

Boston University School of Public Health

Student Practicum Abstracts

Fall 2013

BUSPH STUDENT PRACTICA FALL 2013

The BUSPH Office of Public Health Practice is pleased to present the Fall 2013 Student Practicum Abstract Book featuring students' practicum experiences. Our office would like to congratulate this semester's practicum students for their accomplishments and express our appreciation to the agencies and organizations for their commitment to the BUSPH practicum program and for providing our students with valuable, hands-on public health experience.

Where in the world were BUSPH summer practicum students?

21 Cities and Towns

7 States across the U.S.

14 Countries

Brazil

Cameroon

Ecuador

Ethiopia

Guatemala

India

Nicaragua

Nigeria

Pakistan

Peru

Rwanda

Switzerland

Uganda

Zambia

TABLE OF CONTENTS

Biostatistics	7
Environmental Health	9
Epidemiology	11
Health Law, Bioethics & Human Rights	21
Health Policy & Management	23
International Health	29
Maternal & Child Health	43
Social & Behavioral Sciences	49
Index (by student)	57
Index (by organization)	61

Name: Ambia, Tabassum

Practicum Site: Brigham and Women's Hospital - Department of Biostatistics

Location: Boston, MA

Title: Statistical Programming Intern

Introduction: The Statistical Programming internship at Cubist Pharmaceuticals, Inc. supports activities within the Statistical Programming department. Cubist Pharmaceuticals is conducting several clinical trials comparing new drugs to the existing ones and this practicum involved the use of different statistical software including SAS, to provide programming support to analyze and interpret clinical trials data. Primary focus of the internship was to obtain practical experience in data analysis and to gain knowledge about clinical trials.

Methods: I reviewed complex clinical trials datasets, slides describing phases of clinical trials, protocol summaries and Statistical Analysis Plan (SAP) to obtain knowledge about the ongoing trial and data analysis. I checked the previously entered data and matched to the original database to ensure Quality Control. I performed some simple statistical programming with SAS along with several other software and prepared medical reports comparing the treatment options on outcomes in a trial.

Results/Outcomes: I became familiarized with large industrial clinical trials datasets, assisted senior programmers with QC and validation of data, learned how to use different statistical software to analyze data and present medical reports and obtained ideas about Statistical Analysis Plans (SAPs) and the various phases of clinical trials.

Name: Ambia, Tabassum

Practicum Site: Brigham and Women's Hospital - Men's Health, Aging and Metabolism Research Unit

Location: Boston, MA

Title: Intern- Research Trainee

Introduction: The Department of Men's Health, Aging and Metabolism at Brigham and Women's Hospital evaluates the effect of Testosterone on physical and sexual function, muscle strength, metabolism, cardiovascular risks and pain perception. This unit designs and conducts clinical trials intended to gain further medical knowledge. Trials at this unit often involve exercise physiology, Testosterone supplementation, nutritional supplementation, new drugs etc. Primary focus of my practicum was to have a real life exposure to the conduct of clinical trials - to learn how to coordinate a clinical trial.

Methods: In order to obtain knowledge about the conduct of clinical trials, at first I read the Standard Operating Procedures (SOPs) at the Men's Health, Aging and Metabolism Unit. I went over several protocol summaries of ongoing trials and also trials which required IRB approval. I checked the previously entered data of an ongoing trial and matched to the records in the binders to find errors, and thus performed the data Quality Control. I also observed the regulatory submission procedures, submission of amendments to update previously submitted information on the IRB website, prepared and maintained regulatory binders.

Results/Outcomes: I obtained ideas about methods of conduct at different phases of a trial. I learned and performed Quality Control and Double Quality Control of data entry - tracked 12.58% error in the online database. I also became familiar with study protocols, IRB submission procedures and regulatory activities.

Name: Ngo, Taylor

Practicum Site: Boston Medical Center - Department of Radiation Oncology

Location: Boston, MA

Title: Socioeconomic Disparities in Prostate and Breast Cancer Mortality, and in Time from Prostate Cancer Diagnosis to Definitive Treatment

Introduction: Prostate and breast cancers are the most commonly diagnosed cancers and the second leading cause of cancer death in the US. Disparities between socioeconomic groups in cancer diagnosis, treatment, and mortality still exist and are well documented in the literature. The purpose of this project is to examine the impact of socioeconomic status on mortality in patients diagnosed with prostate and breast cancers, and on treatment delays in patients diagnosed with prostate cancer at Boston Medical Center between August 2004 and October 2011.

Methods: The practicum responsibilities included compiling several data sets, creating derived variables, planning, performing statistical analyses, generating appropriate tables and figures, and writing the materials/methods section for manuscripts. I used logistic and linear regression analyses to identify factors (age, race, marital status, stage at diagnosis, primary language, insurance type, and average household income) related to mortality and treatment delays in cancer patients. This work resulted in three abstracts and two pending publications.

Results/Outcomes: Prostate cancer mortality was significantly decreased in patients who spoke Haitian Creole, and increased in patients who were single. Breast cancer mortality was significantly increased in patients who were single. Treatment delay was significantly increased in Blacks, Spanish speaking patients, single patients, and patients of other marital status (neither single nor married). The results of this project shed light into the drivers of disparity in cancer care and further help future efforts in improving patient outcomes.

BIOSTATISTICS

Name: Shrivastava, Aryendra
Practicum Site: Life Science Nation
Location: Boston, MA
Title: Intern

Introduction: Life Science Nation (LSN), is a premiere sourcing platform for market intelligence and prospect pipeline development in the life science arena. LSN enables life science professionals to generate a list of qualified global targets that are a fit for their company's products, services, and fundraising efforts. The ability to generate these Global Target Lists (GTLs) makes life science professionals more effective and efficient.

Methods: As a research intern, I was involved with unique grass-roots data-gathering process and a two-tier data-validation procedure to collect current and accurate information on these life science organizations, including their company profile, management team, product pipeline, licensing opportunities, financing rounds, and deals. Current investment mandates are included for investor organizations.

Results/Outcomes: Built and constantly updated LSN platform to provide a productivity tool that provides deep insight into target markets, top-tier accounts, and global business opportunities and helps clients earn a measurable Revenue of interest [jmm1] on their marketing investment. With the sequester taking full effect and the research facilities going financially dry, LSN can provide a good platform to assist such facilities in acquiring funds.

ENVIRONMENTAL HEALTH

Name: Dighe, Shruti Girish

Practicum Site: Indian Council of Medical Research - Department of Immunology and Research

Location: Mumbai, India

Title: Research Assistant

Introduction: As per the WHO, India is a Malaria endemic region. ICMR, is the apical Medical research body in India, that receives funding from the central government and supports medical research related to diseases like malaria among others. The primary objective of this practicum project was to determine how malaria affected the immune and hematological systems.

Methods: 100 diagnosed malaria cases that attended the fever clinic between May to August 2013 were recruited. A questionnaire enquiring name, address, age, sex, previous medical history, medications and symptoms was administered. Two blood samples were collected. The first sample was analyzed for hemoglobin level (Hb), total leucocyte count (TLC) and platelet count (PC). These were compared to 100 blood bank normal controls. The second sample was analyzed for immune markers: IL10 (pg/ml) and TNF alpha (pg/ml). I entered the data into excel; performed summary statistics and preliminary analyses using Excel 2010 and SAS 9.3.

Results/Outcomes: Of the 100 patients, 66 males and 34 females. Mean age= 37.76years. The blood work from the patient samples revealed; mean Hb=10.66 ±2.39, median Hb= 10.8; mean TLC= 25,051; mean platelets=83,978. While the control blood samples showed; mean Hb=14.43±1.21, median Hb=14.4; mean TLC= 6488.7; mean platelets= 2,56,978. The immune panel was expensive; hence we only have cases data. Mean IL10 was 18.16, median=5 pg/ml and TNF alpha mean =20.29, median= 8 pg/ml. Our results demonstrate anemia ($p<0.001$), thrombocytopenia ($p<0.001$) and leukocytosis ($p=0.005$) in cases. ICMR has the data stored for further analysis to be used in future projects.

Name: Haley, Corrie

Practicum Site: Green Healthy Homes Initiative

Location: Providence, RI, USA

Title: Intern

Introduction: The Green & Healthy Homes Initiative aligns and coordinates federal and philanthropic investments in weatherization, energy efficiency, health and safety to provide integrated delivery of services to Rhode Island's families in need. State and federal agencies, and community-based organizations enforce policies, implement programs, and collect data related to household energy consumption, health, and safety. Although a common goal exists for the agencies, little collaboration currently occurs.

Methods: In order to better integrate and leverage resources between these agencies and organizations, a Statewide Alliance was developed. Over 12 weeks, six key informant interviews were conducted with state agencies and housing organizations regarding current resources, housing needs, and future goals for housing focusing on low-income communities to determine the best infrastructure of the Alliance. A steering committee was established and the mission, vision and values statements, as well as the bylaws and organizational structure, were developed.

Results/Outcomes: At the completion of my practicum, the "Rhode Island Alliance for Healthy Homes (RIAHH) Community Forum" was held and >100 stakeholders in housing, health and energy attended. The forum instigated dialogue around housing issues and encouraged participation in the Alliance. By connecting stakeholders and providing a framework, the RIAHH is launching in January 2014. RIAHH provides an avenue for collaboration to: 1) develop workforce resources and training; 2) examine gaps in housing legislation; 3) compile data for a statewide database; 4) analyze and recommend improvements on housing systems; and 5) develop a communication platform for all stakeholders.

Name: Kennedy, Erin

Practicum Site: Cambridge Public Health Department - Environmental Health Division

Location: Cambridge, MA, USA

Title: Cyclist Commuter Air Quality Study

Introduction: The Cambridge Public Health Department collaborated with community volunteers to measure nitrogen dioxide (NO₂) on cyclist commuter routes throughout the city. NO₂ is a component of traffic exhaust that can contribute to cardiopulmonary disease and aggravate asthma symptoms. Information about where cyclists may be exposed to relatively high levels of traffic pollutants can guide strategies for exposure reduction.

Methods: Community volunteers carried mobile sensors that collect geocoded data to measure NO₂ on their usual commuting routes. Follow-up testing of the sensors revealed that they did not take accurate readings of absolute NO₂ concentrations. We were unable to identify commuting routes or streets and intersections where cyclists may be exposed to high levels of NO₂ because of this limitation. The sensors did accurately document the relative NO₂ levels within each commuter route. I am using ArcGIS to map these relative data. I am also mapping data from the city's bike count and information about existing bike facilities throughout Cambridge.

Results/Outcomes: Community volunteers were critical to this study. An important outcome of my practicum will be a summary of the study and maps of the commuter routes to provide for the community participants. The project will not be able to provide cyclists in Cambridge with information about areas of high and low NO₂ concentrations because of instrumentation difficulties. Similar studies have demonstrated that cyclists in urban communities can reduce their exposure to traffic pollutants by decreasing their proximity to traffic and choosing neighborhood streets over busier roads.

ENVIRONMENTAL HEALTH

Name: Pillai, Hari Krishnan

Practicum Site: Boston University School of Public Health - Department of Environmental Health

Location: Boston, MA, USA

Title: Research Assistant Assessing In-Vitro Toxicity of Emerging Flame Retardants

Introduction: Since California passed TB117 in 1975, mandating the degree of flame resistance for foam furniture, there has been a surge in the manufacture of flame retardants chemicals. Until 2004, the most common class of flame-retardants used were polybrominated-diphenyl-ethers, but owing to their adverse health effects, their use has declined. As a result, use of alternative flame retardants, is on the rise. Firemaster550, one such proprietary flame retardant, is now in widespread use, has been shown to be present in house dust, and has been shown to induce obesity and cause early puberty in rats. Obesity is a rapidly rising epidemic in the United States and focus is now shifting from traditional causative agents towards environmental toxicants. These environmental obesogens modify the normal controls which maintain lipid homeostasis. The transcription factor PPAR γ is one such factor that is essential for differentiation and function of fat cells. The primary goal of our project was to assess the effects of Firemaster550 and its components on PPAR γ .

Methods: Firemaster550 and its components were assessed for the ability to activate PPAR γ in reporter assays. Effects on adipocyte and osteoblast differentiation were assessed in primary mouse bone marrow cultures.

Results/Outcomes: Organophosphate components of Firemaster550 significantly activated PPAR γ transcriptional activity in-vitro, stimulated adipogenesis (lipid accumulation, perilipin expression) and inhibited osteogenesis (alkaline phosphatase activity, calcium deposition). Results from these studies suggest that emerging flame retardants are a source of environmental obesogens. Given widespread human exposure, further studies are warranted to investigate health effects of Firemaster550.

Name: Scatena, Nicole

Practicum Site: Smith & Wesson

Location: Springfield, MA, USA

Title: Environmental Health and Safety Intern

Introduction: Occupational safety and health programs focus on protecting the health and welfare of workers by providing a safe working environment. As an EH&S intern for a manufacturer of firearms, I participated in updating and executing a health and safety program in an industrial environment. The purpose of this practicum is to conduct a gap assessment of an existing Hazard Communication Program (“HCP”) against the required elements of the new Globally Harmonized System (“GHS”), the Final Rule of the Occupational Safety & Health Administration’s Hazard Communication Standard, 29 CFR 1910.1200 (“HCS 2012”) and to assist in implementing and executing measures to achieve compliance with the new HCS 2012 requirements.

Methods: Activities to support this effort include 1) updating the existing HCP that implements the Globally Harmonized System of Classification and Labeling of Chemicals for the United States; 2) implementing requirements of the HCP on the floor, communicating program requirements with managers and providing recommendations to ensure compliance moving forward; 3) obtaining updated supplier Safety Data Sheets (“SDSs”) in a form compliant with HCS 2012, that correspond with the current chemical inventory; and 4) developing an HCS 2012 training presentation to meet the December 1, 2013 employee training deadline.

Results/Outcomes: Updated electronic version of the HCP available to all employees; updated and re-organized SDS binder and chemical inventory; HCP compliance summary and recommendations for the managers’ review; HCS 2012 PowerPoint presentation that includes examples of GHS classifications and pictograms for employee training.

Name: Bajracharya, Smriti

Practicum Site: Boston University School of Public Health - Department of Epidemiology

Location: Boston, Massachusetts, USA

Title: Graduate Research Assistant

Introduction: Kick It For Good (KIFG) project, a clinical-trial funded by the NIH/NCI, investigated whether Boston Public Housing (our intervention site) residents trained as Tobacco Treatment Advocates (TTAs) can increase (1) existing smoking cessation programs' utilization, and (2) smoking cessation rates among smokers in public housing. The project's aim reduce the burden of smoking-related morbidity and mortality among low-income Boston Public Housing residents suits my interest of applying epidemiological methods to design valid scientific public health interventions.

Methods: I administered follow-up interviews at 3, 7 and 12 months, performed a descriptive data analysis at baseline by using SAS, and assessed the intervention visit tapes for fidelity to protocol and Motivational Interviewing principles. Lastly, I prepared transcripts for approximately a dozen intervention audio tapes (pilot) to prepare for a potential qualitative analysis in future.

Results/Outcomes: While majority of both intervention and control group did not have previous nicotine replacement therapy (NRT) products experience, nicotine patch use was more common among those who did. Overall, the NRT products use were almost three-times as prevalent as non-NRT quit medications at baseline. Past use heavily influenced knowledge and attitude toward NRTs and could potentially play a role in utilizing them for their future quit attempts. These findings led to subsequent project of assessing knowledge and attitude towards products among smokers through in-depth qualitative data analysis of motivational interview audio tapes in Fall 2013. At the end of the semester, my hope is to produce a manuscript to share the findings with broader public health community.

Name: Brandeburg, Christina

Practicum Site: Orange County Department of Health - Public Health Nursing

Location: Goshen, New York, USA

Title: 2013 Orange County Community Health Assessment Survey Analysis

Introduction: Every four years, the New York State Department of Health requires each county to publish a comprehensive Community Health Assessment (CHA). As an integral part of the CHA process, the Orange County Department of Health (OCDH) surveys residents directly to determine health status, identify health priorities and local health needs in the County. For the 2013 CHA, an online-based survey was developed to help prioritize resources and address the most pressing needs of the community.

Methods: The CHA 2013 survey was developed using survey questions from the previous CHA. A literature search was completed to obtain supplemental survey questions to address topics such as physical activity, nutrition and chronic disease management. The survey was created in both English and Spanish and distributed using the online SurveyMonkey tool between April 2013 and July 2013. Data analysis was completed using Excel and results were compiled for the November publication.

Results/Outcomes: A total of 1,479 Orange County residents completed the CHA 2013 survey. The survey was representative of Orange County demographics in regards to age and race but significantly overrepresented females (75% vs. 50%). Using the BMI metric, 32% of respondents are obese compared to only 6.6% who perceived their weight category as obese. Nearly 60% of surveyed residents reported that they have not been advised by their provider to lose weight. Results from this survey will be utilized by OCDH, local hospitals, health centers and community organizations to target programs addressing the county's gaps in services and identified health problems.

Name: Buckley, Mary

Practicum Site: Boston University School of Public Health - Center for Global Health and Development

Location: Boston, Massachusetts, USA

Title: Student Researcher for a Systematic Review

Introduction: HIV-exposed, uninfected (HEU) children are those born to HIV-infected mothers but are, themselves, not HIV-infected. This population has not been investigated in great depth but has become a public health focus in the era of antiretroviral therapy where strategies to prevent transmission of the virus from mother-to-child are effective and HIV-positive women are giving birth to HEU children. Currently, there is no systematic review summarizing the literature on this population. We sought to conduct a literature review in order to identify health outcomes and immunologic characteristics of HEU children as compared to HIV-unexposed, uninfected peers.

Methods: Electronic databases and academic conference websites were identified and search terms developed to compile a comprehensive list of citations. Inclusion and exclusion criteria were specified and two student researchers are screening all citations by title and abstract to determine articles for inclusion in a second screening. Inclusion/exclusion decisions are made independently and a third reviewer resolves any disagreements on citations. A second review of full-text articles identified from the initial screen will determine the final number of studies from which data will be extracted.

Results/Outcomes: 2099 citations were identified and uploaded into an electronic reference manager. To date, 1050 abstracts have been reviewed, of which 116 (10.6%) met the inclusion criteria, 47 (4.5%) are considered conflicts to be resolved by the third reviewer, and the remaining 887 (84.4%) have been excluded. The completion of this review is intended to provide the basis for a grant application to fund study the HEU infant population in greater depth.

EPIDEMIOLOGY

Name: Butler, Jessica

Practicum Site: Isabela Oceanographic Institute

Location: Puerto Villamil, Galapagos, Ecuador

Title: Needs Assessment and Community Outreach Practicum

Introduction: The Isabela Oceanographic Institute is an organization that is dedicated to promoting community development through education, social development and public health works. The goals of my practicum included assessing the burden of disease on the island of Isabela and promoting healthy behaviors through education and outreach projects.

Methods: This practicum involved completion of a community health assessment through data collection and analysis of the prevalent diseases on the island. Outreach projects focused largely on nutrition interventions, as metabolic disorders are evident and problematic on Isabela.

Interventions included working with cooks at the local preschools to implement weekly meal plans and improve dietary behaviors. Sustainability of health behaviors was a main goal of the practicum and was promoted through educational workshops focusing on pertinent health topics.

Workshops were taught weekly to different groups of community members with the goal of educational diffusion throughout the population.

Results/Outcomes: Respiratory infections and diarrheal infections were the most common health problems found on the island of Isabela, with a prevalence of 20.6% and 3.19% respectively over an 8 month period. This is likely due to poor hygiene and inadequate water sanitation. Among chronic diseases, high blood pressure (2.35% prevalence) and diabetes (0.80% prevalence) were present among individuals. The nutrition intervention and educational projects were well received and are currently being continued. IOI is preparing to open a community health center to serve the inhabitants of the island. The community health assessment completed during this practicum will facilitate the planning and implementation of the center.

