



**RUTGERS**

Edward J. Bloustein School  
of Planning and Public Policy

# Summer 2020 Abstract Book



Internship Abstract

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## Internship Abstract

**Title:** Barriers to Health and Recovery Plans (HARP) and Home and Community Based Services (HCBS) enrollment among vulnerable populations in New York State

**Name:** Marwa Adina

**Preceptors:** Ana Stefancic, PhD - Associate Research Scientist & Daniela Tuda, LMSW

**Agency:** Columbia University Department of Psychiatry

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**Purpose:** To identify barriers of enrollment to HCBS and understand what populations are least likely to successfully navigate the enrollment process

**Significance:** Medicaid's HARP aims to integrate physical, mental, and substance use services for adult individuals with severe behavioral health challenges. Enrollment into a HARP allows individuals to access care coordination services through Health Homes (HH) as well as HCBS. Programs under HCBS range from case management to respite care. The aim of this evaluation was to understand the population gaps between HARP eligibility and HCBS members. I've assessed the demographic of enrollment to understand if vulnerable populations (i.e., the homeless, financially disadvantaged, disabled) are having their needs met.

**Method/Approach:** Twenty-seven interviews were conducted with individuals representing stakeholder groups (i.e., care management agencies (CMAs), HH, representatives of state agencies, and HCBS providers) to understand the process of HARP and HCBS enrollment. Interviews were audio-recorded and transcribed. The qualitative analysis consisted of using transcripts and interview summaries to write memos assessing the demographic, social, functional, clinical, and other characteristics of the HARP and HCBS populations. We also utilized these interviews to explore systemic challenges that could, potentially, impact member enrollment.

**Outcomes/Results:** Interviews portrayed a complicated workflow from HARP eligibility to assessment and enrollment in HCBS. Respondents expressed a lack of understanding of the HARP eligibility criteria. Further, respondents expressed frustration regarding the current HCBS enrollment process that requires HHs and CMAs to process referrals, meet with clients for assessments, seek pre-authorization from MCAs, develop care management plans with clients, identify HCBS providers with service openings, coordinate plans with providers, enroll client into services, receive authorization for services, and then follow-up on reimbursement. Clients who are homeless, easily overwhelmed, or in need of immediate service are then neglected as a result of these cumbersome processes. Another common challenge discussed across interviews was staff turnover (particularly for HH Care Coordinator positions), and high caseloads.

**Evaluation/Conclusion:** According to most of our interviews, the members that are recruited into HARP are the *target* audience. Although these respondents never explicitly stated that specific populations are being excluded from receiving HCBS services, they all expressed a desire to be able to help more people under HARP. Based on the review of our respondents, it is clear that there are members of the public who may benefit from HARP and HCBS services but are excluded from the program. These findings implicate a need for change. Possible solutions may include changing the eligibility algorithm entirely and being more transparent, allowing community referrals to be included in the eligibility requirements, and shortening the assessment process. With these suggestions, more individuals may be able to access the care they need and at a shorter wait period.

## Internship Abstract

**Title:** Childcare Workers in New Jersey  
**Name:** Andrea N Alfaro  
**Preceptors:** Elaine Zundl, Research Director at the Center for Women and Work  
**Agency:** Center for Women and Work - Rutgers University

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**Purpose:** To analyze and identify issues faced by childcare workers in New Jersey to propose policy recommendations that policymakers may consider.

**Significance:** Over one million individuals in the U.S. are childcare workers, of this total 19,090 are working in New Jersey. Childcare workers are essential as they enable parents to work while providing children with the care they need. Since parents and guardians often rely on childcare workers when they are not available, the demand there is for these workers is seen. In New Jersey, over 500,000 children are under the age of five. During 2018, 61.1% of children aged 0-5 years old in New Jersey received care from others for at least 10 hours weekly. Although childcare workers prove to be vital, their wages have remained low and they receive minimal benefits. Due to the low wages, childcare workers are paid these individuals cannot make livable wages. Childcare workers in New Jersey experience financial instability and often rely on public programs to fill in the gaps created by their job. In addition, new requirements and financial instability is making it difficult for childcare workers and providers to become registered, therefore some are failing to become registered. Quality care is necessary for the development of children and a necessary component of quality care should involve improvements in job quality for childcare workers.

**Method/Approach:** To explore the occupation of childcare workers, available research and reports were analyzed. To understand the scope of the issues that childcare workers face, national data on childcare workers was first looked at and then the focus was placed on New Jersey. With the use of SPSS, data on childcare workers in New Jersey were analyzed from the American Community Survey. Different sources provided the necessary information to create the fact sheet that will be used to present to policymakers.

**Outcomes/Results:** The research conducted indicates that childcare workers in New Jersey are in need of policies to address the inequities they face. New Jersey childcare workers earned annual mean wages of \$27,740 which was significantly lower to their teacher counterparts as New Jersey Kindergarten Teachers earned \$68,800. Childcare workers earn more than the Federal Poverty Level, placing them in a situation in which they cannot afford the basic cost of living in New Jersey but do not meet the poverty level criteria. Due to financial instability, these workers rely on government assistance. In 2018, 30% of New Jersey childcare worker's families participated in Medicaid/CHIP and 15% of these families participated in the Food Stamp program. Other states are edging forward towards implementing compensation and financial relief strategies however, New Jersey has stalled this progress. The implementation of these strategies is necessary to address the financial instability that childcare workers face.

**Evaluation/Conclusion:** Childcare workers face different hardships as a result of stagnation within their occupation. Low wages have been commonly observed within these workers and financial instability continues to be a problem. In order to combat these issues, policies that include investments in childcare, the addition of benefits, and assistance in becoming registered workers and providers should be implemented. A finalized fact sheet will provide the information that is important to present to policymakers.

## Internship Abstract

**Title:** Recruiting Prospective Individuals for Internship Opportunities  
**Name:** Syed Ali  
**Preceptors:** Alanzo Aris  
**Agency:** Globe-Connect LLC

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**Purpose:** To identify prospective students and other relevant individuals searching for internship opportunities to develop experience in a healthcare setting.

**Significance:** As Globe-Connect LLC is a start-up company that originated at Rutgers University, it heavily relies on interns for their small day-to-day operations. This project allows the company to refresh its intern database for a new round of interns for the fall semester. Currently, Globe-Connect LLC has eight departments and each department requires two interns for a total of 16 interns, after August the company will lose almost more than half of the interns required, due to the duration of the internship program. The company has grown considerably and will need more interns than before because of the increased workload. Due to this increased workload, the company requires more manpower to function efficiently, this project's goal is to make sure that we have acquired an appropriate number of interns before the Fall semester begins.

**Method/Approach:** This project was divided between myself and another intern and the project was conducted by sharing the following tasks:

- Presented and hosted tables at upcoming Career Fairs and Expos at both academic and non-academic settings discussing the importance of GlobeConnect's work and various internships being provided.
- Consulted with the Executive Director in reviewing all potential interns and staff member's resumes and adding relevant information such as contact phone number, email, and major resume components to an Excel Database which easily monitored the onboarding of all prospective employees.
- Interviewed candidates by phone and assessed whether they represent someone passionate about Global Health and Technological Innovation in Mobile Medicine approaches as well as whether their skillset pertains to the position they've applied for.

**Outcomes/Results:** The outcome depends on how thoroughly we complete the aforementioned tasks, such as identifying the right candidates for each department. By our actions the company gained a brand new reserve of interns who are driven and hungry to gain new experience for the remainder of the year. Upon hiring interns who met the specific criteria that was requested by each department, it was observed that the workload on the managers was greatly reduced which allowed them to use their free time towards planning out future goals for the company.

**Evaluation/Conclusion:** Our project will be evaluated in two ways over the year. Firstly, by comparing the number of interns who have applied for this cycle with the last hiring cycle. Secondly, we will also evaluate the performance of interns who have decided to extend their internship with their previous performance reviews so that the company is able to develop a more efficient internship program within which students are able to learn and grow by using the knowledge that they have learned in their universities by practically applying it in the real world.

## Internship Abstract

**Title:** TQJ Site Resumption and Start-Up Activities  
**Name:** Grace Allen  
**Preceptors:** Angela Falcone, Edite OHern, Taylor Palmieri, Barbara Taylor  
**Agency:** Novartis Pharmaceuticals

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**Purpose:** To check-in with the Clinical Research Associates (CRAs) to ensure site resumption and patient safety post-COVID-19.

**Significance:** The significance is to drive continued patient safety and the resumption of clinical activities post-COVID across two clinical studies consisting of a commitment of 200 planned sites and 8405 planned patients overseen by 47 CRAs. Due to the pandemic, many sites involved in clinical trials have had to close the office and pause recruitment, enrollment, treatment, etc. to protect patients. The drug in research is for cardiovascular health. The study measures patients' LP(a) levels in the blood, Lp(a) has been identified as a causal risk factor for coronary artery disease, stroke, peripheral arterial disease (PAD), and calcific aortic stenosis" (Nordestgaard et al 2010). Identifying levels of this atherogenic lipoprotein in the blood could predict a patient's risk of having cardiovascular disease later in life. The sites chosen to participate in this study have closed due to the pandemic, as their patients are immunocompromised and at risk. The significance of this project is to ensure patient safety- when it is safe for patients to be on-site.

**Method/Approach:** In order to complete this assignment, CRAs were initially contacted via email or IM. The most effective method has been to schedule one on ones with the CRAs to get all the necessary information about the sites: Is the site ready to resume? Has a resumption letter been sent? Are the SIV dates accurate or placeholders? When are you able to return to the site to SIV? What do the pandemic restrictions look like particularly for these sites? Etc.

**Outcomes/Results:** The most effective way to contact CRAs is through one on ones. In a one on one, CRAs can check the status of their sites in real-time in order to ensure that information is comparable in the database to what is actually happening at the site. Patient safety is the utmost concern; this is why site resumption of activities is still being monitored. To date, 70 sites in the core study have reopened, and 32 sites in the feeder site have reopened. These numbers are fluid as the state of COVID changes in every region across the United States.

**Evaluation/Conclusion:** The work is in progress. The remainder of the CRAs are collecting data to be shared with the in house clinical team during the month of August. This data is very organic as information changes on a continual basis and updates therefore are made daily. COSSET (new internal Novartis tool) is reviewed by the US clinical team et al continuously to clarify the states that are considered to be "hot spots" where enrollment may be delayed due to COVID resurgences. This information also changes on a regular basis. Strides have been and continue to be made to ensure patient safety, and updates are being provided to the leadership team daily. Sites keep their CRAs as up to date as possible.

## Internship Abstract

**Title:** Medication Therapy Management Service

**Name:** Alexes Aquilina

**Preceptors:** Head Pharmacist/Owner: David Kornas, Head Pharmacist: Andrew Louka,  
Manager: Monea Nash

**Agency:** Peter Pan Pharmacy - South Plainfield, NJ

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**Purpose:** To provide medication therapy management to ensure the best therapeutic outcomes for patients in need at Peter Pan Pharmacy in South Plainfield.

**Significance:** Medication therapy management (MTM), which began in the 1990s provides many helpful benefits for patients, pharmacists, and physicians including the management of clinical, service, and cost outcomes of drug therapy (Barnett, Frank, Wehring, Newland, VonMuenster, Kumbera, Halterman, Perry, 2009). In 2006, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA 2003) was implemented along with Medicare Part D to aid more than 20 million high-cost patients (Barnett et al., 2009). Although Medicare Part D provided many benefits, few publications and explanations exist that explain the importance and benefits that MTM services provide.

**Method/Approach:** A multistate MTM administrative service company's MTM claims were analyzed over a 7-year period starting from January 1, 2001, and ending December 31, 2006. The data collected included patient demographics such as age and gender along with the drug that the intervention was needed for (Barnett et al., 2009). The therapies were characterized as either acute, intermittent, or chronic which was also provided with the specifics about the services that needed to be provided such as the reason, action, result, and estimated cost avoidance (ECA) (Barnett et al., 2009). These same terms and steps are used to complete MTM's at Peter Pan Pharmacy.

**Outcomes/Results:** From 100,000 MTM claims, 50 plan sponsors have been selected, and there are 76,148 claims for 23,798 patients from community pharmacy MTM providers in 47 states (Barnett et al., 2009). Over the seven years studied, pharmacy reimbursement was \$8.44 per MTM service, and the mean ECA was \$93.78 (Barnett et al., 2009). MTM interventions also changed from primary education and monitoring for new or changed prescription therapies to prescriber consultations to discuss cost-efficacy management. Services also changed from claims involving acute such as penicillin medications to involving chronic medications such as beta-blockers. Acute and chronic medications will be included with patient interventions as well as discussing cost-efficacy management. The responsibility of consulting with patients who take acute and chronic medications will be a major task for this project.

**Evaluation/Conclusion:** MTM services have evolved from mainly focusing on acute medications to now holding interventions for more serious, chronic medications. This has resulted in an increase in pharmacist savings. To know if Peter Pan's MTM project works, savings will be monitored as well as how many chronic medications are being provided with interventions. Weekly evaluations will be conducted to ensure the MTM's are moving in the direction we intend for them to which will help to keep the data of the project relevant.

## Internship Abstract

**Title:** CVSpharmacy Competitor Analysis

**Name:** Leonor Arroyo

**Preceptors:** Denine Treacy - Store Manager

**Agency:** CVShhealth

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**Purpose:** Creating a competitor analysis to help CVS Store 853 to improve sales.

**Significance:** CVShhealth's main goals are to get customers what they need and increase sales. The May Year To Date Category Sales statement shows that seasonal sales are down 28% from last year. Marketing Science Journal explains that employee satisfaction directly correlates with sales (Maxham et al.) According to Forbes.com "...happy employees make happy customers" (Hyken, 2017). The company can improve sales by promotion of its loyalty program.

**Method/Approach:** The company being used for the competitor analysis is "Jamacian Me Crazy" located in Margate New Jersey. The topics included in the competitor analysis are Diversity of Merchandise, Opportunity for Growth and Employee Engagement. In order to compare the three topics, the merchandise sold at both stores was analyzed. Store policies for growth were observed from both locations and the employee interaction and engagement were observed. 20 Margate locals were interviewed and asked what they went to Jamaican Me Crazy to purchase and CVS sales sheets were compared in those areas. Jamaican Me Crazy's employees were observed to see how well they engage with customers.

**Outcomes/Results:** The analysis has helped CVS Store 853 address different ways to improve their sales and satisfaction results. In the beginning, CVS ordered 12 sundresses at a time, now 48 are ordered at a time. Store 853 brings new inventory each week such as new beach toy and bracelets. CVS is constantly working towards helping their employees grow with the company. Jamaican Me Crazy employees employees would leave after one summer at the store. CVS store managers will complete a Performance Review Guide once a year to make sure employees are updated on their training. The \$10 Wawa gift card incentive to sell "carepass" has led the store to have sold 336 passes to customers. Since implementing the incentive on July 5th, the store has averaged 22 carepasses a week.

**Conclusion:** The July Category Sales Report will be compared to the June as soon as it is available to monitor seasonal sales. The number of employees that are encouraged to apply for a higher position by August 1st will be monitored and the carepass log will be inspected each week. Jamaican Me Crazy is a summer store and will not be a competitor once the fall and winter months hit Margate. Employee growth and employee engagement in loyalty plans will still be crucial.

## Internship Abstract

**Title:** Actively Managing and Running a Profitable Business that is Responsible for Direct Marketing Sales for Clients

**Name:** Hesham Atif

**Preceptors:** Pushkar Sharma, Senior Executive

**Agency:** Meraki East

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**Purpose:** To actively manage and run a profitable business that is responsible for direct marketing sales for clients. Learning the backend side of a business such as, public relations, human resources, accounting, finance, and legality issues, to fully comprehend what it takes to run a business

**Significance:** Fifty one percent of managers are disengaged with their job meaning that only 49% of managers are truly engaged with their job. This information comes to show that many people set out to start new business or become managers, jobs that both hold some type of social status, however, end up failing due to a lack of training and development. It's important to understand business and management fundamentals and undergo appropriate training to be considered a good leader, that will ultimately lead to the success of the business.

**Method/Approach:** A review of candidates was done to apply for a position at Meraki East. Top candidates were selected and enrolled into a full time or internship position. Candidates were then put onto a team, depending on the candidate and how well they could relate to the team manager. The goal is for individuals to be duplicatable and show their team how to recruit, retrain, and bring revenue to clients. By having a large team that has quality individuals on it, one can be deemed as successful because of the skills acquired to manage and run a successful business.

**Outcomes/Results:** The outcomes and results of this internship will be measured by how many times one can replicate themselves within their team. The internship teaches how to make customer acquisitions and generate profit. Individuals are then taught how to recruit a team to where they can generate profits for clients together. They create a small business within the internship where they can have people that work with them to create revenue for clients together. One of the top individuals at the office has been able to create a team of ten people that look up to him as a leader and work together to bring in revenue for clients, while expanding and growing the scale of his small business into a larger office one day.

**Evaluation/Conclusion:** The way to evaluate any success or progress is through promotion. The internship program here at Meraki East offers a merit- based promotion where when criteria is hit from an individual, there is no choice but to promote that person. Hitting criteria is an indication that progress is being made through the program. By having a large business that continues to grow is also another form of evaluating success at the program. Another key performance indicator is getting an offer letter for a full-time position after the internship. A conclusion that can be made is that management is all about leadership, which is a skill that can be learned. The only method to learn these skills is through proper training and experience. By learning these transferable managerial sets of skills, one is able to put any business that they are involved with in a great position financially, emotionally, and structurally.

## Internship Abstract

**Title:** New Jersey 24/7 Emergency and Information COVID-19 Hotline Review

**Name:** Isaiah Aviles

**Preceptors:** Direct Supervisor: Bruce E. Ruck, PharmaD, Director of Drug Information Services & Professional Education  
Project Director: Diane P. Calello, MD, Medical Director

**Agency:** New Jersey Poison Control Center (COVID-19 Hotline) - Newark, New Jersey

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**Purpose:** To maintain the safety of public health by providing essential information to New Jersey residents and collecting COVID-19 patient data through the IBM Microdex Database.

**Significance:** It is the responsibility of the hotline to give residents the adequate information that is available. The primary focus at the COVID-19 hotline is to help clarify, treat, and prevent the spread of disease to the general public. This contributes to society significantly because it is an important step in helping people directly by allocating available resources in the purpose of helping them remain healthy.

**Method/Approach:** Bloustein interns developed a Suicide Prevention Training and Peer-Resource Guide that allows interns to provide answers and guidance to the general public. Interns quickly reported the type of hotline call that was received and contributed the results to a qualitative analysis, rather than a quantitative analysis. The relevant COVID-19 calls were reported in separate categories but were all present in terms of COVID-19 data collection. The unrelated calls were also reported in separate categories but were present in terms of labeling these calls as unrelated to what the hotline is originally intended for.

**Outcomes/Results:** The population consisted of 1,082 individuals who called the COVID-19 Hotline. Out of this population, 778 asked COVID-19 related questions and required guidance. The sample size cohort (n=778) was able to display COVID-19 related questions and guidance which was obtained from the full cohort (n=1,082). Callers reporting questions were categorized as COVID-19 related questions (0.72%), work related (0.03%), nursing/medical (0.01%), wrong number (0.19%), housing (0.01%), and unemployment (0.04%). The timeline of tracking hotline calls began from April 29th to July 22nd. Positive interactions were measured by the level of clarification that the interns were able to provide to the caller's questions, their personal satisfaction over the phone, and volunteer feedback.

**Evaluation/Conclusion:** Evidence shows that more than half (n=778, 0.72%) of the callers were trying to get additional clarification in terms of executive orders that have been put in place, testing locations, guidance, and increased support. With the Bloustein Resource Guide, interns were able to cooperate with frequent callers, callers that lack transportation, callers with disabilities, and redirect the callers to appropriate services that they had originally tried to reach. Also, through the IBM Microdex database, pharmacists and doctors are able to access one of the largest online reference databases for drug and disease information, which can also be used to track potential positive COVID-19 residents. The Peer-Resource Guide and Suicide Prevention Training is a very useful and important tool in guiding informative resources to New Jersey residents and Americans across the country. These implementations will also help future COVID-19 interns make the experience easier in directing callers to the appropriate facilities that they intend on reaching and provide them with competence.

## Internship Abstract

**Title:** COVID-19 and its Impact on Cliffside Park Eye Associates  
**Name:** Ryan Bae  
**Preceptors:** Direct Supervisor: Dr. Van Vinciguerra, Optometric Physician  
**Agency:** Cliffside Park Eye Associates - Cliffside Park, NJ

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**Purpose:** To comply with the new COVID-19 guidelines set forth by the CDC (Centers for Disease Control and Prevention) and by the AOA (American Optometric Association) at Cliffside Park Eye Associates; and to help provide optimum vision care and products to patients, including those with compromised health issues.

**Significance:** As reported by the World Health Organization (WHO) COVID-19 is a disease caused by a new strain of coronavirus which is primarily spread when an infected person coughs, sneezes, or speaks. According to the CDC, New Jersey is the fifth leading state nationwide with 173,878 confirmed cases of COVID-19 as of July 8, 2020. When NJ Governor Murphy issued statewide closing of all businesses on March 21, 2020, only essential healthcare facilities were permitted to handle emergency patient care. With the available information and unknown nature of the COVID-19 virus, it was imperative to ensure safety protocols were in place before Cliffside Park Eye Associates (CPEA) could open its offices and provide a safe environment for the employees and patients.

**Method/Approach:** In addition to the protocols mandated by the Occupational Safety and Health Administration (OSHA) for office safety, extensive research and information were obtained by reviewing the guidelines set forth by the CDC, AOA, and NJ Department of Health to prevent the spread of COVID-19 at healthcare facilities. Procedures were augmented as a result of the unknown coronavirus: patient health screening and placement of chairs and floor decals to create six-foot social distancing. Plexiglass shields were installed at all counters to create a barrier from any spread of contaminated droplets. Staff dressed in PPEs (personal protective equipment) were instructed to frequently disinfect office counters and operator stations. Technicians and assistants were to ensure all ancillary clinical equipment such as headlamps, testing machinery, and instruments were disinfected and sterilized.

**Outcomes/Results:** With the support of state and federal loans, the office recalled most of the employees and reconfigured the facilities and operations to manage patient care with the utmost attention to viral protection. The added protections described above have been vetted from the CDC, AOA, OSHA, and NJ Department of Health without any disruptions or interruptions to the daily operations. Ninety percent of recent patients surveyed reported feeling confident that Cliffside Park Eye Associates took all necessary steps to ensure their safety and would recommend the office to family and friends. Whereas the remaining 10% of patients expressed discomfort in seeking any type of medical treatment.

**Evaluation/Conclusion:** The response to the health crisis caused by COVID-19 is ongoing. Cliffside Park Eye Associates ensures accountability and responsibility for the maintenance and safety measures required to limit the exposure of COVID-19. Contingency plans are in place, updated regularly, and readily available for implementation should they be required. Moving forward, health practitioners and staff can expect to learn from this pandemic and implement best practices and applications in the management, preventive measures, and treatment of COVID-19 and other infectious diseases.

## Internship Abstract

**Title:** Suicide Awareness and Prevention Outreach  
**Name:** Emma Bergman  
**Preceptor:** Elizabeth Roithmayr  
**Agency:** American Foundation for Suicide Prevention (AFSP)

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**Purpose:** To create a database that connects AFSP with groups that may be at risk for suicidal behavior, while also providing education and resources to aid in suicide prevention.

**Significance:** As the United States battles to lower COVID-19 rates, the ensuing repercussions on mental health continue to rise. The culmination of stress, anxiety, and isolation are detrimental to people's mental state. Collectively, the world is not only fighting against the virus, but also the psychological toll of this present moment in history. Just as one takes care of their physical health, one must maintain a healthy mindset. Suicide is a global health crisis. According to the WHO, 800,000 people die by suicide each year, excluding the number of deaths that were underreported. In the United States, the CDC records that 48,344 people died by suicide in 2018 which makes suicide the tenth leading cause of death in the nation, disproportionately affecting people aged 10-34. This amounts to one suicide every 40 seconds. For every death by suicide, it is estimated that 25 others attempt (Talk Saves Lives, 2018). Although suicide is a complex health issue, there are warning signs and risk factors that can be detected and addressed to help eradicate this leading cause of death.

**Method/Approach:** An outreach program was designed through excel to locate and inform various agencies of mental health resources that are readily available throughout counties across New Jersey. These resources included the numbers for suicide and crisis hotlines, a directory to the AFSP website/virtual programming, and a Talk Saves Lives module. Talk Saves Lives module is a community-based presentation that emphasizes the importance of talking and sharing as a role of suicide prevention. It covers the general scope of suicide, the research on prevention, and what people can do to fight suicide. Through email, AFSP offered to connect with LGBTQ groups and New Jersey Food Banks to provide education and resources to these specific demographics. The LGBTQ groups were offered a collaboration with AFSP and a specialized Talk Saves Lives module while the Food Banks were given flyers that emphasize the importance of reducing the stigma around mental health and utilizing virtual programming for support.

**Outcomes/Results:** Once connected with the groups, the Talk Saves Lives program was delivered. This program portrayed statistics, indicators, and solutions regarding suicide prevention. By monitoring talk, behavior, and mood, research has found signals to pinpoint and intervene when a person may be distressed or in crisis mode. The goal of this model was to initiate early tactics to prevent a person from ever reaching a time of crisis and to teach people how to interact with someone who is struggling. Simply listening to a person, without trying to interject an opinion, minimize feelings, or offer any advice, can make a drastic difference. The outreach provided a beacon of hope during this unprecedented time.

**Evaluation/Conclusion:** Time is the most important thing that can be put between a suicidal person and loss of life by suicide. Protective factors, self care strategies, limits to lethal means, and support to those already affected by suicide are preventative means to further deaths. Most importantly, starting the conversation and advocating for suicide prevention has the power to save lives.

## Internship Abstract

**Title:** Coronavirus Hotline Training and Improvement  
**Name:** Hieu Bui  
**Preceptors:** Direct Supervisor/Project Supervisor: Dr. Bruce Ruck  
**Agency:** New Jersey Poison Information and Education System

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**Purpose:** To improve hotline operator skills and knowledge in order to better assist residents in regards to the ongoing coronavirus pandemic.

**Significance:** In cooperation with the New Jersey Department of Health (NJDOH), the New Jersey Poison Information and Education System (NJPIES) have taken on the burden of hosting a statewide coronavirus hotline. Interns and volunteers working for NJPIES are academically enrolled in either a public health or clinical program. Student operators are supervised by fully trained and licensed poison specialists at NJPIES. Due to a lack of experience among student operators, this project was designed to close the gap in education and training among student hotline operators and poison specialists. Student operators at NJPIES receive limited training and must rely on their clinical or classroom knowledge to assist residents. This particular project focuses on applying suicide prevention and de-escalation training. Operators have reported an increase in distressed and suicidal callers due to coronavirus or coronavirus-related concerns. In addition, a student-operated resource guide will be created to supplement current resources provided by NJPIES.

**Method/Approach:** Collaboration will be done via an internal resource guide as well as weekly virtual meetings. The student-operated resource guide covers most commonly asked questions and includes additional resources not provided by NJPIES. Suicide prevention and de-escalation training will be conducted to improve operator skills and knowledge. A survey will be distributed to Bloustein interns near the end of the internship period. Any and all results and outcomes will then be turned over to the managing director. The resource guide, as well as a training program, will then be pending office-wide implementation if approved. Due to the nature of clinical rotations this project was only able to gather five participants.

**Outcomes/Results:** All five students (n=5, 100%) believe that this training program will be effective in assisting suicidal callers. Four students (n=5, 80%) strongly agree that they would intervene if there was a distressed caller, one remaining student (n=5, 20%) agree that they would intervene. On a gauge of confidence, two students (n=5, 40%) strongly agree in their ability to help a distressed caller, another two students (n=5, 40%) are confident, and only one student (n=5, 20%) strongly disagrees on their confidence in assisting a distressed caller. Four out of five students (n=5, 80%) have applied their training in a real-life scenario. Out of those four students, three (n=4, 75%) have used their training in a real-life scenario at least 1-3 times. One intern (n=4, 25%) claims to have applied their training 3-5 times.

**Evaluation/Conclusion:** Three students (n=5, 60%) have rated the training program as “good” while two other students (n=5, 40%) rated “excellent”. Results from the survey show that students are competent in their ability to apply suicide prevention and de-escalation in a real-life scenario. With a sample size of only 5, it is difficult to determine the effectiveness of the training program. However, all participants agree with office-wide implementation of this training program. Results and abstract will be forwarded to the directing manager for analysis and further consideration.

## Internship Abstract

**Title:** Leadership Development Program

**Name:** Reid Callicoa

**Preceptors:** Ioana Opris, NYC Disaster Workforce Engagement Manager

**Agency:** American Red Cross, Greater New York

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**Purpose:** To offer a month-long leadership cohort virtual pilot consisting of 4 workshops adapted to a virtual learning environment and offered to Disaster Cycle Service (DCS) Staff and Leadership Volunteers. Virtual pilot to provide an opportunity for a test-run of newly created workshops, feedback from students to allow for improvements, engagement for Disaster Workforce Engagement (DWE) volunteers, and preparatory education for Disaster Cycle Service staff and mentors prior to the launch of full cohort.

**Significance:** Virtual pilot program to provide an opportunity for a test-run of newly created workshops, feedback from students to allow for improvements, engagement for Disaster Workforce Engagement (DWE) volunteers, and preparatory education for Disaster Cycle Services (DCS) and mentors prior to the launch of the full cohort.

**Method/Approach:** Pilot will consist of 4 workshops to be taught virtually on the Microsoft Teams platform. Classes will be offered to the entire region and to volunteers and employees at the same time. Each workshop, “Effective Communication”, “Coaching and Mentoring”, “Stress Management for Leaders and Teams”, and “Project Planning, Motivation and Delegations”, will consist of 1 daytime session and 1 evening session. An evaluation form will be used to gather specific data needed to improve the workshops. Each evaluation form is customized to the individual classes, using targeted, open-ended questions to gather real feedback on the workshops. The evaluations will be reviewed, and necessary changes will be made to the program ahead of the full launch.

**Outcomes/Results:** Demand for the workshops by volunteers ended exceeding the capacity available, a second round of workshops is being considered to gather more data. The evaluation forms consisted of targeted open-ended questions that aim to gather the most crucial information needed to further develop the workshops into a full 6-month long leadership development program. The results of the evaluations from each workshop pointed out key flaws and areas that needed improvement. Some key areas that ended up needing improvement were the activities we had the participants complete, as well as the overall method of delivery.

**Evaluation/Conclusion:** Due to the current COVID-19 situation, our only option is to offer the workshops virtually. This has turned out to be more of a hindrance than a help, due to connectivity issues and trying to manage people when they are not physically present. The major point that has resulted from the evaluation form is that the workshops would be better suited in an in-person format. The current situation does not allow us to do that, so we are going to better tailor the workshops to be better suited for online learning. Overall, however, the workshops provided were an outstanding success and have already led to further development and improvement to the full 6-month Leadership Cohort that is set to launch in January 2021.

## Internship Abstract

**Title:** Community Health Worker Initiative  
**Name:** Yamiyah Carr  
**Preceptors:** Renata Svincicka, M.P.A., Community Health Manager  
**Agency:** Family Resource Network

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**Purpose:** To analyze community health workers (CHW) in the state of New Jersey and advocate for additional informative and supportive services CHW's provide.

**Significance:** According to the first 50-state nationwide study on Community Health Workers conducted by the US Department of Health and Human Services, Health Resources and Service Administrations, and the Bureau of Health Professions, CHWs serve as natural bridges between underserved populations in need of care and health care systems (HHS, 2007). Eighty-two percent of the respondents in the study noted that culturally appropriate health promotion and education were a major part of their work activities as well as assisting in the access of medical and non-medical programs and services. According to the Bureau of Labor Statistics in 2019, New Jersey was one of the highest paid states for CHWs but in Trenton, NJ's state capital, there were .29 CHWs per 1000 jobs available compared to the .271 CHWs per 1000 jobs available throughout the entire state (BLS, 2019). A shortage in community health workers has greatly contributed to the human resources crisis and because they serve as valuable contributions to community development, CHWs should become a mainstream service used and accessible to all communities in need of care.

**Method/Approach:** A Community Health Worker Initiative was implemented by The Family Resource Network (FRN) to provide health and wellness services to the families of NJ. During the process, current interns were trained as Navigator Assistants, COVID-19 Tracers, as well as research initiators on the roles and responsibilities of CHWs; ultimately creating employment training for possible CHW new hires. These collective efforts outlined a possible performance description of a CHW.

**Outcomes/Results:** The outcome of this initiative is dependent upon the effectiveness of the information mentioned in the CHW training as it relates to the needs and long-term goals of the organization. Due to NJ's lack of official CHW training requirements, the implemented CHW training educates new hires on their scope of practice as it relates to several health and wellness topics including mental and behavioral health, social determinants, caregivers, pandemic relief, navigator assistance, community outreach, and more. Most importantly, the training outlines essential approaches to effectively engage with the community in which they advocate such as building rapport, the importance of confidentiality, cultural competence, data collection, outreach activities, and ways to assess the needs and contributions of said community.

**Evaluation/Conclusion:** This initiative was reviewed and evaluated by a Community Health Manager and Senior VP affiliated with the Family Resource Network as an addition to the objectives of the Health and Innovations Team. This two-day training exemplified the essential qualities, procedures, and qualifications necessary to efficiently perform the duties of a CHW. The training will not be immediately implemented; however, the expectation is to potentially become a marketed training for other organizations in need of a proficient training program for CHWs.

## Internship Abstract

**Title:** New COVID-19 Policy and Procedure Handbook

**Name:** Lennys Carrillo

**Preceptors:** Direct Supervisor: Marie Owens, Practice Manager, Healthcare Administrator

**Agency:** Highland Park Surgical Associates/Vein Treatment Access Care, North Brunswick, New Jersey

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**Purpose:** To create a new policy to maintain a non-COVID pathway in order to deliver high quality care in an efficient manner for all patients.

**Significance:** As result of the COVID-19 pandemic in March 2020 it was mandated that all hospitals and surgery centers nationwide must pause all elective surgical procedures and other non-emergent services. Physical access to facilities for nonessential health care personnel and patient visitors was limited to minimize the spread of the virus. On May 26, 2020, the suspension was lifted by Philip D. Murphy, Governor of the State of New Jersey. Elective surgeries or invasive procedures, which by definition do not have to happen immediately, needed to be performed to avoid major health issues in the future for some patients. By creating this new policy, the facility will adopt new practices to support safe reentry of patients and staff to the facility, by following a consistent approach and best practice guidelines to increasing surgical case volumes during the COVID-19 public health emergency.

**Method/Approach:** According to the State and the Centers for Medicare & Medicaid Services (CMS) regulations and recommendations, as well as accrediting body standards the following actions were adopted by the facility:

- A COVID-19 screening test at a maximum of 6 days before the planned procedure
- Before the scheduled procedure, all patients were asked a series of questions addressing viral symptoms such as fever, cough, shortness of breath, and fatigue to monitor their health status.
- A COVID-19 screening test was required for all physicians, nursing, and ancillary staff involved in patient care 3 days before the entrance to the surgery facility.
- Personal Protective Equipment (PPE) use guidelines were followed per the latest Centers for Disease Control and Prevention (CDC) recommendations.
- All waiting room spacing guidelines such as; only two people allowed at the time on the waiting area, 6 feet social distancing, face masking, and other recommended procedures for patients and visitors before entering the facility were followed.
- A rigorous disinfection routine in between cases and at the end of the day was implemented to prevent and mitigate the risk of COVID-19 spread.

**Outcomes/Results:** Changes have been in place since the reentry of patients and staff to the facility. Rescheduling of procedures and regular office hours have been happening more often if the patients are not being compliant with COVID-19 test screening. No new cases have been reported in the facility.

**Evaluation/Conclusion:** Effective strategies and the use and implementation of safety guidelines have ensured the delivery of high-quality care in an efficient manner for all patients. Maintaining and updating the policy as COVID-19 is still considered a public health emergency will be required as the pandemic keeps evolving.

