterson Assistant Manager, Outpatient Operations Department of Pediatrics

Agency: Memorial Sloan Kettering - Pediatric Ambulatory Care Center

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To work as a member of the practice staff team of Care Coordinators to ensure physician office visits are well prepared and organized through triaging phone calls, facilitating the workflow of the clinic schedule, and completing various daily tasks.

Work Duties: The Pediatric Care Coordinator at the Traffic Desk is trained to perform the opening and closing shift duties. Both shifts consist of warmly welcoming patients on to the floor, following infection control protocols, and checking patients into their appointments for the day. Individuals in this role are also responsible for releasing lab orders, triaging phone calls, and constantly communicating with patients and other staff members. Duties specific to the opening shift include posting exam room allocations, distributing the environmental services schedule, and delivering fax memos from the night before. The closer is tasked with updating appointment notes for the following day, identifying same/similar name patients, and alerting staff about upcoming new visit appointments.

Techniques: As the liaison between the patient/family and clinical team, Care Coordinators are encouraged to ask patients probing questions to gather as much information as possible before seeking the attention of a medical staff member. It is helpful to utilize critical thinking skills and use available resources throughout the day because every patient's case is unique and different doctors prefer their clinic to run a certain way. Most importantly, to be a valuable part of the pediatric team and find success in the role, Care Coordinators must work together to help facilitate workflow and offer positive support.

People Skills: This position requires effective communication skills with people of all ages and backgrounds, attention to detail, and the ability to calmly handle a variety of emergency situations. Every patient and staff member should be treated as an individual. All patient preferences are respected and teamwork is essential to manage their care in a safe, effective, comfortable manner. Care Coordinators at MSK express patience and empathy at all times in the workplace. For example, we do our best to abide by preferred appointment times, travel accommodations, and other special considerations.

Results: Diligent Care Coordinators enhance the overall patient experience at MSK. Embodying a professional and passionate work ethic provides comfort and compassion in the fight against cancer, which is what patients and families expect when they choose MSK. Experience as a Care Coordinator also builds the foundation for young professionals to advance in the medical field, in both clinical and administrative positions. The effort and energy put into the job will determine future opportunities.

Lessons Learned: Outpatient clinics bring new lessons, experiences, and triumphs every day. The most valuable lesson to be learned as a Care Coordinator in Pediatrics is to be a team player. The patient-centered care that MSK provides is contingent on the ability to work together as supporters and advocates. Without these values, the job cannot be done.

Name: Michael Kennedy

Position: Office Coordinator

Preceptor: Carlie Riordan Supervisor

Agency: Memorial Sloan Kettering

Work Duties: My role at Memorial Sloan Kettering is an Office Coordinator. I act as a liaison between the patients and the medical staff. My job consists of a plethora of duties ranging from answering patients questions and concerns over the phone, rescheduling, file inventory, submitting pathology reports, phone coverage and uploading medical CDs. I am a "mover" in this position, so I spend time in different services, Endocrinology, Cardiology, and Renal, but all under the medicine department.

Techniques: Since there are a lot of tasks that are required, I make a list first thing in the morning of everything that needs to be done. To do so, I open up my email, and check if anyone has emailed me anything important from the prior day that I missed, and what is on my schedule for the day, as well as any lines that I will be covering. Second I open the Health Information Software in order to be able to quickly find any patient that is calling, or whose file I am working on. As any unexpected tasks that may be appointed to me, I make sure to add to my list, and I work as efficiently as possible throughout the day to get things done.

People Skills: MSK is a diverse environment in which I get to interact with many people from different backgrounds, sexual orientation, and ethnicity. The job required me to have an open line of communication, and I am frequently emailing others, calling coworkers, and being able to work as a team. When handling patients, there are many different personalities I've come across, and I've learned how to handle various situations ranging from an angry patient, to those who just want to talk about their day. This how allowed me to improve on my communication skills, and ability to deal with stressful situations.

Results: One of the biggest challenges as an office coordinator is the ability to multitask, work efficiently and complete tasks correctly. One mistake can lead to a patient not getting their prescriptions filled, or cause them to have side effects. At the beginning of the internship, I was a bit nervous, but after constant repetition, I have found a new confidence, and I'm excited to come into work each day.

Lessons Learned: As a future healthcare provider, I've learned the importance of communication across different disciplines. When handling each patient, there are so many people involved, Doctors, Nurses, Office Coordinators. Working as a team, and making sure everyone is on the same page is the key to provide patients with optimal care. My empathy skills have improved as well, by talking to patients on the phone, I've gotten to understand what they really go through on a daily basis, and it has been my job to help them out as much as I can.

Name: Kiara Montilla

Position: Office Coordinator

Preceptors: Allison Manley, Team Lead and Deborah Pugach, Supervisor

Agency: Memorial Sloan Kettering Cancer Center

Work Duties: As an Office Coordinator at Memorial Sloan Kettering, my main responsibility is to act as a liaison between the patients and their providers. Having taken the place of a full-time employee who has moved from the Manhattan location to Bergen, my responsibilities include but are not limited to; scheduling patient appointments according to the MD's weekly clinic schedule, entering prescription requests from patients, and triaging patient calls and requests. My overall goal is to ensure patients have the best possible experience when visiting their providers or even just trying to get a prescription refilled.

Techniques: It is important to understand that our patients are going through a tough time in their life. We want to ensure everything runs smoothly, from their visits to their phone calls with us. In order to do this, I have a template set up in my email account for any scenario that may come through the phone. For example, before answering I'll pull up a blank email, if a patient calls in for a prescription refill request, I am able to choose the "rx request" template stored in my signature section. This template will help guide me through all of the information I need to ask for, from the patient, so that I'm not constantly calling patients back for missing information. This is efficient and prevents the patient from repeating him or herself, which can get frustrating for some.

People Skills: A huge part of being an office coordinator is constant patient interaction and communication. It is important to know how to handle different patient situations and be able to triage patient calls so that the most urgent ones get dealt with first. I am able to do this by taking my time to speak with a patient in regards to whatever they need. I am attentive and professional but I am also soft-spoken so the patient feels comfortable talking to me. It is also very important to not take negative patient calls or interactions personally, we need to understand that our patients are facing something much bigger and are under a lot of stress. Being transparent, empathetic, and mindful when speaking to our patients can build that trust and bond that they need in their situations.

Results: This internship has encouraged me to not be afraid of taking on new challenges and opportunities that come my way. Starting this internship was scary because I didn't know how to do anything and after finally learning little by little after two weeks, I was put into a completely different service and environment. I had to adjust quickly because I was no longer an intern but a full-time cover. I had to learn a new system, new patients, new providers and all of their needs, and also learn my new responsibilities. Since then, I have been able to complete tasks with little to no help, I have gained relationships with patients as well as my colleagues, and have been offered a full-time position at the end of the summer.

Lessons Learned: My role at MSK has helped me grow as a person and a professional. I have learned to balance a large work-load by being organized and efficient, as well as, learning to be compassionate and understanding in high-stress situations. It has taught me that there is always room for growth even as an intern.