Name: Chung, Seyoung

Practicum Site: Center for Future Technologies in Cancer Care - Clinical Needs Assessment Core

Location: Boston, Massachusetts, USA

Title: Cancer Research Assistant

Introduction: Biomedical engineers often develop a new technology based on what they think would make cancer prevention care better without accurately assessing the existing barriers. The purpose of my practicum was to assess the unmet needs in cancer prevention care at urban hospitals and primary care providers' preferences for using point-of-care technology to inform biomedical engineers.

Methods: My responsibilities included performing background literature review on existing cancer barriers, designing an online survey, preparing IRB documents, developing networks with the community health centers in Boston, and performing data analysis. To date, I have successfully completed the literature review, designed the survey, and obtained IRB approval. The survey is scheduled to launch soon.

Results/Outcomes: The primary outcome from this project will be a final project. The first part will summarize the results from the literature review and include information on patient-, physician-, and system-level barriers to providing cancer care to underserved populations. The second part will summarize the survey results and include information on primary care physicians' preferences in using point-of-care cancer screening technology and what they see as the greatest advantages of using such technology in their practice. The final report will be used for future RFAs to help biomedical engineers to develop new point-of-care technologies to address and bring solutions to the existing barriers in cancer care.

Name: Coleman, Christina

Practicum Site: Slone Epidemiology Center

Location: Boston, Massachusetts, USA

Title: Data Analyst – Pregnancy Health Interview Study (PHIS)

Introduction: Asthma and allergy are the most common indications for prescription medication use during pregnancy. However, little is known about the effects of asthma and asthma medications on fetal development and birth outcomes. Data from an on-going case-control study about pregnancy and birth defects is being utilized to assess the safety and risk of asthma and asthma medication use during pregnancy.

Methods: Mothers from 5 geographical regions in the U.S. are interviewed within 6 months of delivery. The interview includes specific questions regarding maternal asthma history and level of control. Other questions focus on maternal timing of exposure to asthma medications. Medical records are reviewed to confirm the presence (a case) or absence (control) of a birth defect. Birth defects are coded according to an internal coding system. SAS was used for preliminary statistical analysis. Frequency distributions for both outcomes and exposures were generated including birth defect classes, asthma medication categories and specific asthma medications. 2x2 tables for malformations and exposure to asthma as well as first trimester use of short and long acting beta agonists were created. Crude OR's were calculated by logistic regression for first trimester exposure to short and long acting beta agonists for 41 birth defect classes.

Results/Outcomes: Results were presented at an advisory committee meeting. Since these results are preliminary and considered confidential by the committee they cannot be presented at this time. Adjusted OR's will be presented when calculated.

Name: Feeney, Kristin

Practicum Site: Harvard Medical School - C. Michael Gibson, MS, MD, Professor of Medicine

Location: Boston, Massachusetts, USA

Title: Data Analyst - Allocation of Healthcare Spending by Pharmaceutical Companies

Introduction: C. Michael Gibson, M.S., M.D. is an interventional cardiologist, cardiovascular researcher and educator who pioneered the field of quantitative coronary angiographic analysis. Gibson has over 25 years of experience as a Senior Investigator leading phase 1-4 clinical trials, and cardiology megatrials of over 15,000 patients that eventuate in publications in the New England Journal of Medicine and FDA approval.

Methods: I worked directly with Dr. Gibson as a data analyst investigating hypothesis surrounding discrepancies across states in allocation of healthcare spending by pharmaceutical companies. Healthcare spending was ascertained through publically reported physician payments records as mandated by the Physician Payments Sunshine Act and maintained by the Centers for Medicare & Medicaid Services. We specifically investigated three hypotheses: 1. There are significant discrepancies across states in the distribution of healthcare expenditures by pharmaceutical companies. 2. Greater expenditures on dissemination and delivery of knowledge (meals and speaking) are associated with greater Medicaid / Medicare expenditures. 3. Greater expenditures are associated with lower adjusted mortality when adjusted for state and other covariates such as age and median income. I was responsible for using SAS 9.3 to conduct overall data management of 52 state/US-territory specific databases with names/addresses of physicians along with each individual physician's spending allocations for meals, speaking, research/consulting.

Results/Outcomes: I successfully merged all 52 databases into SAS, created new reporting variables, and developed regression analysis models specific to the hypothesis under investigation. My statistical analysis will be used in the submission of a manuscript to an academic journal.

Name: Florea, Ana

Practicum Site: Massachusetts Health and Relationships Project MassHARP

Location: Boston, Massachusetts, USA

Title: Assistant Researcher at MassHARP

Introduction: MassHARP aims to look at how the dynamics of marriage impact health in various areas, including health behaviors at home, how spouses care for one another during illness and injury, and how health care providers involve spouses in one another's health care. The goal of the study is to investigate how being in a marital relationship shapes health through in-depth interviews on the health experiences of long-term gay, lesbian, and heterosexual married couples in the state of Massachusetts. The purpose of this practicum was to help with the recruitment of such couples and start examining interview data as the study moved on to the analysis phase of the project.

Methods: As a research assistant: 1.) I went to the Vital Records office to collect data for recruitment, which was also facilitated through neighborhood fliering and contact with community and neighborhood groups; 2.) I transcribed interviews and checked transcripts for accuracy; 3.) I collected socio-demographic data and other important variables (e.g. age, race, relationship duration, income, education, children, major illnesses, occupation, BMI, self-rated health) from the in-depth interview transcripts; and 4.) I maintained the online presence of the study through Facebook, Twitter, and Craigslist.

Results/Outcomes: Long-term gay, lesbian, and heterosexual couples in Boston, ages 40-60, married for at least seven years were recruited and interviewed this summer, thus adding to the couples the study recruited in 2012. The interviews were transcribed and socio-demographic data was collected. However, due to the on-going nature of the MassHARP project, couples are still being recruited and interviewed and so there are no final qualitative results for the project.

Name: Forman, Leah

Practicum Site: Boston Medical Center - Children's HealthWatch

Location: Boston, Massachusetts, USA

Title: Research assistant

Introduction: The PEP study is a continuing longitudinal study of a cohort of 150 primarily African American urban youth recruited with their mothers at birth from 1990-1993 to examine the effects of intrauterine drug exposure on children's physical, neurocognitive, and behavioral development. Data has been continuously collected on subjects approximately once every 2 years. The study is currently interviewing the children, who are now 21+ years old.

Methods: I worked with the study data to conduct a research project on the effects of longitudinal food insecurity on BMI. Using SAS and archived datasets, I pulled together food security data from ages 8 to 18. Last known BMIs were included for each subject, and were matched to CDC guidelines for age and gender weight percentiles. I considered a few different methods for quantifying food insecurity, including: number of times food insecure, changes in food insecurity status, and percentage of time food insecure.

Results/Outcomes: I ran chi-square and regression models with BMI z-score as the outcome, and food insecurity measurements as the main predictor. I also included a number of covariates from the rest of the study data, including, but not limited to: maternal BMI, pre-natal cocaine exposure, ethnicity, and sex. Of these covariates, only maternal BMI was found to be significantly associated with last known BMI. My analysis, however, had some important limitations. The most significant of which is its small sample size, which was further exacerbated by missing data. More research on longitudinal food insecurity is needed.

EPIDEMIOLOGY

Name: Gordon, Natalie

Practicum Site: Boston University School of Dental Medicine - Department of General Dentistry

Location: Boston, Massachusetts, USA

Title: Student Research Assistant

Introduction: Sudden cardiac arrest is the leading cause of death in adults over 40. Recent studies suggest oral inflammatory factors may predict underlying arrhythmias that can lead to sudden cardiac death. However, it is unclear which indicators of oral inflammation best predict underlying arrhythmias. Therefore, the purpose of my practicum conducted in the School of Dental Medicine was to summarize all oral inflammatory indicators into a single composite score to better predict acute cardiac death.

Methods: Exam and interview data from NHANES III was used to create a dataset containing all variables with known associations with cardiovascular disease and arrhythmias such as age, BMI, physical activity, family history etc. Dental inflammation variables from NHANES include decay, gingival bleeding, retained roots, periodontitis, P.Gingivalis and A. Actinomycetemcomitans antibody status for each tooth surface, summary variables for endentulism and overall oral condition. The presence of each these oral inflammatory indicators were used to create categorical and dichotomous variables. The variables were regressed against cardiovascular death using a logistic model. Significant dental predictors were then used and weighted to create a single composite oral inflammation score.

Results/Outcomes: Cross-sectional analysis using the composite oral inflammation score to determine the association with long and short QT interval arrhythmia will be performed. Additional analysis will test whether the increases in the composite score increase the risk for sudden cardiac death. We aim to identify a well-defined, modifiable measure for predicting risk of acute cardiac deaths.

Name: Hariharan, Praveen

Practicum Site: Massachusetts General Hospital - Department of Emergency Medicine

Location: Boston, Massachusetts, USA

Title: Research Fellow

Introduction: Electrocardiographic (ECG) changes may be seen in patients with pulmonary embolism (PE) who have associated right heart strain. Whether these ECG findings are predictive of short-term clinical adverse events after PE is less well known.

Methods: We prospectively enrolled a consecutive sample of patients diagnosed with acute PE in the Emergency Department from October 2008 to December 2011. Patients were eligible if they were 18 years old and had an imaging test confirming PE. We collected ECG's on all PE patients at the time of enrollment. ECG patterns were interpreted by the study investigators and scored according to clinical patterns. Our primary outcome was evidence of right heart strain on echocardiogram or CT pulmonary angiography (CTPA), or myocardial necrosis based on a troponin-t ≥ 0.1 . We derived an ECG risk score, and compared this score to the performance of a previously published score.

Results/Outcomes: We enrolled 298 patients with PE. Of these, 147 (51%) were males, 261 (90%) were white. The mean age was 59 years. ECG data was available in 290 subjects. Right heart strain was noted in 146 (50%) subjects. On multivariate analysis, S wave in lead I (OR-2.0; 95% CI 1.1-3.5), tachycardia (OR-2.5; 95%CI 1.3-4.8) and T wave inversion in lead I-III (OR-4.7; 95%CI 1.7-13.2) were associated with right heart strain. Test characteristics for primary outcome with our ECG score (2 points): sensitivity 39% (95% CI: 31%-47%), specificity 84% (95% CI: 77%-90%), NPV 58% (95% CI: 51%-64%) and PPV 71% (95% CI: 60%-81%).

Name: Huang, Qian

Practicum Site: Boston Children's Hospital - Informatics Program

Location: Boston, Massachusetts, USA

Title: Work-Study Internship

Introduction: HealthMap is a freely accessible, automated electronic disease surveillance system that brings disparate data sources together to achieve a unified and comprehensive view

Methods: I worked primarily as an informatics intern and curated the collected news alerts to train the computer. I also corrected some old data in the system that remained uncategorized, especially the alerts of H1N1. Furthermore, I helped to develop Chinese dictionary for the system to better search and target the meaningful news sources from CDC news and mass media news in China.

Results/Outcomes: HealthMap's Chinese feeds database is better organized and the system is able to target the meaningful news more accurately due to the improvement of the Chinese dictionary. From the collected news alerts, study could be conducted to investigate the cause and risk factor of infectious diseases.

Name: Kponee, Kale
Practicum Site: Riverst State University of Science and Technology
Location: Port Harcourt, Rivers State, Nigeria
Title: Exposure to highly contaminated drinking water in a rural Nigerian village

Introduction: In 2011, the United Nations Environment Programme (UNEP) reported findings from its study of petroleum hydrocarbon contamination in the Ogoniland region of Nigeria where frequent and massive oil spills have destroyed vast areas, including farmland, fisheries, and water supplies. Benzene alone has been detected at concentrations almost 2,000 times higher than the USEPA drinking water standard. UNEP staff observed people using the contaminated drinking water and noted its strong odor. Because such elevated exposures are likely to be associated with a range of acute and chronic effects, UNEP recommended emergency provision of clean drinking water, medical surveillance, and implementation of a prospective cohort study to investigate the effects of exposure to the contaminated drinking water in Ogale.

Methods: This study implements some of UNEP's recommendations for Ogale. Based on an investigator-administered questionnaire to two hundred households, this study provides a (1) detailed assessment of exposure to the contaminated water supply; and (2) a preliminary comparison of self-reported symptoms and health outcomes in the community served by the contaminated drinking water supply and a nearby comparable community served by a relatively clean drinking water supply.

Results/Outcomes: This study represents the logical next step to determine whether the extremely high levels of exposure in Ogale might be associated with acute and chronic adverse health effects. It also might improve understanding of how oil spills affect human health, a question that has eluded those investigating oil spills involving lower levels of exposure.

Name: Kumar, Ramya
Practicum Site: Boston University School of Public Health - Department of Epidemiology
Location: Boston, Massachusetts, USA
Title: Evaluating Selection Bias in the Snart Gravid Cohort

Introduction: The Danish web-based pregnancy planning study "Snart Gravid" was initiated in 2007 by researchers at BU SPH, in collaboration with Aarhus University Hospital, Denmark. Internet-based cohort recruitment (IBCR) is an increasingly popular mode of recruitment in epidemiologic studies because of advantages with cost, logistics, and even attrition. IBCR, however, raises concerns regarding bias due to selection factors, since non-participants cannot always be enumerated. I evaluated the presence of selection bias in the Snart Gravid cohort (n=4,801) by linking it to Danish Medical Birth Registry data on all other live births during 2007-2011 (n=234,990).

Methods: After a literature review of selection bias analyses in large European cohorts, I (1) cleaned and recoded Danish variables; (2) restricted analyses to live singleton births, (3) generated prevalence estimates for various exposures stratified on cohort membership, and (4) fit logistic regression models to obtain crude odds ratios (OR), adjusted OR, and 95% confidence intervals for well-known exposure-disease relationships.

Results/Outcomes: Women in Snart Gravid tended to be younger and healthier compared to the overall Danish population, but the ratio of adjusted OR for the exposure-disease relationships were all close to 1. This indicates a negligible amount of bias due to selection factors, lending support to the internal validity of this cohort. These results were presented in the 2013 EuroEpi conference in Aarhus, Denmark.

Name: Leveille, Claudel
Practicum Site: Boston Medical Center - Department of Family Medicine
Location: Boston, Massachusetts, USA
Title: Data Research Assistant

Introduction: The Back to Health Study is a 52-week comparative effectiveness randomized controlled trial evaluating the effectiveness of chronic low back pain interventions in individuals aged 18-64 from predominantly minority backgrounds. Participants are recruited from Boston Medical Center and affiliated centers. A total of 140 participants will be enrolled in one of three groups: 56 participants in once per week yoga classes, 56 participants in physical therapy (PT), and 28 participants in education for chronic low back pain. The program's mission is to determine whether it is justifiable for yoga to become an acceptable mainstream treatment for chronic low back pain.

Methods: I worked directly with the Research Assistant and Study Coordinator to assist in data entry and quality assurance using StudyTRAX, a web-based electronic data capture system. I aided in the administration of questionnaires for the study participants and contacted the participants by phone to schedule follow-up appointments. Furthermore, I created datasets using relevant study variables and outcome data collected at 6 weeks, 12 weeks, 26 weeks and 40 weeks for future analyses.

Results/Outcomes: After data analysis, it is hypothesized that patients randomized to the 40-week structured yoga maintenance program will have similar effectiveness in alleviating back pain and improving function compared to patients randomized to the 40-week structured PT maintenance program, and that patients randomized to either yoga or physical therapy will have superior effectiveness outcomes compared to patients in education. To test these hypotheses, two-sided alpha=0.05 two-sample t-tests will be used to determine the differences between groups.

EPIDEMIOLOGY

Name: Li, Jiahe

Practicum Site: CVS Caremark

Location: Boston, Massachusetts, USA

Title: Consultant in Enterprise Analytics

Introduction: CVS Caremark Corporation is an American drug retailing company with a U.S. pharmacy chain. It has three operating segments: CVS/pharmacy (the retail pharmacy chain), Caremark Pharmacy Services, and Minute Clinic. Caremark Pharmacy Services is one of the nation's leading pharmacy benefit management (PBM) companies, which provides comprehensive prescription benefit management services to over 2,000 health plans. My practicum with the Enterprise Analytics team in Caremark is to analyze and identify the optimal channel strategy for our PBM members to change their behavior and maximize our profit.

Methods: I utilize marketing analysis tools including SQL, SAS and Excel to gather and examine data from Caremark's database and to conduct channel analysis for our 'Retail to Mail' (RtM) product, which aims at converting members to refill their prescriptions from around 30 day at retail to approximately 90 day at mail. The practicum also involves performing health research to increase drug adherence, collecting datasets to create a database project in our Enterprise Analytics team, and coordinating in the RtM campaign operations.

Results/Outcomes: The channel analysis is significant for the marketing team to understand the role of each channel in RtM, target distinct members with the optimal channels, integrate the channel strategy with other models and make financially sound decisions. The projected outcomes indicate the mail channel is more profitable than live phone call or mail and live phone call combined channels, and members who are over 65 year-old are more likely to convert to RtM.

Name: Moore, Shannon

Practicum Site: Yantaló Peru Vasquez Foundation

Location: Yantaló, Peru

Title: MPH Candidate Volunteer

Introduction: Over six weeks in summer 2013, I worked with the Yantaló Peru Foundation, a nongovernmental organization founded by Dr. Luis Vazquez in 2005 focusing on health and education. The project included examining the nature and type of information adolescents receive on sexual and reproductive health issues (e.g. puberty, HIV and other STIs, and preventing pregnancy); assessing their health-seeking behavior and the factors that influence health-seeking behavior; understanding the nature of their intimate relationships; and examining factors influencing the societal and familial influences on adolescent health.

Methods: Activities to ascertain baseline knowledge, common practices, and current beliefs included the following: interviewing 19 of Yantaló's and surrounding communities' professionals and citizens; surveying over 300 adolescents aged 13-19 for sexual and reproductive knowledge and practices; comparing the high school adolescent sexual health curriculum with student surveys and assessing it with a Curriculum Assessment Tool, modified from Washington, D.C.'s HIV and Sexual Health Education Program; presenting the results in graphical form in Spanish to local authorities; and creating a database to host past and future research.

Results/Outcomes: A final presentation was given to community authorities including Municipality, National Police, Ministry of Health professionals, professors, and citizens. Deliverables included a log and analysis of oral interviews; assessment of the current curriculum; recommendations for interventions, and the creation of an internet-accessible database. Adolescent pregnancy accounts for about 20% of all pregnancies in the Yantaló network. Adolescents reported wanting more sexual and reproductive health education and desired their parents be primary sources of information.

Name: Myles, John

Practicum Site: Project Bread

Location: Lynn, Massachusetts, USA

Title: Research Associate

Introduction: Because of the rise in childhood obesity rates, Project Bread has been collaborating with Harvard University on the "Plate-Waste Project" to create healthier menus for school-aged children. This project was undertaken as part of the Chefs in School Initiative, which sends chefs into local schools to provide healthier, tastier foods for the school menus.

Methods: The "Plate-Waste Project" included four intervention schools and four control schools matched to the intervention schools on grade, ethnicity, and socioeconomic status. Baseline measurements of eating practices were taken on nonconsecutive days and included the serving sizes of the schools' lunches and the amount of food (e.g. entrees, side dishes, fruits, and vegetables) left on the students' tray. Following baseline data collection, the chefs implemented the new menus at the intervention schools. To allow the students time to get used to the new food options, follow-up plate-waste measurements were taken five months following the implementation of the intervention which was cooked in the cafeteria and incorporated more vegetables compared to the prepackaged food served at baseline. Analysis: Baseline and follow-up data were cleaned and combined into a single data set for analysis in SAS. The change in the amount of fruits and vegetables consumed from baseline to follow-up is the main outcome of interest. The analysis is currently underway.