**Title:** Depression and Anxiety for High Schoolers in the age of COVID-19

## Internship Abstract

**Name:** Sajeela Chaudhry

**Preceptors:** Direct/Project Supervisor: Manuel Castaneda, Director of Community Health

**Agency:** New Brunswick Tomorrow (NBT)

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**Purpose:** To provide mental health educational messaging for adolescents (grade 9-12) in New Brunswick (NB) to raise awareness regarding depression and anxiety during the era of COVID-19.

**Significance:** Due to COVID-19, 15.3 million high schoolers can't physically attend school. High schoolers miss milestones like orientations, prom, graduation, driver license tests and loss of part-time jobs, safety concerns, social isolation, family abuse, etc. School closure equates to the disruption of school services (physical, social, mental health) and other opportunities to engage with peers/supportive adults. In the U.S. (2016-2018), over 3 million (12%) adolescents (ages 12-17) had depression or anxiety. Suicide is the 2nd leading cause of death in adolescents. According to the NB 2016 Community Survey, 28% of NB experiences depression with the youth occupying the majority of the statistic. Typically, mental health illnesses go untreated/undiagnosed due to lack of education/awareness about resources, uncomfotableness, not having funds/insurance, etc. The risk of going undiagnosed/untreated is exponentially higher. It begins with prevention, outreach, consultation, training, raising awareness and efforts to collaborate amongst different sectors/orgs. At NBT we are doing just that on social media. Evidence suggests that intervention can vastly impact how mental health is addressed/fixd.

**Method/Approach:** To ensure accuracy, I will measure engagement using average analytics on both target and regular mental health posts for July. Being that our Twitter followers (238) are very low, almost half the amount in comparison to our Facebook (585)/Instagram (494) followers, I will omit Twitter data. Overall, Instagram is the 2nd most important by 35% for teens and Facebook is 5th on the list of popularity with 3% finding it important, so our posts are more likely to be seen on Instagram through it's explore page and hashtag searches. Based on results, I will make suggestions to NBT.

**Outcomes/Results:** On Instagram our targeted weekly mental health posts had a 42.2% increase in likes, 15.1% increase reaches, 2% increase in saves and 22.4% increase in impressions. Facebook/Twitter favored our regular posts as they tended to have better analytics. All in all, Instagram is the platform to focus intentional/targeted posts as they have more favorable outcomes to support NBT in their endeavours to prove community benefit/impact to stakeholders.

**Evaluation/Conclusion:** Instagram analytics favored intentional posts for teenagers, whereas, Facebook favored applicable-to-all posts. A target-based approach with appropriate platforms to combat mental health is an effective strategy for outreach as each age range experiences mental health differently. An evaluation can be done by most engaged followers to see if they found the targeted posts beneficial by sending surveys via personal DMs. A difficulty faced was that we only had 1% of followers in the 13-17 age range so we weren't targeting directly. Next, NBT can target working adults, housewives, parents, etc., as there is greater opportunity to target directly as the followers are primarily 25-35 years old.

## Internship Abstract

**Title:** Understanding the Needs of Cancer Patients During COVID-19 Crisis

**Name:** Christina Chen

**Preceptors:** Internship Supervisor: Hiral Shukla, Outreach Coordinator

**Agency:** Cancer Support Community Central Jersey (CSCCNJ)

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**Purpose:** To maintain the safety and quality of programs and services provided by CSCCJ by analyzing and evaluating the needs of cancer patients and families in the Central Jersey region.

**Significance:** The rapidly spreading novel coronavirus has impacted all areas of life - particularly and disproportionately affecting the poor, the elderly, the immunocompromised, and various racial and ethnic minority groups. Thus, Cancer Support Community Central Jersey (CSCCNJ) has adapted its programs and services to a virtual format in order to better assist the community's needs. New statewide restrictions have limited visitation guidelines and strict social distancing protocols, contributing to widespread feelings of loneliness and abandonment in cancer patients. In particular, the African American community battles racial and ethnic health disparities, including levels of education, income, employment, health insurance, language barriers, access to preventative health services, and discrimination. The significance of the project is to connect the underserved population with resources to help them navigate their physical and mental health during the COVID-19 crisis.

**Method/Approach:** Three students from the Edward J. Bloustein School of Planning and Public Policy of Rutgers University collaborated in efforts to conduct needs-based assessments designed to understand, evaluate, and implement programs and services targeted to the needs of the Central Jersey community at large. The empirical research component involved a written literature review outlining current statistics and disparities present in the African American community located in Central Jersey. The outreach component involved performing well-being calls to active cancer patients enrolled in CSCCNJ programs, compiling county-specific resource lists for services such as health centers, churches, and bilingual physicians, and contacting local organizations and hospitals to establish partnerships and collaborations for members of the Central Jersey community.

**Outcomes/Results:** The literature review outlining current statistics and disparities present in the African American community is currently undergoing revision to highlight the key risk factors and focus areas. The resource list is currently being refined in accordance with the needs of the Central Jersey community. The proposals to establish partnerships and collaborations with local organizations and hospitals are currently in-transit or on hold due to the severity of the COVID-19 crisis.

**Evaluation/Conclusion:** The literature review, resource list, and establishment of partnerships will each contribute to the overarching effort to analyze, evaluate, and implement programs and services catered to the needs of cancer patients and families located in the Central Jersey region. The next steps would involve altering CSCCNJ services to address the findings uncovered through the literature review.

## Internship Abstract

**Title:** Community Engagement Analysis within UNICEF USA  
**Name:** Elisha Choi  
**Preceptors:** Direct Supervisor: Morgan Thobe, Community Engagement Manager  
**Agency:** UNICEF USA

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**Purpose:** To analyze the network of youth engagement within UNICEF USA and propose an enhanced website resources page to improve student leadership and development.

**Significance:** Every year, UNICEF USA selects exemplary high school and college students to become UNICEF youth advocates and Club leaders. These student leaders spend the academic year focusing on volunteer/Club retention, strategy, and education for UNICEF clubs. These students are trained for leadership by UNICEF USA staff and associates through online meetings and in-person gatherings. However, COVID-19 has brought several challenges for students and USA staff to move training 100% online. Students and the organization need a better means of accessing training material and resources. There will need to be an enhanced website module for students to reliably turn to throughout their virtual semester. This new program will ensure that student leaders and their club members have everything they need to have an enriched and engaging academic club year.

**Method/Approach:** Students go to the main UNICEF USA website and Clubs resource page when they need to find materials for starting and leading their clubs. On the Clubs resource page, students will find information surrounding the four pillars of UNITE or UNICEF's Clubs and volunteer mission- Advocate, Build Community, Fundraise, and Speak out. More specifically, this website page is where students commonly go when they need to find important fundraising forms, advocacy activations, ways to speak to elected officials, and UNITE training events. In an End of Year survey, 430 Club leaders responded to questions regarding the Community Engagement department's efforts in activating UNITEs or Club leaders around the four pillars of UNITE.

**Outcomes/Results:** Using the survey responses, a qualitative and quantitative evaluation was made on how students felt about the resources made available to them. A common response was that COVID-19 had a huge impact on how clubs mobilized around the four pillars of UNICEF UNITE. For the fundraising pillar, 6% of respondents said that they were unable to submit donations due to the pandemic. A starking 55% of clubs said they were unable to hold in-person advocacy events. And for community building, 73% said they did not participate in a UNITE event or training, due to conflicts. Having a more robust online Club resources website would provide necessary training materials and reinforcement for Club leaders to move forward in this upcoming virtual or hybrid academic year. Using these data-driven results, a sufficient club resources page is in the process of being created.

**Evaluation/Conclusion:** Setting students up for success should be a high priority for academic institutions as well as organizations that support and mobilize young people. One way that the Community Engagement department at UNICEF USA can support students and Club leaders is by creating a user-friendly Clubs resource page. This leads to a smoother and more efficient means of training student leaders in leadership and development. In addition to the ongoing renovations being made to the Club resources website, a new proposal should be made to include an educational intervention tool to improve volunteer training and retention. The final proposal will be an undertaking for the next intern.

## Internship Abstract

**Title:** Nutritional and Fitness Educational Material Assessment

**Name:** Alexa Colon

**Preceptors:** Project Supervisor: Cynthia Armand, Senior Program Manager, Health in the Community

**Agency:** Jersey Cares

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**Purpose:** To develop educational material to increase the knowledge of young Newark students on nutrition and fitness and assess their learning through evaluations.

**Significance:** A study from 2010 indicates that Newark had the highest incidence of food insecurity in New Jersey (Hellriegel, Parello, 2014). Many families are faced with the decision between paying rent or feeding their children healthier foods. Due to this, 45 percent of children in Newark, aged 3 to 5 years were overweight or obese. Forty-seven percent of Newark children aged 6 to 11 are overweight or obese, and 42 percent of those aged 12 to 18 were overweight or obese (Hellriegel, Parello, 2014). These statistics indicate education for affordable nutritional alternatives and increased fitness education is needed within this community.

**Method/Approach:** A remote educational program, in light of COVID-19, was developed to foster effective nutrition and fitness education at home. Based on a prior curriculum and extensive research, informational videos and lessons were generated each week covering topics such as grains, protein, dairy, cardio training, gardening, creating a budget, and various other topics. Each video and lesson topic was need-based by assessing the population directly. At the end of each lesson, there were short review quizzes to assess the quality of the lesson and to assess the student's knowledge following the lesson.

**Outcomes/Results:** The conclusion of the project would indicate the completion of various lessons geared towards filling the gap between nutrition and fitness education in a low-income population. The purpose of this project is to target the high rates of childhood obesity in the city of Newark and to limit the consumption of low priced, processed foods by providing resources to combat these issues. The research and creation of healthy modifications on traditional recipes from various ethnic backgrounds in this population is one project within this plan. The end outcome desired is to increase student's knowledge, with the intent of influencing positive health decisions.

**Evaluation/Conclusion:** The project will be assessed by the response of the students. Each nutrition session will include 8 students and there will be a total of 6 sessions, with the addition of a review session at the completion of the summer program. At the end of each lesson, there will be a series of games and quizzes to assess the knowledge learned by the students. The games and quizzes will also determine areas of trouble so they can be readdressed, and future lessons can be tailored to those needs. This will also determine if proper teaching methods were utilized and if the information was presented at the proper education level. Due to lack of time, the limitation to this method is that a thorough assessment of the student's knowledge prior to the lessons is missing. Implementation of a pre-test at the start of summer school is a valuable option to address this limitation.

## Internship Abstract

**Title:** RENEW360° Rehabilitation Center  
**Name:** Julian Cortes  
**Preceptors:** Direct/Project Supervisor: Alexandra Lopez  
**Agency:** RENEW360° - Toms River, NJ

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**Purpose:** To develop the policy and procedure manual for a new state-of-the-art substance use disorder rehabilitation center offering detoxification, inpatient and outpatient services.

**Significance:** In New Jersey, confirmed drug-related death rates have increased to 30.8 deaths per 100,000 people (State of New Jersey Department of Health, 2019). These rates are especially high in the southern counties of New Jersey, where some counties reach higher than 60 deaths per 100,000 people, according to the New Jersey Department of Health (NJ Department of Health, 2019). The southern region of New Jersey, where Toms River is located, continues to struggle with opioid addiction and lacks treatment options. In an effort to decrease the elevated number of deaths, new facilities and interventions are necessary. A drug rehabilitation center will provide people who abuse drugs with a place to seek help to overcome their addiction. RENEW360° is designed to provide patients with diverse evidenced services and multiple levels of care, all under one roof. With this concept fully realized, RENEW360° will offer full service, one stop programming and clinical care to patients and families in the state of NJ and beyond.

**Method/Approach:** In order for the facility to open and begin seeing patients, it must be given a license by the State of New Jersey, Department of Mental Health and Addiction Services. In order to be approved, a master policy and procedure manual must be developed and submitted to the state of NJ. This document will include policies and procedures that reflect federal statutes and state regulations. The creation of this document involves reading and understanding the guidelines that the state has laid out and adopted for NJ substance abuse facilities. In addition, meetings with vested partners of RENEW360° are held to review progress, develop strategies and brainstorm future options.

**Outcomes/Results:** After the submission of the master policy and procedure document to the State of New Jersey, the goal is for the committee to approve of the document and allow for the facility to operate. The master policy and procedure manual is a living document, and written blueprint that will serve as the foundation for services at RENEW360°. Upon approval and licensure, RENEW360° will offer families and individuals in NJ and across the US, holistic rehabilitation services, including detoxification services, medication-assisted therapy, residential care, outpatient care, and alternative therapies.

**Evaluation/Conclusion:** In order for this project to continue to provide much needed services. RENEW360° will have a quality assurance coordinator who will be responsible for continuous evaluation and needs assessments. RENEW 360 will be conducting and analyzing pre, during and post surveys, completed by all patients and families for quality assurance. Low levels of readmission for patients is one example of what the facility will be carefully monitoring in order to measure client success. The master policy and procedure document will be a living document, with regular reviews, updates and edits that reflect state and national mandates.

## Internship Abstract

**Title:** Patient Experience Improvement  
**Name:** Lucas Coyle  
**Preceptors:** Direct and Project Supervisor: Jill Anderson, Vice President of Patient Experience  
**Agency:** Robert Wood Johnson Barnabas Health

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**Purpose:** To mitigate reimbursement cost and improve patient belongings policy at Robert Wood Johnson Barnabas Health.

**Significance:** COVID-19 has initiated a large influx of patients into all hospitals and in particular RWJBH. With the rising number of patients in all departments of the hospital, there is less time to be with each patient individually, which decreases the ability to make sure that each patient contains their belongings before, during, and after each visit. Patients' missing belongings is also an overlooked issue in hospitals with limited education, awareness, and accountability.

**Method/Approach:** A review on 50+ different hospital policies found through their website was conducted in order to distinguish potential approaches towards missing belongings. Notably different policies were recorded on a spreadsheet and marked with critical differences and key points. During a three-week social media outreach period, an informal semi-structured interview was conducted with an individual in criminal investigation to assess possibilities of theft and fraud in hospitals. Three anonymous, informal, semi-structured interviews of kidney patients were also conducted. During social media outreach, a total of 20 survey responses were recorded. Additionally, a decision tree was created to indicate critical points in patient experience where potential items may have been lost.

**Outcomes/Results:** The policy review will aid in the creation of a more specific system-wide policy that improves patient experience and reduces hospital liability for belongings. When comparing other policies, about 18 differences in policy were found that can be utilized. Information on the criminal investigation interview found that lower position staff members have been largely responsible for theft of small items like jewelry and cash. Of the social media surveys taken, 67% indicated that there is a lack of available information on keeping belongings safe and 72% were never reminded to check their surroundings. The decision tree indicates that a large number of missing belongings occur during transfer of patients as well as after patient death.

**Evaluation/Conclusion:** The insights on other current policies will provide both a long-term and short-term strategy to mitigate the current liability imposed by missing valuables. Understanding the pathway of interaction between patient and staff provides a root cause that pinpoints patient transfer and deceased patient area of policy improvement. Feedback from the interviews and surveys provide data on potential improvements in security practices including safes, employee trackable badges, and labeling methods. Belongings safety education will also reduce lack of surroundings awareness. Additionally, ownership and accountability is key to sustain this process.

## Internship Abstract

**Title:** The Impact of Interpersonal Emotional Intelligence in Patient-care  
**Name:** Diya Datta  
**Preceptors:** Project Supervisor: Jamie Perry MSN, RN, Assistant Vice President of Nursing  
**Agency:** Robert Wood Johnson University Hospital- Somerset

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**Purpose:** To determine how the application of interpersonal emotional intelligence as a healthcare professional impacts the patient's experience and perception of Robert Wood Johnson University Hospital- Somerset.

**Significance:** Lack of communication between medical professionals and patients is the cause of up to 4% of patient deaths caused by medical error. Communication is only one facet of what builds up having a well-rounded emotionally intelligent healthcare provider. Emotional intelligence consists of various factors such as self-awareness, self-regulation, empathy, and motivation that are directly linked to patient outcomes. Since there is limited training provided to healthcare professionals in emotional intelligence, many do not know why it is necessary in a patient-provider relationship. The current study aimed to examine the impact of healthcare professional's EI on patient's trust and the patient-provider relationship through the use of a multi sourced and evidence-based approach.

**Method/Approach:** The implementation of emotional intelligence in patient care experience allows for the healthcare professional to use verbal and body language cues to express interest and care on a personal level. In order to implement this in the patient care setting, an enhanced awareness was practiced when listening to patients during "check-in". Additionally, consistent eye contact was maintained with patients throughout the interaction coupled with keeping close, yet appropriate, proximity. In addition, a hushed tone of voice was utilized while speaking with the patient. This is done with the intention of enhancing patient comfort and overall patient experience in the Oncology unit in the hospital.

**Outcomes/Results:** Patient satisfaction was measured through patient demeanor and verbal feedback. Upon implementing some of the skills that I researched about emotional intelligence, it was found that patients were overall more satisfied. Furthermore, utilizing a hushed tone resulted in patients being more receptive and involved in their care. Many patients especially appreciated when spoken to about their lives beyond their medical conditions. Their appreciation was expressed through a friendly and open attitude, as well as being more responsive to their care even if it was medically unpleasant.

**Evaluation/Conclusion:** I have learned that healthy communication helps patients feel cared for and respected. This can lead to patients being more likely to share their concerns with the healthcare staff, which leads to better care and an improved patient experience. By focusing on giving the patient the utmost satisfactory care based on the guidelines of emotional intelligence, I have learned that elevating patient experience influences how patients receive care. In addition, I have realized that delivering a great thoughtful "check-in" increases efficiency by reducing the frequency of activated call bells.

## Internship Abstract

**Title:** COVID-19 Effects on Orthodontic Treatment Assessment

**Name:** Erin Dellane

**Preceptors:** Direct Supervisor: Dr. Steven Asanza, DMD

**Agency:** SA Orthodontics - Toms River, NJ

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**Purpose:** To analyze the main effects, advantages, and disadvantages that COVID-19 had and still has on the different types of orthodontic treatments and propose observations to establish fair treatment amongst them all.

**Significance:** According to the American Association of Orthodontics, an estimated 4.5 million Americans wear braces or another form of orthodontic appliances. With that being said, it is of high importance to try and make both Invisalign and braces convenient in helping to promote the straightening of teeth. Statistically, braces are chosen more frequently than Invisalign for a multitude of reasons. These reasons are that braces are cheaper and work faster in the process of straightening teeth. Invisalign has proven to be the better choice in terms of convenience, especially during the COVID-19 pandemic. By establishing fairness amongst these orthodontic treatments, it will help patients in treatment become equal in regard to the straightening of teeth. Evidence-based statistics will address the need to improve fair treatment amongst both of these treatments.

**Method/Approach:** A survey with two focus groups, Invisalign patients and braces patients, will be conducted, and it will consist of questions regarding fairness in regard to treatment during the COVID-19 pandemic. The steps involved are to narrow down the focus groups of twenty Invisalign patients and twenty braces patients and distribute a written multiple-choice survey to them, asking both groups the same questions. These surveys will consist of questions asking the patient's perspective regarding their treatment during the pandemic. By recording the different answers from the two focus groups, it will show the significant effects that COVID-19 had on the patients and the main differences between the two types of orthodontic treatments.

**Outcomes/Results:** Of the two focus groups, the survey showed that patients with Invisalign had a higher advantage during the pandemic than patients with braces. 90% of Invisalign patients had felt that they had received continuous treatment throughout the pandemic. In contrast, 10% of patients with braces felt that they received continuous treatment throughout the pandemic. Creating a survey has helped show the major differences that COVID-19 has had on the types of orthodontic treatment and has contributed greatly to establishing fair treatment amongst both. Overall, the survey has proven that Invisalign is more friendly altogether, especially during a pandemic, in comparison to generic braces.

**Evaluation/Conclusion:** More than half of the patients with Invisalign favored their treatment choice, specifically during the pandemic. If dental offices were to close again, zoom calls could take place for patients with braces to have a continuous treatment like patients with Invisalign receive. The zoom calls could help patients with braces continue their treatment if they are told to close again, which may happen due to the recent rise in cases. A post-survey will be taken after the implementations are put in place for patients with braces receiving continued treatment throughout a pandemic, and this survey will show if any changes took place throughout the braces patient's opinions and feelings. Other ways to provide fairness amongst both orthodontic treatments will be thought of and sought out if a shutdown is to reoccur.

## Internship Abstract

**Title:** Importance of Telehealth Platforms in Mobile Health Clinics

**Name:** Madeline DiBello, Community Relations Intern

**Preceptors:** Direct Supervisor: Rohit Mukherjee, Executive Director of GlobeConnect  
Project Supervisor: Imene Beche, Community Relations Manager

**Agency:** GlobeConnect LLC

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**Purpose:** To construct an informational survey of well-researched questions for distribution to a compiled list of registries of mobile health clinics in the tri-state area to be followed up with qualitative data analysis of content through the Qualtrics platform.

**Significance:** Mobile Health Clinics (MHC's) offer services without restrictions such as: socioeconomic status, age, gender, race, or location. MHC's ensure that people are receiving equal opportunity to healthcare by removing geographic and social barriers associated with fixed health care settings. MHC's are proven to be beneficial, however, these clinics become unserviceable over a period of time. The purpose of the GlobeConnect (GC) team is to identify MHC's and ameliorate the productivity of these clinics by equipping them with Telemedicine platforms. The survey that is compiled will serve as a feasibility study to understand the needs of these clinics and how they can be met in order to increase their effectiveness. GlobeConnect introduces telehealth platforms to MHC's to meet the needs of patients while decreasing hospital crowding and physician burnout. Through the use of this software, the clinics are projected to overcome some of the challenges they are facing and bring equitable care to socioeconomically disadvantaged populations.

**Method/Approach:** Online research was conducted to demonstrate a level of importance that MHC's and telemedicine platforms serve. To support this, locations across the state of NJ that offer MHC's were identified. The institutions that offer MHC's were compiled into an Excel database, along with their services offered and contact information. Assessment materials were created, including an informational and a satisfactory survey using Qualtrics Survey Software.

**Outcomes/Results:** Feasibility data will reveal the need for innovative solutions like the one GlobeConnect offers. The results that will be obtained through information surveys, interim analyses, and satisfaction surveys will build the basis of our pilot data to prove how these clinics bolster prevention and chronic disease management. Follow up with patients as part of the care provided aboard these MHC's, will allow the GC team to track chronic health management and preventative care that may not have been available without these solutions. Overall, the clinics are projected to result in better health outcomes for those who are victims of less-than-optimal access to healthcare.

**Evaluation/Conclusion:** Once the surveys are sent out and collected, partnerships will be built, and the information will be compiled creating a feasibility study that will dictate the team's pilot project. As the telehealth equipped MHC's takeoff, measures will be put in place to collect relevant data for interim analyses, as well as a satisfaction survey to be completed by partners at the end of the agreed-upon duration. Data analysis features in Qualtrics will assess the data collected from the surveys. Once data is collected, it will make certain that GC's telemedicine platforms are benefiting MHC's and accommodating the needs of our partners. If partners are satisfied, it will allow GlobeConnect to build larger partnerships and expand internationally.

## Internship Abstract

**Title:** Community Health & Wellness Fitness Assessment and Outcome

**Name:** Lisa DiOdoardo

**Preceptors:** Michael Collazo, Owner & Facility Director

**Agency:** Anytime Fitness Center

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**Purpose:** To assess and promote the benefits of structured fitness classes to current members while offering educational health workshops that focus on the importance of physical and emotional activities.

**Significance:** The physical and emotional aspects of fitness training and education cannot be stressed enough. In the wake of COVID-19 people need to be educated on the benefits of structured fitness plans to achieve optimal health and build immune systems to fight viruses and disease. An article written in the Journal of Health and Sport Science links physical activities with the body's defense system to fight disease (Nieman, D., & Wentz, L., 2019), research focuses on four areas of immunology exercises and highlights the many benefits of each. In addition to the benefits exercise has on the immune system, further research in the article evaluates the acute and chronic effects, clinical benefits, and nutritional significance. It is estimated that 80% of American adults do not get enough exercise, weakening their immune systems and setting themselves up for future health problems. There is a direct correlation between exercise and preventing chronic disease. The importance of physical activity is vital to one's overall health and should be at the forefront of our healthcare system as a measure of prevention. Many Americans suffer from chronic illness, implementing healthy lifestyle strategies in young adults and seniors is imperative. This project seeks to support members through health workshops and community engagement. Educating the community and connecting with them will bring awareness to the importance of living a healthy lifestyle and creating lifelong habits.

**Method/Approach:** A participation survey was developed and distributed to a small group consisting of five participants measuring the positive effects on one's health. The group consisted of three females and two males 28 to 61 years old. The structured classes consisted of a warm-up, high-intensity intervals, and low impact combination circuits. The survey addressed three key factors that included sleep patterns, emotional stability ie: mood swings, and relationships. The participants indicated how they felt relating to each of these categories by selecting either: 1. Significant Difference 2. Moderate Difference or 3. No Change/Stayed the Same. Ending this two-week study, members were asked to further elaborate on their selections their answers were recorded and will be used to develop future workshops and classes.

**Outcomes/Results:** The data collected showed positive results relating to the participant's sleep patterns, emotional stability, and their relationships. The positive effects that the structured fitness classes had on the focus group was significant. Four out of five participants stated that there were significant differences while only one expressed moderate changes in sleep patterns, emotional stability, and their relationships. This participant indicated in the open discussion forum that external influences such as loss of a job may have significantly impacted their sleep patterns and relationships.

**Evaluation/Conclusion:** The training classes received an overwhelming response. The goal was to draw more awareness to the importance of developing and maintaining consistent fitness habits. By applying the support philosophy and engaging with the group there is a greater chance to embrace healthy habits throughout life.

## Internship Abstract

**Title:** Inpatient Commercial Gainsharing Program

**Name:** Whitney Dunn

**Preceptors:** Director, Value-Based Initiatives, Patricia Richards

**Agency:** Saint Peter's University Hospital

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**Purpose:** To analyze financial and quality data for the Inpatient Commercial Gainsharing Program, which provides incentives to participating physicians for efficient utilization of inpatient resources.

**Significance:** Gainsharing Programs aim to incentivize physicians to improve efficiency and quality. An initial evaluation by the New Jersey Hospital Association (NJHA) showed that Saint Peter's University Hospital would save approximately \$20 million per year, on commercial cases (included managed Medicare) by appropriately reducing length of stay, reducing duplication of diagnostics and testing and standardizing implant use in surgical procedures.

**Method/Approach:** Physician cost and utilization data on inpatient commercial cases is analyzed and compared to a state-wide Best Practice Norm (BPN), established by NJHA. Physicians can earn incentives in two ways: 1) comparison to the BPN; and 2) comparison to their own historical performance. Incentives are calculated at a per patient level. After the utilization component has been calculated, a quality component is incorporated, to ensure that costs are not decreasing at the expense of patient care. When it is time to distribute money, physicians are engaged with hospital leadership to review performance dashboards.

**Outcomes/Results:** With over 178 physicians in the program, of which over 100 are community physicians, Saint Peter's benefited from face time with external physicians that would normally have no incentive to align with hospital goals. In the first performance period of the program, Saint Peter's saw a savings of \$912,244 for improved performance, which translates to \$913 per case.

**Evaluation/Conclusion:** Physician engagement is a constant challenge for hospital administrators. Sharing data and savings from quality and efficient services is an effective way to align physicians with hospital goals around patient care. Hospitals should continue to find ways to engage providers as shared stakeholders in quality and financial outcomes. I would like to thank Patricia Richards for all her help during this internship.

## Internship Abstract

**Title:** Promotion of Health and Wellness Through Social Media Platforms for the Rutgers University Community

**Name:** Marilyn Duverge

**Preceptors:** Direct Supervisor: Francesca Maresca, Director of H.O.P.E

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

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**Purpose:** To advance health and wellness through virtual educational workshops/outreach utilizing Rutgers Student Health social media platforms for the Rutgers University-New Brunswick community during the COVID-19 remote environment.

**Significance:** Every year Rutgers University enrolls more than 70,000 students on campus. It was reported that 23.2% of students have not received information on Depression/Anxiety and 35.5% on Nutrition from their academic institution, Rutgers University. Mental health, general well-being, and nutrition, is a major concern for higher education (American College, 2017). Hence, Health Outreach, Promotion & Education, focuses on promoting health and wellness through community engagement. This evidence indicates the importance of implementing healthy practices such as exercise, healthy nutrition, stress reduction strategies for mental health, student health, and how to navigate college; to help students function mentally, emotionally, and physically. The unique conditions of the COVID-19 pandemic have created a need for virtual outreach.

**Method/Approach:** A draft of an outreach schedule calendar with upcoming workshops was created. Professional staff and peer educators hosted workshops, outreach, and educational sessions on Instagram Live. Topics such as mental health, nutrition, and general well-being were promoted through virtual workshops. The back-end analytics were examined to determine how many participants watched and engaged in the scheduled workshops. The social media platforms that are used to promote, host and post this content are Instagram (IG), Facebook, Twitter, and the Rutgers Student Health website. From July 22nd through August 31st, 20 sessions will be hosted. Back-end analytics will be measured for only 4 sessions for this project. H.O.P.E understood that students still need health and wellness engagement over the summer, especially in light of COVID-19. Since the fall 2020 semester will be predominantly remote, these virtual workshops are expected to expand in frequency and topics in the fall semester.

**Outcomes/Results:** Of the 1,181 followers on Rutgers Student Health's Instagram page, about 100 followers watched each virtual session on Instagram Live. The first session consisted of "Mental Health Resources and Self-Care Vs Self-Help." This session reached 233 followers but received 172 views and 23 likes. The second workshop introduced the "Cooking The Basics" series which focuses on nutrition. The host prepared a healthy meal. The Live session had 112 views and 16 likes. "Learning how to Line Dance" was the next weekly session to motivate students to exercise. It received 129 views and 25 likes. A "Stress Reduction Strategies" session received 79 views and 22 likes. All sessions were promoted the week prior via Instagram, Facebook, Twitter and the Rutgers Student Health website.

**Evaluation/Conclusion:** Individuals were engaged and interacting with the hosts by commenting and "waving" virtually. The first session was the most viewed on IG, suggesting that mental and emotional health could be the priority topic of interest at this time. Promotion of the workshops before they take place will serve as an effective strategy to grow Rutgers Student Health's audience and reach.

## Internship Abstract

**Title:** Research Responds to Public Health Crisis RWJUH

**Name:** Brittany Fanka

**Preceptors:** Dr. Reynold A. Panettieri: Supervisor (Vice Chancellor for Clinical and Translational Sciences), Judith Argon: Volunteer Coordinator

**Agency:** Robert Wood Johnson University Hospital

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**Purpose:** To analyze and evaluate how the Robert Wood Johnson University Hospital Screening Study responded to and contributed to the public health emergency, through interviews with leaders and key team members.

**Significance:** According to the Pew Research Center, the coronavirus outbreak is having an immense impact on the lives of Americans. Nearly nine-in-ten U.S. adults say their life has changed at least a little as a result of the COVID-19 outbreak, including 44% who say their life has changed in a major way. This also applies to research professionals, who have pivoted their research programs to solve this globally spread public health issue. The RWJUH Screening Study assesses the prevalence of SARS-CoV-2 among staff at the Robert Wood Johnson University Hospital and identifies risk factors associated with the SARS-CoV-2 infection. The significance of this project is to evaluate how research professionals were able to change their roles throughout the pandemic as well as the contributions they were able to make through their studies.

**Method/Approach:** To gain insight regarding how research professionals were able to collaboratively implement a project meant to identify those at greater risk of contracting the virus, an in-depth phone interview with open-ended questions method was utilized. The unit of analysis consisted of 10 study leaders, which includes the principal and co-investigators, along with members of the response and project coordination teams. All participants of the study were given a set of baseline questions that pertained to their specific role in the study and methods they used to carry out the project.

**Outcomes/Results:** The aim of this project is to demonstrate the impact of the RWJUH Screening Study and analyze the ways in which research team members can contribute and take action amidst a global health crisis. When asked about the major disruption caused by the pandemic, 100% of participants spoke about how they refocused their attention to COVID related projects. Additionally, the quarantine protocols required a majority of them to work remotely, a change that alters co-worker interactions. As some of the team were not familiar with one another prior to the onset of the study, they were able to form online connections through their collaborative efforts. When asked about what prompted their involvement in the study, 50% attributed their involvement to recognizing a need to solve the problem and their ability to help given their background, and the other 50% were brought on by the principal investigators. 100% of the team members responded yes when asked whether or not the study would reveal what population groups were at greater risk along with where there was a need for improved safety precaution methods.

**Evaluation/Conclusion:** The RWJUH Screening Study has shown that nurses, along with lower income groups, are at the greatest risk of exposure and infection. This brought attention to the fact that nurses and doctors should not be the only group of essential workers considered when allocating proper personal protective equipment. Those in the hospital working in transport and housekeeping for example, have daily interactions with sick patients. Dr. Panettieri and his team are currently working on a new project meant to educate these groups, along with their families, and arm them with more accessible testing methods such as take-home saliva kits.

## Internship Abstract

**Name:** Sidrah Farooq

**Position:** Patient Care Coordinator

**Preceptors:** Jason Sarjue, Director of Patient Care Department  
Sunita Rakhan, Manager

**Agency:** PWN Health

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**Work Duties:** As a Patient Care Coordinator at PWN Health, I provided patient outreach with test results for patients on different test panels, such as STD, Lipid as well as Covid-19 while remaining empathetic. Along with this, I provided any additional support needed such as connecting patients to the physician, as well as calling in prescriptions at the desired pharmacy for the patient. I was responsible for scheduling appointments based on the state the patient was located in as well as a licensed physician in the same state. It is important for me to keep track of availability to ensure that there is at least one physician available for a patient. Clearing schedules, and ensuring smooth communication between patients and physicians was one of the key components.

**Techniques:** On a daily basis there are over 100 calls that each PCC has to complete along with other work duties. PWN has set standards for quality and ensures that we are trained to be as sensitive and polite when conversing with the patients as we deliver delicate information. My co-workers and mentors at work were my immediate support system which made my experience smoother and more efficient. They offered notes for more commonly occurring events and were always available to answer questions. There are informative “cheat-sheets” created which help one navigate through the different platforms.

**People Skills:** Most of my day went into interacting with patients with illnesses, however by treating them with respect and being empathetic towards them, I had a limited number of patients who were not satisfied with our services. Along with this, I learned to enhance my communication skills within the department as well as with the patients. When interacting with patients it is extremely important to be transparent and concise with the information you provide, since it directly relates to their wellbeing. Honing such a skill will go a long way for my personal and professional growth.

**Results:** As a Patient Care Coordinator, the quality of care the patient receives and the satisfaction level of a patient derives the success and result of my work. I truly feel that I succeeded in my role as a Care Coordinator at PWN Health, with the help of my co-workers and supervisors. I attained a great amount of knowledge and was able to provide the quality care which the company strives for.

**Lesson Learned:** A major lesson I learned includes the management of time and being as transparent with the patient as well as your supervisor. When an uneasy situation arises, it is critical to provide your supervisor with as much information and detail as possible to help find the best solution. Time management is extremely important in this field of work since you are dealing with critical health information of patients. Most importantly, their wellbeing depends on how soon and efficiently I reach out to them and provide them with the right resources.

## Internship Abstract

**Title:** Children’s Book: Helping Children with Autism and Epilepsy Cope with COVID-19

**Name:** Ashley Fernandez

**Preceptors:** Project Supervisor: Renata Svincicka, MPA, Community Health Manager

**Agency:** The Family Resource Network - East Windsor, New Jersey

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**Purpose:** To analyze the impact of the Coronavirus on children with autism and epilepsy and providing mechanisms on how to cope during this pandemic.