Results/Outcomes: The results are pending. Discussion: Even if the consumption of fruits and vegetables does not increase, the intervention will be deemed a success because the intervention meals are much healthier than the control meals.

Name: Ndirangu, Kerigo

Practicum Site: New England College of Optometry

Location: Boston, Massachusetts, USA

Title: Quality of Glaucoma Care in Massachusetts: Gaps in Service Delivery to an Underserved Population

Introduction: In Massachusetts, doctors of optometry are trained and licensed to diagnose primary open-angle glaucoma (POAG) and often participate in the management of the disease, but the prescriptive authority for this particular eye disease is explicitly held by medical doctors or nurse practitioners. The New England College of Optometry committed to assess how this policy (MGL, Ch. 112, S. 66 B) affects service delivery to a particularly underserved population: Health Safety Net (HSN) Insurance recipients. HSN users face multiple barriers including geographical, temporal and language match constraints. Given that a glaucoma diagnosis requires at least two baseline visits and two follow up visits, the flaws in referrals are a burden on both the patient and the health system.

Methods: Reviewed pertinent literature regarding the natural history and epidemiology of POAG if left untreated to communicate the implications of poor access to treatment. Estimated the prevalence of glaucoma to illustrate the burden of this chronic, progressive disease across the state. Evaluated data from Lynn Community Health Center Eye Clinic to examine factors related to obtaining services or not and determine rate of completed appointments. Drafted a policy memorandum supported by this evidence.

Results/Outcomes: Topical eye medications aimed at lowering intraocular eye pressure are the primary intervention used in the United States to control POAG. Eliminating the mandatory consultation of Ophthalmologists in the management of POAG will promote access. I sought to enhance the evidence base in support of the argument to increase the prescriptive authority of doctors of Optometry.

Name: O'Neill, Allison

Practicum Site: Boston Medical Center, Infectious Disease Clinical Trials Unit - Data Coordinating Center for TB CDRC

Location: Boston, Massachusetts, USA

Title: Data Management Intern

Introduction: The Tuberculosis Clinical Diagnosis Research Consortium (TB-CDRC) is an international organization whose purpose is to collect and analyze data to determine the effectiveness of various TB diagnostic tools. I worked on several projects here, including the ICIDR study. The goals of the ICIDR project in Brazil are to determine whether variation in TB strains impact transmission of and immunity to the disease, the risk of an infection progressing to disease, and the identification of biomarkers in newly infected individuals. As a Data Manager for the project, I coordinated data collection from the project's international study site, created and entered data collection forms, and performed quality checks on a weekly basis. I performed preliminary analyses of the data that had been previously collected.

Methods: Staff in Brazil collected participant information and performed multiple diagnostic and confirmatory tests for TB (including Tuberculin Skin Test and Cough Aerosol Sampling System). I organized and entered all of the resulting data from these assessments, and performed a preliminary analysis on over 1200 cases. Using SAS 9.3 and Excel, I created summary tables and ran comparisons to determine if there were any differences in TB status by age or gender. The study is currently ongoing.

Results/Outcomes: The preliminary analyses revealed there are significant differences in TST test results when stratified by age in decades. The results of the preliminary analysis will be used to determine what associations will be considered in the final analysis. Further analyses will be done at study completion.

Name: Osseiran, Alia

Practicum Site: Boston Scientific - Biostatistics Department

Location: Valencia, California, USA

Title: R&D Intern

Introduction: Hypertension affects 1 billion people worldwide. It is a risk factor for many other negative health outcomes, including heart attack, heart failure, stroke and kidney disease. Pharmacological therapies, despite great advances, are still unable to control all hypertensive cases. They are disadvantaged by their dependence on patient compliance as well as patient doctor relationship. Even among compliant patients, the number of resistant hypertensive case may be as great as 30% and growing. This practicum focused on the possibility of treating hypertension using neurostimulation and existing technology at Boston Scientific Neuromodulation (BSN).

Methods: A critical literary review of current knowledge of neurostimulation to treat hypertension was performed, similar to article critique on comprehensive exam. The findings were used to design a pre-clinical case series to test a neurostimulation device on the baroreflex in an ovine model. The design followed principles of epidemiology; data collection, analysis, and considered bias and confounding.

Results/Outcomes: If successful, the device will provide a treatment to resistant hypertension and chronic hypertension. The public health impact of such a device on the market would be significant in lowering the burden of disease. In addition, I was able to see the process from conception to FDA approval to manufacturing. Medical devices are a growing part of health care. Learning to take advantage of these technologies will improve our lives and that of future generations.

EPIDEMIOLOGY

Name: Philip, Ancey

Practicum Site: Boston Medical Center - Pediatric Adolescent Medicine

Location: Boston, Massachusetts, USA

Title: Research Assistant

Introduction: There is growing evidence for pubertal maturation occurring at earlier ages among young girls. Boston Medical Center's GEMS study aims to assess the association between social experiences and pubertal development among young girls. Recruitment is from the clinical ambulatory area where we will recruit 200 mother-daughter pairs to be study participants. Mothers of daughters ages 4-7 who are defined as African American are eligible for this study.

Methods: I worked alongside Dr. Boynton-Jarrett and Eva Gliberman with 1) the recruitment and distribution of the study surveys 2) the collection of biomarkers which included hair and saliva samples from the child participants and 3) producing monthly newsletters for the study participants in order to maintain clear communication and provide incentives to continue in the study. Additionally, I did a literature review and wrote a policy analysis that focuses on the societal implications of early pubertal development and policy recommendations for focused education regarding the negative outcomes.

Results/Outcomes: The outcomes of this practicum include an understanding of the ethical conduct of research, training in biomarker collection and administering sensitive surveys, developing good communication and writing skills, and completing a literature review and policy brief.

Name: Pistole, Jennifer

Practicum Site: Massachusetts Department of Public Health - Division of Epidemiology & Immunization

Location: Boston, Massachusetts, USA

Title: Research Analyst

Introduction: Hepatitis C virus (HCV) infection is a major public health problem in the United States. Currently, 2.7-3.9 million people in the US are estimated as living with HCV. In Massachusetts, between 2000 and 2013, approximately 100,000 persons were reported to the Massachusetts Department of Public Health (MDPH) as having HCV infection. The implementation of the Massachusetts Virtual Epidemiologic Network (MAVEN) in 2006 allowed the MDPH to receive surveillance data more efficiently for HCV and other infections. Due to the high volume of HCV cases reported each year, many reports prior 2006 were not entered into MAVEN. My internship focused on organizing information from paper labs from the year 2000 and assessing how these data would impact current surveillance classifications.

Methods: Information from paper lab results were reviewed and compiled in an Excel spreadsheet. Each lab result was cross-checked with data in MAVEN and the spreadsheet was updated as to whether the lab results were in MAVEN already and if not how they could change existing surveillance classifications.

Results/Outcomes: The data analysis is ongoing. As of 11/19/13, 1,046 HCV labs have been reviewed and 435 individuals were identified who were not previously entered into MAVEN. Of the 611 individuals already entered into MAVEN, 535 (88%) had previously un-entered lab results. These updated data will give a more accurate representation of the HCV epidemic in Massachusetts. The information also may be used to determine how at-risk populations have changed over time.

Name: Shergill, Karanpreet

Practicum Site: Boston University School of Public Health - Department of Epidemiology

Location: Boston, Massachusetts, USA

Title: Research Assistant

Introduction: Current literature is available on the mortality rate in HIV-positive adults at the end of the first year of highly anti-retroviral treatment (HAART). However, majority of the deaths take place within first 3 months of treatment initiation. So this systematic review will therefore serve an important purpose in identifying how much mortality occurs within first 3 months of HAART initiation in HIV positive adults in developing countries.

Methods: As a research assistant my primary responsibilities were 1) to collect articles to be reviewed 2) selection of articles to be included into systematic analysis from the initial articles 3) data extraction and entry from the selected articles.

Results/Outcomes: By using search protocol from PAi et al (2004), creating search terms and finally combining these search terms in various search database (EMBASE, web of science, pubmed etc.) 1510 articles were selected for review. These articles were then screened with respect to their titles/abstracts and 49 articles were selected to be included into the analysis. I will continue working on this project to extract data from these selected articles in order to complete this systematic review.

Name: Shriber, Elizabeth

Practicum Site: Brookline Health Department - Public Health Nursing/Epidemiology

Location: Brookline, Massachusetts, USA

Title: Surveillance/Informatics Intern

Introduction: Rabies is a highly fatal zoonotic disease caused by an RNA virus affecting the central nervous system. Bats are the most common source of human rabies in the US, and so the Brookline DPH uses surveillance measures to monitor the number of bats that make contact with humans and to ensure that captured bats are tested for the disease. I investigated the number, location, and test results of household bat exposures in Brookline from 2008–2012.

Methods: I extrapolated data from Brookline's paper and electronic records to determine the number of household bat exposures and the number of rabies positive bats. ArcGIS was used to map these occurrences in order to explore trends.

Results/Outcomes: The number of household bat exposures and the percentage of bats testing positive for rabies are as follows: 2008–67(0%), 2009–60(0%), 2010–113(2.94%), 2011–102(2.27%), and 2012–106(2.11%). Bat exposures were more frequent in Brookline Hills, as this area has older, larger houses than other parts of town, allowing bats easier entry. There are fewer exposures in the south, since this area is less populated and has newer homes. The increase in bat exposures from 2008–2012 could be due to better record-keeping after Brookline's 2010 transition from paper to electronic records. This could also represent an increase in reporting, not in actual exposures. Moving forward, this data can be used to educate Brookline residents about evaluating bat exposures in their homes.

Name: Spite, Sasha

Practicum Site: Boston University School of Public Health - Department of Epidemiology

Location: Boston, Massachusetts, USA

Title: Research Assistant

Introduction: The purpose of my practicum is to work with Professor Emily Rothman on her XXX study. This study is designed to evaluate the relationship, if any with teen dating violence and pornography.

Methods: My role is to administer the XXX questionnaire to teenagers that meet our eligibility criteria (16 years or 17 years old who have watched pornography willingly 2 times or more in the past year). The enrollment goal for this project is 80 participants for room to enroll extra participants if there are enough resources. These activities were relevant to the program by providing researches with information on frequency and type of pornography watched and rationale for watching pornography. This information will then be analyzed after enrollment ends for trends in amount/type of pornography used and teen dating violence. During my time as a XXX study research assistant I have screened approximately 10 patients and identified and enrolled one participant.

Results/Outcomes: The projected outcome of this project will be to identify a relationship between teen dating violence and pornography. In addition, I am to research child/teen awareness of their parents' use of marijuana and compile this information into a literature review. The goal of this review is to identify any gaps in the literature around this subject and report on potential study designs for this type of research question. This literature review will help inform Professor Rothman's future study to assess whether children/teens are aware of their parents' drug use.

Name: Tiwari, Stephanie

Practicum Site: Whitaker Cardiovascular Institute - BUSM

Location: Boston, Massachusetts, USA

Title: Increased expression of fibrotic genes in visceral adipose tissue is related to metabolic dysfunction

Introduction: Expansion of adipose tissue requires significant remodeling including the extracellular matrix. Studies have demonstrated that visceral adiposity is significantly associated with metabolic dysfunction. We hypothesize that impairment in the extracellular matrix remodeling in visceral tissue is associated with metabolic dysfunction which leads to whole body cardiometabolic risk.

Methods: We examined 64 severely obese individuals scheduled for bariatric surgery. We measured blood metabolic markers and anthropometrics. Fat samples were taken from the subcutaneous, omental and mesenteric regions during bariatric surgery. Subjects were divided into two groups: metabolically healthy (N=15), and metabolically unhealthy (N=49). We compared the differential expression of 7 genes related to fibrosis and inflammation in a depot specific manner. In addition, we explored how levels of inflammatory genes and genes controlling extracellular remodeling were related.

Results/Outcomes: Subjects were 45 ± 5 years old, 86% female, with mean HOMA of 4.1 ± 2.7 and a BMI of 46.6 ± 7.3 . There was a significant up regulation of PPAR- γ , TIMP, HIF1- α , TGF- β , and VEGF-A in the omental and mesenteric depots when compared to the subcutaneous depot. The mRNA levels of TGF- β , PPAR- γ and HIF1- α are also significantly correlated with TIMP, and MMP2 which are related to extra cellular remodeling. In the metabolically healthy group the mRNA levels of TIMP, TGF- β , and MMP2 are significantly lower in the omental depot when compared to the metabolically unhealthy group. The differential expression between these two groups suggests that a dysregulation of extra cellular matrix remodeling may be associated with metabolic dysfunction and an increased inflammatory profile.

EPIDEMIOLOGY

Name: Tucker, Robert

Practicum Site: Massachusetts Department of Public Health - Division of Tuberculosis Prevention and Control

Location: Boston, Massachusetts, USA

Title: Special Project Coordinator to Redesign and Redevelop the Massachusetts Tuberculosis Outbreak Response Plan

Introduction: The persistent spread of tuberculosis (TB) throughout communities is a significant public health concern. The US Centers for Disease Control (CDC) mandates that all states have a plan to manage such outbreaks of TB. The most recent plan for Massachusetts was last updated in 2003 and required revisions to bring it up to date with current standards. Working with Division of TB Control and Prevention (TB Division) at the Massachusetts Department of Public Health (MDPH), I was responsible for the redesign and rewriting of the TB outbreak response plan.

Methods: Under the direction of the TB Division epidemiologist, I reviewed the current CDC guidelines for TB outbreak response, the TB outbreak strategies of other states with similar TB burdens as Massachusetts, and outbreak plans for other infectious diseases utilized by the MDPH in order to appropriately construct the content of the new plan. In addition, I interviewed several key staff members in the TB Division to incorporate their expertise, input, and feedback into the development of the plan.

Results/Outcomes: The redesigned plan consisted of a tiered strategy that prioritized response efforts for potential outbreaks of TB according to severity. Critical indicators were created to quickly identify outbreak severity based on surveillance alerts, and an incident command hierarchy was created to ensure a clear delineation of responsibilities. Routine TB management practices were incorporated with these measures to allow for seamless response to potential outbreaks, ideally providing Massachusetts with more rapid and efficient TB response capabilities than it previously possessed.

Name: Yang, Ying

Practicum Site: Boston University, Sargent College - Genomics and Decision Sciences Laboratory

Location: Boston, Massachusetts, USA

Title: Research Assistant for Cost-Effectiveness Project

Introduction: HIV testing strategies were found effective in improving overall HIV testing performance in the VA healthcare system. The objective of our study is to conduct a budget impact analysis of three HIV testing strategies 1) traditional pre-test/post-test counseling, 2) counseling and a new clinical reminders system and 3) only clinical reminder in the veterans health care system.

Methods: A payer-perspective decision model was conducted to calculate the 1-year budget impact of three HIV testing strategies. Parameter values were obtained from the literature, including patients' probability of accepting test, and costs associated with HIV testing procedures. De-identified patient data, including total population screened and number of new HIV cases, was collected from one clinic in Los Angeles, CA, from August 2004 to December 2011. Annual total costs and costs per new case were calculated based on parameter values and patient data. Sensitivity analyses were conducted to evaluate the robustness of the critical variable on costs.

Results/Outcomes: The total cost of clinical reminder system with pre-test counseling was \$81,726 over one year compared to \$109,208 for traditional HIV testing. Under a clinical reminder system with no pre-test counseling, number of HIV tests performed and number of new diagnoses increased for that year. In addition, cost per new diagnoses was the lowest. The clinical reminder system can reduce the cost per case identified and promote better performance of HIV testing. The fundamental decision model can be used for hospital facilities outside the VA adopting a similar program for improving HIV testing rate.

Name: Zhang, Miao

Practicum Site: World Health Organization - Department of Essential Medicines and Pharmaceutical Policies

Location: Geneva, Switzerland

Title: The 2011 Pharmaceutical Sector Country Profile Survey Evaluation

Introduction: A comprehensive assessment of the national pharmaceutical sector helps to determine what the gaps are in order to design effective interventions and allows evaluation of the impact of interventions over time. WHO has developed the Pharmaceutical Sector Country Profile (PSCP) to measure key aspects of the pharmaceutical sector and systematically monitor the progress of efforts to improve access to essential medicines. In order to have a comprehensive evaluation upon the 2011 PSCP and to prepare for the 2014 pilot and the 2015 global PSCP, a qualitative evaluation was conducted. It was expected that a web based solution as a substitute for the former paper based questionnaire could be tested through this survey.

Methods: Research for this report included the review of past reports about the series of PSCP projects, the test of the feasibility of using LimeSurvey to generate the next round PSCP and the collection of respondents' suggestions and recommendations upon the process and the content of the 2011 PSCP project through both online survey and telephone interviews.

Results/Outcomes: Prefilling was recognized as being helpful and efficient in the validation and completion of the questionnaire; the length of the questionnaire was considered reasonable; the time required for completing the whole questionnaire was complicated by the availability of information, the format of the questions and the different mechanisms used by countries in obtaining the formal endorsement; and the Instruction Manual and Glossary were not all thought to be useful. Detailed suggestions about specific sections and questions were also summarized in the report.

HEALTH LAW, BIOETHICS & HUMAN RIGHTS

Name: French, Jessica

Practicum Site: Blue Cross Blue Shield of Vermont - Wellness Department

Location: Burlington, Vermont, USA

Title: Wellness Intern

Introduction: BlueCross BlueShield of Vermont is a non-profit company providing health benefits and services. The Information and Wellness Center supports Vermonters as they transition to the health exchange, and provides health and wellness information to the general public. They work with various partners including hospitals, physicians, nutritionists, and the Department of Public Health.

Methods: I worked directly with the Vice President of Planning and the Wellness Events Coordinator on various projects related to Vermont's health exchange, primary care under the Affordable Care Act and Vermont's Act 48, as well as the organization and implementation of health and wellness events. One key project, a four part wellness series on maintaining and promoting a healthy body, mind, heart, and spirit, provided the general public with information on ways to improve their health. Another major project was a presentation developed for and delivered to graduating primary care physicians on the importance of general practice and family medicine under the new health system.

Results/Outcomes: The wellness series provided the general public with important health information including biometric screenings and educational sessions with local doctors and nutritionists. Individuals reported improved understanding of what to do to maintain health and where varieties of care can be accessed. As a result, wellness programs have been expanded at the center, and BCBSVT has partnered with Burlington's main hospital to provide weekly sessions on living with diabetes.

Name: LaPointe, Emily

Practicum Site: Our Bodies Ourselves

Location: Cambridge, Massachusetts, USA

Title: Our Bodies Ourselves Intern

Introduction: Our Bodies Ourselves (OBOS) is a global nonprofit, public interest organization that promotes accurate, evidence-based information on girls' and women's reproductive health and sexuality, and addresses the social, economic and political conditions that affect health care access and quality of care. My practicum focused on supporting two programs: the OBOS Voice and Action program, which uses high quality information resources to advocate for public policies that enhance reproductive health and justice for women and girls; and the OBOS Global Initiative, which collaborates with women's organizations from around the world to create resources for public education and political action.

Methods: I provided various administrative and research support to OBOS staff; completed extensive reading and film viewing on issues of surrogacy, egg donation, and breast implant safety; identified and summarized key findings from these readings for OBOS staff; synthesized and summarized responses from viewers of film screenings into multiple documents; and attended a British Consulate event on behalf of OBOS.

Results/Outcomes: I exercised and developed a variety of writing, editing, advocacy, and research skills. I produced an Op-ed style paper in response to JAMA article on maternity costs and also created a document for potential funders regarding reactions and outcomes to screenings of "Can We See the Baby Bump Please?" film. I compiled a spreadsheet that tracked my extensive research regarding current status and messaging surrounding issues of US and international surrogacy to assist in production of OBOS creation of website communicating issues of surrogacy to the greater public.

Name: Leonard, Hallie

Practicum Site: NARAL Pro-Choice Massachusetts

Location: Boston, Massachusetts, USA

Title: Political/Organizing Intern

Introduction: As a political intern at NARAL Pro Choice Massachusetts, I spent the Summer of 2013 specifically working on the Certified Truth Campaign. The goal of this campaign is to raise awareness and educate the greater Boston community in regard to crisis pregnancy centers (CPCs). CPCs are disguised as women's health clinics but in actuality, give medically inaccurate information to females in an attempt to dissuade them from choosing abortion. Unfortunately, there is very little that can legally be done to shut CPCs down because they are privately funded. Therefore, it is important to educate the public and reveal the truth via the Certified Truth Campaign.

Methods: This project incorporated many grassroots strategies such as collecting signatures, tabling, making phone calls, sending emails, and attending events to get the word out. During my practicum, I participated in all of these duties.

Results/Outcomes: We were able to gather just under 1,000 signatures in two months. All of those who signed in support were given resources and information about the existence of CPCs. We project that this alone will increase and spread awareness throughout communities. We would like to see an increase in the number of legitimate women's health clinics so that women do not feel the need to go to CPCs for free pregnancy tests and ultra sounds. That, along with the increased knowledge, will hopefully prevent women from seeking care at CPCs.

HEALTH POLICY & MANAGEMENT

Name: Agule, Katherine

Practicum Site: MA Department of Public Health - Office of Community Health Workers

Location: Boston, Massachusetts, USA

Title: Policy Intern

Introduction: The Massachusetts Department of Public Health (MDPH) Office of Community Health Workers provides both programmatic and capacity-building support to the community health worker (CHW) workforce. As the Office works to implement the CHW Board of Certification bill (included in Chapters 322, Acts of 2010), further exploration of the current state of training programs in and outside of the state would assist in identifying gaps and recommending solutions, as one pathway to certification will be to complete a training program which includes the core competencies that are set in the legislation.

Methods: Background research related to other states' training and certification programs and key informant interviews with CHW stakeholders were completed. Both qualitative and quantitative data were assessed and compiled into a report and presentation.

Results/Outcomes: Gaps were identified related to the overall and geographic availability of training and availability and sourcing of sustainable financing and recommendations were proposed to combat these known gaps. Research results were presented to the CHW Board of Certification Advisory Workgroup in order to further discussions related to the developing statewide certification process.

Name: Avakoff, Elizabeth

Practicum Site: Veteran's Affairs Boston Health Care System

Location: West Roxbury, Massachusetts, USA

Title: Clinic Productivity

Introduction: The purpose of this project was to address the list of Non-vested patients before the end of the fiscal year in order to acquire the full reimbursement for their care. Non-vested patients are reimbursed at a flat, \$286/patient rate, whereas Vested patients are reimbursed proportionally to the cost of their care.

Methods: In order to complete this project, there were many steps that needed to take place. We had to recruit providers and set up a clinic schedule, schedule patients into the clinic time lots, coordinate the efforts between all parties involved, as well as track how many patients were scheduled, vested and no-showed.

Results/Outcomes: While the vesting clinic is still ongoing at this time, we have vested 67 patients to date, with only 22 no shows. This provides for a minimum increase in revenue to VA Boston of about \$163,000 - although, we have about 50 more patients scheduled into the future to date and have plenty of more time in the vesting clinic before the end of the fiscal year.

Name: Bandyopahdyay, Jayanti

Practicum Site: Boston Medical Center - Primary Care/Internal Medicine

Location: Boston, Massachusetts, USA

Title: Process Improvement Intern - Primary Care

Introduction: Boston Medical Center (BMC) strives to deliver exceptional patient care for some of the most vulnerable populations in Boston while achieving the utmost levels of patient satisfaction for all of its services. A critical peripheral service provided by BMC's Primary Care department is processing patient forms. These forms encompass requests for disability, supplies, transportation, etc. Before this project began, the turn around time for the process was twenty-five days, which was far from the target of fourteen days. The aim of my project was to reduce the turn around time to less than fourteen days by streamlining the process using quality improvement (QI) tools focusing only on the coordinators' side.

Methods: The project was modeled using BMC's preferred QI tool, the A3. In the first part of the project I assessed the initial state metrics, constructed a process map, and created a root cause analysis diagram. For the second part, I used this data to craft two rapid experiments: a best practice worksheet to standardize the process and an excel forms database that would serve as a comprehensive tracking tool.

Results/Outcomes: The best practice worksheet was used as an education piece to train the forms coordinators and the supporting administrative staff, standardizing the process for the entire department. The database that was implemented and sustained helped significantly reduce the turnaround time down to five days. It also increased the monthly throughput of the process. Owing to its notable success, the project was awarded BMC's quality improvement award.

HEALTH POLICY & MANAGEMENT

Name: Brierley, Leif

Practicum Site: Massachusetts Medical Society - Health Policy Department

Location: Waltham, Massachusetts, USA

Title: Understanding the Legislative and Advocacy Efforts of a Statewide Professional Association

Introduction: The Massachusetts Medical Society (MMS) is the statewide professional association for physicians and medical students. Dedicated to educating and advocating for the patients and physicians of Massachusetts, the MMS is active in legislative and advocacy efforts around the state. Working in conjunction with the Government and Community Relations Department and Health Policy Department at the MMS, I focused my practicum on understanding how a member-based physician association forms, prioritizes, and acts upon policy initiatives.

Methods: By actively participating in MMS efforts, I sought to gain a hands-on understanding of the work associated with organizational policy formation. I worked directly with the Legislative Counsel and with the Vice President for health policy, planning and membership at MMS on these initiatives. My responsibilities included attending and participating in meetings, hearings, and workgroups related to physician issues. Specifically, I focused on attending and reporting on the meetings of Massachusetts Health Policy Commission (HPC). Following all events, I produced summaries and briefed upper-level staff on points of interest for the Society.

Results/Outcomes: As a result of my meeting attendance and summaries, MMS staff members were able to prioritize MMS involvement regarding various physician issues. Briefing the Society on the HPC's activities and priorities enabled swift action and response to HPC initiatives, such as draft regulation formation regarding risk-bearing provider organizations, which may directly impact physicians. Through my continued role with the MMS, I will monitor the developments of the HPC in the context of the Society's interests.

Name: Colizza, Alicia

Practicum Site: Boston Medical Center - Pediatric Ambulatory Center, Neurology Division

Location: Boston, Massachusetts, USA

Title: Administrative Medical Assistant and Quality Improvement Intern

Introduction: The Pediatric Neurology (Pedi Neuro) division of the Pediatric Ambulatory Center at Boston Medical Center (BMC) is committed to providing exceptional, compassionate, efficient and coordinated clinical care for children and their families. To do so, the highly skilled providers of this division rely heavily upon administrative support. During my internship, there was a shortage in administrative staff while the number of providers was being increased, which created tension amongst staff and the need for additional assistance. As an intern, I served to enhance administrative efficiency, clinic flow and overall patient experience and to help integrate new providers into the Pedi Neuro division. I chose this practicum site so that I could gain administrative/quality improvement experience in complex, provider-based healthcare organizations.

Methods: I worked collaboratively with staff around administrative priorities through performing: observations of/recommendations for clinic operations; routine duties including patient-scheduling, managing/maintaining medical records, and transcribing medical charts/documents; and duties to improve patient/family experience, such as responding to any clinically-unrelated concerns that patients or their families had contacted our office about. During the process of integrating a new neurologist into the division, I was responsible for creating/managing a comprehensive patient-scheduling tool for this provider as well as creating electronic medical records for patients that were new to BMC.

Results/Outcomes: My work in this division has contributed to improved administrative efficiency/communication between providers and patients/clinic flow/patient and family experience and satisfaction and to staff morale, as well as to the successful integration of a new provider into the division's provider network.

Name: Cuevas, Erica

Practicum Site: Massachusetts Department of Public Health - School-Based Health Center Program

Location: Boston, Massachusetts, USA

Title: Increasing Usage at Boston Latin Academy School Based Health Center

Introduction: The School-Based Health Center (SBHC) at Boston Latin Academy is a great, yet underutilized resource.

Methods: A survey was created to identify student's knowledge of the SBHC and its services, their opinion on whether it should be and if it is advertised, and what they would do to advertise it. The survey was distributed during study periods, which are not by grade so the sample and population distribution are not exactly the same. The sample consisted of 159 out of 1,112 students. The results were entered in an excel spreadsheet and analyzed.

Results/Outcomes: The results show that as grade level increases, students are more likely to know about the SBHC and report that most people know about it. In contrast, the majority of students of all grades reported that most students do not know about the services it offers. Currently the SBHC is advertised through an enrollment form and at an assembly, both at the beginning of the school year when other information is given. The majority of students of all grades think that the SBHC is not advertised but needs to be. Students suggested posting signs around the school, homeroom announcements, and homeroom visits to talk about the SBHC and better advertise it. To increase utilization at the SBHCs, the SBHCs should follow the students' suggestions so that more students learn about what a SBHC is, where it is located and what services it has to offer so that they can use it as a resource.

HEALTH POLICY & MANAGEMENT

Name: Densley, Diana

Practicum Site: Boston Medical Center - Department of Obstetrics and Gynecology

Location: Boston, Massachusetts, USA

Title: Decreasing Preterm Deliveries in Women with a History of Preterm Birth

Introduction: The purpose of this quality improvement project is to decrease the number of spontaneous preterm deliveries (STPD) in women treated at Boston Medical Center (BMC) and to increase patient safety, education and autonomy. The BMC population is especially at risk for SPTD due to previous incidences of SPTD, socioeconomic standards, and lack of self-advocacy in a treatment setting. Though appropriate prenatal care for the population is available at BMC, many do not receive treatment due to lack of patient knowledge of their own risks and lack of provider knowledge of the patient's history. At the onset of this project, the rate of SPTD documentation in a patient's chart at discharge from BMC was near zero percent.

Methods: The following was completed to meet project aims: (1) Write/submit proposal for a BMC Patient Safety Grant (2) Broadened charting and education pieces of discharge by expanding/specifying options in the EMR and deepening patient education prior to discharge (3) Developed screening and chart documentation checklists for clinicians (4) Developed an education campaign to enlist and remind clinicians of the importance of discussing SPTD (5) Partnered with stakeholders to strengthen patient advocacy and education

Results/Outcomes: The ultimate goal of the project is to: document and educate all cases of SPTD at BMC; enable more complete clinician care; and allow patients more active participation in their healthcare. This practicum demonstrated the significance of using a quality improvement model; the importance of onboarding all possible stakeholders; and the power of education and simple changes in delivering big health results.

Name: Frithsen, Brad

Practicum Site: Boston Children's Hospital - Children's Hospital Integrated Care Organization (CHICO)

Location: Boston, Massachusetts, USA

Title: Specialty Episodes of Care

Introduction: Working with members from the Children's Hospital Integrated Care Organization (CHICO), an organization that seeks to improve health care integration among the hospital (Boston Children's Hospital), specialists, and primary care providers, I worked on a project to improve the care of patients with ulcerative colitis. Multiple goals for this project have been identified including: 1) identifying the patient population: 2) developing a total episode of care; 3) identifying any variation in costs and/or utilization; and 4) recommending interventions for reducing variation. The ulcerative colitis population was chosen as a pilot diagnosis because of the high potential for variation in clinical decision-making and treatment options.

Methods: Working closely with the Chief Medical Officer and the health care analyst from CHICO I completed the following tasks: 1) identification of existing quality measures and benchmarks; 2) locating resources necessary for conducting the patient search analysis; 3) overall project management; 4) process mapping of an episode of care; and 5) data scrubbing for SAS coding.

Results/Outcomes: At the practicum's conclusion we will have identified the patient population to be included, identified existing quality measures and benchmarks, collected the necessary data from multiple databases, completed data analysis for the project population, and developed a process map for an episode of care. Next steps of the project will be to identify the key drivers for variation in cost and utilization and recommend interventions to stabilize variation.

Name: Gonzalez Vanegas, Manuel

Practicum Site: Health Connector Authority - Mass Health Insurance Exchange

Location: Boston, Massachusetts, USA

Title: Customer Service and Operations Intern

Introduction: The Affordable Care Act (ACA), a national health reform law passed in 2010, advanced the development of online health insurance exchanges. The ACA created a Catastrophic Plan intended to attract young healthy individuals to buy health insurance. The Massachusetts Health Connector serves as the state's online health insurance marketplace, and prior to the development of the Catastrophic Plan, the Health Connector sold a similar product called Young Adult Plan (YAP). The goal of my project was to do a side-by-side comparison of YAP and Catastrophic Plan designs, and predict future enrollment into Catastrophic Plans. The sustainability of the exchanges across the nation rests on their ability to attract young healthy individuals.

Methods: A report was created on the history of enrollment on Young Adult Plans until the beginning of the open federal enrollment period (October 1, 2013). The benefits of the plan were outlined and compared to the newly formed Catastrophic Plan, and a shopping scenario was developed to analyze the affordability of the two plans.

Results/Outcomes: The number of enrollment in YAP plans have declined since the enactment of the 2010 Affordable Care Act. As of June 2013, there were 1,918 subscribers in YAP a 2% reduction (518 subscribers) as a percentage of all enrolled from a year before. The affordability of Catastrophic compared to other plans sold through the Health Connector does provide a major incentive for young adults to enroll. However, their lack of benefits could prove a major burden for them in the future.

HEALTH POLICY & MANAGEMENT

Name: Marshall, Allison

Practicum Site: Boston Medical Center - Department of Family Medicine

Location: Boston, Massachusetts, USA

Title: Research Assistant

Introduction: The Program for Integrative Medicine and Health Care Disparities, part of the Department of Family Medicine at Boston Medical Center, conducts research in complementary and alternative medicine for underserved or ethnic minority populations. I worked for the Back to Health Study, a randomized controlled trial comparing the effectiveness of yoga, physical therapy (PT), and health education for chronic low back pain. The purpose of this practicum was to expose me to methods of recruiting participants into the study via community outreach and the process of conducting research and presenting research findings.

Methods: I held a leadership role in developing methods for the recruitment of participants into the Back to Health Study from the surrounding neighborhoods of Boston Medical Center. I collected data from participants and ensured data quality. Using a subset of the data from the study, I also conducted a statistical analysis of the impact of the three treatments on coping and self-efficacy. I created a poster presentation using my analysis, which I presented at the American Public Health Association national conference. Finally, I will draft a manuscript for publication of my analysis.

Results/Outcomes: Outcomes include the successful recruitment of participants into the study, the APHA presentation, and manuscript draft. In conducting my analysis, I found that yoga and PT increase self-efficacy and PT increases coping skills. The implications for positive changes in coping and self-efficacy are that they may be mediators of pain perceptions and pain-related disability.

Name: McGrath, Matthew

Practicum Site: Boston Medical Center - Department of Family Medicine

Location: Boston, Massachusetts, USA

Title: Research Assistant

Introduction: The Back to Health study at Boston Medical Center is a randomized controlled trial aimed at assessing the comparative effectiveness of three treatments for chronic lower back pain - yoga, physical therapy, and health education. The nature of the treatments of interest requires a high degree of commitment from participants. As is the case in many behavioral research studies, recruitment and retention are major obstacles to overcome. The purpose of this practicum is to implement and assess effective strategies to recruit and retain participants while encouraging high levels of adherence.

Methods: I conducted literature reviews to determine effective recruitment strategies. The approach was modified as the study progressed to reflect the results displayed in the study population. Some recruitment strategies included identifying potential participants by ICD-9 codes, targeted telephone calls and mailed letters, as well as establishing an in-person presence at local community health centers and community events. I conducted a recruitment statistic analysis weekly and presented the findings each week at study staff meetings.

Results/Outcomes: The analyses indicate that while targeted mailings generated the highest volume of study inquires, establishing an in-person presence in high-traffic areas of Boston Medical Center was the most time and cost-effective recruitment strategy. Another key finding was that more frequent communication with participants via telephone calls and mailings was effective in generating a higher degree of participation and adherence.

Name: Mehnickerdizadehseraj, Siamak

Practicum Site: Boston Medical Center - Department of Quality Improvement

Location: Boston, Massachusetts, USA

Title: BMC Sepsis patient QI

Introduction: The FY2013 quality QUEST goal for BMC was to decrease the mortality index to 0.84 or lower. In support of achieving this goal, sepsis mortality was identified as a priority for improvement by the BMC Clinical Analytics department. There are evidence-based guidelines for sepsis treatment, but there is a gap between these and the care patients receive. Time to treatment (antibiotics) is a critical element in the initial treatment for sepsis patients. There is high variability in timing of initial antibiotic administration for sepsis patients. In 2012, our BMC sepsis mortality was 16% while Sepsis accounted for 141 of 444 BMC deaths in 2013. A review of 20 BMC inpatients who developed sepsis and deceased showed a median time to antibiotics of nearly 3 hours.

Methods: A multidisciplinary team of physicians, nurses, and pharmacists utilized the A3 process improvement framework as the main QI method. PDSA cycles were used to test and implement change on pilot sites (Menino Medicine services and Menino 6W). In addition, manual chart review was conducted on patients who did not meet target performance.

Results/Outcomes: The sepsis order set usage increased to more than 50% of cases. The percentage of hospital acquired sepsis patients who receive initial dose of broad spectrum antibiotics within 1 hour increased to more than 50% of cases. Median time to initial antibiotic administration reduce to less than 90 min.

HEALTH POLICY & MANAGEMENT

Name: Mihos, Marissa
Practicum Site: BAMSI Inc.
Location: Brockton, Massachusetts, USA
Title: Quality Management Project Intern

Introduction: This self-designed practicum served as an introduction to the non-profit industry while mainly focusing on Quality Management and how to compute various metrics and present the findings to the executive team.

Methods: Working with the VP of Quality Management, I am mainly responsible for completing tasks related to the CARF accreditation. Responsibilities include generating and analyzing satisfaction survey results from all of BAMSI's service areas, reaching out to Program Directors if there is an issue with their surveys, using Access to pull data necessary to compute quality metrics such as Person Served Attendance rates and Rate of Program Objective Completion, acting as editor for the annual Quality Management Report, and working with Finance and Operations team to retrieve and analyze necessary data. Other responsibilities unrelated to Quality Management, include interviewing members of the executive team to gain a baseline understanding of the nonprofit industry and conducting a SWOT analysis in a BAMSI Residential Home.

Results/Outcomes: It is important to have the quality metrics presented to the executive team in a timely manner as all departments of the organization play a role in the quality outcomes. By having a completed Quality Management Report, the executive team can plan the best course of action to address areas in which the organization is falling behind. The CARF accreditation process is important to a human services organization like BAMSI. It is a symbol of the organizations efforts to improve efficiency, fiscal health and service delivery.

Name: Ni, Jing
Practicum Site: Social & Scientific Systems, Inc.
Location: Silver Spring, Maryland, USA
Title: Data Analyst Intern

Introduction: Clinical trials are very important to new treatment development. Clinical Research and Bioscience (CRB) of Social & Scientific Systems, Inc. focuses on advancing the research efforts related to many kinds of diseases. The main purpose of the practicum at CRB was to learn how to use SAS to analyze clinical data. The practicum also provided an opportunity to develop knowledge about the concepts of clinical trials design and data management.

Methods: We have many ongoing projects at the same time and most of the projects will last several years, so I finished many different tasks. The practicum activities included: 1) reading and learning the whole procedure of data management and analysis; 2) creating faked patient information and entering data to Open Clinic 3) re-checking the Statistical Analysis Plan (SAP) and annotated Case Report Form (aCRF); 4) using SAS to run edits for faked and raw data. All these activities are steps in clinical data analysis and are helpful in understanding more about the industry.

Results/Outcomes: Since most of the projects are still ongoing, no project has reached the stage of final outcomes. This practicum has allowed me to better understand the Research and Development (R&D) process within the pharmaceutical industry, the difficulties of developing new treatments, and the basic requirement for working in this field.