**Significance:** The Coronavirus disease (COVID-19) is a respiratory illness that is transmitted from close contact that can be asymptomatic or cause mild to severe symptoms. Since COVID-19 is a new disease that has rapidly caused a pandemic with over 12 million cases globally, according to the Center of Disease Control, the deadly virus has created a major effect on social and economic factors due to several months of quarantine. The importance of this project is to address and evaluate the impact of the global pandemic on the daily lives of children with autism and epilepsy. Children with autism are accustomed to having a routine and may struggle to adjust to the new changes that the COVID-19 pandemic has brought upon them. In a SPARK (Simons Foundation Powering Autism Research for Knowledge) study completed by 8,000 families, only 42% said that their children with autism could understand information about COVID-19 “moderately” and more than 90% reported worsened behavioral, mood, and/or anxiety symptoms. The children’s book will bring awareness to helping children with autism and epilepsy better understand what the Coronavirus is and the safety measures they must take in order to keep themselves and those around them from spreading the virus.

**Method/Approach:** Archival research was conducted in gathering scholarly information from reliable sources such as the Center of Disease Control and the World Health Organization to provide accurate information on what the Coronavirus is and techniques to stay safe such as social distancing, wearing a mask when outdoors, and proper handwashing.

**Outcomes/Results:** The collection of information through research will be presented in the form of a children’s book geared towards the audience of young individuals that have autism or epilepsy. Using Adobe InDesign, the children’s book will include simple text and illustrations that explain the new virus, the importance of social distancing, wearing a mask, and step-by-step instructions for proper hand washing. The project will help reach a population of children between the ages of 0-18 years old throughout New Jersey that may not understand the global phenomenon that is currently taking place and ensure that their needs are being met. These individuals with disabilities may have a negative reaction to the drastic changes in their routine which is why it is critical to educate them on the necessary preventive measures and ease their worries that result in maladaptive behavior.

**Evaluation/Conclusion:** The Family Resource Network is a comprehensive group of community-based programs and service organizations designed to provide individuals and families with disabilities the necessary support in order for their needs to be met. The Health & Innovations Team at the organization will plan a webinar series that centralizes the health education based on COVID-19. The children’s book will serve as a resource that caregivers can use to simply explain the virus, how their children can stay safe during the pandemic, and help ease the fears and frustrations that these young children with autism and epilepsy may be experiencing.

## Internship Abstract

**Title:** COVID-19, Assessment of Community Knowledge  
**Name:** Yuneldys Garces  
**Preceptors:** Margaret Drozd (Program Director), Cheryl Policastro and Megan Chs (Staff Nurses)  
**Agency:** Community Health Services/ Saint Peters Health Care System (CHS/SPHCS)

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**Purpose:** To assess and increase knowledge of Coronavirus disease (COVID-19) in the New Brunswick community.

**Significance:** COVID-19 (Novel Coronavirus December 2019) has killed more than 650,000 people and has infected over 16 million, according to Johns Hopkins University Coronavirus Resource Center. The United States has had the highest cumulative total of cases and deaths since March. Infectious diseases experts and government authorities have stated the need for testing and following preventive guidelines to decrease the spread of the virus. Lack of health insurance, health resources and language barriers are social determinants of health that impact health outcomes. If these barriers are left unaddressed, their detrimental effect could be fatal over time. This project supports the importance of health education to underserved populations within the community, serving as a tool to promote health and proper hygiene to prevent further spread. This project provides evidence of participants' improvement in knowledge about COVID-19. As Healthy People 2020 endorses, "Educational Community-based Programs are crucial to promote health, prevent disease/injury, and enhance the quality of life".

**Method/Approach:** The method used was a qualitative survey/questionnaire, composed of six true or false questions, given verbally to participants at Elijah's Promise, a local soup kitchen in New Brunswick. A verbal pre-test was given to assess participants' baseline knowledge of COVID-19. An interactive educational session (in English and Spanish) utilizing a trifold poster provided primary information about Coronavirus prevention and guidance. Lastly, a verbal post-test was given to re-assess the learning that had taken place. Data from 21 participants were verbally collected and recorded on the same questionnaire sheet. Also, Coronavirus care kits containing soap, hand sanitizer, masks, educational literature, and a list of available testing sites were given to attendees of the event, without regard to survey participation.

**Outcomes/Results:** A sample (n=21) of individuals participated in the educational project. 62% (13 participants) showed a lack of knowledge about COVID-19 by failing the pre-test. Out of those 13 participants, 48% (10 participants) answered at least one question incorrectly and 14% (3 participants) replied inaccurately to at least two questions. 38% (8 participants) obtained a perfect score on the pre-test. The 62% of participants who failed the pre-test responded correctly during the post-test, after the educational presentation, showing that learning had taken place.

**Evaluation/Conclusion:** This project demonstrated that there are still populations of the community that require further education on COVID-19. This project successfully showed learning improvement after the educational presentation to participants. A disadvantage of the study was the amount of data obtained (only 21 surveyed); this number may not support the projections or evidence accurately. Education to underserved populations would increase awareness and knowledge of COVID-19 and how to prevent its spread.

## Internship Abstract

**Title:** Assisting the Latino Community with Virtual Resources During COVID-19

**Name:** Paola Giacometti

**Preceptors:** Project Supervisor: Hiral Shukla, Outreach Coordinator

**Agency:** Cancer Support Community in Central New Jersey (CSCCNJ)

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**Purpose:** To compose an array of educational virtual programs that cancer patients within the Latino Community can access while facing the COVID-19 pandemic.

**Significance:** According to the Centers for Disease Control and Prevention (CDC), there are certain groups who must take extra precautions to remain healthy and avoid contracting COVID-19. These groups include those who are immunocompromised, older adults, racial/ethnic minority groups, and people with disabilities. The Cancer Support Community in Central New Jersey (CSCCNJ), shifts its focus on helping cancer patients specifically in the Latino community as they make up two separate groups, being immunocompromised and being a part of an ethnic minority group, who must take extra precautions throughout this pandemic. Composing an array of educational virtual programs for this population is imperative as Hispanic-Latinos face many barriers to receive care which includes low personal income, cultural and linguistic factors, discrimination, and provider bias. The significance of this initiative is to ensure this high-risk population that CSCCNJ is present and that they are safe, which is at home.

**Method/Approach:** These virtual programs took place in a Spanish dialogue, working with resourceful agencies such as the SNAP-Ed program through Community Food Bank of New Jersey, RWJ Barnabas Health, and others. In order to assist the targeted population with virtual resources, data on Spanish-speaking patients who visited CSCCNJ in Bedminster, NJ prior to COVID-19 was compiled into a database. The method of contact proceeded with primary phone calls, secondary text messages, and lastly, emails if a response had not yet been received. Registration is completed by CSCCNJ staff. The educational virtual segments take place via ZOOM, which are conducted by CSCCNJ staff and other partnered agency staff. CSCCNJ worked primarily with Latinx populations in Middlesex and Union counties, however because the platform used was virtual, anyone throughout the state had access to the programs.

**Outcomes/Results:** CSCCNJ's database of Spanish-speaking patients consists of a total of 51 patients whose emails/phone numbers were accessible. The Hispanic Nutrition Series, which was a total of 3 segments over a 3-week course, had a total of 22 people register, however, only a handful actually logged on. Of the registered patients, two (1%) people were able to log on to the first session, nine (4%) people were able to log on to the second session, and three (1%) were able to log on to the third session. During reminder calls, emails, and texts, the consensus was relatively identical throughout the majority of the patients as almost half of the patients did not know how to correctly log onto the meetings.

**Evaluation/Conclusion:** Accessibility is a multifaceted issue that is demonstrated with the amount of people registered for the virtual sessions versus the amount of people who actually were able to log on. A step-by-step guide was made for ZOOM and weekly reminders with the links on how to access the meetings were given. The next step would be to conclude a needs assessment on how CSCCNJ can help this community with being able to access their resources via a telephone survey where the staff can determine what the main issue was that prevented patients from accessing the virtual meetings.

## Internship Abstract

**Title:** Assessing the Effectiveness of an External Physical Therapy Treatment Area

**Name:** Julia Gomez

**Preceptors:** Direct Supervisor: Robin Fanizzi, Project Supervisor: Mark Nagel

**Agency:** Belle Mead Physical Therapy

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**Purpose:** To plan and install a fully functioning outdoor treatment area in addition to the office space already available to treat patients and create more space.

**Significance:** Physical therapy is an important step in the rehabilitation process as it is a non-invasive treatment to many types of injuries. Belle Mead Physical Therapy was forced to temporarily close because of the ongoing COVID-19 pandemic. The primary goal of the facility after its reopen on May 11th is to treat as many people as New Jersey state guidelines allow at that point in time. While the practice started to see many previous patients, an increase in need for physical therapy has been observed since hospitals in New Jersey started to perform elective surgeries once again. This surge has inspired an ongoing project at Belle Mead Physical Therapy to create an outdoor space to expand how many people this office can take. By doing so, this office will be able to aid those seeking rehabilitation in a timelier fashion. My role for the duration of this project involves the execution and installation of the outdoor tent. With the help of my project supervisor, we will determine what exercises are best practiced outdoors to reduce risk of the spread of disease and to treat as many patients as possible. In person treatment also increases risk of spread of COVID-19 to both patients and staff.

**Method/Approach:** First, the outdoor area was measured. The measurements were then used to determine what size tent can be purchased to build outside which measured to 20x30 feet. Once the tent was ordered and delivered it was pitched by myself and a few other aides and observed for a week to make sure it could withstand weather conditions. From there, a list of equipment was approved by my project supervisor to place outside. This list included medicine balls, a floor ladder, an upright trampoline, cones, balance boards and golf clubs. All items were moved outdoors, and patients were brought to the area to perform exercises with the previously stated equipment. I observed these patients and made notes on the positive and negative results regarding the increased flow of patients to reduce risk of spreading disease.

**Outcomes/Results:** All patients brought into the outdoor tented area displayed competence in performing their exercises given by the physical therapists. In fact, some patients performed even better than expected due to the more open space that the tent provides. A qualitative value called a “perform score” determines the severity of an injury as treatment progresses over 6-8 visits by filling out a form. The ones treated outdoors showed lower scores from one evaluation to the next. Additionally, no patients reported testing positive for COVID-19 since the reopening of Belle Mead Physical Therapy.

**Evaluation/Conclusion:** It has been concluded by my project supervisor, Mark Nagel, that the quality of treatment has remained the same for all patients and improved for few due to the outdoor space. Progress evaluation forms for patients have reduced in number which indicates positive outcomes of physical therapy, meaning their pain is reduced and ability is being restored. The project was deemed successful and the tent and equipment used outside will continue to stay throughout the fall.

## Internship Abstract

**Title:** Coronavirus Hotline Training and Improvement Assessment

**Name:** Victoria Gomez

**Preceptors:** Direct/Project Supervisor: Dr. Bruce Ruck, PharmD, RPH, Director of Drug Information Services and Professional Education

**Agency:** New Jersey Poison Information and Education System (NJPIES)- Newark, NJ

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**Purpose:** To improve call quality at NJPIES when assisting New Jersey residents of racial and ethnic minority populations regarding the current Coronavirus pandemic.

**Significance:** The New Jersey Department of Health (NJDOH) in collaboration with the New Jersey Poison Information and Educational System (NJPIES) established a health hotline to provide medical information to New Jersey residents concerned about Coronavirus (COVID-19). Student hotline operators receive a limited amount of training, then rely on their clinical and/or classroom knowledge in order to further assist residents. Due to the lack of knowledge and resources, there have been numerous calls student hotline operators are not equipped to answer. This particular project focuses on improving call quality among racial and ethnic minority populations who are at an increased risk of getting COVID-19 due to health and social inequities. Social determinants of health have historically prevented them from fair opportunities for economic, physical, and emotional health. By creating a specific training plan and peer-resource guide tailored to the needs of these populations phone operators would be able to better assist these callers.

**Method/Approach:** To combat the lack of knowledge and resources available at the time of receiving a call, interns from the Bloustein School created a peer-resource guide that included answers to commonly asked questions and additional resources not provided by NJPIES. Furthermore, two interns created a training plan dedicated to a topic of their choice. Of the topics included, one training plan outlined the types of resources and assistance provided to racial and ethnic minority populations during COVID-19. Bloustein interns completed a nine question, quantitative, web-based survey near the end of the internship. The findings measured the effectiveness of the training plan; all results and outcomes were turned into the managing director. Lastly, the peer-resource guide and training plan were turned in and pending approval for office use.

**Outcomes/Results:** Due to the nature of clinical rotations, the training plan survey was only able to reach four participants (n=4). All four students were “very satisfied” with the type of information and resources provided on the training plan. Three students (75%) “agreed” and one student (25%) “strongly agreed” on understanding the type of resources/assistance made available to minority populations throughout the COVID-19 pandemic. All four students “strongly agreed” in their ability to help a caller of the specified population find the resources they need. Finally, all four students “strongly agreed” that the training program would have been useful if they had access to it at the start of the internship.

**Evaluation/Conclusion:** With a sample size of only four students, it was difficult to determine the effectiveness of the training plan. However, three students (75%) rated the program as being “excellent” and one student (25%) rated the program as being “good”. Results from the survey show that student hotline operators strongly agree with office implementation as a way to improve call quality. The overall project if approved for office use should be consistently updated with new and changing information and the same survey should be given out bi-weekly to ensure continued effectiveness of the training plan.

## Internship Abstract

**Title:** Community Implementations to Help Minority Groups Affected by COVID-19

**Name:** Fatima Hazoor

**Preceptors:** Direct Supervisor: Dr. Atif Nazir, Health Officer

**Agency:** Division of Health - Plainfield, New Jersey

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**Purpose:** To analyze COVID-19 impact amongst minority groups within Plainfield, New Jersey and propose new guidelines and policies for communities to initiate and lower the spread of the virus.

**Significance:** According to the Centers for Disease Control and Prevention (CDC), due to the social inequalities and unfair health system, minority groups are at a higher risk of getting sick and dying from COVID-19. Issues relating to poverty and not having proper healthcare access has been an underlying problem for years that minorities suffer. Hispanics who make up 18% of the population and Blacks who make up 13%, account for 55% of the total population in the US who have become terminally ill or died from the coronavirus (CDC). Stay at home orders and quarantining were not optional for minority groups as most people worked in essential businesses that stayed open during the pandemic (AARP). Quantitative data was collected within the city of Plainfield, New Jersey to analyze and create new health policies that will benefit the affected population.

**Method/Approach:** Data was collected from the community and analyzed based on different categories such as race/ethnic group, age, gender, and locational demographic. The data helped show statistical information on how the Hispanic and Black community were heavily affected by COVID-19. Interviews were conducted based on the date of hospitalization or when a positive patient went into self-isolation. This required more Hispanic contact-tracing workers being hired to help communicate with those who had difficulty sharing information with non-hispanic healthcare providers. Emerging patterns and themes were found amongst the positive patients and further helped dissect the problem at hand.

**Outcomes/Results:** The analysis indicated that minority groups consisting of Hispanics and Blacks/African Americans were more greatly affected due to COVID-19. Of the total population affected in the city, Hispanics accounted for 62% and Blacks accounted for 16%. Racial distribution of positive COVID-19 deaths that affected minorities totaled for 74% out of total deaths that occurred within the city. Statistical data showed that racial and ethnic minorities who lived in apartments that housed large families added to the spread of the virus amongst family members, as isolation and quarantine were not an option in small spaces.

**Evaluation/Conclusion:** The Hispanic and Black minority group is very much in need of better health education and resources. These two minority groups face many injustices within our society including discrimination, lack of access to healthcare and utilization, and unsafe housing situations. With better health communication tactics and access to healthcare facilities that are willing to help undocumented or uninsured people will greatly help the population as a whole and contain the spread of the virus. Accessibility to more testing sites and visual aid guides will allow for (a) more people to be aware of the symptoms and precautions, and (b) strategically help with collecting data to break down COVID-19 impact.

## Internship Abstract

**Title:** Reformed Deliverance by the Center for Hope and Safety During COVID-19

**Name:** Ashley Heo

**Preceptors:** Project Supervisor: Olivia Pascarella, Community Engagement Coordinator

**Agency:** Center for Hope and Safety – Rochelle Park, NJ

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**Purpose:** To analyze and evaluate the implementation of reforms by the Center for Hope and Safety (CHS) during the COVID-19 pandemic and how it allowed the organization to remain operational as a haven for domestic violence victims.

**Significance:** Governor Murphy signed an executive order implementing a lockdown, requiring all individuals to stay at home except for necessary travel. These implementations forced victims of domestic violence to quarantine with their abusers for an extended period of time. The total Uniform Crime Report (UCR) domestic violence reports in New Jersey of March and April of 2020 was 4,498 compared to March and April of 2019, which was 7,357- 16 percent difference (Office of the Attorney General, 2020). Julye Myner, the Executive Director of the Center for Hope and Safety, states domestic violence has not decreased, but rather not reported. This has resulted in nonprofits such as the CHS facing new challenges to remain available for and reach out to domestic survivors and their safety during a pandemic.

**Method/Approach:** Multiple meetings with Community Engagement Coordinator, Olivia Pascarella, and the Directors of Development, Linsey Short, and Ellen McGuire were held over the strengths and weaknesses of the reform implementations at CHS. Themes were analyzed as to whether the chosen reforms allowed the nonprofit to provide the same resources to domestic violence victims before the COVID-19 pandemic.

**Outcomes/Results:** Center for Hope and Safety remains open and has adopted multiple recommended safety preventative measures and procedures. It has reinforced social distancing, altered entrance procedures, and required domestic violence victims to call beforehand. Furthermore, more regulations were implemented in safe houses and transitional housing. These include limitations in capacity, transferring individuals to hotels, and inputting a fixed schedule in meals to facilitate social distancing. Therefore, CHS has collaborated with several hotels, local restaurants, and community leaders. It has also extended its legal team for victims with an in-house team of paralegals to offer legal assistance remotely or in-person at court despite the pandemic. The nonprofit has also lost volunteers, which led to a backlog in catalogs of clothing donations affecting the donation towards the clients.

**Evaluation/Conclusion:** The research demonstrated the maintained opening for CHS provided a continuous line of supportive resources, and aid those affected by domestic violence during the pandemic. Implementation of the reforms and the resulting restrictions do not limit the assistance provided to those affected by domestic violence within the community.

## Internship Abstract

**Title:** Chemical and Pharmaceutical Lab Performance Assessment

**Name:** Leon Hu

**Preceptors:** Jerry Wang

**Agency:** NetChem Inc.

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**Purpose:** To analyze and ensure the effect of the custom chemical and pharmaceutical lab components and drugs that will benefit, support, and accelerate R&D activities for a wide-variety of biochem companies under Good Laboratory Practice (GLP) and Good Manufacturing Practices (GMP).

**Significance:** In 1972 Devonport, UK, an incident resulted in five deaths when the production of drugs designed to be sterile became contaminated. As a result, recipients developed infections. The miscommunication alongside with lack of written operations resulted in dextrose intravenous solutions that were not uniformly sterile. "The Clothier inquiry, which examined the causes and contributing factors, identified several violations of what we now consider basic good manufacturing practice (GMP) (Patel)." Thereafter, GMP aims to diminish the risk inherent in any pharmaceutical production while ensuring that products are consistently produced and controlled to the quality standards appropriate to their intended use

**Method/Approach:** A literature review conducted by multiple pharmaceutical professionals had collected data to ensure the World Health Organization (WHO) and Food and Drug Administration (FDA) push the documentation and records to harmonized GMP requirements. The production lines were monitored at all times while documenting the progress. From initial production of sampling, mass production and to packaging and delivery, scientists and interns carefully kept track of the progress while following the GMP requirements.

**Outcomes/Results:** Custom chemicals and compounds, chiral amines, and unnatural amino acid derivatives are the end result of the project. With most of our products being 97% purity or more, the end products have satisfied the needs of the customer. Utilizing multiple organic synthesis and process engineering in order to form a complete solution that satisfies the needs of our customer. The inquiry from our customers range from as little as 0.1 grams to 1 kilograms of custom chemical for pharmaceutical, biotechnology, and genomics companies.

**Evaluation/Conclusion:** After the delivery of the customers' inquiry, emails are sent out to the customers to reevaluate and validate their satisfaction of the product. Utilizing the satisfaction survey technique, more than half (n=92, 92%) of customers gave back good impressions for their product. The rest of the sample size (n=8, 8%) are concerned due to the delay of our delivery. By following the GMP requirements imposed by WHO and FDA, the production of custom chemicals are able to be completed without any contamination or development of infections.

## Internship Abstract

**Title:** Incident Command Center Preparedness of N95 Respirators Assessment

**Name:** Melanie Iannace

**Preceptors:** Mary Law, AVP Quality and Accreditation and Kim Allen Clinical Director of Center for Perioperative Medicine

**Agency:** AtlantiCare Regional Medical Center

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**Purpose:** To analyze and evaluate current data and policies from Incident Command Center for the purposes of greater efficiency in Fit Testing all necessary medical staff for N95 respirators and to evaluate that all personnel are properly educated and trained in the proper use and care of N95 respirators.

**Significance:** According to the CDC proper fit testing confirms the fit of any respirators that forms a tight seal on the user's face before it is used in the workplace. This ensures that users are receiving the expected level of protection by minimizing contaminant leakage into the facepiece. During large-scale infectious disease outbreaks, there are ways to save time when fit testing as well as conserve supplies. The NIOSH encourages facilities to take the necessary steps to ensure fit testing is conducted in compliance with OSHA protocols.

**Method/Approach:** A quantitative approach was utilized to review data to determine the number of medical personnel tested for more than one make and model of N95's. In review of the AtlantiCare organization's internal database that is located on The Starfish Occupational Health site. Information provided in this database is the employees name, identification number, date of fit testing, make and model of N95, pass or fail of test given and subsequent make and models if more than one has been fit tested. Due to the supply shortage because of the COVID-19 Pandemic, being fit tested for more than one type of respirator ensures efficiency and no further delays in patient care. At this time there are no mandatory education within the organization on wearing and usage of respirators.

**Outcomes/Results:** In reviewing the data for medical personnel who were fit to test during the time frame from Jan 1, 2020 to July 15, 2020 2,353 employee's occupational health records were reviewed, and 83% of employees had to be refit tested for another properly fitted N95 due to the shortage of certain respirator make and models. Twenty four percent had to be fit tested a third time due to shortage. After reviewing organization policies there are no current organization requirements for mandatory education for the proper usage and maintenance of respirators.

**Evaluation/Conclusion:** . In review of the data during the above time frame, the organization could have saved over 696 hours if fit-tested prior for more than one model of N95 respirators. This time would have been given back to needed patient care during the COVID-19 pandemic. Our organization does follow OSHA protocols but there is no requirement within our policies for educating medical personnel on proper use and care of respirators. Further work is needed to implement an e-learning module that can become part of medical personnels educational requirements. Implementing an e-learning module ensures that medical personnel are wearing respirators properly and effectively, infection prevention measures of donning and doffing of respirator, and proper storage for reuse of respirator when needed.

## Internship Abstract

**Title:** Creation of Laws & Regulation Database for Central Cancer Registries  
**Name:** Lina Ibrahim  
**Preceptors:** Ann Marie Hill  
**Agency:** Rutgers, The State University

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**Purpose:** To analyze the laws and regulations for central cancer registries from all 50 states in the United States.

**Significance:** Cancer registries are designed to help guide cancer prevention and control programs that are focused on changing certain behaviors such as smoking and reducing other environmental risks. Cancer registries help identify a need for increased cancer screening in a certain region or area. Their importance lies in the fact that they collect accurate and complete cancer data that can be used for cancer control and epidemiological research, public health program planning, and patient care improvement. The aim of this project was to organize and look at different state laws and regulations to create a national database for use by the cancer surveillance community.

**Method/Approach:** Data and information from all 50 states in the United States was collected from each state's central cancer registry. All the information was reevaluated for inaccuracies, organized into categories and prepared for development as a national database. All the applicable research that was completed will support an improved, updated and more organized database available to the cancer surveillance community (i.e. administrative codes for each state, how frequent a state should report any other diagnoses, pathology reporting).

**Outcomes/Results:** After all data and information were reevaluated and formatted appropriately by individual states, the Exel form was transferred to an IT consulting group who will actually develop the database. Various fields were organized because certain registries had their own reporting frequency time frame, administrative codes, reporting requirements and/or other variations. Some registries, including New Jersey, also have a certified tumor registry requirements. Having a more organized and up to date database available to all cancer registries throughout the United States certainly assists in maintaining an effective cancer surveillance program.

**Evaluation/Conclusion:** The NAACCR's database provides excellent and reliable structure for central cancer registries to keep current with changing policies. All of these factors can assist in determining cancer patterns among various populations, guide planning and evaluation of cancer control efforts in a community, help prioritize health resource allocations, monitor cancer trends over time and advance clinical, epidemiological, and health services research. States having certified tumor registries such as New Jersey and Minnesota demonstrate a requisite knowledge and professional competence needed within the cancer registry. Data should be reevaluated and updated annually to keep the database current

This project was supported by Centers for Disease Control and Prevention, Division of Cancer Prevention and Control, CDC CSTLTS Project ID: 22, CFDA: 93.421, Federal Award #6NU38OT000286-01 01/08/2019 in conjunction with the North American Association of Central Cancer Registries and the National Association of Chronic Disease Directors.

## Internship Abstract

**Title:** Bi-lingual Child Safety Program  
**Name:** Melanie Idrovo  
**Preceptors:** Direct Supervisor: Ginny Adams Kafka, Executive Director  
**Agency:** AECDC - Central Jersey Diaper Bank

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**Purpose:** To design a bi-lingual traffic safety/car seat program for qualified families experiencing financial distress.

**Significance:** Prior to the COVID-19 Pandemic, the AECDC had received a sizable grant from the Rutgers Community Health Foundation (RCHF) to develop an evidence based car seat safety program and distribute free car seats to participants. “Motor vehicle injuries are a leading cause of death among children in the United States,” according to the Centers for Disease Control and Prevention (CDC, 2019). In 2017, 675 children died in motor vehicle crashes and 35% of them were not buckled up. Therefore, proper use of car seats help keep children safe. Over the course of the pandemic, the AECDC had to redesign the car seat program to be contact-free in order to follow COVID-19 guidelines. Additionally, the program was designed in English and translated in Spanish for the large Latino community in Middlesex County.

**Method/Approach:** The AECDC works with more than 50 partner agencies who send clients as referrals. The AECDC selected 10 of those partner agencies to be referring points for families who need car seats. When an agency referred a client for a car seat, a dedicated staff member (intern) emailed the client a link to take the training and answer survey questions. After the training was completed, a staff member called the client, collected further demographic information, assessed their need for diapers, and reviewed the training survey. At the end of that conversation, we shipped the car seat directly to their home. The training and survey consisted of three car seat safety and installation videos, a pre-test, and a post-test. First, one survey questioned the parent’s existing knowledge about car seats. Second, parents viewed training videos on car seat safety, car seat installation, and how to properly buckle in a child. Then, the second survey questioned parents on what information they obtained from the training videos.

**Outcomes/Results:** Two training modules were designed that were used by staff: one for infant car seats and the second for convertible car seats. Both modules were made available in English or Spanish. At the time this paper was drafted, the modules were being piloted with five hand-selected clients; also at this time, we were developing our marketing materials and sign-up forms.

**Evaluation/Conclusion:** Not available yet.

The AECDC successfully developed a free car seat program for qualified families that are experiencing financial distress. The program also successfully followed COVID-19 guidelines by creating a contact-free survey and delivering car seats to their door. The pilot program was sent to the Rutgers Community Health Foundation and a case study is being developed about the responses to pausing this grant-driven program and redesigning it with modifications for the pandemic.

## Internship Abstract

**Title:** RENEW360° Rehabilitation Center Policy and Procedure Manual Development

**Name:** Alexandra Louise Jacko

**Preceptors:** Alexandra Lopez, Lead Consultant

**Agency:** RENEW360° LLC – Toms River, New Jersey

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**Purpose:** To create a master policy and procedure manual mandated by the State of New Jersey for approval and licensure of a new, multi-level of care, addictions rehabilitation center in Toms River.

**Significance:** Upon review of needs assessment data for the area of Toms River, it becomes clear that addiction is a major problem for residents. As the sixth highest town in the state in heroin abuse cases (Davis, 2017), Toms River residents need assistance in the form of access to premier addiction treatment. In 2017, the highest percentage of Ocean County residents seeking treatment hailed from Toms River (NJDOH, 2017). From these Ocean County facilities, the levels of care most frequently used were outpatient and intensive outpatient care, simply due to a lack of further care options (NJDOH, 2017). For Toms River, there are presently no facilities available to properly fit the needs of the public. Based on the high frequency of use and subsequent need for treatment, the development of RENEW360° is crucial to avoid greater overdoses and deaths in the area. In order to provide Toms River with a much needed facility equipped to accommodate detox, residential services, intensive outpatient care, and outpatient care, the planned RENEW360° facility must first open with approval from the State within the next year.

**Methodology:** To acquire program approval and licensure, the policy and procedure manual for RENEW360° had to display strict adherence to administrative guidelines. A comprehensive formal examination of mandated state and federal guidelines put forth in The New Jersey Administrative Code Title 10: Human Services Chapter 161A: Standards for Licensure of Residential Substance Use Disorders Treatment Facilities (2018) was conducted and resulted in a vast understanding of the State's lexicon of addiction policy. These policies were electronically reviewed, then individualized and edited in the perspective of the center's proposed operations with the end goal in mind of composing the master policy and procedure manual. Utilizing Google Doc programming, the intern team worked collaboratively to build this thorough document. Virtual meetings with the developing partners of the center were regularly conducted to offer an understanding behind the unique mission, vision, and values of the project and were consequently integrated within the manual.

**Outcomes:** A 127-paged policy and procedure manual document was crafted as required by the State and individualized to fit the needs of RENEW360°. The manual successfully outlined all aspects of the rehabilitation center including the standards for building, administrative roles and organizational development, staff and personnel guidelines, direct client care processes, quality assurance/evaluation, and accreditation.

**Evaluation:** Success of the center is dependent upon this completed manual, which is measured by the State of New Jersey's granting of approval of services to the RENEW360° project. With State approval, the center can offer treatment to clients, potentially reducing the frequency of substance use and consequent likelihood of overdose in the Toms River population. An annual review of the policy and procedure manual will be conducted in order to ensure continued compliance.

## Internship Abstract

**Title:** Identifying Specific Needs of a Target Population During the COVID-19 Pandemic

**Name:** Sharika Kaul

**Preceptors:** Chauntel Richardson, MPH, CHES, Member Services Manager

**Agency:** World Trade Center Health Program at Rutgers, The State University of NJ and the Environmental and Occupational Health Sciences Institute (EOHSI)-Piscataway, NJ

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**Purpose:** To construct a literature review on patient satisfaction surveys, needs assessment surveys, and logic models based on which data will be analyzed to identify certain populations that are expressing certain needs during the COVID-19 pandemic.

**Significance:** The World Trade Center Health Program is focused on providing medical monitoring and treatment benefits to emergency responders, recovery and cleanup workers who responded to the September 11, 2001 terrorist attacks. This contract allows for medical evaluations and monitoring, and was granted to the Rutgers Biomedical Health Sciences by the (CDC), and (NIOSH). Surveys and logic models are principal aspects in the self-analysis of a healthcare organization by establishing a high level of quality care, reflecting organizational performance and culture in health care. Through this project I will be using the research to help analyze the cohort data from the needs assessment survey, and establish correlations between a target population and their specific needs in the present. This newfound data will then be used to predict a response rate and establish new administrative programs. I have also worked on a patient satisfaction survey which will be administered after approval.

**Method/Approach:** Research on the surveys and logic model was derived from academic journals and previously collected statistics from past surveys. The literature review was then used to create the blueprint of the survey and provided in-depth insight on how to interpret the needs assessment and COVID-19 data. This will then be utilized to implement administrative programs and practices which may better serve a population. The cohort data was accumulated from the needs assessment surveys, and calculations were made to identify the target population, through their certified conditions, demographics, occupations, etc. The independent patient satisfaction survey will be administered by the end of August, after it has gone through the evaluation process.

**Outcomes/Results:** Based on the needs assessment and COVID-19 Survey data, the target population can be identified as the 55-65-year-old age group. This segment expressed the highest number of needs for mental health services when compared to the 65-older age group as 40% expressed their needs in comparison to 18%. Another target segment would be the 65-older age group as 11% identified needs for pharmacy assistance, in comparison to the 55-65 age group from which only 3.6% desired assistance.

**Evaluation/Conclusion:** When a pandemic impacts a society collectively, it is integral that the population that needs the most assistance is recognized. Once the research and assessments regarding this population and its needs are established, an organization can create a logic model to initiate a line of action for implementing administrative programs. In a state of emergency, assisting those who have specific weaknesses can make a major difference in their state of wellbeing. When a provider understands and accommodates the needs of a patient, they enable themselves to create better policies and practices that will strengthen customer retention.

## Internship Abstract

**Title:** Community Health Worker Initiative to Assist Families with Disabilities during COVID-19

**Name:** Sana Khan

**Preceptors:** Direct Supervisor: Dr. Adeola Sonaike, Senior Vice President, Health  
Project Supervisor: Renata Svincicka, Community Health Manager

**Agency:** The Family Resource Network

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**Purpose:** To create an online resource bank for individuals with disabilities (caregivers and their care recipients) affected by COVID-19 with an increased need for resources such as health insurance, mental health, respite, support groups, food, and more.

**Significance:** Caregivers encompass America's health including social, economic, and long-term services as well as support systems. A study by The National Alliance for Caregiving and AARP collected data in 2015 following observational changes to caregiving currently. When looking at caregivers for adults only, the prevalence of caregiving has risen from 16.6% in 2015 to 19.2% in 2020—an increase of over eight million adults (AARP, 2020). Compared to 2015, caregivers are more likely to report their adult care recipient needs care because of long-term physical conditions (63%, up from 59%), emotional or mental health issues (27%, up from 21%), and memory problems (32%, up from 26%), including Alzheimer's or dementia (26%, up from 22%). More American adults are taking on the role of unpaid caregiver mainly for adult recipients who may have increasingly complex medical or support needs. A local level study that was conducted by the Caregivers of New Jersey, an affiliate of The Family Resource Network, in 2016 concluded that various stakeholders need to collaborate to provide better support for caregivers as participants lacked knowledge on services, they are eligible for. Based on this information, CNJ staff committed to further bringing stakeholders together and to provide referral services to caregivers.

**Method/Approach:** Information was gathered on which resources caregivers in New Jersey use most frequently. Various subcategories were then created such as mental health, webinar/education, support groups, etc. Resources were then appropriately categorized under each heading. For example, the Alzheimer's Association of NJ was placed under "Support Groups," the National Alliance on Mental Illness was placed under "Mental Health," and The Red Cross under the "Grief Awareness" category. The results were then published on the Caregivers of NJ website for public use.

**Outcomes/Results:** The online resource bank was created because caregivers in New Jersey have been using the Family Resource Network as a referral source for over a decade. It will allow caregivers to utilize various resources and services in an efficient and organized manner right at their fingertips especially during the COVID-19 pandemic. The website will be regularly updated as more credible resources and services are found.

**Evaluation/Conclusion:** As the country continues to progress, the need to provide support for caregivers as the foundation of society will only become increasingly important. The overall goal of the program is to improve the quality of life for individuals with disabilities, chronic conditions, and caregivers through the development of training, care coordination, advocacy, and population health management in a culturally competent and innovative approach that increases access to care. Virtual webinars and support groups surrounding local communities will be held to ensure that the growing needs of individuals with disabilities are continuously met.

## Internship Abstract

**Title:** Program Assistant  
**Name:** Isabelle Lahens  
**Preceptors:** Quadai Palmer, Vice President; Carol Delia, Program Coordinator  
**Agency:** From Jersey with Love

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**Purpose:** To assist the Program Coordinator in implementing and executing a successful food program geared to feeding people in the Greater Asbury Park area.

**Significance:** In Monmouth County, many families suffer from food insecurity. From Jersey with Love was created with a mission to equip, empower, and encourage the community. During the coronavirus pandemic, many food pantries in the area have completely closed down affecting those who rely on these food pantries to feed their families. From Jersey with Love has remained open by developing ways to feed the community during the pandemic through food deliveries and pickups. The Let's Eat program was created to fight food insecurity. Since inception, many community partners such as fulfill food bank, have helped supplement the Let's Eat program.