Name: Yusuf, Abdullah Adedotun
Practicum Site: World Health Organization - Department of Essential Medicines and Pharmaceutical Policies
Location: Switzerland
Title: Intern

Introduction: The Essential Medicines and Health Products department within the WHO is responsible for a wide range of activities that relate to the access, safety, efficacy, quality and rational use of medicines and health products around the world. As an intern, I worked on the Pharmaceutical Country Profiles (PCP), one of the department's technical areas. My role was to conduct a quantitative evaluation of the data collection tool that was used in the 2011 round of PCP surveys, with the aim of improving the tool prior to the next round of surveys in 2015. Based on my findings, I created a draft web-based survey to be piloted in a dozen countries in 2014.

Methods: My task involved three separate activities: (1) Determine how many of the 194 participating countries (stratified by region and income level) responded to each of the 500+ questions in the survey (to identify any redundancies in the survey questions). (2) Determine the accuracy of information held at the WHO at the time of the survey on national pharmaceutical sectors of each participating country (represented by survey pre-fill and change rates). (3) Determine how long it took countries on average to respond to the survey.

Results/Outcomes: The overall indication from the exercise was that the survey tool was indeed adequate for its purpose in the generation of Pharmaceutical Country Profiles, and that the WHO had country pharmaceutical sector data that was reasonably accurate at the time of the survey.

INTERNATIONAL HEALTH

Name: Akhtar-Zaidi, Samera

Practicum Site: Aga Khan University - Department of Women and Child Health

Location: Karachi, Pakistan

Title: Community-Level Health Financing for CLIP (Community-Level Intervention for Pre-eclampsia), Pakistan

Introduction: The Community-Level Intervention for Pre-eclampsia (CLIP) Trial seeks to identify weaknesses and gaps in community level responses to management of preeclampsia (pregnancy related hypertension)-related complications, one of the leading causes of maternal mortality in low and middle-income countries, including Pakistan.

Methods: By identifying gaps in community-level management of pre-eclampsia, CLIP will initiate a series of interventions to reduce pre-eclampsia-related deaths in pregnant women. The CLIP intervention recognizes the common shortcoming of philanthropic development aid where there is failure to teach and empower communities receiving aid, creating a dangerous cycle of aid dependency. Thus, a key factor of the CLIP Trial includes the development of a sustainable community-level financing scheme in the districts of Hyderabad and Matiari for the management and treatment of pre-eclampsia. The project purpose was to analyze current healthcare financing schemes in Pakistan and determine which model provides the most protection against high cost of medical care in rural and resource-strained settings.

Results/Outcomes: Supporting other concurrent research, we conclude that the government of Pakistan is failing to collaborate effectively with provincial systems, international donors, and national health institutions to develop a sustainable and effective method of universal health coverage. This failure requires a strategic shift from government dependency to research and development towards other healthcare financing mechanisms, which can function independently from the government. As such, the review also developed a community-level financing scheme to facilitate access to primary care, drugs, and essential hospital care for pregnant women in Hyderabad and Matiari, which can be applied to other resource-limited settings.

Name: Anderson, Ashley

Practicum Site: Somphit Chinkam - Midwife

Location: Boston, Massachusetts, USA

Title: Student Intern

Introduction: Somphit Chinkam, a certified nurse midwife (CNM) at Boston Medical Center, is a current Doctor of Nursing Practice candidate. She conducted a study that involved 100 pregnant women at BMC with a history of at least one cesarean. Due to their delivery history, the women had to choose between two standard delivery options: a vaginal birth after cesarean (VBAC), or a repeat cesarean. The study consisted of assessing the effectiveness of a counseling program implemented during antenatal visits to assist the women in making informed decisions regarding their delivery plan. Study participants completed a questionnaire concerning their delivery plan decision before and after a counseling session with their midwife. Over the fall of 2013, I analyzed the results of the study, and developed an educational resource that would become part of the counseling sessions.

Methods: Through the use of journal articles and online sources, I developed an educational resource to be distributed to the women during the counseling sessions. Using SAS, I also helped analyze the results from the study to determine the factors that were most important in a woman's decision-making process.

Results/Outcomes: The percentage of women who felt they had enough information to make an informed decision increased from 61% to 90% after a counseling session with a midwife, but 10% were still not sure if they had enough information to make a decision about their delivery plan. We hope the resource developed can better display the information required to feel confident about the decision.

Name: Bacon, Rachel

Practicum Site: Cameroon Baptist Convention Health Board

Location: Mayo Banyo Division, Adamaoua Province, Cameroon

Title: Rapid Community Needs Assessment of Birthing Practices: Banyo, Cameroon

Introduction: This practicum was a rapid community needs assessment conducted among the Fulani women of Mayo-Banyo, Cameroon. The host organization, the Cameroon Baptist Convention Health Board, is projected to expand their maternal health services at their Baptist Hospital of Banyo (BHB) location. Confronted with low utilization of delivery services this formative evaluation was utilized to help raise awareness of the new maternal health ward and provide insight on how to improve its relationship within the community.

Methods: Purposeful sampling and snowball sampling produced 226 participants. Women of three qualifying groups were approved for participation: 1) Women able to give birth but had not yet; 2) Women able to give birth and currently pregnant with first child/or next child; and 3) Elderly women that had once given birth. Key informant interviews and focus groups were conducted using closed and open-ended questions. Two local female translators that spoke English, French and Fulfulde were utilized. To increase likelihood of participation a local radio station announced our team's presence in the community and our intentions.

Results/Outcomes: After five weeks of interviewing within 15 quarters in Mayo-Banyo and 1 neighboring town women of different ages and tribal affiliations were interviewed. Significant themes such as: high cost of care, desire for adequate hospital equipment, female workers, and a soft bed/clean environment were repeatedly expressed. Often women expressed gratitude for interviewing them or gave anecdotal stories of positive/negative birthing experiences they or other women had. These themes and stories will plan for a community mobilization project to encourage facilitated birth, ANC care and improve hospital/community relations.

INTERNATIONAL HEALTH

Name: Beaudette, Abigail

Practicum Site: Wide Horizons For Children

Location: Boston, Massachusetts, USA

Title: Medical Mission Application Developer

Introduction: Each year Wide Horizons For Children supports 2-3 medical missions in Ethiopia. It has become increasingly important for them to understand the impact of these missions for funding purposes as well as being better prepared for future missions. As part of a consulting team we were asked to develop a data collection application for tablets in order to collect patient data that could be used for these purposes. We were also sent to the Northern and Southern regions of Ethiopia with the November medical mission teams to act as data collectors.

Methods: Using the platform CommCare we developed a form that could be used to collect patient demographics as well as act as a patient's medical record for the current medical mission. Using forms from previous medical missions we developed forms for surgery patients and clinic patients. We also developed forms to collect more in depth stories on how the mission impacted individual patients.

Results/Outcomes: As part of the medical mission team we were responsible for collecting all demographic information as well as triaging and managing all clinic patients. During the medical mission we collected data on approximately 22 surgical patients, over 200 clinic patients and collected 6 in depth patient stories. We are currently compiling and analyzing all of the data and making adaptations to the application and forms that we believe will allow the data collection process to be more easily integrated into the future medical missions.

Name: Berkowitz, Jillian

Practicum Site: Zambia Center for Applied Health Research & Development - Lusaka Main Office

Location: Lusaka, Zambia

Title: ZCAHRD mHealth intern

Introduction: Mobile health (mHealth) projects in maternal, neonatal and child health have been employed in many developing country settings to improve key health indicators. The Zambia Center for Applied Health Research and Development (ZCAHRD) is piloting Project mUbumi, an mHealth initiative with the aim of contributing to a 50% reduction in maternal mortality in Zambia. mUbumi provides automated and timely SMS reminders to community agents paired with pregnant women to enhance uptake of maternal health services, such as antenatal care. During my practicum, I assisted with data analysis to investigate the effect of SMS reminders on ANC attendance.

Methods: We analyzed data collected from March 1 to October 1, 2013. All women who registered a pregnancy and had a delivery date during this period, and possessed a valid ID were included in the sample (n=1,118). Data was cleaned and analyzed in SAS, where basic frequencies and chi-square tests of independence were performed to generate risk ratios for the impact of SMS reminders on women's ANC attendance for the third and fourth ANC visit.

Results/Outcomes: Analysis showed that pregnant women who received a reminder prior to their 3rd visit were 1.88 times (95% CI: 1.52, 2.3) as likely to attend compared to those who did not and women who received a reminder prior to their 4th visit were 5.28 times (95% CI: 3.2, 7.3) as likely to attend compared to those who did not. Project mUbumi demonstrates the potential for mHealth to improve antenatal attendance rates and punctuality using SMS reminders.

Name: Denning, Caitlin

Practicum Site: Hope of Children and Women Victims of Violence (H.O.C.W)

Location: Ndejje, Uganda

Title: Intern

Introduction: H.O.C.W. is a non-governmental organization in Ndejje, Uganda that targets its educational services to refugees and low-income Ugandans. My practicum assignment had four goals: 1.) to design a community assessment, 2.) to increase the capacity of the women's collective, 3.) to develop a partnership with the local health clinic, 4.) to organize Village Health Team (VHT) workers to visit.

Methods: Goal 1: I held focus groups with stakeholders to gather information needed to design a mobile application to support a community health assessment. Goal 2: I fostered collaboration between the women's collective and businesses and ran a fundraiser for a Days for Girls (DFG) Uganda project. Goal 3: I worked with the local district health officer to develop a partnership between the health clinic and H.O.C.W. Goal 4: I led a meeting with VHT workers and refugee women to develop an agenda for VHT visits.

Results/Outcomes: Goal 1: Using CommCare's platform, I built a mobile application for the community assessment that was conducted (after my departure). It's the first time data has been gathered on this population. Goal 2: DFG held training for soap making and sanitary pads sewing and the women collective's profits increased. Goal 3: The partnership with the health clinic should result in improved healthcare access and quality of care for the refugees. Goal 4: VHTs are visiting monthly to discuss health issues with the refugee women.

INTERNATIONAL HEALTH

Name: Dwivedi, Pavitri
Practicum Site: Committed Communities Development Trust
Location: Mumbai, India
Title: Program Consultant/ Research Intern

Introduction: Committed Communities Development Trust (CCDT) has been working with marginalized populations of Maharashtra state of India since 1990. Their mission is: community action combating hunger, disease, and discrimination with a core focus on children. CCDT's Home-Based Care (HBC) program works with 12 wards to empower families in becoming independent and self-reliant through interventions and support programs.

Methods: From June to August 2013, I designed and conducted a cross-sectional study to establish a baseline to monitor the impact of HIV disclosure in adolescents of thirty-three HBC families through parent and child's perspective. I worked directly with the CCDT team to enroll participants, take informed consent, and follow appropriate ethical steps. I used a mixed methods approach, and prepared a questionnaire with quantitative and qualitative questions. The final analysis was done using SAS, NVivo, and Excel.

Results/Outcomes: The survey design included five indicators to assess 1) treatment adherence, 2) blame, shame, and judgment, 3) stigma, fear, and discrimination, 4) disclosure, and 5) daily family interactions. There was a greater variation in stigma and shame perceptions among children and parents. 64% parents compared to 61% children agreed that child's right to know about disclosure is very important. The right age of disclosure of both child and parent's status to children varied between 11-15 years. Both parents (45%) and children (42%) reported overall health being good for the children. Overall results indicated a stronger need of emphasizing on educational and financial concerns of families with less focus on HIV/AIDS sessions.

Name: Flath, Taylor
Practicum Site: MA Department of Public Health - Division of Epidemiology and Immunization
Location: Newburyport, Massachusetts, USA
Title: Newburyport Board of Health Intern

Introduction: The Newburyport Health Department's job is to ensure and protect public health by carrying out preventive programs, adopting relevant health regulations and enforcing state sanctioned health codes. In order to successfully engage and inform Newburyport residents on the dangers of vector borne illnesses, the health department needs appropriate informational material that best addresses the needs of the community which they are able to provide to residents on a regular basis as well as during community outreach.

Methods: Brochures were created and designed to spread awareness of tick and mosquito borne illnesses found in Massachusetts. The brochures provide information on transmission, symptoms, treatment as well as prevention. A "tick kit" was created which is equipped with items and pamphlets that cater to adults and children. A video interviewing an entomologist about how best to avoid ticks and prevent them from entering your property has been published and will air on the local Newburyport channel.

Results/Outcomes: During a concentrated pilot outreach at the local composting facility we were able to reach 35 people, nearly all who used the facility. Many Newburyport residents are active and enjoy the outdoors so pamphlets were designed to reach those who work in their yards and outside. The informational pamphlets focused on landscaping and deer resistant plants. Many of the people reached also found the other more general pamphlets to be very useful. Booklets were created to accompany these pamphlets going in to more specifics about the diseases and will be kept in the health department.

Name: Fuller, Alyssa
Practicum Site: Boston University School of Public Health - Center for Global Health and Development
Location: Addis Ababa, Ethiopia
Title: Ethiopia Organizational Development Study/Research Assistant

Introduction: Billions of dollars are spent on organizational development and capacity building each year. However, there isn't a reliable tool to measure how much an organization has grown and the impact these donations have. As a member of the MODE (Measuring Organizational Development and Effectiveness) data collection team, I was responsible for using a new evaluation tool developed by the CGHD to collect and assess data from NGOs serving highly vulnerable children in Ethiopia.

Methods: I worked with team MODE (Measuring Organizational Development and Effectiveness) to collect the second round of data. The data was then entered and analyzed using CPro and SAS. Lastly, our team put together organizational development reports to each NGO visited in order to identify the organization's strengths, weaknesses, and to provide suggestions for improvement.

Results/Outcomes: The MODE team successfully collected the second round of data and feedback was provided to each NGO in the final report.

INTERNATIONAL HEALTH

Name: Gyan, Efua

Practicum Site: Boston University School of Public Health - Center for Global Health and Development

Location: Addis Ababa, Ethiopia

Title: Evaluating Organizational Capacity in Ethiopia

Introduction: The Center for Global Health and Development is currently conducting research evaluating organizational capacity and development in Ethiopia. I worked as a member of the monitoring and evaluation team examining the organizational development of 60 NGOs (head and branch offices) that primarily serve highly vulnerable children, children living with HIV and their caregivers.

Methods: I conducted 17 interviews and document reviews with Executive Directors, Finance Managers and Program Coordinators and assessed and scored eleven domains including leadership and governance, financial management and budgeting, quality management etc. using a CGHD developed tool called MODE (Measuring Organizational Development and Effectiveness).

Results/Outcomes: Round 2 data collection was completed. I analyzed the scores of the NGOs I assessed using CSPro and SAS and then prepared reports, of their strengths and weaknesses, along with recommendations for improvement.

Name: Helpert, Jacqueline

Practicum Site: Medical University of South Carolina

Location: Charleston, South Carolina, USA

Title: Research Intern

Introduction: In South Carolina, hypertension is the most common chronic illness reportedly suffered by persons experiencing food insecurity (approximately 20% of the total state population). I collaborated with MUSC and their community partner, Palmetto Project, to conduct the following pilot study: The Role of South Carolina Food Banks and their Community Partners in Improving Hypertension in Persons with Food Insecurity. The two aims of the study were to explore strategies for integrating hypertension education, management and prevention for persons accessing nongovernment food banks, and to integrate findings from this pilot study with other information to conduct a feasibility study of a community intervention for hypertension education, management and prevention for the same population.

Methods: To carry out this study, I scheduled ten qualitative interviews with food bank clients, site administrators and volunteer coordinators, and community leaders associated with food banks. I observed four interviews, and conducted three interviews myself. I also evaluated four food distribution sites. Lastly, I organized and began to analyze the study data using NVivo 10 software.

Results/Outcomes: Interviews are ongoing (desired total N=24), yet preliminary results demonstrate multiple reoccurring themes: food distribution sites have little control or influence over what food they are given; food bank clients have little control over what food they are given; education regarding healthy eating and how to read food labels is lacking; and food bank clients often do not have insurance or access to health care. These themes represent areas for possible interventions, to be pursued as described in the second aim of this study.

Name: Herzer, Lore

Practicum Site: Tunaweza Children's Centre

Location: Kampala, Uganda

Title: Assessing Access to Care for Children with Special Needs in Kampala, Uganda

Introduction: This practicum sought to investigate access to care for children with special needs living in Kampala, Uganda. The purpose of the research conducted during the practicum was to understand where families of children with special needs in Kampala seek care, and to investigate additional places for future referrals.

Methods: In order to assess access to care, five mothers of children at Tunaweza were interviewed regarding their experiences. An interview guide was created, which consisted of 20 open ended questions regarding the treatment history of the child, various places where care was sought before coming to Tunaweza, and satisfaction regarding care history. After completing the interviews, the responses were compiled from audio recordings into an excel database and assessed for common themes. The results of the interviews were compiled into a final report for Tunaweza including recommendations for seeking future referrals.

Results/Outcomes: Based on the interviews, the majority of access to care points for children with special needs consisted of various Ugandan hospitals and specialists within major referral hospitals. The majority of mothers also identified stigma, cost, and availability of therapists as major barriers to seeking quality care. As a result, it is recommended that Tunaweza network with hospitals by setting up meetings with appropriate specialists to discuss Tunaweza's services, and to have Tunaweza pamphlets available in office waiting areas. By combining the above strategies with current advocacy projects, Tunaweza may be able to increase enrollment into appropriate treatment for children with special needs.

INTERNATIONAL HEALTH

Name: Ighile, Osadebamwen

Practicum Site: mHealth Alliance

Location: Abuja, Nigeria

Title: Information and Communications Technology For Saving One Million Lives (ICT4SOML)/ Project System Analyst

Introduction: The District Health Information System² (DHIS2) is an online information system used to collate, analyze and distribute information to health program managers for monitoring and management of health services at different levels of the healthcare system. It was developed by Health Information Systems Programme and has been implemented in more than 30 countries worldwide. Despite its implementation in Nigeria, timely reporting rates from community health facilities have remained generally low. This has greatly impaired ability to determine health need and efficient distribution of scarce resources to the community in a timely manner. This study aims to evaluate factors responsible for low reporting rates and provide recommendations for its scale up.

Methods: We conducted a literature review on scaling of an information system and on successful scale up of DHIS2 in 4 countries. Information obtained influenced the conduct of visits and interviews of some stakeholders of health service delivery within two states, Abuja and Nassarawa states of Nigeria.

Results/Outcomes: 3 broad categories of challenges to timely reporting of health data were experienced at all levels of the health system: weak governance and regulatory framework; poor funding and technical support; poor training and staffing of health facilities. Recommendations were made and an information system options appraisal table was developed to provide guidance on appropriate tools to adopt to improve reporting.

Name: Koritsanszky, Luca

Practicum Site: Center for Global Health and Development - Maternal Health, Community Healthcare System Development

Location: Ethiopia

Title: Development Intern

Introduction: As a development team member for Wellbody Alliance, a rights-based organization that delivers free, high-quality care to Sierra Leone by operating a primary clinic in Kono District and implementing several community-based healthcare programs, I worked to integrate Wellbody's vision of data-driven humane care into all NGO processes.

Methods: I worked with the Executive Director and Development Director to promote data-driven humane care, a healthcare approach that prioritizes patient experience, incorporates local understandings of illness into healthcare delivery, and emphasizes respectful clinical care to every patient in need by: (1) hiring indigenous healers and midwives as auxiliary staff and community health workers whenever possible, (2) emphasizing the importance of patient-practitioner rapport and dialogue, and (3) affording indigenous healers space to provide the care they know how to deliver within healthcare facilities.

Results/Outcomes: Supported the integration of data-driven humane care into Wellbody's operational processes through assisting in grant writing and program design for the Wellbody Birth Center, Program for Continuum of Community and Facility-Based Maternal Care, Antenatal Program, and Community Health Worker Specialization Initiative.

Name: Kourtesis, Panagiotis

Practicum Site: University of Miami Project Medishare

Location: Miami, Florida, USA

Title: Telepathology Whole Slide Scanner Configuration, Validation, Deployment, and Training

Introduction: Cancer diagnosis in Haiti is severely limited to the presence of a trained on-site pathologist. A visiting pathologist can only address a small amount of the undetermined cases per visit. Project Medishare would like pioneer the implementation of a telepathology system that uses a whole-slide scanner to transmit slide scans of suspected cancer biopsies via the Internet to pathologists anywhere in the world. The scanner will also act as an educational tool for the first Haitian cohort of student pathologists in over a decade.

Methods: In order to fully grasp the nature of implementing a telepathology system in a resource limited setting, a literature review of was conducted to seek best practices and possible setbacks. The scanner was then configured to the proper settings in order to work in Haiti. Next, the scanner was put through a local technical validation process using some of the College of American Pathologists (CAP) telepathology guidelines. A teaching slide set of known cancer cases were scanned and sent, via the web, to pathologists in the department.

Results/Outcomes: The diagnoses attained from the department pathologists were compared to the actual cytological evidence from the slide set. The concordance was around 94%. The pathologists were debriefed and asked to provide feedback on how to enhance the system to make better diagnoses. The validation process will be repeated once the scanner is deployed to Haiti in order to complete the entire validation of using this scanner technology in resource limited settings.

INTERNATIONAL HEALTH

Name: Lang, Elise

Practicum Site: AMOS Health and Hope

Location: Managua, Nicaragua

Title: Malnutrition Researcher and Analyst

Introduction: AMOS Health and Hope is a Christian non-profit organization in Nicaragua that aims to improve the health of impoverished (particularly rural) communities by working with them in health, education and development. AMOS trains health promoters to act as a first level of healthcare in rural communities. In the summer of 2013, I worked on a nutrition project to determine the community nutritional status of children under 5 years old and build capacity in the community by teaching healthy feeding practices.

Methods: I traveled with a team to rural communities and worked with the health promoters to conduct health stations for children under 5. The stations included, registration, height and weight measurements, an anemia test, a mother survey on feeding practices and a consultation with the health promoter and medication for anemia. In addition, we lead focus groups and educational workshops. The focus groups asked questions on food security in the community to see how the community defined its own socio-economic status.

Results/Outcomes: In seven rural communities, 231 children under the age of 5 were seen at the health stations. In analyzing the data, we found that 45% of those children were either at risk or had moderate to severe malnutrition. 63% of the children under 5 in the poorest household were malnourished, compared to 25% in the most comfortable households. From the data, I developed an implementation and monitoring and evaluation framework that is being used to develop a new program to address malnutrition in the community.

Name: McSparren, Deborah

Practicum Site: Team Heart

Location: Kigali, Rwanda

Title: Equipment Procurement and Supply Chain Management for Cardiac Surgery Program in Rwanda

Introduction: Since 2007, TeamHeart has been assisting Rwanda by sending teams from the U.S. to perform surgery. Four surgical teams from different organizations currently travel each year to Rwanda to perform cardiac surgery for a two week time period. The ultimate goal of the program is to create an independent, sustainable cardiac surgery program in Rwanda. One of the challenges to achieving program independence is establishing a consistent and dependable supply chain for cardiac surgery supplies. Presently, the four surgical teams order their own supplies and ship them from their country of origin before each surgical trip. An additional challenge is to establish uniform supplies for all surgical teams to share. To achieve sustainability, Rwanda will have to assure timely purchase and distribution of a consistent set of supplies.

Methods: My role was to investigate regional companies and supply options that can provide a local supply source. In Kigali, I inventoried existing supplies to find common items among the surgical groups that could be shared and identified a multitude of expired items. To make matters worse, other surgical teams were paying to ship similar items each year.

Results/Outcomes: I recommended that the teams develop a common list of disposable supplies and share them. This would improve inventory management, save money and reduce waste. I identified several regional distributors and recommended that the programs start to compare prices and supplies for TeamHeart's February surgery trip. Both recommendations, if successfully implemented, would contribute to making the cardiac surgery program sustainable.

Name: Mokkarala, Sameera

Practicum Site: ACET Nireekshana

Location: Hyderabad, Andhra Pradesh, India

Title: Nireekshana Clinic Practicum

Introduction: I spent two months at Nireekshana, a clinic and NGO in Hyderabad, India that performs health education outreach in the surrounding communities and provides outpatient care for HIV-positive patients. Under the supervision of Dr. Ravi Barigala, I collaborated with a Boston University medical student to develop and present novel education materials on sexual and reproductive health. The goal of our project was to educate the clinic's community health workers on issues of sexual and reproductive health in a culturally sensitive manner, so that they could effectively answer their patients' questions.

Methods: In order to understand the clinic's health outreach work, we accompanied community health workers into nearby villages and observed them carrying out health education presentations. We also interviewed the pre-teen and teenaged children of clinic patients to understand what they knew about reproductive health; this allowed us to answer their questions and correct misunderstandings, as well as to gain a better idea of the gaps in their knowledge. Using this information, we were able to tailor our presentation materials to the specific needs of the clinic's clientele. Being mindful of local customs and notions of propriety, we developed interactive education materials on a range of sexual health topics, from reproductive anatomy to STI/STD identification, and held a half-day seminar for the community health workers using these materials.

Results/Outcomes: The materials we developed were well received, and are being circulated among other affiliated clinics and organizations for use in the community, especially with school-aged children.

INTERNATIONAL HEALTH

Name: Morgan, Kimberly
Practicum Site: United for Health Abyssinia
Location: Cambridge, Massachusetts, USA
Title: Development Intern

Introduction: United for Health Abyssinia (UHA) is a start up organization working to control and treat tuberculosis in Ethiopia. UHA has developed a three step strategic plan to achieve these goals. The plan includes the improvement of hospital infrastructure and capacity to manage tuberculosis, the training of community health workers to detect and help treat tuberculosis patients, and an awareness campaign to lower stigma around the community.

Methods: I worked primarily with one other intern, the Director of Programs and the Program Coordinator to accomplish our tasks. These included: 1. Developing a brand for UHA to strengthen the communication and image of the organization, 2. Conduct a literature review of current global tuberculosis strategies, 3. Create a monthly newsletter to regularly communicate with UHA's network, 4. Develop a fundraising plan to support program and development activities, 5. Plan and host a fundraiser event at the end of the summer, 6. Edit and improve the current UHA website to make it more user friendly and inviting, 7. Create and manage online presence through social media networking sites, and 8. Begin to develop a database of potential donors and grant opportunities for future funding prospects.

Results/Outcomes: The communication materials, networking tools, and new technology put in place this summer will continue to be used by UHA to build their network within Boston, the US, and global communities. These resources will allow UHA to continue to focus the majority of their time on project goals and allow the administrative aspects of the organizations to grow simultaneously.

Name: Mothi, Suraj Sarvode
Practicum Site: Beth Israel Deaconess Medical Center
Location: Boston, Massachusetts, USA
Title: Interrelationship of brain volumes, cognition and functioning with medical co-morbidities in patients with severe psychiatric disorders - Findings from the B-SNIP study

Introduction: The Bipolar-Schizophrenia Network for Intermediate Phenotypes (B-SNIP) is a multi-site study, which aims to identify reliable biomarkers for people with severe psychotic illnesses. Along side brain structure and symptomatology changes, the occurrences of comorbid medical illnesses were recorded. Medical comorbidities (e.g. hyperlipidemia or diabetes) have higher prevalence in patients living with severe psychiatric disorders, as treating the primary illness is assumed priority – consequently leading to accelerated medical morbidity. My study aimed to examine the interrelationship between medical comorbidity and psychiatric severity.

Methods: Volumetric measures on brain regions were obtained through processing of MRI scans for patients with schizophrenia, Bipolar or Schizoaffective disorders. In addition, data on their psychiatric symptomatology was gathered. The participants reported occurrence of any routinely occurring medical disorders, through a 17-item questionnaire. I designed and performed the analysis using the R-Statistical package, to assess the level of psychiatric symptom severity (cognition deficits, reduction in social functioning) and degree of brain atrophy (frontal, temporal, parietal and orbital regions) across a spectrum of comorbid illnesses.

Results/Outcomes: Significant but weak associations highlighted reduced social functioning with increased occurrence of medical illnesses. No such association identified with brain atrophy and cognition as outcomes. Findings highlight the need to better integrate medical management into a broader psychosocial treatment plan that comprehensively addresses comorbidities resulting in better quality of life for this population, regardless of level of psychiatric symptom severity.

Name: Olsen, Maia
Practicum Site: Global Oncology (GO)
Location: Boston, Massachusetts, USA
Title: QECH-Malawi Social Work Student Volunteer

Introduction: Global Oncology is currently collaborating with the cancer ward at the Queen Elizabeth Central Hospital (QECH) in Blantyre, Malawi. QECH has a dedicated clinical staff that faces many resource constraints. In an assessment of patient support services, nurses at QECH identified a need for patient education materials appropriate for low-literate patients unfamiliar with cancer. The staff intends to use these materials in clinical consultations in order to help their patients understand their treatment and improve patient adherence.

Methods: I conducted a literature review on best practices for health literacy materials for chronic care in Africa. I presented a report and proposal to all project stakeholders. Our team then identified health literacy resources in the Boston area and has continued to facilitate discussions with partners in both Malawi and Boston. We have designed a template for an educational brochure, which is currently being refined and will be developed by a design company in Boston. We are also planning a dissemination strategy and monitoring and evaluation plan to assess the impact of the materials at QECH.

Results/Outcomes: This project intends to assist staff in enhancing psychosocial support services at QECH, in order to improve the treatment experience for the patients and families they serve. We also hope that providing patients with more accessible information about the treatment process (chemotherapy, side effects, advice for patients going through treatment) will have a positive impact on patient adherence at QECH and increase community-wide awareness of cancer in the region.

INTERNATIONAL HEALTH

Name: Palacholla, Ramya

Practicum Site: Boston Public Health Commission - Child, Adolescent and Family Health

Location: Boston, Massachusetts, USA

Title: Intern

Introduction: During my practicum at the Boston Public Health Commission, I provided support to the team working on 'Adverse Childhood Experiences (ACEs)' in the Bureau of Child and Adolescent Health. The focus on ACEs began with increased attention to the fact that exposure to adverse events during childhood could lead to adverse health outcomes in adulthood. The purpose of this practicum was to assist the team in collecting data, summarizing surveys, writing and editing reports on ACEs.

Methods: A number of activities were assigned to me during my time with the Commission and I completed the following: detailed literature reviews, summarizing surveys, writing and editing reports, collaborating with staff in other departments, writing briefs and reviewing information gathered on ACEs. The activities were aimed at driving the team to do more productive work on the upcoming project focused on ACEs.

Results/Outcomes: I wrote, edited and submitted various reports on ACEs for the Commission. I also summarized the Boston Child Health Survey 2012. Finally I produced a paper on ACEs after a detailed literary review of the information available on ACEs.

Name: Pierce, Leslie

Practicum Site: Sneha Care Home and Shining Star School

Location: Bangalore, India

Title: Intern

Introduction: The aim of the Sneha Charitable Trust (SCT) is to provide holistic health care to the marginalized sick and comprehensive training for healthcare professionals. SCT manages multiple sites, including Snehadaan, a care and support center for PLHIV, and Sneha Care Home (SCH) and Snehagram, residential and education programs for children and adolescents infected with HIV. Sneha Care Home and Snehagram aim to create a future for these children through an environment that addresses their multifaceted needs.

Methods: I worked on a project to better understand the process of pediatric HIV disclosure. This included: (1) creating an organizational system to document longitudinal strengths and difficulties questionnaire data, an index used to assess the mental wellbeing of children (2) generating descriptive statistics of the SDQ data (3) and conducting focus group discussions to better understand how the children view the disclosure process, what questions they had in the past, and where they are now in regards to understanding and coping with their HIV status.

Results/Outcomes: SDQ data for over 100 children collected biannually over the last two years was cleaned and entered into an electronic database. Descriptive statistics were calculated to show the overall psychological wellbeing based on SDQ scores of the children in their care. FGDs revealed the importance of continuing the disclosure conversation with HIV+ children, in a world where research is constantly advancing and information travels quickly.

Name: Price, Miles

Practicum Site: Swasti - HIV sector consulting Services Bangalore, India

Location: Bangalore, India

Title: Swasti Intern

Introduction: of the current global state of infectious diseases. It is also a huge database for researchers who look for specific disease outbreak information. Through an automated text processing system, the data is categorized by disease, location, and species, with details about case number and disease category. The alerts will be displayed by location on the main interface for user-friendly access to the original alert. HealthMap provides a jumping-off point for real-time information on emerging infectious diseases and has particular interest for public health officials, infectious disease researchers and international travelers.

Methods: As a remote collaborator, I used Skype, email and online document collaboration to communicate with my supervisor. The UNAIDS Regional Team provided research and commentary on drafts. Generally, I spent my time researching and writing in the library with regular check-ins with my supervisor.

Results/Outcomes: Both the regional thematic reviews will be available on aidsdatahub.org, although they are currently being reviewed by multiple organizations. As migrants are a new addition to national lists of populations vulnerable to HIV, the regional review of migration, mobility and HIV will be useful to decision makers seeking to understand the relationship between the spread of HIV and migrant populations.

INTERNATIONAL HEALTH

Name: Reinen, Nichole
Practicum Site: Uganda Village Project
Location: Kasambika Village, Uganda
Title: Program Implementation Intern

Introduction: The Uganda Village Project (UVP) is a small NGO based in Iganga Town, Uganda. UVP conducts public health programs in safe water, sanitation and hygiene, malaria education, HIV/STI education, family planning, and nutrition using the WHO Healthy Villages model. Every year it launches programs in five new villages which remain enrolled in the program for three years.

Methods: I worked on a team made up of international interns and Ugandan public health students in a rural village of approximately 1,500 residents. As a member of the team, my task was to work with Village Health Team (VHT) members to mobilize the community in my rural village to become more engaged in public health decision-making and practices.

Results/Outcomes: My team conducted a baseline survey of all households in the village to assess access to safe water, sanitation coverage, bed net use, and malaria risk. We held community meetings to sensitize community members to health issues. Working with my team, I conducted focus groups to inform our community sensitization sessions and address villagers' health concerns. I also helped establish bed net distribution and built Tippy-Taps, or hand-washing devices, in the community. The two-month internship program occurs shortly after villages join the UVP organization, and therefore serves as a major "push" to gain momentum and support for the remainder of UVP involvement with the village. I observed that this short time period made it difficult to accomplish all our assigned tasks. Low community turnout and management of the data collected in the survey are two challenges that will be the focus of my culminating experience.

Name: Ricklefs, Colbey
Practicum Site: Boston Center for Refugee Health and Human Rights
Location: Boston, Massachusetts, USA
Title: Refugee Health Evaluation Intern

Introduction: The Boston Center for Refugee Health and Human Rights (BCRHHR), residing within Boston Medical Center (BMC), provides health services to the refugee population in Boston. To reduce healthcare disparities, refugee patient navigators (RPNs) guide clients through the intricacies of the healthcare system. To measure the efficacy of the program, health literacy pre- and post-tests and a client satisfaction survey were collected from clients.

Methods: For health literacy, paired t-tests were used to measure continuous data, such as confidence levels with the healthcare system, while McNemar's chi-squared test measured differences in the dichotomous outcomes, such as correctly defining key health terms. T-tests for means and t-tests for proportions were used to test for differences in those who developed a positive relationship with their RPN versus those who did not for continuous (rating the helpfulness of the RPN) and dichotomous outcomes (did the client call their RPN), respectively.

Results/Outcomes: Regarding health literacy, we found that clients at post-test were more likely to feel confident filling out medical forms by themselves ($p < .05$), to correctly define a primary care provider ($p < .001$), to know that an ER cannot refuse treatment based on refugee status ($p < .001$), and to feel confident in understanding the US healthcare system ($p < .001$). English ability, holding interpreter usage constant, was significantly associated with many answers. Those who developed a positive relationship with their RPN were more likely to report successful navigation of BMC ($p < .01$) and higher attendance of medical appointments ($p < .001$).

Name: Riotto, Jade
Practicum Site: Clinton Health Access Initiative
Location: Boston, Massachusetts, USA
Title: TB Volunteer Analyst

Introduction: The Clinton Health Access Initiative (CHAI) is a Boston-based organization dedicated to strengthening health systems in resource-poor countries, including increasing access to care and treatment for people living with HIV/AIDS, high-quality treatment for malaria, and new vaccines and essential treatments for common childhood illnesses. Prompted by partner governments and slow progress on global and country targets, CHAI is exploring engaging in the TB and is establishing a small team to scope the TB space. The purpose of this practicum was to supporting the overall scoping exercise and development of the CHAI TB strategy for submission to CHAI Senior leadership.

Methods: I worked directly with the CHAI TB strategy team. Responsibilities included conducting research for the literature review, coordination of strategy sessions, document collection, and document development. I performed research on topics including MDR-TB models of care, BCG vaccine booster, TB testing strategies, treatment policies, drug development, integration of HIV/AIDS and TB care, and pneumocystis pneumonia.

Results/Outcomes: At the conclusion of this practicum, the literature review I conducted will be utilized to create an informational presentation covering 1. TB epidemiology 2. The current scope of non-profit and governmental work around TB and 3. Where CHAI's resources might best be employed to have the largest impact.

INTERNATIONAL HEALTH

Name: Roche, Stephanie

Practicum Site: National Association for the Practice of Anthropology- Occupational Therapy (NAPA-OT) Field School

Location: Antigua, Guatemala

Title: Assistant Project Manager

Introduction: The NAPA-OT Field School promotes social justice and health as a human right by involving students in applied research projects that address specific public health issues identified by local NGO partners. As Project Manager, I led a student research team in the collection of 23 patient experiences of surgical missions—events in which low-income populations receive free surgical care from teams of visiting foreign medical providers. The goal of this study was to elucidate the process that patients must navigate to receive surgical care in Guatemala and to understand patient perspectives on receiving surgical care from foreign medical teams.

Methods: I worked with the Field School Director: 1.) to complete the in-country IRB application; 2.) to pilot interview instruments; 3.) to recruit study participants; 4.) to train students in human research standards, qualitative research techniques and data analysis; 5.) to finalize a write-up of study findings.

Results/Outcomes: Key recommendations arising from the study include that NGOs and foreign medical teams clearly communicate information to the patients about 1.) diagnosis, 2.) the surgical procedure to be received, 3.) post-operative care instructions, and 4.) the ancillary costs the patient will incur. A team of biomedical engineers from Oxford University will use the study's findings to design of an open-sourced electronic medical record and/or calendaring system to improve the flow of information and reduce logistical barriers in the surgical referral process.

Name: Ryan, Erin

Practicum Site: Sacred Valley Health/Ayni Wasi

Location: Ollantaytambo, Peru

Title: Monitoring and Evaluation Intern

Introduction: SVH is a young organization that runs a community health worker (CHW) program in rural high-altitude communities in Peru. The program now includes 20 CHWs and works in 15 communities covering 1,567 residents. Over four months in summer 2013 I developed, streamlined and implemented a comprehensive monitoring and evaluation plan for the CHW program. I also had the opportunity to take on various program management tasks.

Methods: In addition to creating a monitoring plan for routine data collection and analysis, I was responsible for baseline data collection in 10 communities for a major program expansion. This involved developing a household survey, training and overseeing data collection teams, logistical planning of surveying and GIS mapping and input and analysis of data. Information collected by the survey included demographic information as well as nutrition, hygiene, reproductive health and perceived barriers to health care indicators. Additionally, I developed a handbook for future Monitoring and Evaluation Coordinators, oversaw social media activities of the organization and provided technical expertise with objective writing and goal setting.