**Method/Approach:** I was brought onto the From Jersey with Love team as a Program Assistant. The team consists of twelve staff members. First I was working on developing a breakfast program called Top of the Morning. Currently, lunch and dinner are served in the community to the needy but there has not been a breakfast program in the community, which makes Top of the Morning a unique program. In order to bring this program to life again, I developed a menu of nutritious breakfast options which included 18 different meals. We expected to serve around 20 people starting out. We planned to serve breakfast on Tuesday and Thursday mornings from 8am to 10am. I contacted 20 local restaurants for donations of hot breakfast meals that we can serve. They were not able to provide donations during this time. I then became in charge of the Let's Eat program that involves Food Pantry, Dinner Party, the Silver Vista Dinner Party for the seniors, and the Top of the Morning breakfast program. I worked with the local food banks to order more nutritious food such as fresh fruits to include in the food pantry distribution.

**Outcomes/Results:** We were not able to implement the breakfast program due to the lack of donations and not yet getting approval from the health department. Through the Let's Eat program, we were able to distribute food every Tuesday, Wednesday, and Thursday to families and senior citizens in the community. We distributed over 15,000 pounds of food in the month of July. We were able to feed 220 people through our Dinner Party program that serves hot meals. We were able to fill in the nutritional gaps by providing fruits, vegetables, grains, and protein to our consumers. One of our consumers who had a strict diet was limited to eating fruits and vegetables and I was able to cater to his needs by providing him with food packages of fresh produce.

**Evaluation/Conclusion:** We are going to continue to tackle hunger in the community. Providing healthier food options to those in the community who go hungry due to lack of resources, will improve their health. During the coronavirus pandemic, we have remained open, giving the locals hope. We were also able to reach more people through our efforts to fight food insecurity.

## Internship Abstract

**Title:** Maintaining the Integrity of New Safety Protocols in the Workplace

**Name:** Jason Lam

**Preceptors:** Direct Supervisor: Winnie Woo

**Agency:** Manhattan Pulmonary and Sleep Medicine PC

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**Purpose:** To devise an effective and efficient process for incoming patients while prioritizing the safety of both patients and healthcare workers in the workplace.

**Significance:** New York is making significant strides combatting COVID-19 through data driven approaches and preset health care guidelines. The statistical peak of the virus has technically passed with everyone staying home practicing the proper techniques advised by government officials. However, the surge of new cases and hospitalizations across the country are increasing at alarming rates. More than 60,000 new COVID-19 infections were reported on July 8th, 2020, the greatest single-day tally of cases by any country since the virus emerged late last year (Aljazeera 2020). Furthermore, all these new cases could potentially be brought into the state leading to a deadly mix.

**Method/Approach:** In order to protect patients and clients from COVID-19 exposure, the clinic placed multiple sneeze guards around the waiting area as well as the front desk. In addition to physical barriers, patients also had their temperatures checked upon arrival. The company has also integrated a series of questions for any patient who enters the facility ensuring that the proper quarantine measures have been met. This way, the staff can learn about previous travel history and any other essential background information. Before receiving healthcare, patients were also asked to throw away any used personal protective equipment. They are then given a new set of masks and gloves by the clinic. As a team, everyone reviewed safe work practices and protective measures prior to the start of the workday.

**Outcomes/Results:** The clinic has been running for a couple of weeks with no significant issues related to COVID-19. However, this virus has impacted the goals and functions of the workplace. Prior to COVID-19, there were an average of thirty-five patients per day. Upon returning to work, the number of patients seen has declined to an average of twenty-eight per day. The reduced number of patients seen is a result of social distancing while strategizing waiting times in order for state mandated guidelines to be met. The safety and wellbeing of everyone within the clinic displays the success of my work. With the proper precautions taken and conducted, the patients and staff have a lower chance of getting infected with COVID-19.

**Evaluation/Conclusion:** As this novel virus continues to spread, Manhattan Pulmonary and Sleep Medicine has taken active measures to enhance the safety of their patients. Physical barriers, along with frequent measurements all serve as effective strategies to decrease exposure. With a cohesive workforce, implemented strategies can be rolled out effectively and efficiently benefiting everyone from patients to frontline workers within the healthcare system.

## Internship Abstract

**Title:** Social Media Effect on Building Strong Ties Within a Diverse Community Between Teachers and Families

**Name:** Quamira Lumpkins

**Preceptors:** Amy Garcia Phillips: Artistic Director, Ann Marie Williams: Managing Director

**Agency:** Rahway Arts & Business Partnership - Rahway, NJ

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**Purpose:** To promote and analyze the need for support from family and teachers that teach in a diverse community to be able to engage and interact with the younger generation of students.

**Significance:** The concept behind Rahway's Own shows the development of spreading awareness of student environments that play an important role in who they become in the future. With the expansion of data being developed yearly about the connection between students, parents, and teachers, showing a widespread significance of information displaying why students must have support from the members in their community. To date relevant research, there is a study that reflects on the importance of Bronfenbrenner's belief in human development in a child's life. For example, "children learn to distinguish between the different expectations associated with their homes, classrooms and environments" (Bronfenbrenner's, 1990). Highlighting successful individuals who come from similar backgrounds within the town of Rahway should aim to motivate younger generations to follow a similar path.

**Method/Approach:** There has been a need to conduct research on promoting the use of impactful engagement and interaction within Rahway in which represents a diverse community. Through the motive of several different social media platforms such as Facebook, Twitter and Instagram, it would contain building an audience through each platform posts containing positive information about previous members who have made a difference in the community. Those positive reflections within the posts enlightens the community to understand the benefit of being able to communicate and support the younger generation of students so that they're able to carry on the ties of success. Moving forward, there would be a survey created to be used and posted on each of the social media pages. Each question would assess how the posts on each page are influencing the younger generation to want to do good. The posts would consist of members of the community that has excelled in their field of occupation from healthcare, to professional athlete, professional chef, etc. Some of the posts would contain steps to explain how teachers and parents could push students to do and study things they initially wouldn't be attracted to. In conclusion, there would be a post-survey assessment to assess how the posts on the pages are beneficial to the students, teachers, and parents.

**Outcomes/Results:** After program assessments will be held yearly to determine whether or not the social media posts are inspiring the students to have a well-rounded experience of support as well as to examine their engagement with what they have read about on the posts. Rahway's arts and business staff will discuss the effectiveness of the social media pages and identify other beneficial outcomes for students, teachers, and parents to learn from and connect with. Social media activity has increased with 37 new followers on Facebook, over 50 new followers on Instagram.

**Evaluation/Conclusion:** There will be a post-program evaluation to determine what other beneficial elements could be added onto the social media pages to support student's success in the future. A consistent social media interaction and outreach is needed from others in the community to gain more attraction of supporters for the younger generation.

## Internship Abstract

**Title:** Ameliorating Health Disparities for Generation Z  
**Name:** Juan Marte  
**Preceptor:** Direct/Project Supervisor: Juliet John, HR/OD Coordinator  
**Agency:** Englewood Health Medical Center

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**Purpose:** To analyze which health disparities are affecting Generation Z and propose solutions on how healthcare organizations can better serve their communities.

**Significance:** Generation Z accounts for 27.7% of the United States population. According to Business Insider, it is estimated that Gen Z accounts for 72 million of our world population.<sup>3</sup> Yet, they are considered one of the loneliest generations and the most prone to chronic stress.<sup>1</sup> This is due to the increased influence of social media, disturbed sleep schedules, and outside pressures. As a result, these factors have led to health disparities around mental health and vape use. This is of growing concern because these are the leaders of tomorrow, who are increasing their risk for chronic health conditions.

**Method or approach:** Several surveys from the American Psychological Association and the American Academy of Family Physicians are utilized to assess the general health of Gen Z. The Stress in America survey of 2018 (APA) analyzes teens ages 15 to 17, accounting for n=300 of the participants. Some of the variables assessed for age group 15 to 17 included household size, race/ethnicity, gender, and parent's education. For Gen Z, gender, race/ethnicity, education, employment status, household income, and household size are analyzed. The AAFP National Cancer Opinion Survey, questions n=4001 participants ages 18 and older, to assess their smoking status and their opinion on vaping devices causing cancer.<sup>2</sup>

**Outcomes/Results:** Generation Z scored the lowest amongst all age groups when describing their mental health. In fact, only 45% of Gen Z described their mental health as good or excellent.<sup>4</sup> In terms of general health, only 47% of Gen Z considered themselves to be in Excellent/Very Good health. However, 18% of Gen Z consider themselves consumers of vaping devices. Amongst those in Gen Z, 20% believe that vaping devices do not cause cancer.

**Evaluation and Conclusion:** Generation Z has increasingly focused on the use of technology to drive their everyday living. This has resulted in increased pressure to conform to trends like vaping and a need to keep up with the movements promoted by influencers on social media. However, healthcare organizations can utilize technology and social media to promote health and wellness initiatives. Patient-Doctor applications such as ZocDoc appeal to Gen Z because they allow patients to select providers that are within patient network. Ongoing monitoring of Gen Z's development of chronic conditions by healthcare organizations will provide assessments on how health disparities influence this population. Additionally, patient surveys can give a glimpse on areas patients believe our healthcare system can improve on, in order to better assist them.

## Internship Abstract

**Title:** Providing Mobile Hygiene for Homeless in Middlesex County

**Name:** Katherine Martinez-Medina

**Preceptors:** John El-Maraghy, Co-Founder & Co-Director of ARM

**Agency:** Archangel Raphael's Mission (ARM)

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**Purpose:** To provide the homeless population in Middlesex County with adequate hygiene, PPE, and information to stay as safe as possible during the Covid-19 pandemic.

**Significance:** The National Alliance to End Homelessness states that on any given night in 2019 there were about 620 homeless people in New Brunswick and Middlesex alone. Many homeless people rely on public restrooms for hygiene. During the past months everyone experienced a change in their lifestyle due to many places closing their doors because of Covid-19. Closing these public areas decreased hygiene resources to homeless people who are now more vulnerable to the virus. ARM is working hard during this time to provide adequate hygiene for the homeless and underserved communities throughout New Jersey, specifically New Brunswick, to decrease their susceptibility to the disease and promote health in the lives of these individuals.

**Method/Approach:** ARM has taken upon themselves to focus on the hygiene aspect of homelessness. Many people do not have proper access to the hygiene that is necessary to live a dignified life. They have worked hard to provide the homeless community in Middlesex County with mobile hand washing stations as well as a Mobile Hygiene Unit that consists of a shower, toilets, toiletries, and washer and dryer. During the hours of service all volunteer members are protecting themselves by using masks and gloves at all times. The hand wash station is filled with hot water, following CDC guidelines. People who use it use their feet to pump water after a volunteer provides them soap. The water drains to a dirty container filled with two cups of bleach to disinfect. After each use a volunteer sprays the station with disinfectant to avoid cross contamination. By making hygiene stations available for individuals, ARM hopes to make a difference in the hygiene of the homeless community to decrease their risk of contracting Covid-19 and hope to continue to promote hygiene throughout the community in the future.

**Outcomes/Results:** Everyday members and volunteers of ARM provide service at the mobile hand wash station in New Brunswick. According to the data collected everyday since the hand washing station has begun, there have been 1,638 hand washes. At the same time, volunteers distribute masks and other forms of PPE due to the pandemic, a total of 1,068 have been distributed. The data also demonstrates that 1,268 pairs of socks and 500 care packages consisting of a variety of toiletries have been handed out as well. These numbers are continuing to increase daily. Currently, the main focus of the team is to finalize the details to launch the Mobile Hygiene Unit. It will be the first of its kind in Central Jersey. Everyone is working hard to obtain donations and adequate supplies in order to begin to provide these services in New Brunswick.

**Evaluation/Conclusion:** The organization began in 2014 and since then the numbers of the amount of services that are being provided have doubled. Due to the pandemic, the homeless population and underserved are very vulnerable and ARM is working very hard to close the gap between the disparity of hygiene in these individuals. The hand washing station has been a success and many of the people that receive the services provided show up on a daily basis. By creating that connection and trust with these individuals, ARM's Mobile Hygiene Unit will be able to succeed and provide a great service that is often overlooked by many when thinking about the homeless.

**Internship Abstract**

**Title:** Over the Counter / Amazon Product Launch (R3SET)

**Name:** Sapna Mehta, Associate Analyst Intern

**Preceptors:** Supervisor: Aisha Khan

**Agency:** Aisha Khan Consulting LLC / R3SET

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**Purpose:** To use sales and marketing data aggression methods to complete the successful launch of an over the counter all natural pharmacy product.

**Significance:** The product, R3SET, is an all natural, plant and herb based stress relief and melatonin supplement. Both the day and night options are vegan, caffeine free, melatonin free, and GMO free. R3SET day version is a capsule filled with natural anti-anxiety herbs whereas the R3SET night version is filled with herbs and vitamins that improve sleep. Both supplements do not contain any hormones that can cause addiction or ruin the immune system. The goal is to spread awareness of this product before and during its official launch through strategic marketing techniques.

**Method/Approach:** To create awareness on this product, the product was advertised as “sponsored” on several platforms such as Facebook and Instagram. The audience was mostly those who were between 20-40 years of age because it is believed to be most effective for them. The approach was to advertise using the highest quality media pictures, influencer accounts, and gain 5-star reviews on Amazon after customers' usage. After having worked with several marketing agencies, monthly advertisements were tracked on spreadsheets and sponsored ads were either increased or decreased based on the number of clicks on those platforms. Lastly, R3SET marketing specialists created a marketing blueprint with monthly plans to promote the brand.

**Outcomes/Results:** At the end of the project qualitative metrics revealed more views on Instagram when the product was shown on a live video and when a top influencer unboxed it. Quantitative results included the amount of clicks on Amazon, and the amount of customers who bought the product and took the time to review it based on how much it positively impacted their life.

**Evaluation/Conclusion:** This product launch will be evaluated by how many products are bought both online on Amazon (with 5 star ratings) as well as how many are bought in store. For those who purchased the product online, it was important to track if they purchased it again and continued to use this natural supplement instead of their usual melatonin, caffeine induced supplements. Creating customer and brand loyalty is another goal. Lastly, a focus group was created before the product was launched to assist with naming the product, and to provide ideas regarding packaging.

## Internship Abstract

**Title:** Menopause: Women's perceptions and experiences across cultures

**Name:** Ria Melani-Lubis

**Preceptors:** Direct supervisor: Gloria A. Bachmann, MD, MMS, Director of WHI of the Rutgers RWJMS  
Project supervisor: Dr. Sinjini Mukherjee, Visiting Fellow, History Department, Rutgers University & Member of the WHI RWJMS

**Agency:** Women's Health Institute of the Rutgers Robert Wood Johnson Medical School

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**Purpose:** To analyze women's perception, attitude, symptoms, and experiences of menopause in different cultures in the past and present

**Significance:** Menopause is marked by fluctuations in reproductive hormones due to declining ovarian function. The reported symptomatology of menopause varies in different areas of the world. This study aims to examine the prevalence of menopausal symptoms and perceptions about menopause among women across cultures. For instance, some menopausal symptoms in addition to hormonal fluctuations may be the result of modernizing lifestyle changes and/or genetic inheritance. Sociocultural research into the attitudes and beliefs impacting women's experiences around menopause in conjunction with biological studies can contribute to a better understanding of this life cycle transition and better assist women and health care providers in managing menopause symptoms.

**Method/Approach:** A systematic review of the socio-cultural literature was performed using PubMed, Medline, PsycINFO, and Google scholar to retrieve English language studies that included information on the menopause, symptoms, cultures, perceptions, and experience keywords from the 1800s to 2020 fit the inclusion criteria. In this review, studies that were not based on primary qualitative data were excluded.

**Outcome/Result:** Of the 15 sources used, 13 defined the diversity of menopause symptoms across cultures, 5 discussed the history of menopause in different cultures, and 2 articles considered the age at menarche genetically influencing menopause age. The data sought confirmed that there are marked differences across cultures in women's experience of menopause. Biological, psychological, social, and/or cultural factors may be related to either positive or negative perceptions. In North America and Europe, menopausal women appear to report more symptoms than women living in Asian cultures. Asian women generally reported low rates of a variety of physical and psychological symptoms related to menopause. The former group of women has likely been educated to consider menopause as a deficiency disease that may cause uncomfortable symptoms around the time menstruation ends as well as cause an overall physical decline in women and elevate their propensity for various diseases in later life.

**Evaluation/Conclusion:** Western societies often place a high value on age and youthful appearance. Women from these countries reported higher rates of various physical and psychological symptoms related to menopause than women in Asian countries. During menopause, changes in physical appearance equated with loss of attractiveness, a belief that may cause people to take a negative attitude with regard to the menopause adjustment. Asian culture's positive attitudes in regard to menopause appear to normalize menopausal symptoms as part of the natural aging process. While substantial research has been conducted to document the biological changes associated with menopause, further research into aspects of menopause and women's perceptions is recommended.

## Internship Abstract

**Title:** Domestic Workers in New Jersey  
**Name:** Lou Mialhe  
**Preceptors:** Elaine Zundl, Research Director  
**Agency:** Center for Women and Work (CWW)

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**Purpose:** To explore and examine current economic and social equity issues that women face as domestic workers in New Jersey to ultimately help policymakers enact New Jersey legislation

**Significance:** Domestic workers in New Jersey are 97% female, over 50% are immigrants, and 60% are non-white. Non-domestic workers earn a wage that is 3-4 dollars per hour higher than their counterparts. These wages are unstable and have not seen an increase since 2003 (CWW Report on Domestic Workers in New Jersey). The need for domestic workers is increasing since the average age of the country's population is generally increasing. As these employees face a multitude of work challenges, the increasing demand for them in the workforce is hardly met. Domestic workers are highly vulnerable due to the lack of regulation and enforcement of policies. As a result, they are taken advantage of very often as employers know they lack the leverage to speak up about labor violations such as the absence of formal contracts and access to benefits, unpredictable work schedules, workplace harassment, and high exposure to injuries.

**Method/Approach:** Research was the first step in creating a baseline of knowledge on the issues at hand. There was a lot of information from many reliable sources to explain how and why women have been disproportionately affected by domestic worker injustices. The CWW conducted a survey of 414 domestic workers across the state. This information was used to create tables and graphs to represent the data. SPSS was used to analyze the US Labor Force Survey and the Current Population Survey (CPS). The goal was to understand the underlying factors driving these injustices and help make a change. In comparing policies and legislation that have been enforced by several other states (some who have already created a Domestic Workers' Bill of Rights) it is obvious that New Jersey should make changes to the way they are allowing these women to be treated.

**Outcomes/Results:** The goal at the end of this project is to put together enough information and reliable resources for the CWW to be able to bring to policymakers; ultimately, these resources will be used to create a Domestic Workers' Bill of Rights in New Jersey. COVID-19 worsened many challenges that domestic workers already had to face. Many continued working although not having been qualified "essential workers". About 70% of domestic workers lost all wages and jobs when the shutdown was prompted. As the demand for these workers has grown by 50% since 2003, it is necessary to implement new strategies that will help meet this demand. The fact sheet includes policy changes that would help support domestic workers such as establishing worker center/standards boards, amending laws to include domestic workers, mandating written contracts, and providing federally funded financial relief efforts for these at-risk workers. It will also increase public knowledge and visibility on these injustices and inequalities that domestic workers are facing while also helping them build leverage through education.

**Evaluation/Conclusion:** Seeing whether the policymakers are able to use our work constructively to make a change will be an effective way of tracking whether progress is being made.

## Internship Abstract

**Title:** Examining the factor structure and psychometric properties of the gay-related aging stigma scale (GRASS)

**Name:** Priscilla K. Moreira

**Preceptors:** Kristen D. Krause, Ph.D. - Center Manager

**Agency:** The Center for Health, Identity, Behavior and Prevention Studies (CHIBPS)

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**Purpose:** To examine the validity and reliability of tools used to measure stigma within the 55+ gay men population living with HIV.

**Significance:** Numerous studies have found HIV stigma to be associated with depression, anxiety, shame, and other negative feelings towards the self. Effects of stigma may prevent individuals from getting tested for HIV, which can work to delay prevention and early treatment efforts (Berger et al., 2001). To alleviate the effects of gay-related aging stigma, it is important to understand stigmatization and how it can be experienced by individuals living with HIV. Although there is now a greater understanding of the implications of living with HIV for younger individuals, there is limited information on older adults (Emlet, 2006). The increased stigma with age has been challenging to evaluate due to the exclusion of older adults in HIV stigma research. As the number of older adults living with HIV increases, it is important for healthcare providers to better understand the factors that may interfere with their overall quality of life.

**Method/Approach:** Data from this analysis were drawn from a study on older HIV-positive men who have sex with men (MSM). In this survey (GOLD I), questionnaires were administered to older adult men who have sex with men (n= 199) from diverse backgrounds between 2010 and 2012. A novel measurement was included to examine age-related stigma specifically among gay men (GRASS) and will be analyzed for its overall factor structure and psychometric properties. In addition, this survey assessed the behaviors and well-being related to stigma and aging with HIV and included measures around body image, and feelings toward younger gay men and aging.

**Outcomes/Results:** Results from GOLD I are presented here. Of the sample size (n=199), 22 men (11.1%) strongly agreed to having stopped going to clubs and bars because they feel too old, while 34 men (17.1%) strongly disagreed. 42 men (21.1%) agreed to not looking at younger men on the street because they think they will turn away from them because of their age, while 93 men (46.7%) disagreed. Nearly two out of ten men (19.1%) agreed to the perception that younger gay men have no interest in talking to older gay men, while nearly half (48.7%) of men disagreed. Nearly three out of ten men (30.7%) agreed to the perception that younger gay men believe that older gay men only want sex from them, while 45.2% of men disagreed. 39 men (19.6%) agreed to the perception that younger gay men are shallow and uninteresting, while 40 men (20.1%) disagreed. 44 men (22.1%) strongly agreed to think about Botox and other cosmetic procedures to be more attractive to younger gay men, while 67 men (33.7%) disagreed. After summing the full measure, the mean score of the graph is 16.02,  $SD = 6.60$ .

**Evaluation/Conclusion:** After evaluating the fourteen items, each item has a normal distribution of responses, which provides essential information to conduct future exploratory factor analysis. This would allow researchers to understand whether the measure can be used in other research or clinical settings.

## Internship Abstract

**Title:** Rethinking Business Operations in the Era of COVID-19

**Name:** Christopher Morelli

**Preceptors:** Direct Supervisor: Cheryl Lufrano - RPAC

**Agency:** Dr. Frank Scafuri & Associates

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**Purpose:** To analyze the cost-efficiency and compliance of newfound business practices involving social distancing regulations in the wake of the COVID-19 pandemic.

**Significance:** SARS-COV-2, the virus which causes the disease known as COVID-19, has taken the world by the storm in the last year. According to the John Hopkins University of Medicine Coronavirus Resource Center, there are currently 12,164,502 confirmed cases and 551,522 deaths attributable to COVID-19 worldwide. SARS-COV-2 primarily spreads through the transmission of respiratory droplets between individuals that are within six feet of each other. Additionally, evidence provided by the CDC and WHO has emphasized the ease at which SARS-COV-2 spreads ( $R_0 > 1$ ). This has prompted both agencies to provide guidelines pertaining to social distancing practices that are known to reduce the transmission of SARS-COV-2, while allowing varying institutions to continue operating. To reduce the transmission of SARS-COV-2 amongst the local community, Dr. Frank Scafuri & Associates has implemented a series of social distancing strategies, which allows the practice to continue operating and deliver health services to patients in need.

**Method/Approach:** Dr. Frank Scafuri & Associates medical practice serves approximately 93,000 patients cumulatively between two locations in Staten Island, New York. Prior to the COVID-19 pandemic the practice was averaging 700 in-person patient visits per week without any social distancing guidelines in place. Additionally, the practice was sustaining financial surpluses of 30% each quarter. The practice has implemented the following practices for the remainder of the pandemic: WFH for non-essential staff, temperature screenings, tele-medicine (virtual) visits, COVID-19 screenings, PPE requirements, virtual check-ins, and reduced internal capacity (375 in-person patient visits per week). The cost-effectiveness of these new business practices is evaluated by the following parameters: COVID-19 breaches, positive COVID-19 tests for staff as a result of the breach, monthly internal capacity, and quantitative monthly budget evaluation.

**Outcomes/Results:** Of the sample size cohort ( $n=3,200$ ) for in-person patient visits, only 5.2% of 96 employees tested positive for COVID-19. The recovery rate for these employees was 100%. Additionally, the practice was able to increase its internal patient capacity from 375 patients per week to 450 patients per week (20%). Furthermore, the implementation of these practices has allowed the office to complete 3,200 in-person visits, and only sustain 16 ( $n=16$ ) COVID-19 breaches. The program was considered to be 99.5% effective in reducing COVID-19 exposures. Economically, the program allowed the practice to report small financial surpluses of 4% for March, April, May, and June.

**Evaluation/Conclusion:** The results indicate that the enforcement of these business practices were 99.5% effective in allowing the practice to continue in-person visits and financially sustain business profits (4%). The reduction of reimbursement rates by insurance providers in regard to tele-medicine visits resulted in tele-medicine continuing to be an option for only at-risk patients. The practice will continue to leave these protocols in place until the pandemic is mitigated and normal business operations can begin again.

## Internship Abstract

**Title:** The Impact of COVID-19 on Detention Centers and Future Recommendations

**Name:** Naela Naasan

**Preceptors:** Emily Sastre (Outreach Coordinator)

**Agency:** New Jersey Alliance for Immigrant Justice

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**Purpose:** To highlight and analyze the measures that were taken in detention centers to prevent the spread of the coronavirus and what recommendations are available for future outbreaks by designing an infographic.

**Significance:** The COVID pandemic has affected society in many ways. Masks and social distancing have become the new norm, but for those who are detained by Immigration and Customs Enforcement (ICE), it's difficult to adhere to these rules. Data show that 3146 detainees had been tested for coronavirus and 1623 cases had been confirmed positive (Jawetz & Prchal Svajlenka, 2020). The evidence shows that further research must be done to construct ICE's future methods for dealing with outbreaks. The infographic will highlight the number of cases and methods the literature recommends for outbreaks. In addition, this infographic will aid in the push to end detention facilities.

**Method/Approach:** Data was collected from the most reliable sources along with studies from similar situations and are used to construct an educational infographic. The main concern is that ICE is not as transparent as it should be making it harder to collect data. ICE has come out with its set of standards and regulations when dealing with this pandemic but fails "to contemplate population reduction and to provide adequate guidelines for testing" (Kerwin, 2020). Social distancing is seen to be the most effective measure to take and is the main reason there is a demand for shutting down detention facilities.

**Outcomes/Results:** The infographic that will be created with the research and data provided will capture the public's attention and educate those who can create change towards a safer system. The public has a hand in who is making the decisions and laws by voting for local, state, and federal candidates. By educating those who vote, change is possible, therefore the infographic will highlight the number of cases, the methods used by ICE, and the methods that are recommended. The conditions in ICE facilities include solitary confinement, lack of hygiene products, and inadequate medical care. ICE admits that proper social distancing might not be possible

**Evaluation/Conclusion:** Supervised releases is the safest method that can be used to prevent the spread of coronavirus within ICE detention facilities. Supervised release is being backed up by politicians but ICE refuses to cooperate. ICE refuses to follow guidelines as well by deporting people before their deportation date and not sharing information with activists. Supervised release will allow people who were detained to social distance and quarantine. A study can be conducted post-implementation in order to see if the number of cases has been lowered. Tabs on all detainees will allow monthly checkups to see if the detainees are sick. Limitations on what detainees will be able to do out of custody can be expected as well, such as not leaving the state they reside in.

## Internship Abstract

**Title:** Research & Selection of an Inventory Control System

**Name:** Becky Newcomb

**Preceptors:** Joseph Katz, Director of Finance

**Agency:** Temple University, Kornberg School of Dentistry

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**Purpose:** To prevent the waste of disposable inventory utilized during patient care by researching and selecting an inventory control system for the Kornberg School of Dentistry.

**Significance:** The dental school spends approximately 1.2 million dollars each year on dental materials utilized in the undergraduate clinics. The majority of this cost comes from disposable inventory items. There are currently no inventory data available for any of the undergraduate clinics. Those placing supply orders must perform a visual check of the inventory on hand and order what they believe to be the correct amount of material. With the current system, it is impossible to know how much material is being utilized in patient care and how much is simply evaporating. This information demonstrates the lack of data available surrounding inventory in the undergraduate clinics. An inventory control system would provide control over the timing of purchases and the volume of product being purchased.

**Method/Approach:** An experiment was conducted to prove that there was little to no control of inventory in the undergraduate clinics within the school. At the beginning of the month, a manual count was taken of all inventory in one of the undergraduate clinics. For the next four weeks, all purchases made were added to a worksheet to track inventory. At the end of the month, the inventory was manually recounted. The results of the experiment were poor; the inventory counts did not match. Therefore, it was determined that an inventory control system should be utilized. Research began to compare five different software programs that could accomplish the task. This included exploring the software manufacturers' websites and reading independent reviews to determine which programs may fit the needs of the dental school. Once the options were narrowed down to four software programs, four virtual software demonstrations were completed. There were then several Zoom meetings completed to discuss with the IT department the plan we thought offered us the best solution.

**Outcomes/Results:** The inventory management system that will be implemented is called Odoo, an open-source software program that offers multiple applications that can be purchased individually. The school of dentistry will be utilizing the inventory application which will allow the school to track all inventory. Once items are scanned into Odoo, it will create a real-time database to show what items are on hand and how many are available. It will be able to monitor expiration dates to prevent waste and spoilage. The software will also allow limits to be put in place so that each clinic can only have certain quantities of materials on hand at any time. This should help limit the unexplained evaporation of material. By utilizing Odoo to assist with inventory management, it is estimated the school will save 8% or \$96,000 per year.

**Evaluation/Conclusion:** Once established, this project will provide the dental school with the ability to track and monitor inventory. It will provide real-time inventory counts which will help to prevent unnecessary orders. The inventory control system will also give the Director of Finance the ability to compile multiple reports to track the frequency and volume of orders which will provide the finance department better control over the amount of money being spent on inventory items. The success of the system will best be determined by the lack of waste and the amount of money saved on inventory.

## Internship Abstract

**Title:** NAMIWalks Fundraiser for Advocacy, Education, and Support of Mental Health

**Name:** Kimberly Nguyen

**Preceptors:** Primary Supervisor: Susan Eisenhower, NAMIWalks Manager  
Secondary Supervisor: Beena Bhatcar, SAMHAJ Director

**Agency:** NAMI NJ - North Brunswick, NJ

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**Purpose:** To plan the annual NAMIWalks NJ fundraiser on September 26, 2020, by coordinating with staff, sponsors, and community members.

**Significance:** According to the World Health Organization ([WHO](#)), one in four people will be impacted by a mental or neurological disorder. Mental illnesses are among the leading causes of ill-health and disability. The [CDC](#) states that mental illnesses such as depression increase the risks of physical ailments such as stroke, type 2 diabetes and heart disease. [WHO](#) advocates for community-level mental health services in its Mental Health Action Plan because it promotes awareness, advocacy, and education. These are components for successful interventions. NAMI NJ is responsible for providing resources and services to its communities. With county affiliates, interventions are increasingly effective due to its considerations of each unique community.

**Method/Approach:** Data and research for previous NAMIWalks fundraisers had been compiled over the years. The promotion of NAMIWalks and its sponsorships was completed via phone calls, emails, and more. We called previous and current lists of potential sponsorships. We'd follow up with emails to confirm participation. They'd list opportunities such as donations, volunteering, and registration for the walk itself. In collaboration with other NAMI affiliates, we were able to reach more people that NAMI had established relations with. From NAMI National, resources on effective fundraising and how to secure sponsorships were utilized to improve efforts. Informational events such as the NAMIWalks Rally via Zoom created attendee reports which were cross-referenced with NAMIWalks registration to create an analysis on specific target audiences.

**Outcomes/Results:** With two months before the event, as of July 29, there are 34 teams and 123 participants. The NAMIWalks 2020 goal is to have 105 teams and 2000 participants. The fundraising goal is to raise \$158,000. In comparison to 2019, the current progress is less than the 2019 results. However, NAMI NJ reached 70% of their targeted goals for spring walks. NAMI National reported that other non-profits had a national average of 50%. Surveys completed by team captains and walk registrants after events showed that most were satisfied with the content NAMI NJ produced.

**Evaluation/Conclusion:** The COVID-19 pandemic necessitated the creation of a virtual event. Technology such as computers and phones make it possible for NAMIWalks to reach participants beyond NJ. Applications such as training and group events online can exceed limitations of in-person events. A combination of both an in-person and a virtual walk can be more inviting to those home-bound or unable to travel. The deficit in raised funds was expected, but NAMI NJ exceeded the national non-profit average during the spring. This implies that the organization is capable of adapting during these unique conditions.

## Internship Abstract

**Title:** Robert Wood Johnson Somerset- Outpatient Services  
**Name:** Genessis Pacheco  
**Preceptors:** Maria Rivera-Manager of Patient Access  
Rica Chang- Supervisor of Outpatient Department  
**Agency:** Robert Wood Johnson Somerset- Patient Access Department

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**Purpose:** To check in patients who are being tested for COVID-19 prior to getting outpatient services such as lab work, pre-admission testing, vascular, and same-day surgeries. Also, coordinating and facilitating registrations and admissions on all patients, ensuring timely registration and patient satisfaction.

**Significance:** To ensure and drive safety for patients and employees due to the COVID-19 pandemic. Every patient who will be receiving outpatient services has to be tested for coronavirus before getting any procedure or exam done.

**Method/Approach:** Every patient who will be coming in for outpatient services will have to get screened before entering the hospital, then have to sign in with the receptionist of the main hospital. After getting their temperature checked and handed a proper mask, the patient checks in with the outpatient front desk representative. Patients are later sat down with a registrar to complete a full registration by obtaining pertinent demographic, financial and insurance information. All patients are asked the travel questions which are: "Have you been traveling in the last 14 days out of the state?" and "Have you been in contact with anyone with COVID-19." These questions are very crucial as this prepares our nurses/technicians to gear up with the proper PPE before coming into clinical contact with the patient. After each registration, the registrar is responsible to wipe down the table, pens and seats after each patient. After being registered, the patient later goes to their respective floor to get their procedure or exam done.

**Outcomes/Results:** With the patient coming in for COVID-19 testing, patients are required to be registered for both COVID testing and outpatient procedure within the 5-day rule to be screened for coronavirus. After being registered, the information stays in the system allowing the registration of the day of the procedure to be smoother and quicker. This shows patient satisfaction as the patient gets to their procedure promptly. With the COVID testing, statistics have shown that more patients are testing negatively for COVID-19, allowing patients to get their surgeries or procedures without putting medical staff at risk. Between July 18 through July 28, there were a total of 4 patients who tested positive out of 300+ patients who were given the coronavirus test.

**Evaluation/Conclusion:** As many patients are still afraid of coming to the hospital, the volume of outpatient services has not been the same before the pandemic. The outpatient department assures safety of patients by inputting proper information into the system as well as wiping down after each patient. Statistics have shown that the hospital has taken every precaution to ensure the safety of patients and employees.

## Internship Abstract

**Title:** Smoking and Drinking During Pregnancy: Need for Intervention Programs

**Name:** Khushali Patel

**Preceptors:** Gloria A Bachmann, MD, Director of Women's Health Institute

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

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**Purpose:** To research, evaluate, and analyze the literature pertaining to the detrimental effects that drinking, and smoking can have on maternal and fetal health.

**Significance:** Women can face many difficulties during pregnancies, however, there are many other problems that can arise if a pregnant woman consumes alcohol and smokes during the prenatal period. The consequences of participating in such behaviors while pregnant are taught to children as early as middle school and enforced year after year until high school graduation and even after in various different venues. However, still, more than 1 in 9 pregnant women in the United States of America drink alcohol while pregnant, and about 4 percent binge drink, according to survey estimates from the Centers for Disease Control and Prevention. Therefore, it is evident that this topic is still very important for medical professionals to heavily reinforce to pregnant women.