Results/Outcomes: Household surveys and GIS mapping were completed in 10 new communities and a total of 295 households with 887 individuals. The data collected will be used to tailor trainings for CHW to the unique health needs and track health indicators in the communities over years of programming. The full analysis of this data was left to the next M&E Coordinator, as were the monitoring plan and handbook.

Name: Scholl, Kenzie

Practicum Site: Uganda Village Project

Location: Iganga District, Uganda

Title: Project Intern

Introduction: Uganda Village Project is a nongovernmental organization based in the Iganga District of Uganda. Since 2003, UVP has worked to promote public health and development in rural areas of the district. The goal of the organization is to improve health access, education and prevention through the implementation of community-based programming.

Methods: Alongside five other team members, I worked in the rural village of Kasambiika to implement community-based health programs relating to HIV/AIDS, malaria, obstetric fistula, family planning, safe water and sanitation. Initially, this involved quantitative and qualitative baseline data collection using survey instruments and focus group discussions. Baseline data was then used to inform the development of education workshops aimed toward increasing village members' knowledge of pertinent public health issues. Program efforts also included the provision of relevant health resources including subsidized malaria nets, family planning services and sanitation facility materials.

Results/Outcomes: Baseline data collected among 186 households comprising 1,067 members indicated that coverage of prevention commodities was low, particularly hand-washing stations (7%) and malaria net use among pregnant women (24%) and children under five (37%). Distribution of resources, construction of facilities, and dissemination of knowledge throughout the community likely increased community members' motivation to adopt preventative behaviors, but comparisons with follow up data is needed to determine program efficacy. Our team also conducted a needs assessment and SWOT analysis throughout the summer and made recommendations to improve program outcomes and sustainability based on these results.

INTERNATIONAL HEALTH

Name: Soucy, Maura

Practicum Site: Management Sciences for Health

Location: Washington, DC, USA

Title: Center for Pharmaceutical Management Intern

Introduction: MSH/CPM is developing practical guidance on managing medicines benefits by providing lessons from successful and unsuccessful country experiences. I worked to help develop a case study of pharmaceutical management in Costa Rica to inform improved policies and management in Universal Health Coverage schemes.

Methods: I worked directly with David Lee at MSH and Dr. Albin Chaves Matamorros of the Costa Rican Social Security office to compile and research indicators and data relevant to this case study. I began with a review of current literature on the subject of pharmaceutical management in Costa Rica under their universal coverage scheme. The search was to rule out duplicated work and ensure that a similar case study had not already been published. After ruling this out, I began a review of Dr. Chaves' publications and PowerPoint presentations to compile a master spreadsheet of data and indicators, laid out chronologically. I identified gaps in the data and addressed discrepancies in units and conflicting data.

Results/Outcomes: Costa Rica is the first country to offer comprehensive drug coverage through a universal coverage scheme successfully. They have a single payer system that streamlines and consolidates the process, and have achieved coverage of greater than 95% of the population while containing pharmaceutical costs. A case study that examines the mechanisms that have allowed them to do this successfully will be invaluable to health systems and other countries and international agencies such as the WHO as well.

Name: Studenic, Amy

Practicum Site: Public Health Institute - Global Health Fellows Program - II | USAID Intern

Location: Washington, DC, USA

Title: Using Service Delivery Point Logistics Data to Ensure Commodity Security and Avert Stock-Outs

Introduction: USAID's Commodity Security and Logistics division supports the USAID | DELIVER Project, which works to strengthen national and international supply chains and increase coordination, commitment and collaboration for commodity financing, procurement and delivery. During three months in DC and two months remotely, I worked on projects including: recommending areas for improved performance indicators; drafting technical briefs on current USAID supply chain activities; and conducting an assessment of countries' collection of logistics data from service delivery points.

Methods: In order to assess current data collection efforts from service delivery points supported by USAID, I performed an initial literature review, drafted an interview guide, and conducted interviews and document reviews with USAID staff and field staff from USAID supported projects. Topics covered in the interviews included: types, methods and frequency of data collection; how data is used at the local and central levels; key challenges; quality and accuracy of data; and feasible options for improving data collection efforts in the future.

Results/Outcomes: I collected data and information from 15 countries and consolidated my findings into a summary report highlighting current data visibility, key challenges, and recommendations on where USAID should focus its efforts in this area in the future. Key challenges included human resources, motivational issues, poor infrastructure, data quality and completeness. Recommendations included increasing collaboration, advocating for infrastructure improvements, change management, and leveraging private sector innovations. Overall, this assessment will inform USAID's development of global policy regarding logistics data visibility to ensure commodity security throughout the supply chain.

Name: Thomas, Ashley

Practicum Site: Brookline-Quezalguaque, Nicaragua - Sister City Project

Location: Quezalguaque, Nicaragua

Title: Brookline-Quezalguaque Sister City Project: Summer Student Volunteer

Introduction: For 25 years, the Brookline Sister City Project has been working with the mayor's office and townspeople of Quezalguaque, Nicaragua to improve their livelihoods through health- and education-based programming. Each year, BSCP sends students to Quezalguaque to assess the needs of the community and make recommendations for useful interventions.

Methods: With a team of 5 US-based students, I worked on the following 5 projects: a study evaluating hydration practices (in conjunction with local medical school), an evaluation of community health worker program, record reviews of ambulance usage, medical record reviews of Pap. smear results, and discussions about sex practices with local secondary students.

Results/Outcomes: While the hydration study is still underway, results will help determine whether or not hydration should be studied further as a contributor to Chronic Kidney Disease in the region. The Community Health Worker program has much potential, but community buy-in is minimal. Ambulance information indicated that a new ambulance would be a useful investment for the health center. Pap. smear review indicated that only about 20% of eligible women received a Pap. smear in the last year. These results will be used to inform future decision-making for the BSCP and the town's leadership.

INTERNATIONAL HEALTH

Name: Tilimo, Milki

Practicum Site: Boston University School of Medicine - Vital Village Network

Location: Boston, Massachusetts, USA

Title: Assessing child well-being and neglect needs in three Boston neighborhoods

Introduction: The Vital Village Network (VVN) is a place-based community engagement network that aims to improve child well-being in three communities in the greater Boston area; Codman Square, Dudley Square and Mattapan. In these underserved communities, little is known about the availability of specific resources aimed at improving child well-being and preventing child abuse and neglect.

Methods: From June 2013 – November 2013, I collaborated with the VVN to use the Community Readiness Model (CRM), a behavior change model that comprises of 9 stages of readiness for change in a community. We used the CRM framework to develop semi-structured qualitative interviews of 7 key stakeholders around child-wellbeing in these neighborhoods (N=21). Using web-based internet searches of keywords such as local agencies, community groups, boards and news media we identified stakeholders and community leaders. I contributed to the web searches and outreach to identify stakeholders via e-mail, phone and in-person meetings and subsequently conducted several interviews. The audio recorded qualitative interviews are being transcribed. I also contributed to the data entry and analysis of a needs assessment survey in Dudley square. Data was summarized and presented to community residents.

Results/Outcomes: The proposed outcome is to understand the stage of readiness of each community-led effort to promote child well-being and reduce child abuse and neglect. VVN intends to use the community readiness model and make recommendations to interventions to address child well-being and neglect in the target neighborhoods.

Name: Trosclair, Katherine

Practicum Site: Hope of Children and Women Victims of Violence (H.O.C.W)

Location: Ndejje, Uganda

Title: Public Health Intern

Introduction: Hope of Children and Women Victims of Violence (HOCW) is a small non-governmental organization (NGO) located in Ndejje, Uganda. Established in 2008, HOCW was started a group of refugees. The NGO primarily provides services to refugees, but recently has expanded services to low income community members. HOCW conducts various workshops primarily focused on improving English and business skills. Speaking English is necessary for Ugandans to work and a major challenge for refugees. HOCW's facility is located near a small health clinic that treats a wide range of infectious diseases in the community.

Methods: In collaboration with another BUSPH student, I worked as an intern on several HOCW projects. I conducted focus groups with local stakeholders in the community, updated social media sites, collaborated with the local Women's Community Collective, and created an mHealth application for a community health assessment using CommCareHQ.

Results/Outcomes: The fundraising effort raised over \$2,000 that was used to bring essential skill training to refugee and low-income Ugandan women. Working with stakeholders, HOCW established partnerships with local clinics, visiting medical teams, and NGOs in Greater Kampala. The collaboration with the Women's Community Collective culminated in a program helping the women mobilize, network, price, and market their products to local businesses. The mHealth application was used to conduct the first community assessment for HOCW. The data and results from the assessment are being compiled for grant purposes.

Name: Ward, Lillian

Practicum Site: Blackstone Community Center

Location: Boston, Massachusetts, USA

Title: Community Based Research Assistant

Introduction: The Blackstone Community Center (BCC), in partnership with Boston Centers for Youths and Families (BCYF) serves South End and Lower Roxbury neighborhood residents of all ages. Among the services they provide is the FitWell facility, built in partnership with Boston University to address the obesity concern in these communities. For this practicum, we worked to identify the motivations and barriers that may affect young adults and families' access to the BCC facility. In gathering this information, the BCC may be able to adapt its outreach to better meet the needs of these communities and, ultimately, provide better care.

Methods: Key informant interviews were conducted with BCC staff, board members, and community members to identify these motivations and barriers effecting use of the fitness center. Our informants were recruited through outreach at local events and through recommendations from our BCC staff partners. Once the interviews were completed, we compiled a questionnaire to be given to BCC participants in order to better inform future programs.

Results/Outcomes: The interviews indicated that many community members are either unaware of the programming that BCC provides or dissatisfied with the facility itself. Lessons were learned regarding community health research: the importance of having a liaison between the research team and community partners and of firm adherence to the primary research question regardless of the interests of stakeholders.

INTERNATIONAL HEALTH

Name: Xia, Samantha
Practicum Site: Sneha Care Home and Shining Star School
Location: Bangalore, India
Title: Project Intern

Introduction: Sneha Charitable Trust (SCT) is an international faith-based organization exclusively involved in health care for the past 450 years. In Bangalore, SCT has two locations specialized in care for HIV positive individuals: Snehadaan, the clinic and Sneha Care Home (SCH), the adolescent care home for children aged 4-12 where children live and go to school year-round.

Methods: At SCT, I worked on two major projects to improve organizational capacity. (1) One of the largest problems faced by Snehadaan was maintaining the pharmacy. Previously, all records were handwritten and kept in several books, making it difficult to track the stock. I created a pharmacy management tool on excel tailored to specific clinic needs. (2) At SCH, the staff had noticed that when the children went home to their villages that many would come back in poor health. I created a system on excel for the staff to track the children's weight and health changes.

Results/Outcomes: (1) The creation of the pharmacy management system and training employees how to enter and track data has greatly improved the organizational capacity of Snehadaan. Meeting the organizational needs has now allowed the pharmacy to focus on cost-reduction goals. (2) The electronic system at SCH provided health information has led to disproving some beliefs that the staff had about their own performances in the care home and has also been used in informing families about better care practices for when the children visit their villages.

Name: Yeshitla, Mahlet
Practicum Site: Boston University School of Public Health - Center for Global Health and Development
Location: Ethiopia
Title: Research Assistant

Introduction: The purpose of the practicum is to collect and analyze data for a longitudinal study conducted by the Center for Global Health and Development (CGHD). The objective of this study is to evaluate the capacity of NGOs serving OVC in Ethiopia and to examine linkages between changes in organizational capacity of these NGOs and child health outcome.

Methods: Over the course of Spring and Summer 2013, I worked as part of a research team on data collection and analysis to contribute to a new methodology of assessing and evaluating NGOs in Ethiopia. I used the Measuring Organizational Development and Effectiveness (MODE) tool, to assess NGOs in eleven domains of organizational development. In addition, I wrote comparative analysis reports for each NGO on how their score in 2013 compare to 2012 and made recommendations for improvement in each domain.

Results/Outcomes: The reports I prepared for the NGOs identified high priority areas based on a comparative analysis of the organization's performance in each domain in 2012 and 2013. Once validated, the MODE tool has the capacity to reveal which aspects of organizational capacity are pertinent to better health outcomes for orphans in the country.

Name: Zirimwabagabo, Hubert
Practicum Site: Management Sciences for Health - Center for Leadership and Management
Location: Cambridge, Massachusetts, USA
Title: Intern/Integrated Health Project

Introduction: When immunization information systems function well, health workers and families have the knowledge that they need to ensure that every child is vaccinated. One critical component of current health information systems is the child health record. During my summer practicum, therefore, I assisted MSH Integrated Health Project (IHP), a 5-year USAID-funded project for Democratic Republic of Congo, in redesigning the child vaccination record to enter the Bill and Melinda Gates Foundation Records for Life contest.

Methods: I re-examined different national child health records and consulted the IHP field technical team to assess drawbacks the new vaccination card should address. I identified different limitations of the existing card and designed a new card that would accurately track vaccines doses, increase ease of interpretation and use, and incite behavior change, thereby improving health information systems and empowering health workers and families to protect children from vaccine-preventable diseases and save lives.

Results/Outcomes: The proposed prototype was submitted to the Bill and Melinda Gates Foundation Records for Life contest and results will be announced in early 2014. Top designs may be piloted in as many as ten countries by 2018. The IHP child technical team has manifested the interest of proposing the designed prototype to the DRC immunization program for an eventual adoption.

INTERNATIONAL HEALTH

Name: Zirimwabagabo, Hubert

Practicum Site: Management Sciences for Health - Center for Leadership and Management

Location: Cambridge, Massachusetts, USA

Title: Intern/Integrated Health Project

Introduction: The MSH Center for Health Services (CHS) works with ministries of health, local governments, the private sector, and nongovernmental and civil society organizations to strengthen the delivery of health care. MSH/CHS develops systems and build management capacity to support the delivery of lifesaving public health services. During my fall practicum, I assisted the MSH/CHS health financing technical team to assess the impact of demand-side financing mechanisms, Conditional Cash Transfers (CCT) and vouchers in improving health outcomes in Sub-Saharan Africa, thereby contributing to MSH's policy making.

Methods: I conducted literature review on successful CCTs programs in other parts of the world and generated a 2-page memo that discusses the CCTs and vouchers programs impact on health outcomes. Next, I learned about MSH's Results-Based Financing interventions in Sub-Saharan Africa and received technical advice to improve my final deliverables.

Results/Outcomes: A 5-page policy memo that describes Sub-Saharan African CCTs and vouchers design features, implementation framework, impact on health outcomes as well as their trends will be shared to the MSH's health care financing team and also to the MSH community through a PPT presentation. Overall, it recognizes CCTs and vouchers impact on health care utilization but suggests more research to understand how these interventions affect both efficiency and quality of care.

MATERNAL & CHILD HEALTH

Name: Aebi, Megan

Practicum Site: Boston Medical Center - Department of Obstetrics and Gynecology

Location: Boston, MA, USA

Title: Boston Medical Center Midwifery/Birth Sister Intern

Introduction: The Birth Sisters Program at Boston Medical Center is an innovative doula service that provides individualized, culturally appropriate care to vulnerable women during pregnancy, childbirth and the post-partum period. Doulas are trained to deliver social support to mothers in their community, connecting them to available resources, and empowering women during the perinatal period. The goal of this practicum was to assist the program in redeveloping the curriculum for new Birth Sisters and to work with the department to establish a sustainable fundraising plan.

Methods: After a comprehensive review of available training materials, recommendations were made on updates to the curriculum. Current Birth Sisters were also interviewed to identify any perceived training gaps. Furthermore, a proposal for a fundraising plan is being established, including the development of an annual event framework.

Results/Outcomes: The curriculum was updated and will be used in the coming months to train a new group of Birth Sisters. A spring fundraising event is currently being planned and targeted annual goals will be identified. Establishing an annual fundraising goal with an achievable blueprint will help provide a sustainable source of support to allow the program to continue offering this important service.

Name: Atcheson, Katherine

Practicum Site: NARAL Pro-Choice Massachusetts

Location: Boston, MA, USA

Title: Organizing and Outreach Around Reproductive Rights in Massachusetts

Introduction: NARAL Pro-Choice Massachusetts is the political arm of the pro-choice movement in Massachusetts, and advocates for pro-choice legislation, endorse pro-choice politicians, and organizes Massachusetts communities around political issues pertaining to reproductive choice and women's health issues.

Methods: This summer, our first main goal was to reach out to other organizations in Boston to create a platform based on issues facing Boston women for the upcoming mayoral race. The other goal was kicking off NARAL's Certified Truth campaign, which focuses on raising awareness about crisis pregnancy centers' deceptive advertising towards women facing unplanned pregnancies. We met with workers from various shelters and women's organizations throughout the city, to discuss the most prominent problems women face in Boston, particularly low-income women and women of color to create a platform. To raise awareness of CPCs we primarily engaged in street canvassing, asking people to sign a petition to regulate CPC advertising and distributing pamphlets to raise awareness about their practices.

Results/Outcomes: At the end of the summer, we had established the two most pressing issues for women in Boston were difficulty finding safe, affordable housing and domestic violence, and we started bringing together the organization in roundtable discussions to draft the platform. We got over one thousand signatures on our petition, raising awareness about CPCs and I was also able to write copy for the campaign website. The practicum also allowed me to learn the basics of healthcare organizing and advocacy, as well as learning about the politics of health policy and legislation.

Name: Braun, Natalie

Practicum Site: Boston Medical Center - The Breastfeeding Center

Location: Boston, MA, USA

Title: The Breastfeeding Center: Maternity Care and Infant Feeding in Indian Country

Introduction: Breastfeeding provides many important health benefits, including lowering the risk of obesity and diabetes in both mothers and infants. The Breastfeeding Center at Boston Medical Center is working to increase breastfeeding rates in American Indian and Alaska Native populations by helping to implement the Baby-Friendly Hospital Initiative (BFHI) in Indian Health Service and tribal birthing hospitals. My practicum included assisting with the organization of a conference for health professionals working with American Indian and Alaska Native populations, writing and publishing website content about the center's work, and working with American Indian community groups.

Methods: Over the course of my practicum, I helped to write and design material for the upcoming Maternity Care and Infant Feeding in Indian Country Conference, as well as informational materials, promotional flyers, and website content for The Navajo Nation Breastfeeding Coalition and The Navajo Area Baby-Friendly Task force. In conjunction, I was trained and acted as the website manager for The Breastfeeding Center, creating pages describing the work of the Center and the involvement with The BFHI.

Results/Outcomes: Since the Breastfeeding Center began its work, many hospitals in Indian Country have begun the process or have received Baby-Friendly designation. The Conference on Maternity Care and Infant Feeding in Indian Country will be an opportunity for providers from hospitals serving these communities across the U.S. to share knowledge about the designation process and promote good breastfeeding practices in their local hospitals and community organizations.

MATERNAL & CHILD HEALTH

Name: Budwit, Samantha

Practicum Site: Metamovements

Location: Boston, MA, USA

Title: Intern at MetaMovements- Move4 Health

Introduction: MetaMovements (MM), a Latin Dance Company, hosts Salsa In The Park (SITP) at Blackstone Community Center. SITP is a community-based multi-factorial initiative that emphasizes community empowerment by: 1) promoting physical activity; 2) nutrition; 3) water availability; and 4) environmental awareness to under-served communities. Approximately 200-500 participants attend SITP weekly events.

Methods: MetaMovements employs 10-15 motivated youth during the summer. My main project consisted of coaching and training MM youth to act as ambassadors by delivering public health messages via posters, videos, public service announcements at SITP events. The youth and I researched and brainstormed various public health nutrition topics including: 1) MyPlate; 2) Hydration; 3) Sugar-sweetened beverages; and 4) Healthy alternatives. In addition to training the youth, I worked to transform the community's understanding of nutrition by showcasing healthier snack and drink options and by providing access to affordable and appealing nutritious snacks. In addition, the water bar's multi-factorial component reinforced the importance of hydration and environmental awareness. Lastly, I created an evaluation survey, distributed to MM youth and SITP participants, to compile feedback and measure the impact of nutrition to under served communities.