**Method/Approach:** An inclusive literature review was conducted to identify the various risks that occur to the women and the fetus if the mother drinks and smokes during the pregnancy. In order to find the relevant and necessary articles, many different search engines were used including CDC.gov, Parents.org, and the U.S. National Library of Medicine National Institute of Health. The types of searches that were conducted included smoking, drinking, pregnancies, Fetal Alcohol Syndrome (FAS), Sudden Infant Death Syndrome (SIDS), and many related keywords. Each article, academic journal, news article, and factsheet was carefully reviewed to fully understand the outcomes of the impacts that drinking, smoking can cause on the fetus and the pregnant woman.

**Outcomes/Results:** According to reports published by the CDC in 2018, in 2016 one in fourteen women who gave birth in the United States of America (7.2%) reported smoking during their pregnancies. Additionally, in a CDC report from 2015-2017 one in nine pregnant women reports to alcohol use in the past 30 days, and among those, about one third reports to binge drinking. Smoking and drinking while pregnant increases the risk for adverse health problems for developing babies, such as, preterm birth, low birth weight, birth defects, FADS, SIDS, and even death. The available data suggest that despite being exposed to so many precautions as to avoid drinking and smoking while pregnant, women who engage in these behaviors are usually those without a spouse/partner, have limited formal education and health literacy, have an unplanned pregnancy, and have suffered from previous addictions.

**Evaluation/Conclusion:** Although information and statistics on the numbers of women who smoke or drink during their pregnancy are available, there are scant data as to why women indulge in these destructive behaviors when they know they are putting themselves and their babies in a compromised situation. For the future, it is crucial that the women who are pregnant in high-risk groups be assisted in helping to prevent smoking/alcohol consumption. Although healthcare officials are consistently reported on the negatives of smoking and drinking while pregnant it is crucial that this message be conveyed, and help be given to those women who are still taking part in these behaviors.

## Internship Abstract

**Title:** Hygiene Through Hand-Washing Station  
**Name:** Janvi Patel  
**Preceptors:** Direct Supervisor: John El-Maraghy  
**Agency:** Archangel Raphael's Mission - New Brunswick, NJ

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**Purpose:** To provide hygiene services to the homeless through a hand-washing station in New Brunswick, NJ.

**Significance:** As of September 2018, The Centers for Disease Control and Prevention (CDC) estimated that about 1.8 million children under the age of 5 die every year from diarrheal diseases and pneumonia. Additionally, diarrheal disease-associated deaths can decrease by 50% by washing hands with soap and water. New Brunswick is one of the cities in New Jersey that has the most homeless population. If an individual is sick, then the germs from that individual can spread infectious diseases rapidly. Handwashing is something so little but very pivotal to prevent the spread of infectious diseases. Thus, Archangel Raphael's Mission (ARM), a non-profit organization, provides hygiene services through a hand-washing station in the New Brunswick area to ensure the hygiene of the homeless population.

**Method/Approach:** ARM holds a handwashing station outside the United Methodist Church in New Brunswick every day from 5:30 to 7:30. This is an apt location because before receiving dinner packages from the church, the individuals can wash their hands. To provide the best hygiene service to the individuals, they are given two to three pumps of soap and warm water to wash their hands to ensure that all the germs are washed off. After washing their hands, they are given a paper towel to dry their hands. Along with providing hygiene service, the importance of handwashing is also promoted and educated to the population by showing them how to wash their hands and the effects of hand-washing. In addition, due to the current pandemic, wearing a mask is crucial for their safety. So handmade masks are also given out to prevent the spread of COVID-19.

**Outcomes/Results:** Outstanding results have been shown from the hand-washing stations. Initially, there were only about 10-12 people coming. But after a couple of weeks, more people started coming to the station. Now there are approximately 35 people that come to the station every day. They understood the importance of washing their hands. Also, when we initially started holding the station, many people did not wear masks because they did not own any. Hence, after giving out handmade masks, everyone made sure they were wearing their masks when they came to the station and to collect the dinner.

**Evaluation/Conclusion:** This is the first hand-washing station that is held in New Brunswick for the homeless population. ARM's mission is to provide hygiene and health services to the homeless population, which are accomplished through the hand-washing station. There are still some people who come to get their dinner from the church but do not wash their hands. Those individuals do not think handwashing is critical. Therefore, still trying to educate the importance of handwashing to them is critical. But the people that do participate appreciate and thank everyone for taking an initiative for their hygiene. Each and every day the organization improves and is successful because new individuals come which means that our organization's message on hygiene is spreading.

## Internship Abstract

**Title:** Evaluating the Process of Enrolling in Home and Community-Based Services for Medicaid Recipients with Behavioral Health Needs

**Name:** Shivani D. Patel

**Preceptors:** Direct Supervisor: Ana Stefancic, Ph.D., Associate Research Scientist  
Direct Supervisor: Daniela Tuda, LMSW

**Agency:** Columbia University, Department of Psychiatry

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**Purpose:** To analyze the workflow and barriers to enrollment in Home and Community-Based Services (HCBS) for Medicaid Health and Recovery Plan (HARP) recipients in New York State.

**Significance:** Individuals with significant behavioral health needs, who are enrolled in Medicaid Managed Care(MMC) Health and Recovery Plan(HARP), are eligible to receive specialized services through the HCBS program after completing the New York State Eligibility Assessment. HCBS consist of a wide scope of individualized services including assistance with social skills, employment and education, peer support, respite care, and managing their mental health and substance abuse. However, even if an individual is enrolled in HARP, the process of accessing HCBS services can be challenging and laborious. This qualitative evaluation focuses on understanding the process of enrolling in HCBS and the numerous obstacles associated with accessing these services.

**Method/Approach:** Twenty-nine informal interviews were completed via virtual platforms with individuals representing various stakeholders (Health Homes, Care Management Agencies, and HCBS providers). Interviews strived to extract respondents' perspectives on the impact of the transition of coverage for behavioral health services into managed care, the implementation of HARP/HCBS, and the eligibility, enrollment, and engagement of HCBS services. Interviews were recorded, transcribed, and summarized to facilitate an explicit analysis and identify emerging themes. Memos were developed to highlight common barriers and challenges, which also included quotes and examples from stakeholders to provide support for the interpretation of findings. In-depth memos were constructed to synthesize findings across various interviews as fellow interns contributed to data analysis based on their explanations.

**Outcomes/Results:** Overall, stakeholders find that HARP plans are beneficial, but the transition to MMC is difficult. Specifically, the introduction of HARP/HCBS requires time and training to build buy-in from various stakeholders to help them fully understand the services and benefits of the program. Regarding enrollment into HCBS services, respondents found Peer Support through HCBS the most requested and effective service. Still, there are challenges associated with state policy, peer certification requirements, long waitlists, and low reimbursement rates, which limits HARP enrollees' access to HCBS services. Because of the numerous steps involved in the workflow, many clients may choose not to access these services after becoming discouraged with slow progress through the HCBS enrollment process.

**Evaluation/Conclusion:** Based on the majority of interviews, it is vital to improve the current HCBS workflow that HARP enrollees are required to pass through to access HCBS services. Respondents noted potential solutions such as making all HARP enrolled clients automatically eligible for HCBS or shortening the assessments. Additional strategies to expand HCBS access include having more HCBS providers, higher reimbursement rates, and more effective training for care managers so that they can better understand and explain the services to clients. Implementing stakeholders' recommendations may help increase HCBS involvement rates and make the program more effective.

## Internship Abstract

**Title:** Sandwich Generation Caregivers Survey

**Name:** Vibha Patel

**Preceptors:** Direct Supervisor: Dr. Adeola Sonaike, PHD, MPH Senior Vice President, Health  
Project Supervisor: Renata Svincicka, MPA, Community Health Manager

**Agency:** The Family Resource Network

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**Purpose:** To identify the services gaps Sandwich Generation Caregivers are experiencing.

**Significance:** Sandwich Generation Caregivers, also referred to as Compound Caregivers are a group of caregivers that are caring for an adult family member due to health needs or disability, while also caring for children at home. Adults who are part of the sandwich generation—that is, those who have a living parent age 65 or older and are either raising a child under age 18 or supporting a grown child—are pulled in many directions. Not only do many provide care and financial support to their parents and their children, but also their grown children and their parents rely on them for emotional support. The survey will provide concrete data that Caregivers of New Jersey and Family Resource Network can use to provide improved support and resources for the Sandwich Generation Caregivers.

**Method/Approach:** A survey was created that would collect data on acknowledging financial, emotional, and physical responsibilities of Sandwich Generation Caregivers. The survey consists of 57 questions about the care recipients and different aspects concerning the caregivers' responsibilities. The survey divided into 7 different pages which included "Getting to know the Caregiver and Care Recipients", "A Day in the Life", "Caregiver Well Being", "Care Recipient (Child/Children)", Care Recipient (Adult/Adults)", "Respite Care", and "Caregiving Finances".

**Outcomes/Results:** Out of the 79 responses, 90.54% of caregivers felt emotional/mental health is where they need most support in followed by physical and social health both at 40.54% with 10.81% in others which mainly included financial help. With caregivers caring for care recipients, 36.07% caregivers need help every day in caring for care recipients followed by on an emergency basis and once or twice a week with 14.75% and 13.11% respectively. When questioned about barriers to using respite care financial was the highest with 33.69% followed by 16.67% of caregivers were concerned with the quality of care. 60.66% of caregivers responded that when utilizing respite care they would like to spend it for personal relation time, 57.38% responded to doing errands/housework, 27.87% wanted to go to work, 3.28% wanting to volunteer, and 21.31% selected other.

**Evaluation/Conclusion:** Having an aging parent while still raising or supporting one's own children presents certain challenges not faced by other adults—caregiving and financial and emotional support to name just a few. Creating self-care technique classes and support groups which focus on the emotional and mental health and financial aspects of the Sandwich Generation Caregivers will be more beneficial to them.

## Internship Abstract

**Title:** The Development of a Post COVID-19 Recovery Center

**Name:** Vraj Patel

**Preceptors:** Patricia Richards - Director of Value-Based Initiatives

**Agency:** Saint Peter's University Hospital - New Brunswick, NJ

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**Purpose:** To measure the lasting impact of COVID-19 on individuals and the community surrounding Saint Peter's University Hospital.

**Significance:** COVID-19 is a new disease that has created a lasting impact around the world. With the CDC reporting the total confirmed cases within the US reaching 3,114,746 and rising, it is essential to assess the long-term effects of this disease on the human body. Since the disease's progression has been aggressive, not much is known of its long-term effects. The Post COVID Recovery Center aims to identify patterns in patients who recovered from COVID-19 in order to better understand the nature of the disease and its impact.

**Method/Approach:** A call center has been established by Saint Peter's University Hospital and currently run by their nursing staff. These nurses are contacting patients who had previously been discharged from the hospital after being treated for COVID-19 as well as patients who tested positive and self-isolated. The call center script aims to identify symptoms that patients are still experiencing after being infected with COVID-19. The symptoms the survey identifies currently consist of "shortness of breath", "lack of energy," "chest pain," "cough," "leg swelling," "stomach pain," "weight loss," and "other". Patients who answer "other" are instructed to explain their symptoms, and their responses have been recorded. As of, (08/03/2020), patient data is still being collected.

**Outcomes/Results:** A total of 342 calls have been made by the COVID-19 call center; of these, 215 patients surveys have been completed. Results are as follows: 18 calls (8.3%) had been to either the number or out of service (n=197). Of the remaining patients that were called, 13 patients (6.7%) reported having shortness of breath, 6 patients (3.1%) reported having lack of energy, 5 patients (2.6%) reported having a cough, 2 patient (1%) reported having stomach pain and 16 patient (8.2%) reported having other conditions. Of these patients 2 reported having "loss of sense of smell, taste, and hearing," 6 reported having "shortness of breath upon physical exertion," 5 reported having "Pain anywhere on the body," 1 reported "loss of hearing," and 1 reported "loss of appetite."

**Evaluation/Conclusion:** It is important to note that additional data is needed for these results to be conclusive. Assessments of currently collected data suggests that a quarter of patients who recover from COVID-19 present with lasting chronic conditions. Of the 197 patients who were surveyed, 42 patients (21%) reported having symptoms that persisted. Further investigation needs to be conducted for patients who reported having other symptoms since some symptoms overlapped with the main symptoms investigated in the survey. Additionally, the current results are thought to be biased since the low-income minority populations who are more susceptible to COVID-19 have yet to be explored. Overall, more data is required to validate these findings and allow us to learn more about the long-term effects of COVID-19.

## Internship Abstract

**Title:** Food Waste Audit Across New Jersey Public Schools to Meet Federal Guidelines

**Name:** Irena Pavlovic

**Preceptors:** Sara Elnakib

**Agency:** Department of Family and Community Health Sciences

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**Purpose:** To analyze food waste audit data in order to propose an optimized custom plan for New Jersey Public Schools to reach the USDA and EPA joint challenge of reducing food waste by 50% by the year 2030.

**Significance:** In the United States alone, 40% of food grown, transported, and processed goes to waste while concurrently 40 million Americans face food insecurity (Move for Hunger). In 2015, the USDA and EPA created a joint challenge to reduce food waste in the United States by 50% by 2030. This challenge incorporates guidelines that notably target schools. By focusing on food waste at schools, students ultimately take home this knowledge and implement it in their lives at home, decreasing the overall consumer food waste. Schools generate these amounts of food waste due to students' individual preferences and nutritional needs. Many students may be provided with food they do not want during the lunch period which means that there is a greater chance of it winding up in the trash. Therefore, school food waste data and audits are crucial resources in reducing food waste in the United States and potentially exceeding the USDA and EPA joint challenge.

**Method/Approach:** Food waste audits were conducted from October through December 2018. The area of audits consisted of elementary and middle schools that prepared meals on site. This school district consisted of 15 schools, of which 5 met the inclusion criteria and were selected to participate. These schools included: Lincoln Annex, Livingston, McKinley, Redshaw, and Woodrow Wilson. There were 649 total students between the five schools and 18,188 total records of data. This data was recorded in a survey for each school during their respective lunch periods. The collected information includes tray weight, type and weight of fruits, vegetables, milk, and entree chosen as well as any additional comments for each tray. The distribution of pre- and post-intervention data was assessed through statistical analysis for each school in each food category.

**Outcomes/Results:** The mean of each food category, estimated at roughly 10% change overall, did not see significant changes between the pre- and post-values between each of the schools, however each of the five schools being analyzed saw an overall decrease in the food waste produced after implementing the findings. For all five of the schools the differences between pre- and post-intervention are statistically significant where the t-values are quite high, leading to the p-value being zero.

**Evaluation/Conclusion:** As the t-test depicts, the findings from the pre- and post-audit at each of the schools are significant showing that the implementation of the findings pre intervention decreased food waste post intervention. While considering the guidelines for the school and cafeteria staff as well as the students, it is to be determined that overall food waste decreased. This came in turn due to the audit data analysis of the weight of the food before and after implementation. This research will serve a role in modeling food waste auditing measures across other schools in New Jersey, to reach the USDA and EPA challenge goal.

## Internship Abstract

**Title:** New Jersey Bill Proposal: “Water Resources Protection Trust Fund Act”

**Name:** Randy Petronko

**Preceptors:** Direct Supervisor: Sophia Dolashewich, Internship Coordinator  
Direct Supervisor: Ben Ghiano, Legislative Director

**Agency:** Office of Assemblyman Robert Karabinchak, New Jersey Legislative District 18

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**Purpose:** To research and enact legislation that would create a fund to support water quality, supply, and infrastructure projects.

**Significance:** Over the years, natural water resources and state water infrastructure have experienced various forms of deterioration. New Jersey is also the most densely populated state in the nation, with 1211.3 residents per square mile (Statista). Due to population density and natural disasters like Hurricane Sandy, natural waterways, and water infrastructure have required massive overhauls and updates to properly serve residents. The various rivers, lakes, wetlands, and underground aquifers support numerous flora and fauna species, and residents' water needs. Through various research projects, the state has discovered that the drinking water infrastructure is in dire need of updates and repairs. Failure to maintain the infrastructure has led to water main breaks, service interruptions, loss of drinking water, and lead in the drinking water (Jersey Water Works).

**Method/Approach:** Assemblywoman Nancy Pinkin has introduced Bill 3348, which would create a \$0.40 tax for every 1000 gallons used to every household’s water bill to fund water infrastructure projects to be charged quarterly. Research on the various aspects of the bill and its impact will help Assemblyman Karabinchak decide whether he should be a primary sponsor of the bill. The work involved summarizing the bill and researching the financial impact on residents and the state government as well as how the funds would improve water infrastructure. Jersey Water Works hosted a webinar where discussions took place regarding current drinking, wastewater, and infrastructure issues brought about by the Covid-19 Pandemic and possible solutions.

**Outcomes/Results:** The United States Geological Survey estimated that an average person uses 80-100 gallons of water per day. The calculations show that a household of 4 would see a quarterly charge of \$14.60 based on 100 gallons per day usage. According to the 2010 census, there were 6,681,839 residents over the age of 18 in New Jersey; based on this number of residents, contributions to the fund would total \$97,554,849 annually to support proposed projects. The bill would allow state and local governments to start working on much-needed infrastructure repairs and upgrades.

**Evaluation/Conclusion:** The recommendation to the Assemblyman is for him to be a primary sponsor of the bill with revisions that would ensure that projects are prioritized appropriately. A review of the bill's impacts should be done yearly. The review should examine the balance deposited into the fund, and the projects started and completed. Additionally, monitoring the water conditions in areas affected by the projects, prior to and upon completion of the work, will ensure necessary improvements were effective. Showing an increase in water quality and other benefits gained from completed projects will alleviate any concerns residents may have regarding the tax.

## Internship Abstract

**Title:** UnitedHealthcare Dental Home Performance Assessment

**Name:** Gianna Powell

**Preceptor:** Joshua Owen, UnitedHealthcare Account Manager for Government Dental Programs

**Agency:** UnitedHealthcare (UHC)

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**Purpose:** To analyze claims output data and document the progress of UHC's Dental Home Program in New Jersey designed to improve access to oral health services for adolescent Medicaid members.

**Significance:** Tooth decay (dental caries) is the most common chronic disease of adolescents that is almost entirely preventable. Untreated caries can lead to pain, infection, problems with attendance and performance, teasing and bullying, or delayed development, and an increase in healthcare costs. These results disproportionately affect those from low-income families by 25%. (Centers for Disease Control, 2019) As evidence suggests, this is a detrimental issue in children's oral health, which can have continuing effects. Preventative dental care, such as routine cleanings, applying fluoride varnish, and sealants on the back teeth, prevents an astounding 80% of cavities. Prevention has proven to reduce the possibility for younger members to develop caries and reduce emergency department visits for non-traumatic dental care. (American Dental Association, 2013) Evidence-based interventions will bridge the gap to help members achieve excellent oral health and research will identify improvements based on program data.

**Method/Approach:** First, a project was completed to develop a quarterly claims analysis output on data for Medicaid members receiving dental services from 2018 through the first quarter of 2020. A comparison was then finalized to identify members who had received dental in the previous 12 months, versus those who had not. The results were trended and recorded to visualize the improvement since the program's implementation. Second, direct feedback solicited from five providers during the project to understand how the program was operating and to obtain suggestions for improvements. Specifically, asking dentists if they understood the program and expectations if they were using the designated roster of members, and if there were suggestions for improvement or any potential obstacles experienced.

**Outcomes/Results:** Beginning in (Q1 2018) the Dental Home Program, data indicates 58.51% (n=247,884) of all adolescent members (n=145,045) have a recorded dental visit in the previous 12-month period. With these findings, the new program would increase that percentage. Next, the same metrics, two years later, in Q1 2020. The percentage of members (n=204,426) with dental visits (n=124,227) increased to approximately 60.76% of members receiving care in the previous 12 months.

**Evaluation/Conclusion:** From 2018 to 2020, 945 dental clinics in 21 counties in NJ participated, increasing care for adolescents by over 4%. While 4% may seem like a small percentage, UHC manages a substantial number of members in NJ; this program has proven successful with additional members now receiving needed dental care. Outreach with several relevant providers to get feedback on the program indicated that a common barrier was that crucial data elements were missing from the member rosters. The remedial work has been completed and the rosters have been corrected and reloaded to fill missing information. Prevention can be achieved through comprehensive programs that assign, track, and measure the progress through metrics to determine if dental care is on the rise. Results suggest that assigning members a dental home, with ongoing provider outreach, can be a useful tool to increase dental health across this age demographic.

## Internship Abstract

**Title:** Qualitative Evaluation of Challenges and Solutions for Eligibility and Enrollment in Health and Recovery Plans and Health and Community Based Services

**Name:** Nidhi Prajapati

**Preceptors:** Ana Stefancic, Ph.D., Associate Research Scientist and Daniela Tuda, LMSW

**Agency:** Columbia University Department of Psychiatry

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**Purpose:** To analyze eligibility and enrollment challenges associated with Health and Recovery Plans (HARP) and Home and Community Based Services (HCBS), and to identify strategies that address these challenges.

**Significance:** Medicaid members with behavioral health (BH) problems face many challenges in accessing a range of BH and medical services, which often leads to poor health outcomes (Castillo et al. 2017). Health and Recovery Plans (HARP) offered by managed care organizations (MCOs) sought to improve BH outcomes for members through enhanced access to, and coordination of, services, including Health and Community-Based Services (HCBS). A qualitative evaluation was conducted to identify the barriers associated with members' eligibility and enrollment in HARP and HCBS. This will expand the understanding of these programs and guide strategies for how to address these challenges.

**Method/Approach:** The principal investigator conducted semi-structured interviews virtually with stakeholders (n=29) representing MCOs, care management agencies (CMAs), health homes (HH), and HCBS providers. Interviews focused on processes and outcomes associated with the implementation of HARPs and HCBS. Interviews were audio-recorded and transcribed. Researchers then used thematic analysis to address key evaluation questions. This involved multiple researchers reading transcripts and developing memos that systematically grouped interview excerpts by topic. Researchers then independently identified emerging patterns and themes across memos and subsequently developed interim findings through iterative discussions to achieve consensus on final themes.

**Outcomes/Results:** Preliminary analyses indicate that some Medicaid members, who are in need of enhanced access to BH services, are excluded from HARP and HCBS services because of ambiguous eligibility qualifications. Stakeholders mention that the HCBS eligibility assessment and enrollment process are arduous due to the complicated workflow involving interactions between multiple agencies and their members. Medicaid members, care coordinators, and HCBS providers have to complete many steps to finalize eligibility and secure enrollment for members. To address this challenge, stakeholders suggest allowing providers to refer Medicaid members into HARP, expanding the eligibility qualifications for HARP, and simplifying the HCBS enrollment workflow.

**Evaluation/Conclusion:** Emerging findings from stakeholder interviews suggest that unclear HARP eligibility requirements and the steps and agencies involved in HCBS enrollment resulted in limited access to services. These barriers excluded individuals who were in high need of BH services but were not identified as meeting eligibility criteria or did not successfully navigate the prolonged workflow. To address these issues, stakeholders suggest expanding the qualifications for HARP so more members could get access to services and simplifying the workload for the enrollment process for HCBS. Doing so facilitates a broader range of Medicaid members with BH needs gaining access to HARP and HCBS.

## Internship Abstract

**Title:** Utilizing “Short-dated” medication to assist the needs of the community

**Name:** Donna Ramdhanny

**Preceptors:** Sharon A. Mindel, PharmD., MBA/Assistant Clinical Director of Pharmacy

**Agency:** Robert Wood Johnson Hospital-New Brunswick, New Jersey

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**Purpose:** To provide short-dated medications to community residents in New Brunswick, who cannot afford to purchase them.

**Significance:** As an ongoing side assignment, the Pharmacy department out date all medications that that are refrigerated and non-refrigerated ninety days before they expire. They usually add up to a significant amount, and the hospital does not receive credit for these medications from the manufacturers. That is a lot of medications being wasted and there are residents in New Brunswick who can use these medications but are unable to afford them. St John’s Clinic in New Brunswick is a free clinic and can certainly use these medications for its non-paying patients. It is a very tedious process to check all these medications, but all these out-dated medications can be very helpful to a lot of people in New Brunswick. According to a study done by the US Air force in 1985, the military had over one billion dollars’ worth of medication stockpiled. When these medications were tested by the FDA, most of the medications were good for nearly three years past their expiration dates (Harvard Health Publishing).

**Method/Approach:** The hospital will have to send a representative to approach the clinic to find out what medications they can use. These medications are very expensive and will not include any type of narcotics. This has to be done as a separate assignment, because the entire process takes a long time to do. Usually, it may be one or two technicians checking the expirations and outdates. All medications that are expired will go into a large bag, and then into a bigger box. For all the outdated medications of the same kind will be placed in the same bag, and each bag will only have one type of medication. So amiodarone will go into the bag marked Amiodarone, and Digoxin will be put into the bag marked Digoxin, and so on. Also, the tablets will go into one bag and the injectables will go into another bag. The medication will be recorded by name and amounts, then delivered to the clinic.

**Outcomes/Results:** This is a brand-new project for the hospital, so all the free clinics in the area have not been approached as yet. So far, the response from the first clinic, which is St. John’s has been very favorable. Hopefully as things clear up from COVID-19, there will be more clinics coming on board to receive the donations.

**Evaluation/Conclusion:** In as much as this is a brand-new project for the hospital, St. John’s clinic was the only one approached so far. With the positive response the hospital has received, after the present pandemic more free clinics will be approached, and the hospital anticipates the response to these donations will be very favorable.

## Internship Abstract

**Title:** New Voters Project Assessment  
**Name:** Neil Rana  
**Preceptors:** Carly Brannan, Rutgers New Brunswick Campus Organizer  
**Agency:** The Students PIRGS

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**Purpose:** Analyze the efficiency of the New Voters Project campaign by tracking how many individuals participated in organizational efforts and how many people registered to vote specifically because of the campaign.

**Significance:** Democracy is strongest when citizens actively participate, but young people have not been involved as much as they should. Young voters turn out at significantly lower rates than older Americans. In 2018, for instance, 31% percent of eligible young (18-29-year olds) voters cast a ballot, compared to an average of 50% for the entire population of eligible voters (The Student PIRGS). They are nearly the largest demographic but have the lowest voting participation rates. One major reason why youth voting rates are lower is that candidates tend to address older voters' concerns because they know this demographic is more likely to vote (The Student PIRGS). Youth turnout continues to decline, causing candidates to neglect young voters, even more, creating a cycle of mutual neglect. The only way to remedy this would be to increase youth voter turnout.

**Method/Approach:** One of the best ways to reverse this cycle and increase youth voter turnout is a peer-to-peer contact. One of our main methods of doing so is establishing and expanding coalitions on campus to increase civic engagement. Creating a coalition develops relationships between the organization, NJPIRG Students, and different organizations/departments at a college, allowing both parties to utilize each other's resources in efforts to raise civic engagement and youth voter turnout. Another method used to increase civic engagement is to create and share social media posts to encourage people to register to vote, educate themselves, and get involved. Calling friends and family to ensure they are registered to vote and pledge to vote safely during the ongoing pandemic, is another key method in raising awareness for civic engagement and the need for eligible youth voters to participate.

**Outcomes/Results:** One of the main outcomes is the creation of a civic engagement coalition at the Rutgers University-Newark campus. There should be multiple organizations on campus endorsing the New Voters Project and NJPIRG Students. The coalition is still not completely established as outreach has been done to various organizations but not many have replied. Aside from the actual coalition, other important outcomes include getting 21 people registered to vote in and getting 100 people to pledge to vote safely, while making contact with about 350 individuals.

**Evaluation/Conclusion:** To evaluate the efficiency of NJPIRG Students' work, a short, two-question survey was conducted to determine whether or not individuals registered to vote as a result of NJPIRG Students' outreach and if NJPIRG Students has been helpful with reminders for registration deadlines. Of the participants who willingly took the survey (n=31), almost one-third of them registered to vote as a result of NJPIRG Students (n=9, 29%), while the remainder had registered prior to hearing from NJPIRG Students. More than two-thirds of survey participants (n=23, 74%) claimed NJPIRG Students' campaign work was helpful to them. Overall, this project has been doing decently in terms of increasing civic engagement, and once the coalition begins to take action, it is expected to see an even larger increase in civic engagement/youth voter turnout.

## Internship Abstract

**Title:** Penn Medicine COVID-19 Screener

**Name:** Cathya Rodriguez

**Preceptors:** Tanisha D, Sheila T, Dan F., Stephanie D.  
Penn Medicine-Princeton Hospital: Debbie D.

**Agency:** Penn Medicine- Princeton, NJ

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**Purpose:** To limit the exposure of COVID-19 by screening healthcare providers and patients at Penn Medicine.

**Significance:** A patient was diagnosed by the state of Washington on January 20, 2020 with COVID-19. During this time there was uncertainty of how the virus would affect the nation and procedures were changing every day. Screening before entering a facility became an important procedure to limit the spread of COVID-19. Penn Medicine has created a triage procedure to process patients and employees to ensure those with symptoms are not missed prior to entering the building.

**Method/Approach:** Employees of Penn Medicine take on the role to screen everyone before entering the facility. When patients are being admitted to the hospital, the techs (nursing assistants or mental health associates) take patients vitals, conduct a body search, collect a urine sample, review their belongings with them and explain the rules and regulations of the facility. After the tech is done the nursing staff goes into their room where they are quarantined until the tests are returned with the results. Part of the screening program at Penn Medicine includes taking temperature readings and asking a variety of questions at the triage station which determines if they are allowed to enter the facility to limit exposure of COVID-19.

**Outcomes/Results:** Of the sample size cohort (n=136), there was 3% of employees who were positive for COVID-19, of those who were symptomatic there was 75% and for asymptomatic employees there was 25%. Out of the total patients at Penn Medicine the cohort sample size is (n=55) and there was 16% of the patients were positive for COVID-19 and 100% of the patients had some kind of symptoms of COVID-19 which leaves us with 0% of asymptomatic patients. The full cohort of patients and employees is (n=191) and those who were positive with COVID-19 was (2%), those with symptoms were (75%) and of those who were asymptomatic were (25%).

**Evaluation/Conclusion:** The program was highly effective; it allowed an increase of (25%) of patients admitted to the facility. The psychiatric facility went from (50%) of operation to (75%). Which showed that more than half of the total (n=191) who had symptoms came to be (75%) which allowed the facility to test for the virus effectively. Creating a screening triage, asking the survey questions and taking temperature were strategies used in limiting people from being exposed by the virus. Ongoing monitoring of screening and testing of COVID-19 will continue to be compliant of limiting exposure to patient and staff.

## Internship Abstract

**Title:** Supporting Healthy Lifestyles for Women with Menopause  
**Name:** Grace Rodriguez  
**Preceptors:** Direct/Project Supervisor: Ashley Woods, Content and SEO Director  
**Agency:** Assuaged, Inc.

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**Purpose:** To develop a partnership with the *Eat Like A Woman* organization and collaborate on the Like A Wonder Woman campaign initiated to support women of menopause and provide healthy lifestyle alternatives.

**Significance:** All women who experience puberty will experience menopause. It is related to the decreased production of estrogen and progesterone in ovaries. During these hormonal changes, menopause can affect the body in many ways. Despite being so common, the severities of these side effects go unnoticed. Statistics show that most women fail to realize they are experiencing menopause until later on. According to a survey conducted by the University of Arizona College of Nursing, 110 women were surveyed and selected to describe and rate the worst symptoms they had experienced related to menopause in the past week. All participants had experienced their last menstrual period within the previous three years and were between the ages of 43-55. Over 94 percent of women have trouble sleeping, 92 percent become forgetful, 87 percent experience irritability, 83 percent experience hot flashes, and over 85 percent experience night sweats. Women experiencing menopause need their vitamins and minerals to make up for their new internal makeup and help their bodies adjust comfortably.

**Method/Approach:** A written campaign proposal, along with five campaign video scripts, were presented to Staness Jonekos, the *Eat Like A Woman* founder. Cynthia created a template to follow to format the five video campaigns. From there, the videos got the amount of time necessary for each concept, ranging between 15 seconds and 1 minute. The video ideas developed are meant to promote both Assuaged, Inc. and Staness Jonekos' *Eat Like A Woman* products, while still being informative about menopause. The campaign includes the different stages of a woman's experience with menopause. Finally, we reached out to Staness via email with our proposal on how to move forward and promote this campaign.

**Outcomes/Results:** Due to the country's current pandemic crisis, the five video scripts are on hold for now. Once the economy lifts a bit more, Assuaged will move forward with that campaign. Until then, a social media campaign will take its place. In a brief, unapologetic video, women will explain their worst menopause side effects and how they make the best of it and overcome it. The video will help create a safe atmosphere for women to openly discuss their experiences and bring awareness to the issues they live with every day. The result will provide insight into the menopause community and bring more awareness to it. These videos will get delivered on the Instagram and Tik Tok platforms.

**Evaluation/Conclusion:** Once both campaigns go live, the projected outcomes can expect to deliver positive results. The tracked results from the social media campaign and the video campaigns' feedback will be more accessible to gather the information and create better-analyzed videos and informatics regarding menopause. The campaigns should get reviewed quarterly to ensure that the information provided is accurate and on-trend. By doing so, both partners will be able to see what is working well for them and what should be updated.

## Internship Abstract

**Title:** Rutgers Future Scholars' COVID-19 Summer 2020 Town Hall

**Name:** Jessica Saintel

**Preceptors:** Ashley Douglass, Program Coordinator  
Brittany Pryor, Student & Community Affairs Coordinator

**Agency:** Rutgers Future Scholars- New Brunswick, NJ

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**Purpose:** To evaluate and inform the 9th to 12th grade scholars on the Coronavirus during our Rutgers Future Scholars summer program by emphasizing all aspects of the virus resulting in increased awareness to maintain the health of their community. Rutgers Future Scholars is a majority Black and Latinx in which COVID-19 is disproportionately affecting these communities the most.

**Significance:** The global pandemic that is plaguing the world right now is the Coronavirus. COVID-19 has completely halted the world of its typical routine, while increasing health measures in every avenue. There is no current vaccine or cure for the Coronavirus which means that every individual plays a role in keeping this virus contained. It is essential to be properly informed as this virus continues to spread, and new discoveries are being made. Social media, and friends are a common way amongst youth populations for information to spread, however it is not the most reliable resource for information. It is important that our scholars have fact and evidence-based information in order to make informed decisions.

**Methodology:** Pre- and post- evaluations surveys on COVID-10 using Google Forms were distributed to the Rutgers Future Scholars summer program attendees. The pre-survey consisted of questions that we created to gauge how much information on COVID-19 the students of Rutgers Future Scholars knew prior to attending our information panel. Our information panel was presented using Cisco Webex and covered the topics of: the general scope of Coronavirus, symptoms, precautions, myth busters, and the "new normal." After the two sessions on the 15th and 22nd, we then evaluated the information to gauge how much information the scholar's retained from the presentation.

**Outcomes:** Our pre-panel survey consistent of responses from 88 scholars. For Rutgers Future Scholar's COVID-19 Town Hall held on July 15th, 2020 we had a total of 68 attendees. The Town Hall held on July 22nd, 2020 had a total of 31 attendees. Our post-panel survey had a total of 12 responses.

**Evaluation/Conclusion:** Despite the large drop of attendance and responses from the first COVID-19 Town Hall to the second, the project was successful. Rutgers Future Scholars' first COVID-19 Town Hall that was held on July 15th, 2020 covered the main components of the presentation such as overall scope of COVID-19, symptoms, precautions, mask use and application, healthcare system, disproportionate impacts on populations, and the number of cases. The second COVID-19 Town Hall was focused on debunking the myths surrounding the virus, discussing what the "new normal" may look like, and summarizing all the information from both sessions. The scholars of Rutgers Future Scholars' are now confident in the knowledge they have on COVID-19 and are equipped to navigate this pandemic safely and as mindful as possible.

## Internship Abstract

**Title:** Assessment of normalization methods in TCGA microRNA sequencing data

**Name:** Kinnary Shah

**Preceptors:** Direct Supervisor: Dr. Li-Xuan Qin, Associate Attending Biostatistician

**Agency:** Memorial Sloan Kettering Cancer Center

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**Purpose:** To examine different normalization methods for batch effect correction in ovarian cancer and endometrial cancer microRNA sequencing data from The Cancer Genome Atlas (TCGA).

**Significance:** Batch effects are non-biological variations in data due to the experimental process. The methods used in the literature to mitigate batch effects are neither sufficient nor standardized (Qin, L.X. et al., 2014). TCGA is a large-scale project coordinated by the National Cancer Institute to collect and sequence cancerous tumor samples from patients across America. TCGA is used extensively by researchers to identify biomarkers and improve outcomes for patients with cancer.

**Method/Approach:** TCGA microRNA sequencing data from patients with serous ovarian cancer and endometrial cancer were extracted from the National Cancer Institute's Genomic Data Commons Data Portal. There were 397 endometrial cancer samples and 499 serous ovarian cancer samples. A random set of 96 ovarian cancer and 96 endometrial cancer samples was utilized. The following protocol was used to compare the impacts of types of normalization on reducing batch effects in the RStudio environment. Nine normalization methods were used on the samples: six methods were scaling-based, and three were regression-based. Differential expression analysis was then performed on the normalized datasets using the voom method. Finally, the differentially expressed genes selected in the TCGA sequencing data were compared with those selected in a reference dataset, using the latter as a standard for comparison.

**Outcomes/Results:** Examination of the volcano plots generated after differential expression analysis shows that each normalization method generated different results. The median and upper quartile methods did not perform well compared to the other methods, while PoissonSeq and DESeq produced asymmetrical plots. One version of Remove Unwanted Variation (RUV) performed better than the other two RUV versions. Comparing overlaps between differentially expressed genes from each normalization method to those from the benchmark dataset showed a high degree of repeated genes between the overlaps of each method and the benchmark.

**Evaluation/Conclusion:** The nine methods compared in this project are popular amongst researchers, but they performed very differently. Limitations of this study include using only two cancer types and comparing only nine normalization methods. When attempting to correct for batch effects, researchers should carefully decide on the appropriate normalization method for their data because the normalization method's choice can affect all downstream analyses. Future directions include looking further into the high degree of repeated genes between benchmark overlaps of each method and comparing clinically relevant biological subsets within each cancer type.

## Internship Abstract

**Title:** North American Association of Central Cancer Registries (NAACCR) Data Confidentiality and Security Work

**Name:** Myagreen Shrestha

**Preceptors:** Recinda Sherman

**Agency:** North American Association of Central Cancer Registries

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**Purpose:** To summarize an environmental scan of current practices and protocols for data security and confidentiality in U.S. central cancer registries.

**Significance:** Cancer-related data are extremely confidential and must be protected properly, otherwise improper disclosure of those data could severely harm the patients and their family's emotional, psychological, and financial state (SEER confidentiality, 2020). The North American Association of Central Cancer Registries helps promote the use of cancer surveillance data and systems for cancer control and epidemiologic research, public health programs, and patient care to reduce the burden of cancer in North America. The Data Confidentiality and Security committee for NAACCR was established to evaluate current data security and confidentiality practices among central cancer registries, review NAACCR and other appropriate resources, share best practices across the NAACCR community and develop guidelines and best practices.

**Method/Approach:** The committee developed a Data Confidentiality & Security Survey which was distributed to all US central cancer registries. The survey consisted of 29 questions, some included multiple parts. Responses to survey question four, which asks the cancer registries to present documents that exhibit the terms and conditions that limit or allow data release, were extracted and compiled into a single document to analyze variations in policies and procedures among registries. In addition, survey responses were analyzed to determine whether registry policy and procedures differed by institution type (state health department, joint state health department/university, or university only or other.) An excel spreadsheet included answers from the 38 completed central registry surveys and was downloaded onto SPSS software to obtain cross-tabulations between the institutional type and the survey answers.

**Outcomes/Results:** The document with information about data release policies, formatted in alphabetical order by state name, is currently being analyzed and reviewed to highlight variations among registries in data release, data security, and confidentiality practices. The results from the cross-tabulation are being reviewed to determine if registry policies and procedures differ by institutional type.

**Evaluation/Conclusion:** This research project will contribute to a summary report which describes current practices and make recommendations regarding best practices for confidentiality and data security across the NAACCR community. Additional information related to cancer data release should be retrieved by reaching out to the other cancer registries who have not completed the survey. Incorporation of those information would further result in the composition of a more accurate summary report.

## Internship Abstract

**Title:** The Safety Impact from COVID-19 on the Construction Industry

**Name:** Eric Shwartsman

**Preceptors:** Ernest Sobieski - Regional Safety Director

**Agency:** Clune Construction Company

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**Purpose:** To analyze how the COVID-19 pandemic has impacted the construction industry and the health and safety of construction workers.

**Significance:** Construction was one of the first industries to reopen during the first phase of openings in New York City. This required construction workers to come back to work and have to work in strange new conditions and adapt to new rules and regulations to keep them safe. Observing some of the burdens that were placed on general contractors from the pandemic allows the company to understand the impact this event had placed on this industry and its workers, and whether or not it has worked.

**Method/Approach:** By observing various new procedures and rules implemented at job sites my preceptor was able to show the new protocols issued due to the pandemic. Since New York City is made up of mini governments including the Department of Buildings, Port Authority, and Metro-North, each had its own rules and regulations on top of state guidelines. Research was conducted on all the new policies implemented to that stressed proper PPE, social distancing and half capacity of spaces were enforced. Sign-in sheets were given at all sites to assist with contact tracing, temperature screenings, and symptom questionnaires that must be posted at every single job site within Manhattan. All construction sites must provide an inspector with a COVID-19 Communication Plan detailing exactly how, as the general contractor, they are implementing COVID-19 safety standards into their sites to protect their workers.

**Outcomes/Results:** According to the Department of Buildings, Port Authority of New York, and Metro-North. The governments within the city have developed a low cost and easily obtainable rules that must be implemented into every job site. In order to seek compliance, inspectors will be issuing fine beginning at \$5000.00 for violations such as workers without proper PPE, no social distancing, COVID-19 communication plans not displayed or readily available, hand washing stations available, hand sanitizer bottles full and displayed, sanitation logs of frequently touched surfaces like bathrooms and doorknobs, and proper signage displayed educating people of COVID-19 symptoms and what to do if they have any of the symptoms.

**Evaluation/Conclusion:** While the COVID-19 Pandemic was an event that caused most industries to implement new rules overnight and insert new protocols into their jobs, local governments provided ways of doing this that would not burden the industry with high costs and time-consuming tasks. The local governments of New York City implemented many rules that had to be followed by every general contractor or else they would face fines and be issued stop work orders. These actions as well as proper planning for workers to go into forced isolation and take time off work if they display symptoms have allowed the construction industry to reopen and resume business efficiently and effectively. The construction industry will continue to monitor proper hygiene in bathrooms and common touched surfaces, educating laborers about COVID-19, and enforcing social distancing while wearing proper PPE. The continuation of these new protocols will ensure that the industry continues to move forward through the duration of this pandemic and after that as well.

## Internship Abstract

**Title:** The Impact of Social Determinants of Health on Access to Behavioral Health Services

**Name:** Michael Small

**Preceptors:** Ana Stefancic, PhD, Research Scientist  
Daniela Tuda, LMSW, Research Assistant

**Agency:** Columbia University, Department of Psychiatry

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**Purpose:** To identify how social determinants of health impact the ability of people with serious behavioral health issues access behavioral health services in the community and potential barriers.

**Significance:** Social determinants of health can impact access to behavioral health services for individuals enrolled in HARP (Health and Recovery Plans) and HCBS (Home and Community Based Services) programs. The lack of adequate, stable housing is chief amongst the most impactful social determinants and can lead to poor behavioral health outcomes for those particular people in the community. People who are homeless or at risk for homelessness and have a substance use or mental disorder are often cut off from social support and need services ranging from safe and stable housing, food, and financial assistance to medical care. Homelessness and Behavioral Health Services (2015) It is only when social determinants of health are addressed with these individuals that HARP and HCBS can be effective at providing services and improving outcomes for this population.

**Method/Approach:** Use of thematic analysis to identify concepts and themes relevant to understanding how SDOH may influence access to HARP and HCBS. The interview was designed to study the relationship between social determinants of health and quality of care when accessing mental health services. Different stakeholder types such as CEO's, Directors, Managers and other executive leaders were interviewed by Dr. Ana Stefancic from Health Homes (HH), Care Management Agencies (CMAs), HCBS providers and Managed Care Organizations (MCOs) the interviews were synthesized into memorandums that identified emerging themes related to care plans, recovery-oriented services and social determinants of health.

**Outcomes/Results:** Lack of stable housing and transportation were the most frequently identified social determinants of health that served as barriers to access. Medicaid members could not be enrolled in a HARP if mailed enrollment letters did not reach them at a fixed address, resulting in lower levels of HARP enrollment among populations that lacked stable housing. Additionally, they were more likely to prioritize housing needs than engagement with behavioral health services. In rural areas, organizations and clients are further spread out, requiring more investment in travel time, which often led to reduced contact. Challenges for lack of transportation included a greater likelihood of missing appointments, which resulted in lower HCBS assessment completion rates and lower levels of HCBS engagement.

**Evaluation/Conclusion/ Implications:** Enrollment in HARP and HCBS services is a complex process, with challenges exacerbated by members who experience homelessness including a lack of access to adequate behavioral health services which can destabilize clients lives making it difficult to get job training, maintain housing, communicate with care agencies, providers and services related to their behavioral health treatment as well completing assessments necessary to determine eligibility.

## Internship Abstract

**Title:** Statutory Interpretation of National Collegiate Athletic Association (NCAA) Legislation to Determine Ethical Activity for Rutgers Coaches

**Name:** Clayre Smith

**Preceptors:** Brian Merriam, Director of Compliance

**Agency:** Rutgers University, Rutgers Athletics Compliance Office

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**Purpose:** To analyze and interpret NCAA legislation in regulatory affairs for Rutgers Athletic Coaches.

**Significance:** As the NCAA increases the legislation in circulation, along with complexity which institutions are required to follow, the need for specific expertise in legal interpretation is ever more critical in order to dismiss unethical activities for the NCAA and also the institution (Katz, 2001). The interactive system needed to maintain and determine athletic compliance contains various intertwining factors in which information and communication must be well established between all functioning parties. Without this interactive multiplex system, where athletic compliance is at the epicenter of control, institutions, teams, coaches, and individuals may find themselves in situations where they are unaware of eligibility risk (Schoemann, 2003).

**Method/Approach:** Questions from Coaches were solicited and the specific action under question was identified. Next, the topic under question was placed in the NCAA Legislative Services Database. As the legislature is processed with relativity to the topic, each legislation was analyzed for relative sub-information. When legislation was found on the question, this information was interpreted in order to conclude permissible behavior. Next, emails were outlined to Coaches indicating what behaviors can and cannot occur of their question and citing the applicable legislation. The overall task in the reception of each question was to analyze and interpret the interplay of NCAA legislation; determine the correct behavior that ought to be conducted to maintain eligibility and permissible behavior within the NCAA and institution.

**Outcomes/Results:** A total of 25 questions regarding legislative action were answered and produced in a packet. The packet consisted of the questions asked by Coaches, an answer outlined in an email-format that followed what is permissible and the specific legislation that is used in making the interpretation.

**Evaluation/Conclusion:** Process evaluations were conducted by the Director of Compliance to evaluate the effectiveness of the project. Statutory interpretation for Rutgers Athletics Coaches is paramount to restrain the institution, coaches, teams, and individuals involved in having their eligibility at risk, along with potential fines set in place for these infractions. The responses serve to maintain an ethical intercollegiate atmosphere in the athletic programs, ensuring society of fair and just practice in the world of college athletics.

## Internship Abstract

**Title:** Closing the Healthcare Gap  
**Name:** Derek Thomas  
**Preceptors:** Direct Supervisor: Kathryn Balitsos, Legislative Aide  
**Agency:** Office of Senator Vin Gopal, & Assemblymembers Eric Houghtaling, and Joann Downey

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**Purpose:** To analyze in-state and out-of-state public policy that address groups at risk for lower healthcare accessibility.

**Significance:** Right now the United States is in the midst of a pandemic that has in-part been exacerbated by the healthcare access inequality suffered by those of lower and financially unstable socioeconomic backgrounds. The state of healthcare prior to the pandemic has posed a challenge now that many groups can be at risk and especially those who have underlying conditions possibly unbeknownst to them. This crisis has also caused mass unemployment due to the economic shutdowns put in place to mitigate the spread of the virus. e.In New Jersey alone there have been more than 100,000 who have lost their employer sponsored insurance and shows that having health insurance tied to employment is a dangerous game that is exacerbated by economic downturns that have become increasingly common.

**Method/Approach:** Legislation was researched that has been introduced/passed in New Jersey and compared with policy from other states to see what outcomes were achieved and what policy can be introduced within New Jersey to improve healthcare access and outcomes, especially during this pandemic. These outcomes were measured through the enrollment rates on state medicaid programs for those who are eligible such as those at or below the Federal poverty level, and have lost their employer based health insurance.

**Outcomes/Results:** There has been one bill amended recently by the state of New Jersey that seeks to continue the system of federal fee's upon insurance providers that began in 2014 as a part of the Affordable Care Act (ACA). The funds generated would be used to continue the HIA, Health Insurance Assessment, and increase affordability for New Jersey's most at-risk groups such as children, working families, and generally moderate to low income households. The new state-specific fee will now be used towards specific healthcare costs and will be driven towards closing the healthcare gap through tactics such as subsidies, reinsurance, tax policies, and enrollment efforts, and other efforts to extend coverage to and improve affordability of health insurance for low- and moderate-income families and those who are uninsured.

**Evaluation/Conclusion:** While there is no traditional measure of success for a policy review, the outcomes from other states will be used to serve as a benchmark of sorts. The implementation of this type of state-level fee as a continuation of the ACA's federal fee would be greatly beneficial towards closing the healthcare affordability gap for many of the at-risk groups mentioned before. It will additionally provide steadier budget projections for New Jersey hospitals who operate under Charity Care and have uncompensated costs by expanding insurance to the uninsured.

## Internship Abstract

**Title:** Mass Manufacturing Effects on Environment Survey

**Name:** Ivana Tiani-Tchaye

**Preceptors:** Vanesa Osei, Chief Executive Officer

**Agency:** Fully Cultured Apparel LLC

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**Purpose:** To construct and deploy a survey of well-researched questions on the effects mass manufacturing has on the environment in an effort to better inform customers of why the company is straying away from mass manufacturing.

**Significance:** Unarguable, the efficiency of mass manufacturing is reliable and gives room for the development and use of specialized machines and processes to deliver production in a timely manner. Yet, putting into perspective the impediments plaguing our climate today, mass manufacturing has impacted the environment through air pollutant emissions and water contamination. Gaseous, liquid and even solid waste has been found to be generated as a by-product of production that can actually lead to the pollution of natural resources. Considering many companies are now transitioning away from mass manufacturing, it is vital for individuals to be properly informed of the reasons why this shift is occurring. This transition will move away from mass manufacturing and mass production and transition to giving customers an opportunity to pre-order all items. Data received will serve as a determinant for how information is allocated through different social media channels.

**Method/Approach:** The social media department developed a virtual survey which was distributed to all customers upon purchase. The survey was designed to study how informed individuals are about the detrimental effect of mass manufacturing on the environment. Participants were presented with 15 questions which were assessed by reputable individuals in the Manufacturing Sector. Survey responses were analyzed to determine how the company can best aid in helping inform future customers while also helping in determining ways to reduce our contribution in polluting the environment. The results were compiled into an Excel database, along with the age groups related.

**Outcomes/Results:** Over 200 individuals responded to this survey through a form the company page redirected shoppers to. With over 75% of the individuals responding that they were not aware of the correlation between mass manufacturing and the environment. 37% were indifferent on whether or not it affected the environment so long as it did not interfere with how fast their products would be delivered.

**Evaluation/Conclusion:** The department received an overwhelming response to the survey. The results indicate that many individuals that are benefactors of mass manufacturing actually lack knowledge on the effects it has on the society. These results will be incorporated in an even bigger report on what next steps the company should take on how better to inform customers. Some of these next steps also include

## Internship Abstract

**Title:** Improving consumer experience of Hospice care using feedback surveys

**Name:** Brian Tomczyk

**Preceptors:** Direct Supervisor: Yeong Bae, Executive Director

**Agency:** The Martin and Edith Stein Hospice

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**Purpose:** To survey patient families on the quality of services that loved ones had received while under the care of hospice.

**Significance:** As per the *Consumer Assessment of Healthcare Providers and Services (CAHPS)* program, in a report from 2019, there are 5 major opportunities for improving the services provided by The Martin and Edith Stein Hospice. Questions posed are provided and mandated by the Centers for Medicare and Medicaid Services (Healthcare First by ResMed, Top 5 Report 2020). The domains or care issues involved are: 1) relief from symptoms associated with constipation; 2) help received during evenings, weekends, or holidays; 3) being informed when staff members would arrive to make visits; 4) help with breathing problems; and 5) training for families whose loved ones were experiencing restlessness or agitation. (Healthcare First by ResMed, Top 5 Report 2020). The CAHPS program occupies an important place in the agency's overall Quality Assurance and Performance Improvement (QAPI) program as the surveys represent direct feedback from family members who observed the delivery of services to loved ones. Feedback will be incorporated into change efforts to ensure that future patients and families have experiences of hospice services that are felt to be supportive, meaningful, and effective in alleviating physical and psychosocial impact of terminal illnesses.

**Method/Approach:** Surveys were administered, and data collection undertaken by Healthcare First, a Medicare-approved third party administrator for the surveys. Available reports include demographic, integrated HQRP, percentile ranking, quality indicator report, quality measure report, response distribution, and top 5 reports. The opportunities for improvement were formulated via the "Top 5 report." The timeframe was quarterly, hence, the start of the report was Q1 2019 and the end of the report was for Q4 2019. The report is divided into two charts "Top five drivers of satisfaction" and "Top five opportunities for improvement." Subcategories include: National, Top performers, Your Score, and Difference alongside various performance categories with percentile ranges mandating ranks of the results. It should be noted that all 2020 reports for all surveying options are unable to be compiled until the conclusion of the year, thus, I was unable to compile any information as to Stein Hospice's progress for the current year.

**Outcomes/Results:** Stein Hospice's primary change focus is on improving communications with family members and strengthening relationships with them so Questions 5 and 6 ("received help during evenings, weekends or holidays" and "being informed when staff members would arrive to give services") were the overall objectives of my project. There were 59 surveys included in this sampling. Responses to Question 5 put the hospice in the 20th percentile rank and responses for Question 6 put it in the 20 to 40<sup>th</sup> percentile rank.

**Evaluation/Conclusion:** With patient surveying and recommendation of lean six sigma implementation Stein Hospice expects that within the next 6 months that their scores for both survey questions will improve to national benchmark levels. Using a team of volunteers and staff, weekly phone calls to family members offering supportive dialogue, assessing unmet needs, and routing feedback to management staff if problems are identified. Stein Hospice hopes to leave families with positive perceptions of the services received.

## Internship Abstract

**Title:** Influence of Media on HIV & HIV Disparities within the LGBTQ+ community  
**Name:** Samantha Tumblety  
**Preceptors:** Direct Supervisor: Gloria Bachmann, Director of Women's Health Institute  
**Agency:** Women's Health Institute (WHI) of the Rutgers Robert Wood Johnson Medical School

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**Purpose:** To review how the media can influence patient behavior for those who test positive for Human Immunodeficiency Virus (HIV) and to determine how HIV disproportionately impacts the LGBTQ+ population.

**Significance:** There are approximately 1.2 million people in the US who are HIV positive. However, the literature suggests that approximately 14% of HIV+ individuals are not aware of their status. Studies also note that HIV disproportionately affects those who belong to the LGBTQ+ population. HIV health care is often more challenging for these individuals due to the multiple “psychosocial and structural barriers” they are confronted with (Batchelor, Fair, Greifinger, 2013). As well, the LGBTQ+ population also is at greater risk of homelessness, stigma, substance abuse, etc. It is critical to understand how the media can influence perception of HIV status and assist those who are HIV positive.

**Method/Approach:** Google Scholar, Taylor & Francis Online, and National Center for Biotechnology Information were databases that were used to investigate this topic. Research was conducted on the role different types of media play in affecting HIV patient's behavior in regard to prevention, treatment, and transmission. Research was carried out on the overlap of the HIV population within the LGBTQ+ population, specifically the number of individuals taking pre-exposure prophylaxis (PrEP) and how accessible it is to find information on this medication.

### **Outcomes/Results:**

Print media, broadcast, counselling methods, and social media are used to teach people about the measures they can take to prevent HIV and/or HIV transmission. The “Social Vaccine” is deemed the best way to educate people on HIV/AIDS. A large part of the “Social Vaccine” idea is to promote safe sexual behavior. Knowledge is a critical factor in influencing human behavior. Data suggested that of the HIV positive population in the U.S., 1 in 7 did not know they had it (hiv.gov). While there is a plethora of media/information available to the public, there is still a large percentage of people who do not take preventative measures to lessen their risk of contracting HIV. In 2013 gay/bisexual men made up 2% of the U.S. population, but were 55% of known persons living with HIV. The total number of people using PrEP in the U.S. was over 77,000. In 2016, 93% of all PrEP users were men, which suggests that this population is more at risk than the female population (<https://aidsvu.org/prep/>).

**Evaluation/Conclusion:** Media is a tool that can be used to assist in preventing HIV infection. However, it must be accessible to those groups who are at highest risk. Issues of inequality and inequity need to be addressed in order for those in the HIV and LGBTQ+ population to have more access to health care, which goes hand in hand with greater knowledge of prevention and prophylaxis. Solving access issues, and addressing institutional stigma also are priorities. No long term effects of mass media have been noted yet. Possible media campaigns should be longer in terms of time they are available.

## Internship Abstract

**Title:** Patient Paperwork Inaccuracies in Sample Accessioning  
**Name:** Jacquelyn Twaddle  
**Preceptors:** Direct Supervisor, Project Supervisor: Mike Jansen, Laboratory Operations Manager  
**Agency:** Phosphorus Diagnostics - Secaucus, NJ

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**Purpose:** To analyze the accuracy of patient paperwork in the sample accessioning process to target frequent error categories for increased attention and improvement.

**Significance:** Hogan and Wagner (1997) state that the accuracy of patient data is critical for the optimal provision of healthcare. Patient data has a direct role in the provision of healthcare through its applications to patient care, clinical research, and the operating efficiency of health systems (Hogan & Wagner, 1997). The importance of accuracy of patient data extends to the field of genetic testing through the field's applications to healthcare. At Phosphorus Diagnostics's Secaucus laboratory, there were 446 tickets created in June relative to 1681 kits received, or 1 ticket per 3.769 kits. This project evaluates the most frequent types of errors made in patient paperwork to target problem areas for increased attention and improvement.

**Method/Approach:** A retrospective review of ticket entries occurred through the use of Elements, the primary patient data and operating system utilized for Phosphorus genetic testing procedures. A ticket is created at Phosphorus each time an accessioner finds an inaccuracy or a lack of clarity in patient forms. Other employees then reach out to the pertinent clinic regarding what is specified in the ticket for clarification or confirmation. The ticket log filtered to the "Error" category allowed for a manual examination of the number of tickets created in each of several ticket categories from June 1, 2020 through June 30, 2020. The ticket and kit logs provided the total number of tickets created and sample kits accessioned during June so that continuing reviews can note changes in the number of kits processed per ticket created (baseline 3.769) over time. The data for 225 tickets were examined and assigned to the following error categories: clarification of name, clarification of date of birth (DOB), clarification of biological sex, clarification of test order, duplicate test, mismatched paperwork, and other.

**Outcomes/Results:** An examination of the sample size ( $n = 225$ ) shows 54 cases (24.0%) of clarification of name, 43 cases (19.1%) of clarification of DOB, 49 cases (21.8%) of clarification of biological sex, 25 cases (11.1%) of clarification of test order, 21 cases (9.3%) of duplicate test, 17 cases (7.6%) of mismatched paperwork, and 16 cases (7.1%) of other. Percentages may not total 100.0% due to rounding.

**Evaluation/Conclusion:** The clarification of name ticket category appeared most frequently in the given time. The categories clarification of biological sex and clarification of DOB are the second and third most frequent, with clarification of test order immediately following. A clear indication of a patient's name, DOB, and biological sex is crucial to the identification of the patient, and thus the frequency of errors noted is perplexing. The lack of clarity in test orders presents more immediate delays to the operating procedures since the samples cannot be run until the order is confirmed by the clinic or patient. It is crucial that clinics are informed of the most frequent error categories so that they may focus on improving these problem areas moving forward. The statistics can be re-evaluated bi-weekly to identify new problem areas, provide updates on the progress of previously identified problem areas, and generally re-assess the types of errors that decrease the efficiency of the system in place.

## Internship Abstract

**Title:** Sexually Transmitted Infections: Adherence to CDC Guidelines and Potential Biases Affecting Compliance

**Name:** Cassandra Umetiti

**Preceptors:** Dr. Steven Keller & Dr. Ping-Hsin Chen

**Agency:** NJMS Nera III Program

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**Purpose:** To verify that patient's abstractions followed evidence-based adherence guidelines/proper follow-up protocol and provide insightful data for physicians and improve the quality of care for their respective patient population.

**Significance:** Currently 1 in 2 sexually active persons will contract a STI by age 25. 2. Biases such as financial, race, and age, may be related to adherence rates to proper STI treatment. In the state of New Jersey, the city of Newark is among one of the cities with the highest STD rates with a rate of 15.2 per 1,000 people.

**Method/Approach:** 195 simulated charts were obtained. These were generated by a team of medical students and Dr. Ping-Hsin Chen from New Jersey Medical School, based on actual patient metrics/demographics. Of the 195 charts, 73 were infected with at least one type of STI. 50 charts were randomly selected using a random selection generator. The 50 charts were then abstracted to determine if any biases were present that could have affected adherence to CDC guidelines. VassarStats program was used to calculate confidence intervals. A limitation to the study is that only 37% of simulated charts featured patients with STIs. This greatly decreased sample sizing and could have created instances of exaggerated or underrepresented results, particularly concerning findings of racial bias.

**Outcomes/Results:** In determining what types of bias could have influenced poor adherence rates to CDC guidelines it was discovered that financial bias may be among those. Based on insurance status, adherence rates for follow ups were 70% for those who had some insurance and 40% for those without insurance (CI=55%- 84%). Absence of follow ups may have been the result of a transportation limitation or inability to pay for services, both demonstrative of financial bias. The demographics distribution in the charts were similar to that of the city of Newark. Out of the 50 charts, only 20% of charts indicated race/ethnicity (CI=11%-33%). However, it is unlikely racial bias was present. Asian prevalence in our sample size however, differed from the model demographic. Within the study there were more asians represented than would have been within the Newark population. Further research is needed to better understand the issue of racial bias. The study suggests that younger patients receive more/better treatment with respect to STIs than older adults. (CI's= 65%-95% for ages 18-30; (21%-72%) for ages 31-45; (12%-77%) for ages 44-56; (23%-71%) for ages 56 and up. For patients whose sexual orientation information was not included could be an instance of bias. Some STDs are prevalent within certain groups. For example, according to the CDC syphilis is so common in Men who have sex with Men (MSM) that any man who has sex with men presenting with a genital ulcer should be presumptively treated for syphilis at the initial visit after syphilis and Herpes Simplex Virus tests are performed.

### **Evaluation/Conclusion:**

It is recommended that physicians provide patients with social determinants questionnaires in order to create for the most effective treatments plans. Race and Sexual Orientation should be noted as relevant information on patient charts. The CDC currently advises physicians to provide behavioral counseling to groups at high risk of STIs, however the study suggests this measure may be more beneficial as a mandate.

## Internship Abstract

**Title:** Understanding our competition and our current unmet needs

**Name:** Anita Utkin

**Preceptors:** Ashwin Vaze - Founder/President

**Agency:** Noah's Ark Compounding Pharmacy

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**Purpose:** The purpose of this is to analyze how many veterinary compounding pharmacies exist in New Jersey (and in states which serve New Jersey's clients) in order to understand our competition.

**Significance:** In the veterinary industry, many veterinary clinics are controlled by a large organization called VCA (Veterinary Centers of America). The VCA is a health system that controls and operates more than a thousand hospitals combined in the United States and Canada. Due to the fact that the Veterinary Centers of America controls and operates all of the hospitals, this means that animal clinics do not get to choose which pharmacies they use for their prescriptions. So, already, this eliminates a huge chunk of the veterinary hospital market that we can tap into. They will not be buying our services.

**Method/Approach:** The approach used to assess the prevalence of veterinary compounding pharmacies in the area of Morris County and Essex County was compiling a list of all existing veterinary clinics in the area and cold calling the offices to get more information. A total of 32 veterinary offices and clinics were included in this evaluation.

**Outcomes/Results:** Out of this number, eight of the clinics had compounding pharmacies integrated into their offices. This means that roughly one out of every four offices we called would have to say no to our services due to their standing contracts with the VCA.

**Evaluation/Conclusion:** The overall number of veterinary clinics that have pharmacies in-house ended up being much smaller than what was initially expected. Only one out of every four offices called was able to give us a hard "no". In a way, this was helpful to the business because we could cross off many clinics on our list. By eliminating veterinary clinics that already had existing contracts with pharmacies that they could not back out of, we were able to focus on clinics that would be open to hearing about our services.

## Internship Abstract

**Title:** Telehealth Methods to Treat Mental Health Disorders in the Young Adult Population in Rural America

**Name:** Shikha Vinodanandan

**Preceptors:** Direct Supervisor: Robert Garcia, MSW, MPH, Lead Health Education Specialist

**Agency:** Centers for Disease Control and Prevention

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**Purpose:** To analyze telehealth options for the rural young adult (aged 18-25) population suffering from mental health disorders.

**Significance:** About one in four Americans ages 18 or older suffer from a diagnosable mental illness each year (ADAA). The population most likely to suffer from serious mental illness is the young adult (aged 18-24) population (SAMHSA). In 2009, 62.1% of people aged 18 or older did not receive any form of treatment for their mental illness (SAMHSA). Rural populations suffer from a lack of accessibility. Remote therapeutic services have been proven to be just as effective as in-person face-to-face therapy increasing increased access to therapy (Andrews et al., 2018). This project will summarize considerations to assist policy makers and researchers in maximizing the potential for teletherapy use.

**Method/Approach:** A literature review was conducted to assess why telehealth is necessary to improve young adults' mental health, what the current telehealth options in America are, the various policies concerning telehealth, and how accessibility can be improved amongst the younger rural population. Additional assessments were drawn from various research papers, interviews with experts in the field, and audio and video resources from a range of academics, policy experts, and researchers. These sources detailed the value of teletherapy compared to in-person therapy, and how to circumvent the barriers to accessing telehealth services.

**Outcomes/Results:** Five of fifteen resources concluded that teletherapy was as effective and costly as in-person therapy. The biggest limitation in the literature was that studies varied their definitions of teletherapy. Teletherapy was the most in-demand in small rural communities as it provided anonymity to patients that were unable or unwilling to go to in-person therapy. Three resources concluded that access to teletherapy was largely impossible in rural areas due to limited internet access; internet access was a major problem for residents regardless of socioeconomic status (Anderson, 2018). An assessment of data from the Pew Research Center's Internet and American Life Project and confirmed by a rural health community expert at the CDC concluded that the younger population preferred teletherapy services that relied on texting, versus more intimate audio and video calling methods.

**Evaluation/Conclusion:** Teletherapy is an effective alternative to in-person therapy. We are seeing an increase in the attention and efforts made to expand the telehealth industry due to conditions created by COVID-19. The biggest hurdle for teletherapy is that large internet providers are blocking many small rural communities from establishing independent internet services and limiting their investment in these communities. A new initiative may be to bring teletherapy to the patient, such as a program that provides transportation to a location with a reliable internet connection. Another solution is to push legislation that allows towns to create their own wifi network.

## Internship Abstract

**Title:** Text Message Enrollment Statistic Analysis

**Name:** Aiman Waseem

**Preceptors:** Direct supervisor: Reda Arif; Assistant Manager  
Project Supervisor: Krishna; Store Manager

**Agency:** Walgreens

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**Purpose:** To increase the number of patients signed up for text message alerts such as upcoming refills and pick up reminders as well as to increase company turnover and patient adherence.

**Significance:** The text message program is a vital part of the pharmacy for two reasons. First, it ensures that patient profiles have updated contact information if an associate need to extend a phone call. Secondly, it gives patients updated text messages about their prescriptions such as issues in processing, no refills available, waiting on physician approval as well as upcoming refills. This plays a beneficial role for both the patient and the pharmacy team. Patients are kept up to date on their prescription status and do not need to wait on the phone queue for an answer. Meanwhile, team members are not bombarded with phone calls about simple questions, which place a strain on helping necessary phone calls and tending to customers. When going through system upgrades in 2019, a major issue that arose among patients was waiting in line on the phone for sometimes upwards of 40 minutes. With an associate answering phone calls for a whole shift, it takes away time from tasks at hand and customer assistance.

**Method/Approach:** This task of contacting patients for updated information is conducted via a master list generated by the computer system daily. It provides associates with 20 - 30 patients to call and ask for an updated cell phone number and explain text message enrollment and benefits. This particular task includes making the calls on the daily list provided and following up with pharmacy staff to make sure they are confirming updated phone information of patients in-store. Monitoring the weekly statistical reports gives a good measure of how much improvement was made in that week and how much more focus needs to be dedicated to the task in the upcoming week.

**Outcomes/Results:** Of the daily sample of 20 - 30 patient calls, about half resulted in successful text message enrollment. The other half usually resulted in having to leave a message or a wrong number. From the start of the monitored project, the store has gone from ranking 26th in the district to 17th in the district for most enrollments. The percentile improves on average by 1 - 3 points weekly. This project will allow customers to receive updates on their prescriptions directly to their home and with COVID-19, appeals to the senior audience immensely, avoiding unnecessary trips outside their homes.

**Evaluation/Conclusion:** The corporate company calculates the evaluation of this project weekly. The performance of the district is measured and broken down to individual stores, giving a good baseline for performance and self-measurable performance statistics. Another form of evaluation, which is immeasurable, is the decrease in the number of patient calls; although seemingly decreased over the past few weeks and months, there is no statistic or exact means to measure it.

## Internship Abstract

**Title:** Fracking and The SRL Pipeline Campaign

**Name:** Justin Yuen

**Preceptors:** Jocelyn Sawyer

**Agency:** Food & Water Action

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**Purpose:** To outreach and contact individuals in communities and organizations in New Jersey to stop the SRL pipelines and effects of fracking in New Jersey.

**Significance:** In the previous decade, the ascent of fracking and pipelines has altogether grown because of the greediness of oil companies. Perhaps one of the most serious threats posed by fracking is waste to nearby water supplies. Waste discharge can be full of harmful chemical additives like benzene and elevated levels of naturally occurring contaminants like barium and arsenic (FWW, 2018). Although fracking is not frequently seen in New Jersey, nearby states such as Pennsylvania do practice the actions of fracking which can negatively impact our environment. In our campaign, there is a huge, fracked pipeline running through Monmouth into Burlington county called the Southern Reliability Link (SRL) pipeline. This pipeline is being portrayed as a "redundancy pipeline", implying that it isn't important to address vitality issues in New Jersey. It is currently still being built, and it can represent an immense danger to our networks and water sources.

**Method/Approach:** Participants were contacted via outreach to organizations and events and inviting them to meetings on the SRL pipelines and the effects of fracking in New Jersey. Participants were emailed and contacted via ThruText, Zoom, and phone calls. They were asked to attend rallies, Zoom meetings, and Freeholder council meetings. ThruText proved to be a reliable program due to its ability to reach hundreds of individuals in a short amount of time.

**Outcomes/Results:** The SRL pipeline campaign has made moderate progress in getting people to attend meetings and to show their support. Zoom meetings had extraordinary turnouts because of the forceful methodology in reaching numerous people and organizations. Using ThruText was effective because it allowed us to contact 223 FWA members in a timely manner, thus asking them to speak against the SRL pipeline at the Burlington County Freeholder meeting. Just about 10% responded which was the expected rate. Public comments at the meetings mostly consisted of the subject about the pipeline, and the Freeholders listened to their statements. In another ThruText outreach, a total of 115 individuals were invited to a rally outside a house that was destroyed by the SRL construction. This had a 44% response rate, with 10 individuals agreeing to go to the rally and another 14 saying that they couldn't come yet would make an effort to contact Gov. Murphy asking him to stop the pipeline.

**Evaluation/Conclusion:** There has been developing numbers in individuals that are eager to help prevent these pipelines from being finished. As of late, the state Department of Environmental Protection has understood the impacts of these pipelines and suspended the gas organization's Freshwater Wetlands General Permit because of the natural threats the pipelines are causing. Despite the fact that it is hard to see prompt outcomes, it is excellent to see the DEP make brisk move during these difficult times.

## Internship Abstract

**Title:** COVID-19 Investigation and Tracking Assessment

**Name:** Kylie Woloszyn

**Preceptors:** Patricia High, Assistant Public Health Coordinator

**Agency:** Ocean County Health Department - Toms River, NJ

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**Purpose:** To interview individuals who test positive for COVID-19 to gather data and audit cases for missing information for record-keeping and tracking the spread of the virus in Ocean County, New Jersey.

**Significance:** In Ocean County, there are currently 10,471 reported cases of COVID-19. With the rapid spread of this virus throughout society, it is crucial to get an understanding of how it spreads and who is most impacted by it. Now that restrictions are being lifted and certain amenities are reopening, it is important that the tracking of the virus stay up-to-date. By tracking and investigating the spread, it will create the opportunity to gain knowledge about the virus. By educating those who have tested positive and getting in contact with the exposed, the spread can now be monitored and controlled. A major increase in linking cases allows for individuals to get the knowledge they need before spreading the virus further.

**Method/Approach:** The Communicable Disease Reporting and Surveillance System was used to identify all confirmed COVID-19 patients by the use of a Polymerase Chain Reaction test. Attempts were made to interview every positive case to obtain valuable information. Based on the information given, quarantines and isolations were recommended using the official CDC guidelines. Daily check-ins were used to track the progression of symptoms to categorize close contacts as needed. All information was recorded into CDRSS which allowed cases to be linked and important information to be documented to track the spread throughout communities. The cases were then audited to ensure they had the highest capacity of information included. If they did not, a call was remade to obtain the missing information. If commonalities of cases were found, retracing of these individual's activities would be made to find clusters or outbreaks.

**Outcomes/Results:** Of all of the confirmed cases in Ocean County, 10,066 were closed by the health department. An audit of 2,490 cases demonstrates how they can be categorized. Successful interviews have been conducted on 1,579 of these cases. Investigators found loss of contact with 467 not being reached, 213 expired before taking part in the interview process, and 43 refused to participate. This audit also allowed for missing information to be pinpointed to make each case the most complete. 107 cases were found to be only partially completed and were referred back to the investigators to obtain the missing information.

**Evaluation/Conclusion:** Although the number of confirmed cases in the County fluctuates, 96% of all reported positive cases have been investigated. This progress has allowed the community-spread to slow down to gain an understanding of how the virus moves through society before another spike occurs. If another spike were to ever reoccur, this program should be looked at again to follow as well as used as a tool to evaluate how the virus spread previously and evaluate if there was a change with the new spread. It also brings recognition to the successes and limitations of making contact with individuals. This allows an overall glance at how contact may have been lost to avoid it in the future. Ongoing monitoring of recorded positive cases and the interviewing process that goes along with it should continue to keep updated on the spread of the virus for improvement in the future.

## Internship Abstract

**Title:** Hurdles that Disabled Women Face During Pregnancy  
**Name:** Stephanie N. Zito  
**Preceptors:** Gloria Bachmann, MD, Director of Women's Health Institute  
**Agency:** Women's Health Institute - Robert Wood Johnson Medical School

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**Purpose:** To evaluate existing literature pertaining to the various difficulties that disabled women face before, during, and post-pregnancy.

**Significance:** Data suggest 1 in 4 women have a disability. Only 2% of women with a chronic physical disability are pregnant in a given year. Regarding women with disabilities who are trying to become pregnant, their initial reaction is oftentimes fear, such as how they will be judged and cared for by the healthcare team. These problems arise from prenatal care issues to labor and delivery ones, which extend through to the postpartum period.

**Method/Approach:** A comprehensive literature review was conducted to identify various hurdles that disabled women face during pregnancy. The research was split into 2 categories, physical and mental disabilities. Each article was individually reviewed and sorted according to the different types of complications expected or experienced. These categories include advance planning, clinical knowledge, socioeconomic levels, and stigma surrounding disabled women getting pregnant.

**Outcomes/Results:** Being disabled affects about 36 million women in the United States of America alone, with disability seen more often in women without economic stability. The first category focuses on the barriers that women with physical disabilities faced. Findings concluded that during pre, during, and post-pregnancy, many providers were not necessarily equipped to respond to the mother's pregnancy and disability together. Currently, healthcare providers do not have the research and extensive training to fully aid in disabled women's pregnancies. Women with disabilities are more likely to have complications depending on their preexisting medical conditions, putting them at a higher risk. The second category focuses on difficulties women with mental disabilities face during pregnancy. Women with mental disabilities are often overlooked as many appear to be physically able. The data suggest that mental health affects both the mother and the child. Further, mothers with worsening mental health throughout the pregnancy displayed worse birth outcomes and maternal experiences. Common to all disabilities, another barrier that was faced was the stigma associated with a woman with a disability getting pregnant.

**Evaluation/Conclusion:** Throughout the review, findings were limited to online resources. Women with physical and mental disabilities oftentimes had unmet needs and barriers during pregnancy that adversely affected the mother and the child. These findings suggested that an increase in knowledge and practice of maternal care for women of physical and mental disabilities among healthcare professionals should be considered. There is also a need to normalize pregnancy among women with disabilities as many are able to have a healthy pregnancy with proper care and support. For the future, further research must be conducted to address this group of women's needs in order to support progressive change in improving the care of women with disabilities throughout pregnancy.

Internship Abstract

## Capstone Projects

## Internship Abstract

**Title:** Examining the Effects of COVID-19 and Creating an Effective Emergency Plan

**Name:** Precsilla Acuria

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**Purpose:** To analyze the United States coronavirus disease (COVID-19) pandemic and create guidelines to help healthcare facilities build effective emergency preparedness plans.

**Significance:** The introduction of COVID-19 was an event clinic, nursing homes, and especially hospitals were not prepared for. In just four months there have been over 1 million COVID-19 cases worldwide and more than 5,000 COVID-19 associated deaths in the U.S. The first wave of the pandemic highlighted a number of key issues among the nation's healthcare systems putting healthcare workers and their patients at greater risk of contracting the disease. This study aims to examine better emergency outbreak plans and policies that would create a more safe, effective, and efficient environment for battling a future pandemic and containing the spread of infection.

**Method/Approach:** Data and information were gathered from various hospitals, nursing homes, and studies concerning COVID-19 and past pandemics. This information was assessed for flaws that could be improved upon. Relevant research will support an updated plan that should yield better results in detection and containment of an outbreak.

**Outcomes/Results:** The caretaking staff in nursing homes are only trained to assist with certain non-medical tasks such as feeding or clothing a patient. In the wake of COVID-19 they were not knowledgeable on the skills to recognize and contain an outbreak. Additionally, hospitals and homes faced extreme shortages in personal protective equipment that put patients and workers at risk of infection. Lack of testing and an effective reporting system made it difficult to properly track incidence and prevalence of COVID-19.

**Evaluation/Conclusion:** The Emergency Management Cycle provides good structure to build a preparedness plan. The four stages mitigation, preparedness, response, and recovery offer long term recommendations to continuously plan and ensure the best procedures are in place for emergency situations. First, training for public health emergencies should be given to all health care workers assisting patients. This is essential in ensuring the best and safest care on the frontlines. Secondly, methods for sanitizing personal protective equipment are possible and can mitigate the extreme demand in times of crisis. A reporting system is essential to properly track positive cases and outbreak trends. For viral outbreaks such as COVID-19 such a system can be resourceful. Finally, the use of telecommunications should be perfected to avoid unnecessary contact between healthcare professionals and potentially infected patients for future infectious diseases. Emergency preparedness plans should be reviewed and improved regularly as more knowledge on safety and outbreaks are available.

## Internship Abstract

**Title:** Impacts and Solutions to Medical talent acquisition and retention

**Name:** Omobolanle Adedoyin

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**Purpose:** To determine the provocations that are influencing the medical industry to retain medical experts from 2007 -2020 and ensure equality through evaluation and implementation strategy.

**Significance:** The Medical industry has been practicing talent acquisition and retention for years now. Thirty percent of the employees were retained regardless of their age, as long as their services were effective for the medical department (LaPointe, 2018). The trend has brought some questions on where the young skilled unemployed medics will go. The trend persisted for the past 13years. The Medical departments should consider the effects of poor talent acquisition and retention and make the necessary changes.

**Method/Approach:** Reviews of retention duration and how talents are acquired in the medical industry was conducted on medical experts between 26 to 60 years old who had medical experience for more than three years. Open-ended questionnaires were utilized to enable the respondents to share what they know and annual reports from the medical records which showed the duration. Reviews were obtained from a population of medics with a sample size of 500. One hundred of the samples were doctors who major in surgery, 160 were nurses from various hospitals, 170 were doctors, and other doctors which included opticians and dentists. The investigation was based upon 1) Work duration, 2) Age: (a) Gender, 3) Competitive skills: (a) Communication and (b) Unique talents

**Outcomes/Results:** From the sample size of 500 in the medical industry population the following was the outcome: fifty-five percent of the medical experts had more than 30 years working in the same hospital and department with only a difference in salary because of the competitive unique skills they offer. Thirty-five percent of the groups were men. Fifty-eight percent of the medical experts were between 55 and 60 years old indicating a long duration in the industry. Seventy percent of the medical experts proved that competitive skills in the industry resulted in retaining the employees in their respective departments. Competitive skills are associated with good communication which had forty-five percent and unique talents with fifty-five percent.

**Evaluation/Conclusion:** From the sample size (n=500), seventy percent (n=350) proved that competitive unique skills had greatly contributed to the retention of their talents rather than seeking for other talents in the medical market. Fifty-five percent (n=275) had worked for more than 30 years in the same department because of the competitive nature of their skills. The data from the sample population and reviews will help change the system of high retention by providing equality in talent acquisition and retention.

## Internship Abstract

**Title:** Child Daycare Improving Loneliness within the Elderly in Nursing Homes

**Name:** Hafsa Ahmed

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**Problem Summary:** This is a nursing home for the elderly that has a daycare for toddlers at the same location. This allows for the elderly to have the option to have something to do during the day that will occupy them while their own family members are busy throughout the day and week.

**Solution Summary:** This is an area that allows for jobs and a place for others to be taken care of. The elderly will have the proper caretakers needed and the toddlers will have not only the elderly staying at the nursing home, but daycare teachers.

**Market:** This facility targets both the elderly and parents of toddlers. The elderly who love being around children would be the main target. This facility is located in New Brunswick, New Jersey, with hopes to expand in areas throughout New Jersey.

**Competition:** Regular daycare and nursing homes would be considered competition. Although this offers a different approach to care, some may want to stay on the traditional route and have the facilities separate.

**Why us?** Young and Senior Care is able to provide housing accommodations for ten elderly. These seniors will have the chance to visit the daycare center located in the same facility. The daycare center allows for twenty children from ages two to five.

This team is led by professional caretakers who have had years of practice before them. The elderly and young children will be taken care of just like in any other facility. Nurses and Doctors will be available for the elderly at all hours. Those taking care of the children and elderly will have frequent training, as well as, before starting their jobs.

**Forecast:** Young and Senior Care is a combination of a nursing home and of a daycare. It will be more costly than a standalone daycare or nursing home. The nursing home will require \$45,000 to \$50,000 to start up. The daycare center will require an additional \$35,000 to \$40,000 to start up. All together it will require around \$80,000 to \$90,000 to start up this organization. There will be different fundraisers held throughout so that there are enough funds for the start and the future.

## Internship Abstract

**Title:** Implicit biases and how they cause racial disparities in health outcomes

**Name:** Alishbah Arsalan

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**Purpose:** To identify implicit biases based on race in the healthcare industry, their origins, their effects, and to offer solutions to ease the racial health gap.

**Significance:** Although there have been countless studies done proving the prevalence of racial discrimination in the general population, relatively few of them focus on implicit biases in healthcare settings despite its significant impact on the quality and quantity of care that many patients experience. Therefore, this area of research is impactful and can bring light to an issue that not many people are aware of. This systematic review aims to answer 2 research questions: (1) Is there evidence that healthcare providers hold implicit biases towards people of color based on their race/ethnicity? (2) Is there evidence that because of these implicit biases, healthcare professionals treat patients of color differently, and less effectively, than white patients?

**Method/Approach:** This research draws from other preexisting works on the same topic or on similar topics. All the studies that were utilized were conducted in the US except for one which was conducted in the UK. All the studies referred to in this research survey medical professionals, people studying to be medical professionals, or patients. Literature referred to in this paper was found through the Rutgers University library website using the databases provided, specifically PubMed, National Center for Biotechnology Information, ProQuest, and Access Medicine.

**Outcomes/Results:** An implicit bias is an unconscious belief or attitude held by a person that attributes specific qualities and stereotypes to a member of a social group simply because of their perceived proximity to that social group. One study mentioned in this systemic review focuses on primary care physicians and tested them for implicit biases using the Implicit Association Test and found that two-thirds of participating clinicians showed some implicit ethnic/racial bias that favored whites, even as they rejected explicit expressions of bias. As a result of this, the National Academy of Medicine conducted a study which revealed that, on average, people of color are “less likely than white people to be given appropriate cardiac care, to receive kidney dialysis or transplants, and to receive the best treatments for stroke, cancer, or AIDS” and also that people of color are likely to be “discharged earlier from the hospital than white patients—at a stage when discharge is inappropriate.”

**Evaluation/Conclusion:** Medicine and healthcare often hide behind a shield of science and act as if they allow only logic and data to influence their actions. Despite this, medical racism exists in our so-called “post-racial” world. It is important to remember that healthcare providers, just like every other person, are a product of their social environment. Many of the research facilities mentioned in this paper have tried to lessen the impact of implicit biases in healthcare. Although they have offered many solutions, few have succeeded in doing so.

## Internship Abstract

**Title:** Addressing Disparities Among LGBTQ Adolescents to Reduce Health Outcome Discrepancies

**Name:** Michelle Baksh

**Mentor:** Alwyn Dias, Professor of EJB

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**Purpose:** To investigate the disparities that exist among adolescents who identify as being part of the lesbian, gay, bisexual, transgender, and questioning (LGBTQ) community with the hopes of implementing future changes that can help reduce the discrepancies in health outcomes when compared to non-LGBTQ adolescents.

**Significance:** A 2017 Centers for Disease Control and Prevention (CDC) study was conducted on Youth Risk Behavior and concluded over 2.5 million LGBTQ adolescents surveyed experienced health disparities (CDC, 2017). These disparities include but are not limited to a higher risk of being bullied, experiencing suicidal thoughts, depression, and substance abuse when compared to non-LGBTQ adolescents. These adolescents are a substantial population to study because the health impacts carry over into adulthood and are often irreversible (UNICEF, 2016). An American Medical Association (AMA) self-administered anonymous survey of physicians (n=464) expressed disparities that exist within the medical field against the LGBTQ community, especially when discussing adolescents (Kitts, 2010). LGBTQ adolescent are subjected to added barriers which prevent optimum care and contribute to health disparities (Kitts, 2010)

**Method/Approach:** Various studies were reviewed to gather data on what health disparities were most prominent among the LGBTQ adolescent population. To gain a more in-depth scope of the issue, four main aspects of an adolescent life were investigated. The first sector focused on youths' home life. Homelife was inclusive of family dysfunction and abuse (sexual, physical, mental, or verbal). The next area approached disparities that exist within a school setting and contributed to worse health behaviors for LGBTQ youth. The third sector investigated how communities impact LGBTQ adolescent health. The last area was regarding the healthcare sector and how practitioners address the needs of adolescents who identify as being part of the LGBTQ community. It was essential to focus on multiple facets of LGBTQ adolescent's lives to ensure the most comprehensive results.

**Outcomes/Results:** The compiled result from all the studies and data sets provided evidence supporting the health disparities that exist between LGBTQ adolescents. LGBTQ adolescents are more likely to be victimized, abused, commit suicide, experience substance abuse as well as a receive stigma from healthcare and other adults in their life all contributing to worse health outcomes. By identifying the main issues, better implementation can be put in place to help remedy the problem. Policies and programs in each of the four sectors studied will be recommended. The end goal is to reduce health disparities for LGBTQ adolescents by reducing discrimination towards them.

**Evaluation/Conclusion:** Adolescents are at such a crucial developmental stage in their life, and for LGBTQ adolescence, they must deal with added stigma and health disparities. It is essential to advocate for these youths and intervene to help them. Hopefully, this will reduce the disparities within this cohort and produce better overall health outcomes, leading to longer happier and healthier lives.

## Internship Abstract

**Title:** Socioeconomic Disparities and its Effects on Healthcare Outcomes During Covid-19

**Name:** Jessica K. Barrera

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**Purpose:** To analyze and discuss in ways COVID-19 has negatively impacted healthcare outcomes in low socioeconomic communities of America.

**Significance:** During the global pandemic, Coronavirus-19 there was an increase of alarming rates and morbidity for low income communities (Serkez, 2020). In 2020, it was estimated that the United States spends 16.9% of their gross domestic product (GDP) on their healthcare system, the highest ranking healthcare expenditures compared to other industrialized countries. As of current data, the U.S has 5.08 million cases and 163K deaths, the highest number of cases compared to other countries. For low income communities that are below the poverty level are twice as likely to contract Covid-19. Low income communities faced increased deaths, infectious rates and hospitalizations. Due to lack of resources and socioeconomic factors there is an increased risk. The study aims to examine the health outcomes for low income populations during Covid-19 pandemic.

**Method/Approach:** COVID-19 has caused disadvantages for the low income population. Data was collected from reliable sources such as the Center for Disease and Control (CDC), scholarly review articles, EBSCOHost about COVID-19. With further analysis a greater evaluation was done on the threat imposed by the global pandemic of the vulnerable populations. Also discussed were implications of future improvements for the low income population.

**Outcomes/Results:** Of the data observed that 11.8 percent (38.1 million people) of the United States population were living in poverty at the time of the pandemic. Data taken suggests that of low income counties in the United States that there are 19.3 deaths per 1,000 people. Compared to 6.5 deaths per 1,000 for higher income communities (Siddiqui, 2020). The risk for a low income individual is more than one in three (35%) to be infected with Covid-19. Compared to individuals with higher income the risk of infection is about one in seven (16%) (Koma, 2020). The difference between levels of income is twice as likely to be affected by the virus.

**Evaluation/Conclusion:** The importance of the research paper is to analyze the disadvantages American communities of low socioeconomic status have faced during the COVID-19 pandemic. Socioeconomic and health disparities have caused populations to be more affected by the virus shown by the increasing mortality rates. With the increased safety measures implemented by political figures, communities of low income find more difficulty responding to the virus effectively. With increased preventive tactics and resources, communities can improve their healthcare outcomes.

## Internship Abstract

**Title:** A Safe Space for Senior Citizens; An adult day care service for elderly in need of constant monitoring and physical day-today assistance

**Name:** Sarah Brophy

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**Problem Summary:** More than 1 in 6 Americans working full-time or part-time report assisting with the care of an elderly or disabled family member. Taking care of a loved one can be exhausting especially when the individual has a family of their own. My initiative for this company comes from real life personal stories of family caregivers and the struggles they face. The problem is evident from real life scenarios, such as one caregiver stating “I have no days off because I have no relief...It's public transportation for the both of us and she now has four specialists and her primary that we go to. Grocery shopping, picking up prescriptions, financial matters and of course the daily routine of her medications and everyday chores.

**Solution Summary:** This company offers a solution to create a safe place for elderly people to engage in physical activities and provide a constant watch service to take the daily burden off of family caregivers. In addition, medical assistance to make sure they are receiving medications, physical therapy, etc.

**Market:** The target audience isn't the senior citizens themselves, but rather their caregivers, particularly the family members. For the first time in U.S. history, there are more than 50 million seniors. A survey conducted demonstrates that more than 8 out of 10 caregivers, so just over 80%, provide unpaid care for a family member. 1.4 million children ages 8 to 18 provide care for an adult relative; 72% are caring for a parent or grandparent; and 29% live with their family caregiver. The numbers clearly demonstrate that there will be a demanding audience in need of a service like this.

**Competition:** The competition is other senior service day care centers. I have done my research and seen that there are other day care centers however with every good idea there will always be competitors. I think the services provided and the way this organization works will put us above the rest. We have strict monitoring systems, we have doctors on site, we have just about every activity you can imagine. We are also running based off of membership fees paid monthly for how many days a week they will be there. While the membership fees aren't cheap, it saves a loved one from going into a nursing home where every penny of theirs is sucked away and the treatment is very negligible.

**Why Us?** A Safe Space for Senior Citizens is a service unlike the rest. This facility includes a place that provides transportation to and from the facility, physical therapy and recreational activities, games such as bingo, coloring, dancing lessons, and places for elderly to read, crochet, or engage in whatever hobby they prefer. They will be monitored every day to make sure no one escapes or gets hurt. Upon entry, each of them will put on a bracelet assigned to them with a tracker to keep track of their locations and prevent elopements. Meals will be provided for the hours they are there so the family won't have to also have the burden of making sure they are fed. There will be a variety of diets such as cardiac, diabetic, gluten free, low sodium, or whatever is necessary to meet each individual's needs.

**Expectations:** I predict this organization will blossom with many people signing up for memberships. I expect this company to really soar above competition and be a huge success in 5 or less years.

## Internship Abstract

**Title:** Intervention Proposal for Food Insecurity within Indigenous Communities

**Name:** Oluwatoyosi Busari

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**Purpose:** To analyze the outcomes of food insecurity within indigenous communities and develop a proposal to reform federal funding of the Food and Nutrition Services for American Indians.

**Significance:** Food insecurity, defined by the US Department of Agriculture as having inconsistent access to adequate foods because of limited financial and other resources (CDC,2020). The majority of Native Indians living on reservations rely on federally funded programs that administer food, such as the Food Distribution Program on Indian Reservations (FDPIR). FDPIR is funded federally through the Food and Nutrition Services (FNS). Since the early 20th century, the nutritional quality of food that the FDPIR has been distributing has decreased. Grocery stores on reservations lack healthier affordable choices and have more high sugar foods. The poverty rate on reservations is extremely high, 25% of Native Americans live in poverty (US Census, 2020). The high poverty rates make it hard for Native people to buy healthy options when grocery shopping. Reservations are commonly in food deserts, this makes it even harder to get access to food stores. Lack of nutritious foods can lead to many health complications like obesity, diabetes, and heart diseases. 33% of Indigenous people are obese. 50% of native Indian women are obese and over 40% of indigenous children under 10 classified as overweight or obese (CDC,2018). Intervention plans will be designed to better distribute federal funding of food distribution programs on Indian reservations.

**Method/Approach:** A literature review of 215 scientific papers and previous research studies were conducted to collect data. The keywords used to find the articles ranged from: food insecurity, native life on reservations, and health statistics of Native Americans. This resulted in 74 articles which were best suited for the capstone and proposal. The data was then analyzed and implemented to assist the intervention proposal.

**Outcomes/Results:** After an extensive literature review, it was concluded that the county with the highest child food insecurity rate is on a Native American reservation, Apache County's food insecurity rate is twice the national rate. Another finding was FDPIR packaged foods were not up to standards by the Healthy Eating Index. It was also found that the US has made cuts of more than a billion dollars annually from funding to programs that serve Indigenous communities. The intervention proposal aims to improve the nutritional health of Native Americans on reservations. The proposal will also familiarize the reader of the history of why indigenous natives in the US are on reservations. By using the 2019 federal budget for Native American communities as a standard the proposal will show improved suggestions on how federal money can be utilized differently. Also, it will demonstrate the potential positive outcomes the improvements can make in other areas of Native life.

**Evaluation/Conclusion:** Native American people have gone through centuries of oppression at the hands of the US government. As a result of this mistreatment, many of the tribes that still exist today have to rely on federal funding. The FDPIR does not provide adequate produce for Indigenous people and this has led to an influx of food insecurity on reservations. The funding that goes to the Food and Nutrition Services is not being properly utilized and as a result, the health of Native Americans is in jeopardy. The proposal's objective is for the US to re-evaluate their federal funding for tribal service programs so that the Native American people can continue to thrive like they once did.

## Internship Abstract

**Title:** The Importance of Cultural Training Programs for Ethnic & Racial Minorities Care

**Name:** Stephanie Castillo

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**Purpose:** To analyze how training programs in healthcare facilities affect racial/ethnic minorities healthcare experience and to propose further educational training programs to improve the care of minorities.

**Significance:** Each year, ethnic and racial minorities are the population with more and more victims dying of chronic conditions, such as diabetes, heart disease and obesity. Life expectancy gaps are mostly found in cities where a large number of ethnic and racial minorities are found, where chronic conditions largely impact minorities. Either from lack of access to care, availability of providers to lower income individuals, or cultural differences in care minorities often go unchecked for years to come. Cultural differences may cause a delay in treatment for otherwise preventable conditions and diseases. These disparities will then often cost billions of dollars in emergency medical care that can otherwise be avoided with regular medical check-ups.

**Method/Approach:** A look into preexisting works have been done to further explore the issue of minority healthcare. Research was done through library resources to find previous journal sources and studies. Research was conducted across many different journals and articles, reviewing previous research based on the same issue. Surveys given to ethnic and racial minorities have also been taken into account for the purpose of this paper. Surveys were given to thirty different people from three different counties in New Jersey. Participants were chosen from Hudson County, Union County and Essex county.

**Outcomes/Results:** Ethnic and racial minorities were found to have little to no access to medical care or were found to not have a usual source of care. Nearly 44% of African American men have some form of cardiovascular disease and 48% of women also have some form of cardiovascular disease. Ethnic and racial minorities were found to be 30% more likely than White patients to die prematurely from heart disease and two times as likely to die from a stroke. Obesity is also found to affect more minorities, with Hispanic children having the highest prevalence of obesity in the United States, with 21.9% as opposed to white children with only 14%. From survey studies participants from predominantly ethnic and racial minorities reported not being comfortable asking their doctors questions. Findings also pointed out that cultural training programs do not receive much participation from health care workers, with some training programs focusing instead on the knowledge of different cultures as opposed to how to provide care for different cultures.

**Evaluation/Conclusion:** Given research and survey results, ethnic and racial minorities lack of access is not the only obstacle faced when seeking care. Training programs oftentimes do not focus on cultural competency nor do they focus on outcome designs. Most often they have not been linked to organizational or patient support, leading to lack of participation from healthcare providers and workers. Implementing training programs for cultural competency may begin to draw in the gap between minorities and premature deaths due to chronic conditions. Cultural competency training provides healthcare providers with the correct resources to treat minorities in a way that will be beneficial to ethnic and racial minorities. Along with other training, cultural training especially in urban cities should be required.

## Internship Abstract

**Title:** Improving Health Care for Veterans

**Name:** Bayleigh Destito

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**Purpose:** To analyze the areas lacking in healthcare for military Veterans and create innovative solutions to improve the efficiency of the systems already in place.

**Significance:** There are 22 million veterans throughout the United States, with about 9 million enrolled in VA health care (Chokshi, 2014). Yet there have been enduring problems for the VA, such as lack of accessibility for Veterans in rural areas, rural women Veterans, and substantial delays in care at VA health care centers. Since there is an increasing number of veterans in the United States, the current delay and wait times prevent Veterans Affairs institutions from fully meeting the needs of current and former service members. The average waiting time - as measured from the time veterans requested that VA contact them to schedule appointments to when they were seen - at the six medical centers GAO studied ranged from 22 to 71 days. Out of the 180 veterans GAO tracked, 60 still hadn't been seen by the time the auditors ended their review last month, in several cases because VA never followed up on their requests to be contacted or because of other administrative errors (Yoder, 2016).

**Method/Approach:** Telehealth technology will be able to alleviate some of the burden VA healthcare is dealing with. Telehealth “refers to the delivery of health and mental services (e.g., provider-patient and provider-specialist interactions, diagnostics, treatment, education, consultation, information sharing, monitoring, and reminders) via telecommunication and information technology” (Choi & Sullivan, 2018). Many healthcare organizations have embraced eHealth technologies in their efforts to promote patient-centered care, increase access to services, and improve outcomes. Telehealth has been growing significantly as a cost-effective alternative for patients lacking access to face-to-face care due to barriers of geography, travel, and health-care workforce shortages all of which are areas the VA has been deficient in.

**Outcomes/Results:** Telehealth has been found amenable for patients across the life span. For example, telehealth has been successfully employed to promote maternal and newborn health in remote areas of Mongolia by connecting all 21 provincial hospitals with specialists in the National Centre for Maternal and Child Health in the capital, Ulaanbaatar (Choi & Sullivan, 2018).

**Evaluation/Conclusion:** A good way to evaluate the success of VA implementing more telehealth would be to include satisfaction surveys after all telehealth consultation in order to determine patient satisfaction.

**Title:** Transgender Health Disparities and the Resulting Financial Outcomes

**Name:** Sophia Frank

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**Purpose:** To assess barriers to receiving effective health care and the resulting outcomes amongst transgender individuals in the United States.

**Significance:** Transgender individuals in the United States have consistently reported experiencing frequent discrimination when attempting to access healthcare services. Discrimination in the form of disrespect, harassment, violence, and outright denial of service results in healthcare access and outcomes that are significantly worse than cisgender individuals of similar health (Grant & Mottet, et al. 2010). The National Transgender Discrimination Survey Report on Health and Health Care, conducted in 2010, presents key findings which include 28% of respondents admitting to postponing care when sick due to discrimination, and 50% of the sample reporting a lack of provider knowledge. Understanding the barriers that exist, which lead to a lack of proper care for transgender individuals, is the first step towards developing and implementing solutions to improve access and outcomes.

**Method/Approach:** A comprehensive review of the results of a national survey conducted on transgender experiences in healthcare. The National Transgender Discrimination Survey Report on Health and Health Care conducted by the National Center for Transgender Equality and the National Gay and Lesbian Task Force (6,456 participants) was analyzed to find the most significant areas of discrimination. Areas of discrimination were compared against the control group of cisgender individuals in healthcare. The highest areas of discrimination and the directly correlated health outcomes were then used to determine the medical field and society's total cost associated with the disparities faced by transgender individuals. Costs associated with health disparities were determined through analysis of public records indicating dollar amounts for treating HIV/AIDS, mental health, and the cost of an individual in prison.

**Outcomes/Results:** Of the sample size (n=6,456), 1,226 individuals (19%) were refused treatment based on their sexual orientation, 2,646 individuals (41%) attempted suicide, and 170 individuals (2.64%) were HIV positive. This rate of infection is four times the national average for the general population. Treating an HIV-infected person ranges from \$1,854-\$4,545/month, accounting for age, sex, race/ethnicity. Compared to the monthly cost of treating an HIV uninfected individual which ranges from \$73-\$628. Therefore, the 170 individuals from the survey cost the US healthcare system between \$3.7M and \$9.2M annually. Further, suicide attempts are indicative of extreme mental distress. In addition, 64% of local jail inmates are mentally ill. Incarcerated individuals cost approximately \$31,000 per year.

**Evaluation/Conclusion:** The United States cannot afford to continue to discriminate against transgender individuals in the healthcare arena. The resulting outcomes of prolonged discrimination cost millions of dollars annually. The distinct differences in rates of mental health disorders, HIV infection, and avoidance of medical care seen among transgender individuals compared to the general public speak to the necessity that more focus is taken to bridging the gap. Implementing better training programs for health professionals, transgender-sensitive health education and prevention programs that recognize the unique challenges that arise out of their gender identities and sexual orientations is a strong first step. Overall, understanding best practices to make transgender individuals feel safe visiting the doctor will improve outcomes in the future.

## Internship Abstract

**Title:** Trauma and Critical Care Physician and Nurse Burnout

**Name:** Caitlin Hessberger

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**Purpose:** To evaluate factors that cause health professionals to exhibit burnout and analyze healthcare organizations' techniques to combat burnout symptoms among physicians and nurses.

**Significance:** Physician and nurse burnout is a current problem due to the stressors that are present within advanced critical care and trauma care. Both positions are facing "emotional exhaustion, depersonalization, and low personal accomplishment" after only a few years of working in this specialized field of critical care (Blanchard et al. 2712). Combating and providing support to health professionals within the numerous departments within a hospital will further progress the department as well as prepare the facility for an aging population.

**Method/Approach:** Examined multiple facilities and established programs to create and develop programs that can allow for "burnout symptoms" to be decreased. Through scholarly articles and journals by the Rutgers Library database, the Journal of Critical Care, Journal of Trauma Nursing, and the National Library of Medicine (NLM) provided detailed established programs to reduce physician burnout as well as programs that did not succeed. 30 journals and articles were thoroughly examined as well as data from the U.S. Census to develop new programs that can be used within future research and healthcare facilities.

**Outcomes/Results:** 63%, 19 out of the 30 scholarly articles cohesively mentioned overworking, lack of professional development, and cynicism for the development of burnout among staff. Previously developed programs targeting team-based approach and physician support service, within these journals have exhibited lower turnover rates within the first year for physicians. At Duke University Hospital physician retention rate dropped to 12%, below the national average, and the nursing turnover rate was at its all-time low of 5% (Patlak and Levit 44). One-year measurements have been established within these organizations but to approach a solution for long term success the other 11 journals identified employee development opportunities and expressive characteristics that were linked to burnout symptoms. Approaches for measuring characteristics within the staff for depression, anxiety, suicidal thoughts have been used in previous attempts to assess and identify staff burnout. The Journal of Trauma Nursing reports within West Virginia Hospital, 25% of the participants felt distressed, useless at the job, and overwhelmed, which all belonged to the high risk of burnout symptoms.

**Evaluation/Conclusion:** The gathered research overall illustrated a connection between an imbalanced work environment and low personal development to cause burnout symptoms. Implementing staff programs and support services have reduced retention rates and enhanced work performance. There needs to be additional support within facilities to raise awareness of burnout symptoms in the current workforce as well as for future medical students and nurses. Continued and improved development of measurement tactics and implemented programs for trauma and critical care physicians and nurses will guide this workforce to a long-term solution with positive results. To evaluate the efficiency of staff support programs, surveys need to be conducted concerning depression, suicide, and other burnout symptoms.

## Internship Abstract

**Title:** Covid-19: An analysis of the disparities faced within urban and rural communities

**Name:** Naeemah Jones

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**Purpose:** To analyze the disparities heavily present in urban and rural communities as a result of the COVID-19 pandemic and to propose systematic improvements.

**Significance:** An analysis of the known and newly available statistics will be assessed in order to pinpoint the disparities faced in low socioeconomic, minority communities. This will be an effort to determine which demographics are more severely affected by the pandemic due to systematic blockages, such as lack to access to healthcare due to lack of insurance, as well as understanding the status of the quality of life being endured by individuals within these communities. This will be an attempt to alleviate the pressure on these communities through policy change, increased funding and resourceful efforts to build a supportive foundation within these communities to ensure this we are better prepared to support all Americans for the duration of this pandemic and for possible future similar situations

**Method/Approach:** In order to review these shortcomings, research in statistics regarding but not limited to the following areas will be assessed. A review of statistics in minority communities including exposure rates, risk of disease contraction, percentage of those who have faced job loss, percentage of low wage essential workers, essential workers with magnified risk working in a health care setting, as well as a review or resource availability within these communities. This includes supermarket access, medical care access, community overpopulation rates, etc., this will be an effort to better understand the conditions individuals endured during the quarantine and social distancing period of the pandemic.

**Outcomes/Results:** COVID-19 has helped highlight many shortcomings, more specifically the disparities in low socioeconomic communities made up of a predominantly minority individuals. The socioeconomically disadvantaged have suffered the most during this crisis and its due to heightened exposure rates, a population riddled with underlying health conditions, limited healthcare access and little to no financial support. African Americans and Latino populations have the highest COVID-19 related mortality rates, their communities also have a lack of proper funding to give access to health care facilities. The prolonged duration of the pandemic's effects means a continuous rise in unemployment rates which in turn will only widen the gap of social inequality.

**Evaluation/Conclusion:** The spread of SARS-CoV-2 resulted in a worldwide pandemic, also known as coronavirus 2019 (Covid-19). This pandemic has revealed many health disparities faced by different races/ethnicities in different geographic locations and gives us the opportunity to address these inequalities as they are highlighted. The pandemic resulted in a stay at home order and the loss of many jobs. For so long there has been a gap in our healthcare system as well as in the available resources offered to lower socioeconomic communities. By bringing light to these disparities in context of the recent pandemic we can bring awareness to these preexisting disparities and understand the severity to which they have been exacerbated under the conditions of Covid-19.

**Capstone Abstract**

**Title:** ICE Detainment Of Non-Violent Immigrants Poses a Public Health Threat to Society

**Name:** Crysti J. Hoyos

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**Purpose:** To analyze and bring awareness to the human rights violations that have been occurring in ICE detainment facilities which directly impacts the physical, mental and emotional health of over 40,000 individuals.

**Significance:** U.S. Immigration and Customs Enforcement (ICE) deports thousands of people each year through a system in which abuse is frequent and oversight is nonexistent. By failing to either regulate ICE or hold it accountable for abuse, the U.S. Federal Government is violating the human rights of detainees; there have been over 400 allegations of sexual assault or abuse, inadequate medical care, regular hunger strikes, frequent use of solitary confinement, more than 800 instances of physical force against detainees, nearly 20,000 grievances filed by detainees, and at least 29 fatalities (this includes children), with seven suicides (USA today, 2019).

**Method/Approach:** Testimonials and statistics were analyzed. The testimonials of four individuals were explored to illustrate the physical and psychological abuse that they personally experienced as well as witnessed in the facilities in which they were being held; several of the detainees were held in various detention centers across the country. Data from 2010 and 2017 were analyzed to obtain a clear understanding of the frequency of sexual abuse in ICE detention facilities. Also, data from 2003 to 2017 were collected in order to understand the medical neglect experienced by detainees.

**Outcomes/Results:** There have been over 1200 reports of sexual abuse in Immigration Detention Facilities between 2010 and 2017, half of those accused were workers for ICE (The Intercept, 2018). This shows a clear pattern of neglect and mistreatment towards detainees in these detention facilities. Unfortunately, this number is only a rough estimate as most sexual cases are not reported. Data from 2003 to 2017 showed that there were 185 deaths of detainees while in ICE facilities due to medical neglect (Fialho, 2018). Reports reveal systemic failures such as unreasonable delays in care and unqualified medical staff. Ensuring that detainees are responsibly taken care of and ensuring that their lives aren't put at risk while waiting to be deported is a basic human right.

**Evaluation/Conclusion:** Based on these findings it is crucial that action is taken against ICE and their detention facilities because they are clearly violating human rights and have neglected individuals and their livelihoods for an unacceptable amount of time. Next steps should include advocating for the re-evaluation of the entire agency and looking into other methods that do not involve keeping people captive while having to deal with lack of medical care, abuse, food shortages amongst other violations; all of these issues clearly show a public health crisis for thousands of detainees across the United States.

**Title:** Covid-19: An analysis of the disparities faced within urban and rural communities

**Name:** Naeemah Jones

---

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**Significance:** An analysis of the known and newly available statistics will be assessed in order to pinpoint the disparities faced in low socioeconomic, minority communities. This will be an effort to determine which demographics are more severely affected by the pandemic due to systematic blockages, such as lack to access to healthcare due to lack of insurance, as well as understanding the status of the quality of life being endured by individuals within these communities. This will be an attempt to alleviate the pressure on these communities through policy change, increased funding and resourceful efforts to build a supportive foundation within these communities to ensure this we are better prepared to support all Americans for the duration of this pandemic and for possible future similar situations

**Method/Approach:** In order to review these shortcomings, research in statistics regarding but not limited to the following areas will be assessed. A review of statistics in minority communities including exposure rates, risk of disease contraction, percentage of those who have faced job loss, percentage of low wage essential workers, essential workers with magnified risk working in a health care setting, as well as a review or resource availability within these communities. This includes supermarket access, medical care access, community overpopulation rates, etc., this will be an effort to better understand the conditions individuals endured during the quarantine and social distancing period of the pandemic.

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**Evaluation/Conclusion:** The spread of SARS-CoV-2 resulted in a worldwide pandemic, also known as coronavirus 2019 (Covid-19). This pandemic has revealed many health disparities faced by different races/ethnicities in different geographic locations and gives us the opportunity to address these inequalities as they are highlighted. The pandemic resulted in a stay at home order and the loss of many jobs. For so long there has been a gap in our healthcare system as well as in the available resources offered to lower socioeconomic communities. By bringing light to these disparities in context of the recent pandemic we can bring awareness to these preexisting disparities and understand the severity to which they have been exacerbated under the conditions of Covid-19.

**Title:** An Analysis of the International Health Regulations

**Name:** John Kosinski

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**Purpose:** To analyze the International Health Regulations and what needs to be done to make them more effective.

**Significance:** As the world's population continues to grow, there will be an increase of densely populated living areas, an increase in international travel, and an increase in human and animal contact. This increase in the population will also contribute to the rising carbon emissions and heating of the planet. All of these factors create a breeding ground for new and emerging infectious diseases to appear in the future, which will cause great damage if the world is unprepared, especially those with chronic illnesses, with about  $\frac{1}{3}$  of every adult suffering from chronic illnesses. The International Health Regulations (IHR) are a set of rules and agreements enforced by the World Health Organization (WHO) which obligates to strengthen and maintain the capacity to detect, report, and respond rapidly to the public health risks of international concern; to respond to requests for verification of information about potential public health emergencies; to assess international health risks and notify the WHO promptly of these risks; to carry out inspections and control activities at points of entry; to implement the appropriate measures by the WHO (2012). The main issue with the IHR is that there isn't a strong enough enforcement policy along with a lack of funding for states of lower economic standing, leaving a large amount of room for error.

**Method/Approach:** There were multiple different approaches to this study, first being identifying past regulations and the evolution of the current IHR compared to what it is now. After that, research was done on what kind of risk factors are created due to a weak set of IHR, along with the serious threat it creates to those with chronic illnesses and the world's economy. The first main study used for this research was one conducted on IHR implementation and barriers at a popular Point of Entry (POE), Julius Nyerere International Airport (JNIA), In Tanzania in order to distinguish the challenges faced by POE countries that are a part of the IHR agreement. The next study was done on the validity of countries' self-reported surveillances of emerging infectious diseases. Personal questionnaires on IHR implementation were taken from over 100 countries in 2016-17 and used.

**Outcomes/Results:** The results from the study done by Bakari and Frumence showed that a handful of issues were faced by JNIA employees including limited access to health information, lack of adequate budget allocation for emergencies, lack of training and orientation to health workers, and a shortage of financial resources and laboratory networks. The second study, from Edelstein et al. on the validity of IHR reporting showed low HDI countries had a higher risk (3.59) of having bad disease control outcomes than those with a high ranking (4.71). It also showed that countries with middle-weak healthcare workforces had a 2 two times risk of having negative disease outcomes.

**Evaluation/Conclusion:** Overall, correlations between countries of lower economic standing, lower surveillance, and health outcomes were observed as well as barriers to implementing the IHR. The PROSPER protocol for managing disease outbreaks is one of the many successful options as it can be implemented in sophisticated or even limited access health care systems. In order to fix this issue, better funding and education sources need to be implemented, as well as more strict regulations that involve monetary and trade sanctions to promote compliance from all.

## Internship Abstract

**Title:** Disparities in Maternal Healthcare: The Black Women

**Name:** Giniel Lewis

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**Purpose:** To analyze why Black women experience disparities within maternal healthcare compared to other ethnic groups and to then further establish/research key initiatives that address the disparities.

**Significance:** The American healthcare system is overwhelmed with disparities disproportionately impacting Black women. The causes of disparities Black women endure are related to provider/patient relationships, provider bias and discrimination, social inequities, and the mistrust within the healthcare system. Black women in America are three to four times more likely to die from childbirth when compared to non-Hispanic white women (Rimar). Black women also experience higher rates of unintended pregnancies than all other racial groups (Black women's Maternal Health). Also, 75% of all Black women give birth at hospitals that serve predominantly black populations and the hospitals that predominantly serve Black women have higher rates of maternal complications than other hospitals (Amutah-Onukagha, 2020). Within these hospitals, Black women have higher rates for maternal complications than other hospitals. There is a need for new solutions to assist in eliminating the unequal burdens Black women face in healthcare. Efforts focused on existing solutions and policy formation can strengthen the healthcare system while eradicating the disparities.

**Method/Approach:** To begin exploring the issue, a systematic review of the relationships between the experiences of biasness, structural racial discrimination, and the lack of access to quality healthcare during pregnancy among Black women. The literature research included studies published from July 2007 in the American Journal of Maternal Child Nursing (MCN), Maternal and Child Health Journal, the American Journal of Perinatology, and the Academic Search Premier databases. We evaluated the articles and journals based on the aspect that the authors investigated, which included the association with racial disparities, structural racism, the lack of health insurance, and the lack of quality healthcare experienced by Black women that lead to maternal complication. We concluded researchers should continue to work in this area and develop key initiatives and study on developing more effective study designs and samples.

**Outcomes/Results:** Black women in America deserve to have a safe and healthy pregnancy. Growing research suggests the quality of health care, from preconception through postpartum care is critical in improving outcomes for Black women. A bigger involvement from policy makers, communities, and healthcare workers can help lessen the disparities Black women experience in America. Policy makers, communities, and healthcare workers can come together to improve Black women's maternal health. In order to improve Black women's health outcomes, the social determinants of health need to be addressed nationally and policies should be in place to expand and maintain access to healthcare. There should also be more protection for pregnant workers and a bigger investment in healthcare safety and quality improvement initiatives.

**Evaluation/Conclusion:**

Systematic changes that start with healthcare improvements and the accessibility of care for Black women from preconception to postpartum and inter-pregnancy care is required to reduce the disparities in severe maternal morbidity and mortality rates.

## Internship Abstract

**Title:** How COVID is affecting the mental and physical health of healthcare workers

**Name:** Rozeta Lickollari

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**Purpose:** To analyze the mental and physical health of the healthcare workers dealing with COVID-19 in New Jersey hospitals, in order to improve the self-care for this population and their families.

**Significance:** COVID-19 a global pandemic, also known as the coronavirus disease, has made a tremendous impact since it was first reported in December of 2019. Currently, there is no cure or vaccine to treat the disease and millions of people worldwide have already contracted the virus. New Jersey has had almost 200,000 positive cases, with over 135,000 recoveries (CDC,2020). Even though there has been a drastic change in the numbers decreasing since June of 2020, one thing that has not changed is the commitment of healthcare workers helping patients fight off the virus. Many of them have dedicated all of their time to helping those in need, by putting themselves in danger every day and going days without seeing their families. Hence, it is extremely vital to provide a safe environment for the healthcare workers, so they as well feel safe going to work without worrying about contracting the virus and bringing it home to their families.

**Method:** A survey was distributed among healthcare workers at the Robert Wood Johnson Hospital in New Brunswick and also Hackensack Hospital in Hackensack, New Jersey. Twenty healthcare workers have successfully completed the survey. The survey included questions on whether or not the healthcare workers have worked at the hospital throughout the pandemic. Other questions asked, whether or not their stress levels increased or decreased, as well as, whether or not the healthcare workers have been feeling less/more tired at their job amid Covid-19.

**Outcomes/Results:** Out of the 20 participants, 15 of them were female and five were male, with ages ranging from <25, 25-35 years old, 36-45 years old and >45 years old. All of them responded that they had worked at the hospital for the past six months. Nineteen of the participants answered that their stress levels have been higher during the pandemic. Among that seventeen of the participants, answered that they have been feeling more tired than usual. Six out of the 20 participants answered that they have slept less, four answered that they have slept more and ten of them answered that they have slept about the same number of hours as before the pandemic.

**Evaluation/Conclusion:** Ninety-five percent of the participants that completed the survey agreed that their stress levels have increased during the pandemic, as well as eighty-five reported being more physically tired than usual. These findings suggest that many of the healthcare workers have been mentally and physically affected by COVID due to overworking themselves. Stress can lead to many other mental illnesses such as depression and exhaustion at work. Measures must be taken in order to help the healthcare workers to not feel stressed coming into work every day. Hospitals should keep these individuals in a safe environment by implementing better Covid regulations. Many more PPE (personal protective equipment) and sanitizing products should be available at the hospital. The hospitals also should provide free therapy sessions for those healthcare workers who have to deal with Covid patients every day and provide at least one paid day off for everyone working at the hospital so many of them can relax and enjoy time with their families.

## Internship Abstract

**Title:** Medical Racism in Modern Medicine

**Name:** Maisha Mahjebin

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**Purpose:** To analyze the severity of racism in America's healthcare that has negatively affected African American's and the Black communities health and wellbeing.

**Significance:** A 2016 study revealed that half of medical trainees believe Black people have thicker skin or less sensitive nerve endings than white people, so they cannot feel pain the same way as other races (Sabin, 2020). With this many medical students believing these myths, Black people are left mistreated which has been an ongoing issue due to institutional racism in society. Lee, et al. (2019) found that compared to white patients, Black patients were 40% less likely to receive medication to ease acute pain. There are so many reports of the medical mistreatment of Black people, yet they fail to disclose the structural and medical racism that allows this mistreatment to exist. This evidence indicates that these myths and beliefs are a holdover from the days of slavery and institutions are not taking racism into consideration when training and teaching medical students.

**Method/Approach:** A comprehensive review of the mistreatment of Black individuals in healthcare and medicine conducted through Association of American Medical Colleges, the CDC, data collected from medical schools, and the Journal of the National Medical Association. They were used to analyze and find the most significant areas of racism and discrimination amongst Black people. Areas of discrimination were compared against the control group of White people in healthcare. Information collected through these articles and experiments were used to determine the direct correlated health outcomes, such as the mistreatment and racial and ethnic disparities in healthcare, pregnancy-related deaths or complications, and how slavery plays a role in medical racism.

**Outcomes/Results:** 50% of medical students coincidentally believe that Black people don't feel pain the same way as other races. Half of white medical trainees believe such myths as black people have thicker skin or less sensitive nerve endings than white people. Pregnancy-related deaths per 100,000 live births for Black women was four to five times as high as it was for white women and the risk of death for black babies is double that of white, Asian, and Hispanic babies. In American emergency rooms which included 7,070 white patients and 3,125 black patients, compared to white patients, Black patients were 40% less likely to receive medication to ease acute pain and Black patients were 34% less likely to receive opioids for their acute pain.

**Evaluation/Conclusion:** It is important to discuss and become knowledgeable of the structural, institutional, and medical racism that exists and has existed for centuries in this country. Black people need to be heard, medical schools and universities need to implement classes to inform students of the truth of the history of this country and bring awareness to America's lack of healthcare towards African American's and Black people. There seems to be many gaps in research as reports claim the disparities that exist but fail to mention the systemic factors that contribute to the disparate outcomes we observe. It feeds into the narrative that Black people are inherently "broken" and forgoes an opportunity to put the onus on the true culprit of these inequities: racism.

## Internship Abstract

**Title:** Bullying

**Name:** Jelissa Marquez

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**Purpose:** The purpose of this analysis is to comprehend some of the impact's adolescents undergo or endure, and how they may lead to the likelihood of becoming a bully.

**Significance:** Bullying affects many adolescents every day, making it a significant public health problem in the U.S. and internationally. Significant negative consequences that bullies, and victims could face in a short or long-term period of their life due to this issue needs to be addressed properly. "The lower the adolescent's levels of life and family satisfaction, the more likely he or she will develop bullying behaviors, since parental communication, social isolation, and classmate relationships are similarly related to bullying (Spriggs, Iannotti, Nansel & Haynie, 2007)."

**Method/Approach:** For this research, data was used from the Health Behavior in School-Aged Children (HBSC) Codebook. This codebook was used for a cross national survey method, and focused on results of the United States survey conducted during the aforementioned year. It utilized a three-stage stratified design, with census divisions and grades as strata, and school districts as the primary sampling units. The objective is providing researchers with pertinent information so understandings and explanations about health attitudes and behaviours through early adolescence, can be developed.

**Outcomes/Results:** The data suggested a strong association that adolescents who received strong support from their family relationships, are more likely to not engage in bully actions. The table demonstrates that twenty-two percent of adolescents reporting bully actions six or more times stated having no contact with family, compared to eight percent who reported no bully actions.

**Evaluation/Conclusion:** To conclude, the research analysis determined that further research is needed to find what makes an individual engage in bullying actions. The first step in a future research could be to test a third and fourth variable to validate both hypotheses. For example, exploring how the variable of family income as another independent variable can allow us to gain insight about the reason for some individuals to engage in bullying actions. This research could also include additional interventional strategies for schools and parents to prevent and mediate in childhood bullying.

## Internship Abstract

**Title:** Nkunim Memorial Hospital; Bridging the Gap Between Healthcare System

**Name:** Manuella Mensah

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**Problem Summary:** There are approximately 107 health care facilities in the Greater Accra and Central Region of Ghana. Combined these regions have a resident population total of 7,661,375. Due to recent government initiatives, Ghana is experiencing an influence of expatriates from all around the World. In both of these regions, there is only 1 tertiary level hospital, Korle-Bu Teaching Hospital, which is government owned and has 1,200 beds. Here-in lies the problem; another facility is needed to better serve the increasing population.

**Solution Summary:** Establish a tertiary hospital within these regions to provide a higher quality of specialized care.

**Market:** The target market for this facility are the affluent residents, the upper to middle middle class citizens, and the expatriates that visit the country.

**Competition: Why Us?** Compared to Korle- Bu Teaching Hospital, Nkunim is a modern state of the art hospital equipped with cutting edge technology. Due to the diversity of the Board, Nkunim is able to offer Doctors Without Borders- esque approach to teaching. Employing healthcare professionals with different specialties and from different countries to come in a train our in house staff to ensure that the techniques used are comparable to those of the outside world. Nkunim is founded and operated by talented and highly educated children of the diaspora who combine their knowledge with passion and respect for Ghana, their motherland.

**Expectations:** To offer quality care that exceeds that of Korle Bu and become the premier choice of the Ghanaian people along the Southern coast. Eventually, be able to expand to add fully functional medical and pharmacy schools along with other healthcare professions.

## Internship Abstract

**Title:** Examining the Effects of Implicit Bias on Physician Decision Making

**Name:** Jesutomisola Onafowokan

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**Purpose:** To analyze the impact of implicit bias amongst adult healthcare providers and propose strategies to reduce its influence.

**Significance:** Health disparities are a major concern in the United States healthcare system. Uneven access, poor quality, and at times nonexistent care are experienced by racial minorities. This paper focuses on the potential for unconscious bias to play a role in this issue. In its 2003 report, *Unequal Treatment*, the Institute of Medicine concluded that unrecognized bias against members of a social group, such as racial or ethnic minorities, may affect communication or the care offered to those individuals. Implicit bias can affect physicians' perceptions and decisions, creating racial disparities in medical treatments. The goal of this paper is to investigate the presence of implicit bias in healthcare settings, identify mechanisms in which the bias operates and provide quality improvement interventions that may eliminate implicit bias and its effects on health disparities.

**Method/Approach:** A comprehensive literature study was done of the databases Google Scholar, PsychINFO, Medline, and PubMed to capture studies investigating unconscious bias. Studies were included if they assessed unconscious bias in a healthcare setting, and the study population was patients and healthcare providers. Information extracted included the citation, purpose of the study, study design, study site and location, sampling strategy, response rate, sample size and characteristics, measurement of independent and dependent variables, analyses performed, and results and findings.

**Outcomes/Results:** Evidence suggests that physicians make biased decisions that lead to health disparities. Studies show that physicians had more negative implicit attitudes toward Blacks than toward Whites and stronger stereotypes of Blacks as uncooperative patients. Hispanics and African Americans were almost two times as likely to document problems when speaking with their providers, 14 times more likely to admit that they would receive better health care if they were a different race, and almost two times as likely to feel that they had been treated with a lack of respect during their recent health care visit (Collins et al., 2002). The National Academy of Medicine (NAM) reported that minority persons are less likely than white persons to be given appropriate cardiac care, to receive kidney dialysis or transplants, and to receive the best treatments for stroke, cancer, or AIDS.

**Evaluation/Conclusion:** To deliver culturally competent care, providers must be aware of their own cultural standards and biases while understanding that patients may have different cultural standards and biases. Major improvements that address disparities and improve health equity are needed in the national healthcare system. Interventions for physicians should completely implement basic measures to promote better communication: interpreters, translation services, and so forth. Medical schools should get physicians to see a patient as an individual rather than as a stereotyped member of a group, helping patients become more engaged with their treatment and fostering patients' sense of being. All clinicians and personnel interacting with patients should also receive this training to be better attuned to their biases and equipped with skills and tactics to address them.

## Internship Abstract

**Title:** Widening Disparities In Unemployment as a Public Health Priority.

**Name:** Shyam Patel

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**Purpose:** The purpose of this abstract is to highlight the impacts of COVID-19 unemployment among minority groups and generate priorities to solve these disparities.

**Significance:** The rise of COVID-19 virus in the United States has caused 48 states to declare emergency. The total death toll from the virus is set to rise past 150,000. Amid national shortages of healthcare resources, those of low income, particularly people of color, face disproportionate mortality. Mortality rates have been consistently higher in minority populations. Case report information listed on The Center for Disease Control website shows that Hispanic people made up 30% of all cases despite being 15% of the population. Similarly, hospital rates and disease severity were significantly higher than non-white Hispanic counterparts. Similarly, Hispanic people have faced higher rates of unemployment. After March 2020's economic downturn, Hispanic people have shown to face higher rates of unemployment. Unemployed individuals may or may not be eligible for unemployment benefits or have not yet received, causing low-income individuals to experience financial hardship or eviction.

**Method/Approach:** Research was sought through Google Scholar by using key words "coronavirus unemployment disparities". Google Scholar was chosen over other databases because it was able to search through up to date material, even from the current month. Results were then chosen based on the purpose of the abstract, and any clinical outcomes articles were excluded. Housing security and mental illness or trauma found to be related to the economic fallout of COVID-19 but were referenced to demonstrate the significance of experiencing loss of income. Additionally, unemployment rates found at the Bureau of Labor Statistics website were extracted to produce graphs and empirical evidence.

**Outcomes/Results:** The Bureau of Labor statistics shows the largest increase in national unemployment among Hispanic men and women of working age. Unemployed individuals were counted as those who were willing and able to work but could not meet full employment due to situations in the market. Mass layoffs in almost all industries caused unemployment rates to peak at 16.7% and 18.9% for Black and Hispanic Americans, Respectively. However, in June 2020, Unemployment was still at 15% and 14% for Blacks and Hispanics, compared to 10% for white workers. The reported data showed a widening of existing economic disparities between Black or Hispanic workers and White workers.

**Evaluation/Conclusion:** Employers, public health agencies, and state departments all can play different roles in bridging gaps in disparities. The BLS must maintain the accuracy of its data and means of collection during the pandemic. Public health agencies can work with cities to provide information on applying for unemployment insurance or renter's protection in different languages and formats. This can also include options for low-cost internet access, which can boost one's chances of finding work and steady income. The workplace can incorporate training on discrimination and bias, so that employees are able to recognize unfair practices. The state or city government can extend renter's protection already in place through the CARES act, which currently covers 12.3 million rental units, many of which are multifamily rentals. The CDC can also offer technical training to workers in heavily impacted industries such as meat processing, nursing homes, and agriculture.

## Internship Abstract

**Title:** At-Home Culinary Intervention to Promote Food Literacy in Adolescents

**Name:** Dominique Ricks

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**Purpose:** To create an at-home culinary intervention that will encourage social distancing for middle-school-aged adolescents (10-14 years old) and provide food literacy and life skills from September 2020 to November 2020.

**Significance:** As of July 8, 2020, according to the Centers for Disease Control and Prevention, there are as many as 2,982,900 total Coronavirus cases across the United States. In Pennsylvania, there have been a total of 96,817 confirmed cases. The Coronavirus outbreak has generated educational disruptions, such as traditional classroom learning being forced to continue online. Developing an at-home food education program will allow the students of the hands-on, in-person classes to continue to be able to improve their food education and life skills while also promoting social distancing. A food safety education computer program, discussed in the Journal of Food Science Education, was successful in raising middle-school-aged students' food safety knowledge. This web-based approach could be used to explore if the same results would be seen in the at-home intervention.

**Method/Approach:** After reviewing literature about the necessity of food education for adolescents, it is apparent that food education programs will need to adapt to meet the guidelines set in place by stay-at-home orders in order for students to continue to participate in the programs safely. Originally in Vetri Community Partnership's Eatiquette 360 (EAT360) program, students were taught by nutrition educators on the use of whole foods and whole ingredients in a classroom environment. To ensure that students are safely improving their food education, an at-home intervention could be implemented. This will minimize interactions between students and instructors, which will decrease their chances of contracting Coronavirus. The new program will deliver food literacy kits directly to the participants. The modified intervention will be introduced to a sample audience of thirty participants to measure the effectiveness of the program.

**Outcomes/Results:** Food kits will be designed by the nutrition educators who previously taught in the classrooms. Team members and volunteers would aid in the packaging of the food kits, as well as the delivery of the kits. Packages will include the necessary ingredients, tools, and instructions for the nutrition lesson. At home, students, with the aid of family members, can follow the lesson. If there is access to the internet in the home, the families can log into a virtual classroom that would offer visual aid for the nutrition lessons provided in the food packages. For students who lack the connectivity to access the virtual classroom, the nutrition lessons can be completed without internet access. The food packages will include worksheets of what will be discussed in the virtual classrooms.

**Evaluation/Conclusion:** To evaluate the success of this project, past participation rates can be compared to the participation rates of the new program. If the participation rate is the same or greater than previous student turnouts, the new program may be one that VCP can continue to offer, even after the fall season. Participants will also be surveyed after the completion of their nutrition lessons. Feedback can be valuable in determining where the program is successful and where the program could stand to improve. Pre- and post-tests can be distributed to students to evaluate if their nutrition knowledge is increasing after the completion of the nutrition lessons. The tests will serve the purpose of proving whether or not the students are gaining and retaining nutritional knowledge from the new program.

## Internship Abstract

**Title:** Racial Disparities in Patient Satisfaction and Cultural Competency Trainings in Hospital Settings

**Name:** Elizabeth Ruehle

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**Purpose:** To analyze the potential differences between African American and Caucasian patient satisfaction ratings in hospitals with and without Cultural Competency Trainings.

**Significance:** Healthcare is an important factor in the lives of all humans, and with over 6,000 hospitals in the United States, and the Emergency Medical Treatment and Labor Act, anyone can benefit from the services provided by these departments. Despite the availability of these resources, historical healthcare practices and experiments have created a deep mistrust in the healthcare system for African Americans, leading them to either avoid seeking medical attention, or to avoid confiding in certain doctors. Bowie and Howard, et al. (2017) found that black men reported higher levels of mistrust than white men, 2.7 to 2.4. African Americans also have worse rates of mortality and illness than white Americans. Studies indicate that having doctors who are culturally competent would allow for more honest conversations, less bias, and an overall better medical experience and outcomes for African Americans.

**Method/Approach:** Several pieces of literature were studied in order to determine the need for and effectiveness of the implementation of cultural competency trainings in healthcare settings. Statistics from the National Health Interview Survey of 2017 were used to determine the importance of having a healthcare provider who were able to relate to or understand their culture. This study aims to analyze the number of patients whose needs regarding cultural competency are being or not being met. Statistics from several studies were used to determine the effectiveness of Cultural Competency Trainings in a hospital setting. Questions regarding patient satisfaction and history of these trainings were used to determine if patient satisfaction ratings of African American patients increased because of these trainings.

**Outcomes/Results:** Despite the lack of diversity in the race of healthcare providers, studies have shown that any doctor would be valued as long as they are able to communicate through listening and providing information and earn their patients' trust. Research has also been performed showing that doctors and other healthcare providers might be racial biased against their African American patients leading to further mistrust within the healthcare field. The current studies regarding patient satisfaction ratings and the utilization of cultural competency trainings are scarce, however, it has been found that these trainings do increase the satisfaction ratings of both African American and Caucasian patients.

**Evaluation/Conclusion:** Healthcare providers that are looking to improve their patient satisfaction ratings would benefit from ensuring their staff is diverse both racially and culturally. These providers should also take part in cultural competency trainings which include analyzing case studies, holding discussions, role play, community panels, and debates to teach cultural diversity.

## Internship Abstract

**Title:** Racial Discrimination Creating Health Inequities for Blacks in America

**Name:** Ifath Sadath

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**Purpose:** To study and analyze how the effects of racial discrimination in American healthcare settings results in health inequities for Blacks and propose solutions to bridge the disparities' gap

**Significance:** Structural racism in the United States originated from white supremacy doctrine, which was used to justify mass oppression through slavery and stripping of human rights. This mass oppression heavily involved economic and political exploitation (Hardeman et al., 2016). History has played a crucial role in the formation of the systems in place today; the same systems, such as medical and educational ones, that keep mass oppression alive thereby supporting racial discrimination as an existing and detrimental health disparity. In fact, half of white medical students and residents in 2016 held false beliefs about biologic differences between black and white people, one being that Blacks feel less pain. Implicit bias is fairly common in all fields however, when they create health inequities it's important to clarify.

**Method/Approach:** A thorough literature analysis on the existence of health inequities and effects of racial discrimination in American healthcare settings, using data from The New England Journal of Medicine, American universities, and the Central Jersey Family Health Consortium. These data were collected to highlight systemic medical discrimination faced by the Hispanic and Black populations in America, compared to their white counterparts. Some specific areas to focus discrepancies on in healthcare are pregnancy related issues in Black women and their infant health, mortality rates, pain misconceptions, racist assumptions and stereotypes when diagnosing, and inadequate care leading to health inequities in America.

**Outcomes/Results:** Black individuals are discriminated more than Hispanic individuals and are often adversely treated compared to their white counterparts. More healthcare professionals believe that Black individuals genuinely feel less pain and therefore apply stereotypes to such. In Central New Jersey, the fetal death rate between 2013 and 2015 was six deaths per 1,000 live births and fetal deaths. However, the fetal death rate varies dramatically by race/ethnicity. Whites experience the lowest fetal death rates (4.4 per 1,000 births) while blacks experience the highest rates (13.1 per 1,000 births), approximately 3 times more. In 2011–2014, non-Hispanic black men and women were the most likely to have hypertension compared with adults in the other racial and ethnic groups. Blacks have higher rates of diabetes, hypertension, and heart disease than other groups, and black children have a 500% higher death rate from asthma compared with white children.

**Evaluation/Conclusion:** Highlighting systemic racism in healthcare settings is absolutely crucial in the first step of bridging the gap of such a major disparity in America. Training the next generations of healthcare professionals to explicitly acknowledge history, and implicit bias melded into the system itself is necessary to bring an end to health inequities. Historical and cultural competency requirements create active awareness of systemic racism. More community-based primary prevention centers need to be organized to target specific neighborhoods thereby investing in communities of need.

## Internship Abstract

**Title:** Health Disparities Among the Latino/Hispanic Population and the Improvement of Health Literacy

**Name:** Julio Sanchez

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**Purpose:** To analyze health disparities and its contributing factors to the physical health of the Latino/Hispanic community and by improving health literacy amongst that population.

**Significance:** Statistics have proven that the Latino/Hispanic population face many health-related issues due to the disparities they face. Studies conducted by Calvo (2015) have confirmed that Spanish speaking immigrants have a higher risk of negative health outcomes due to low levels of health literacy. Lower levels of health literacy and education in this community has been linked to higher prevalence rates in mental health issues, diabetes, stroke, heart disease, and even HIV. Researchers such as Amirehsani, K. A. (2010) have stated that health disparities and health care barriers are contributing factors to many health-related issues. It is important for nurses and healthcare providers to understand these barriers and help them overcome them for all future patients.

**Method/Approach:** By using the Rutgers Library and Google Scholar databases studies conducted by Calvo, Soto, and Amirehsani all primarily focused on the barriers leading to the health disparities of this population. Barriers like education, lack of health literacy, and socioeconomic status have been linked as contributing factors to many health-related issues of this population. Research began with health disparities as a whole and has narrowed down to the importance of health literacy among the Hispanic/Latino population.

**Outcomes/Results:** Studies have concluded that individuals with higher levels of education and health literacy have a significant increase in life expectancy by 10 to 12 years (Soto Mas, F., & Jacobson, H. E. 2019). Many health disparities have been solved and corrected but additional research has identified that there are still gaps that need to be improved on. These gaps are results of lack of health literacy and lack of self-awareness of one's own health decisions. In order to help remove these barriers and better the livelihood of the Latino/Hispanic community, health literature must be improved in these communities to better educate this population. Studies conducted by Soto Mas, F., & Jacobson, H. E. (2019) has proven that strengthening health literacy not only improves public health but also helps people navigate self-health sustaining resources and action to seek help.

**Evaluation/Conclusion:** Research has shown that by providing better educational programs, improving health literacy, and by providing infographic visuals, the general public health of the Hispanic/Latino community will improve which also improves the health of the general population by providing these resources to all non-white minorities. Implementing and allowing these programs to be accessible for all that live in the United States can improve the health of the public and reduce numbers in many of the health-related issues the general public faces today.

## Internship Abstract

**Title:** The Quality of Care's Disparities among Health Facilities

**Name:** Jia Sun

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**Purpose:** To use medical data and patients' experiences to examine how the hospital itself will influence the quality of care and improve quality to reduce the government's annual expenditures and extend life expectancy in the United States.

**Significance:** The death toll for COVID-19 varies in each state. The death rate in Pennsylvania is over 6.7% from the confirmed cases, but in North Carolina, it is 1.7 percent. The prominent contrasts reveal that the problem exists in the quality of care within each hospital setting. Several participants claimed that the same illness had a different recovery period. One patient interviewed claimed that the same hospital had made multiple errors. The AHRQ report shows the state value benchmark in NJ about 41 measures achieved 50% to 90% of the state value benchmark, and 17 measures have not yet reached half of its benchmark. Thirty percent out of the ten respondents point out clinical and administrative irresponsibility had to delay their access to care.

**Method/Approach:** The sampling methods used were selective sampling and heterogeneity sampling. The two methods were not non-probability, the intention was to include different demographics to examine whether it has any effect on the project. The questionnaire consisted of open-ended questions and a scores-based survey regarding participants' most remarkable or recent visits to the hospital. After receiving the data, the lowest and highest scored facilities were then reexamined online. The participants were encouraged to describe every event that occurred within the hospital, if applicable, how long it took for their illness to recover. Lastly, evidenced-based research were analyzed and used to support the proposal.

**Outcomes/Results:** The total ten participants include both males and females aged from 24 to 81. One (10%) individual claimed they had encountered delay treatment at the same hospital at least once. Three (30%) claimed that the same illness experienced was diagnosed differently and had a prolonged recovery time at one facility. Four (40%) participants said physicians' attitude plays a role in how the population can receive better care. Some physicians engage with them and inform them about health behaviors, while others just gave them prescriptions.

**Evaluation/Conclusion:** The problem with the quality of care not entirely achievable is due to the various structures in each hospital. Enhancing the overall quality begins with ensuring all hospitals achieve the benchmark measures in both clinical and administration. Furthermore, reducing physician burden granted physicians additional time with patients. A hospital with negative measures affects patients' health outcomes and brings down the overall quality of care and increases national expenditure.