Results/Outcomes: Findings showed that at least in the short-term, SITP's public health nutrition initiative was effective in impacting the community and youth's perception and behavior of eating, hydration, and physical activity.

Name: Bussell, Corie

Practicum Site: Municipal Secretary Of Health Office - Buritis

Location: Rondonia, Brazil

Title: Rede Cegonha Program Development Assistant

Introduction: The state of Rondonia, Brazil has one of the world's highest rates of cesarean birth in the world, 65% in 2010. In the municipality of Buritis, where I conducted my practicum, 78.5% of births were conducted by cesarean in 2011. "The Stork Network" is an initiative by the Brazilian federal government through the Unified Health System (SUS) to improve the care of women during pregnancy, delivery, and postpartum. The objective is to assist health professionals to provide more humane and safe care. For the first year, the Municipality of Buritis, a city of about 35,000 in legal Amazonian Northwest Brazil, received funding to begin the implementation of Rede Cegonha.

Methods: My main role was to provide planning and implementation support for the Rede Cegonha initiative. I worked directly with the local staff at the municipal run health clinic to develop a written educational tool for prenatal clients and carried out a municipal level maternal health needs assessment, identifying strengths, gaps, and challenges in program implementation, and suggested recommendations for quality improvement.

Results/Outcomes: My deliverables included a maternal health needs assessment for the municipality and the creation and publishing of a culturally relevant and targeted educational baby book tool for distribution within the municipal health clinic. The tools can be used to enhance consistency and quality of prenatal care education and improve program planning and implementation for the future.

Name: Hegg, Lauren

Practicum Site: Planned Parenthood League of Massachusetts - Education Department Program

Location: Boston, MA, USA

Title: Improving Clinic Processes at PPLM

Introduction: Planned Parenthood League of Massachusetts (PPLM) provides health, advocacy, and education services through a network of seven locations throughout Massachusetts. My internship supported the education and internal training department located at the Boston office. Planned Parenthood of Massachusetts lies within the national guidance of Planned Parenthood Federation of America (PPFA). PPFA provides support to the 69 independent affiliates located throughout the country.

Methods: To support the local PPLM affiliate the national PPFA office initiated a quality enhancement program named Business Optimization Team (BOT). The project's goal was to enhance the clinic operations to continue providing the best possible care to patients in the abortion and gynecological departments. Two experienced, high performing providers were recruited from each department to update and improve all procedures and workflows using evidence-based research and their first-hand experience. My internship supported these efforts by gathering information, observing in the clinic, designing flowcharts and workflow guides, and creating easily-accessible "pocket guides" for the clinic staff.

Results/Outcomes: New process guides were introduced to clinic staff. This included improved birth control counseling guides, clearer clinic workflows, and standardized codes. The improved process charts presented important, complex information in an accessible and convenient format. This allows the clinic staff to focus on providing exceptional patient care while also documenting their work effectively. Gathering information and recommendations from actual clinic practitioners enhanced the project output significantly. The information was relevant and the improvements were applicable and appreciated. The opportunity to contribute to a business optimization project in an urban clinic that serves such a vital role in the health of our community was a wonderful opportunity.

MATERNAL & CHILD HEALTH

Name: Ligo, Devon

Practicum Site: Boston Medical Center - Department of Family Medicine

Location: Boston, MA, USA

Title: Research Assistant for Back to Health Study

Introduction: This practicum focused on enrolling participants in the fourth and final cohort in the Back to Health research study. The purpose of this study is to find those affected with chronic unspecified low back pain and randomize them into three different treatment groups: yoga, physical therapy, or education.

Methods: As a blinded research assistant, I helped the recruitment team finding potential participants and taking them through the screening process. If they were eligible after screening, I would invite them to the office for an information session. Then, I would lead information sessions to answer any questions a participant may have, and obtain written consent for the study. Later, participants would come back to be randomized in a specific treatment group as listed above and complete a baseline survey. Surveys would be collected from participants at six-week increments, which are vital to evaluate the statistical significance of each treatment group. Another duty assigned to me was checking quality assurance. The outcome of this specific task was helping to correct mistakes that could have happened in survey administration, consent signing, or data entry.

Results/Outcomes: The projected outcome of the project as a whole is to reduce medication use, doctor visits, and overall pain by offering alternative medical treatments for people suffering from chronic low back pain. The outcome of my individual work was successfully enrolling and randomizing the necessary amount of participants in the final cohort.

Name: Lopez, Emily

Practicum Site: Boston Medical Center - Department of Obstetrics and Gynecology

Location: Boston, MA, USA

Title: Addressing barriers to sustainable patient recruitment practices for Centering Pregnancy at Boston Medical Center

Introduction: Centering Pregnancy is a health care model that delivers prenatal care to a group of eight to twelve women with similar gestational ages in ten two-hour sessions. At Boston Medical Center, I led the continuation of an effort to increase patient recruitment and achieve institutional support for integrating Centering into the standard prenatal care model. Previous efforts identified the Obstetrics and Gynecology call center as the source of the barriers limiting patient recruitment, therefore my project focused on identifying and removing those barriers.

Methods: I designed and led a training session for five call center staff members to identify the challenges and solutions to scheduling group prenatal intake visits. I revised the call center script based on their feedback and implemented the changes. Weekly tracking graphs were distributed to the staff to visually display current capacity of intake groups. Lastly, I gathered data from the new prenatal registration sheets and calculated the following information: 1) total number of new prenatal registration sheets completed; 2) patient recruitment rate before and after staff training; 3) reasons for not scheduling group intake visit.

Results/Outcomes: Patient recruitment rate before the staff training was 56%. The recruitment rate three months after the training and use of weekly tracking graphs was 58%. Language (English had to be the patient's primary language) was the main reason recorded for not scheduling the group visit. Lack of consistent supervision and conflicting priorities were the main barriers to achieving sustainable change in the call center.

Name: Morrison, Kate

Practicum Site: Safe Mothers, Safe Babies

Location: Kalalu Parish, Iganga District, Uganda

Title: Safe Mothers, Safe Babies; Kalulu Parish, Iganga District, Uganda

Introduction: Safe Mothers, Safe Babies is a non-profit organization that seeks to improve maternal, neonatal, and child health in Uganda through demand-driven, collaborative, sustainable, and scalable means. The purpose of my practicum was to partner with SAFE and the communities within Iganga District to improve maternal and neonatal outcomes by increasing access to, quality of, and demand for, maternal and child health services.

Methods: I worked with the SAFE team to: 1) plan, organize, and launch an eRanger motorcycle ambulance at Lubira Health Center, 2) evaluate health centers that currently practice with no light source for eligibility for solar suitcases from WE CARE SOLAR, 3) observe deliveries at health centers at night to learn where improvements are needed, 4) conduct follow-up surveys at health centers currently using solar suitcases in order to assess impact of the solar suitcases and what could be improved, 5) collect data on health complications and adverse maternal and neonatal outcomes from maternity records at health centers, 6) implement a system to track and record referrals from health centers to the Iganga District Hospital.

Results/Outcomes: Both the eRanger motorcycle ambulance and the installation of three solar suitcases in health centers without light will increase access to safe deliveries for women living in Iganga District. Maternity record data was collected from 14 rural health centers and the district hospital. Once analyzed, this data will allow for better assessment for delays in referral and treatment in order to improve maternal and neonatal health practices in Uganda.

MATERNAL & CHILD HEALTH

Name: O'Connor, Lauren

Practicum Site: Boston Medical Center - Atrial Fibrillation Study

Location: Boston, MA, USA

Title: Implementation of Centering Pregnancy in the Boston Medical Center's Teen & Tot Program: Adolescent Obstetric Patients' Satisfaction and Personal Experience with Group Prenatal Care

Introduction: Pregnant adolescents are at increased risk for adverse perinatal outcomes. Boston Medical Center's Teen and Tot program offers adolescents a Centering Pregnancy group that provides prenatal care, education and social support to counter perinatal risk. I worked with the Centering program to collect and analyze data on perinatal outcomes, assess satisfaction and readiness to parent and provide recommendations for program improvement.

Methods: I completed a program review of the Centering Pregnancy pilot group and analyzed findings by reviewing research, data and qualitative reports gathered from previous practicum students. I developed surveys and interviewed eight previous and eight current participants to attain qualitative data on satisfaction with the program, educational attainment and readiness to parent. I analyzed quantitative data on maternal and perinatal outcomes. I developed recommendations for future program changes and presented them to the program supervisor.

Results/Outcomes: I looked at eight Centering Pregnancy outcomes from the pilot program. Eight more outcomes will be analyzed before the end of the practicum. Preliminary data analysis of post-partum outcomes among ten teen participants reflects high rates of exclusive breastfeeding (62%), contraceptive use (78%) and post partum visit attendance (88%). Qualitative outcomes from interviews and surveys revealed high satisfaction with the program, retention of educational material and social support received from peers. Satisfaction was assessed through open-ended questions and survey scales. Future analyses will compare low birth weight and preterm birth among adolescents attending Centering programs compared to those receiving tradition prenatal care.

Name: Olukoshi, Olufunmilayo

Practicum Site: Uganda Village Project

Location: Iganga, Uganda

Title: Project and Administration Team Leader

Introduction: The Uganda Village Project (UVP) is an international public health NGO based in Iganga District of Uganda. The organization aims to use education sessions, service outreaches, and project guidance to improve public health in five focus areas: Water, Sanitation and Hygiene (WASH), Family Planning, Malaria, Obstetric Fistula, and HIV/STIs, in order to sustainably improve health knowledge and quality of life in the village. As a Project and Administration Team Leader, I was primarily in charge of collecting baseline data, mobilization, conducting educational outreaches, budgeting, and writing the team's final report.

Methods: The team conducted Needs Assessments with various community stakeholders to better enable us to identify the village's health issues and develop strategies to address them. Similarly, baseline surveys were administered to assess residents' knowledge of malaria, the presence of bed nets, and sanitary facilities. The information was then used to inform the team's educational and outreach sessions.

Results/Outcomes: As a result of the Needs Assessments and surveys, the team was able to acquire nurses for the two Family Planning sessions we conducted. With the nurse present, women were provided with short-term contraceptive methods, while those seeking more long-term methods were registered with UVP's partner for forthcoming services. Likewise, women who attended the Obstetric Fistula outreach were registered with a fistula expert, who will inform them when the next fistula camp is held in the area. Lastly, portable taps (tippy-taps) were established at the primary school, and malaria nets, waterguard, and condoms were distributed after our education sessions.

Name: Parnham, Taylor

Practicum Site: Massachusetts State House - Representative Ellen Story and the Special Legislative Committee on Postpartum Depression

Location: Boston, MA, USA

Title: Intern

Introduction: The Massachusetts Special Legislative Committee on Post Partum Depression was established by law in 2010 and has been tasked with developing proper screening and treatment protocols as well as assisting with new regulations and initiatives across the state. Representative Ellen Story chairs the commission and the body is comprised of various prominent leaders on the issue including legislators, medical professionals, state agency representatives, non-profit leaders, and women who have survived post partum depression (PPD). The commission continuously strives to develop a culture of awareness and destigmatization of PPD.

Methods: As the aide to the commission, I helped facilitate and work towards the goals set at meetings. I primarily worked with a subcommittee dedicated to the expansion of the Massachusetts Child Psychiatry Access Project (MCPAP), a consultant and referral service hotline used by providers. In addition to drafting subcommittee meeting reports, I developed a provider and support group referral list to be used in the MCPAP database as well as compiled commission members resources and references into a central dropbox.

Results/Outcomes: The initial provider and support group list I compiled will be used in the MCPAP database utilized by the call center consultants when practitioners call asking for resources and referral for mothers experiencing symptoms of PPD. This baseline referral list work has helped MCPAP in its continued development of a comprehensive safety net for mothers suffering from PPD.

MATERNAL & CHILD HEALTH

Name: Pechulis, Kristina

Practicum Site: Harvard School of Public Health - François-Xavier Bagnoud Center for Health and Human Rights

Location: Boston, MA, USA

Title: Program on the Health Rights of Women and Children, FXB Center for Human and Health Rights with Alicia Yamin

Introduction: Due to the expense and difficulty of litigation, legal challenges for health rights have decreased. As enforcement of health-related laws weakens, the ability of individuals and families to promote their own health rights and manage their own health risks has decreased. In my practicum, I helped to prepare for the Global School on Socioeconomic Rights, a course developed by Alicia Yamin, lecturer on global health at Harvard University and conducted in September 2013. The course, geared toward lawyers and human rights practitioners, was designed to educate and provide the skills needed to utilize litigation to promote health rights, particularly those of women and children.

Methods: Throughout my practicum, in addition to providing support logistically, I performed extensive literature searches on the current state of health, economic and social rights litigation throughout the world. The literature searches I completed were used to educate the participants and instructors. I also helped to reorganize and rewrite case studies used by participants; the case studies provided examples of how enforcing health-rights related laws can directly affect an individuals' health.

Results/Outcomes: The Global School was successfully completed. Forty-four people from 24 countries participated from around the world. Nine instructors, who are experts in their field, taught the course throughout the week. At the end of Global School, participants had an understanding of health rights on the national, regional, and international levels and gained tools on how to use litigation to enhance health systems and to advocate for individuals.

Name: Perreault, Rebecca

Practicum Site: Boston Medical Center - The Breastfeeding Center

Location: Boston, MA, USA

Title: Intern

Introduction: The Centers for Disease Control and Prevention reports that only 54% of mothers practice exclusive breastfeeding at one week and even fewer (16%) at 6 months of age, despite clear recommendations. Mothers who deliver at Baby-Friendly Hospitals are more likely to exclusively breastfeed at 6 months and at 1 year. Hospitals achieve Baby-Friendly designation by certification in implementing the World Health Organization's 10 Steps to Successful Breastfeeding.

Methods: Through the first national campaign of its kind, called Best Fed Beginnings, a cohort of 89 hospitals across the nation is working through the 4D Pathway together, hoping to attain Baby-Friendly status by November of 2014. As an intern for one consultant at the Breastfeeding Center in Boston, I have 1) assisted the consultant with organizing networks of hospitals for national webinars, 2) written up findings from hospital visits conducted by the consultant, and 3) visited hospitals to conduct mock audits among patients and providers in preparation for assessment by Baby-Friendly USA.

Results/Outcomes: Hospitals use feedback from mock surveys and written reports to pinpoint certain areas of practice that do not meet the standards for becoming Baby-Friendly. Documentation also provides guidance and critical tools for cohorts in the future. The first hospital in this cohort has become Baby-Friendly and by November of 2014 a majority of these hospitals hope to be designated. Exclusive breastfeeding rates will likely rise for these hospitals. Participation in this project has directly taught me about benefits and challenges to the process of becoming a Baby-Friendly Hospital.

Name: Siegel, Hannah

Practicum Site: Cone Communications - Social Impact Department

Location: Boston, MA, USA

Title: Intern

Introduction: Cone Communication is a public relations and marketing company specializing in cause-marketing and brand storytelling. Cause marketing describes the union of a corporation's brand identity with a cause, usually represented by a nonprofit partner. The goal of cause marketing is to improve brand image, brand allegiance, and profitability for the corporation, and to raise awareness and funds for the nonprofit.

Methods: Cone specializes in using social and environmental impact as the heart of a messaging and marketing framework. As a social impact intern, I worked with my team on many steps of the Cone-client process: brand-briefing, asset assessment, stakeholder interviews and alignment of objectives, benchmarking analysis, social impact framework development, implementation, nonprofit engagement and evolution, and company engagement. In addition, I worked with a mentor assigned to me based on my background and interests on an independent thought leadership project that assesses the impact of cause marketing campaigns on social behavior. I evaluated 15 award-winning campaigns for integration of cause-related social behavior into the consumer engagement aspect of the campaign. This research will continue through 2014.

Results/Outcomes: There is a lot of overlap between Cone's process for creating cause marketing campaigns and the public health processes for program assessment, management and campaign development. There are large differences, however, in motivation to address social causes, funding sources, depth of analysis, and timeframe. In conclusion, public health could learn from the creative messaging and corporate partnerships used by Cone. Cone could improve needs assessment and evaluation to meet public health standards.

MATERNAL & CHILD HEALTH

Name: Sullivan, Brianna

Practicum Site: Association for Frontotemporal Degeneration

Location: Radnor, PA, USA

Title: Program Evaluation/Quality Assurance Intern

Introduction: FTD: Frontotemporal degeneration (FTD) is a progressive neurological disease process where the frontal and/or temporal lobes of the brain become damaged. This damage causes a variety of cognitive and behavioral changes, memory issues, and impairments in executive functioning, motor skills, and/or social interactions. These changes interfere with the ability to accomplish work and personal tasks and result in increasing dependency. A diagnosis of FTD affects both patients and families in numerous complicated and difficult ways. SEM: The Social-Ecological Model (SEM) offers a useful lens for assessing the needs of FTD patients and their families. The SEM shifts the focus from health on a purely individual level to a multilevel analysis of the relationship between individuals, their environment, and their health. AFTD: The Association for Frontotemporal Degeneration (AFTD) is the national advocacy organization for FTD in the US. The AFTD HelpLine acts as a source of information, support, and community for people affected by FTD. Objective: Describe the characteristics and complex needs of AFTD helpline users using a SEM framework.

Methods: Wrote coding manual for AFTD HelpLine based on levels of SEM. HelpLine cases from July 2012-June 2013 (n=1680) will be coded by four reviewers for individual SEM levels (intrapersonal, interpersonal, institutional, community, policy/society) and total number of SEM levels present in each case description.

Results/Outcomes: Descriptive statistics for basic case data and SEM framework will be presented, including caller and patient demographics where available. Additional analyses will assess associations between caller type (patient, caregiver, healthcare professional) and SEM framework.

Name: Wiley, Aleta

Practicum Site: Slone Epidemiology Center

Location: Boston, MA, USA

Title: Predictors of male partner participation in an Internet-based fertility study

Introduction: Many couples face adverse psychological effects when they experience delayed conception. The Boston University Pregnancy Study Online (PRESTO) is a prospective cohort study that began in July 2013 to identify lifestyle factors that influence a couple's fertility and pregnancy outcomes.

Methods: Women complete online questionnaires for one year or until they achieve pregnancy. They are encouraged to invite their male partner to complete a one-time online questionnaire. Male participation in the study has been low. Of the 382 enrolled women as of mid-November, only 166 (43%) invited their male partner to participate. Of those men, only 50 (30%) completed the survey. For this practicum, I used SAS 9.3 to investigate predictors of whether a male partner completes his questionnaire.

Results/Outcomes: Past pregnancies did not predict whether a woman invited her male partner (42% vs. 44%), nor did it predict whether males would complete the questionnaire if invited (29% vs. 30%). Women with college and graduate degrees were more likely to invite their partners than those with a high school degree or less (37%/52% vs. 0%) and, of males invited, males were more likely to participate if the woman had a college or graduate degree compared with some college/vocational degree (29%/36% vs. 13%). While Hispanic women were slightly more likely than non-Hispanic women to invite their male partners (48% vs. 43%), partners of Hispanic women were less likely to complete the questionnaire (15% vs. 31%). These findings may inform recruitment strategies for the PRESTO Study moving forward.

SOCIAL & BEHAVIORAL SCIENCES

Name: Alderman, Max

Practicum Site: Healthy Hearts for Life, INC - Chronic Disease Prevention

Location: Boston, MA

Title: Program Manager

Introduction: Healthy Hearts for Life, INC (HHFL) is a registered 501c3 non-profit in the Metro-West area of Massachusetts and the entity responsible for developing the HHFL Lifestyle Program. The HHFL Lifestyle Program is a comprehensive disease prevention and intervention platform created in partnership with local YMCAs and medical centers in the Metro-West region of Massachusetts to promote long-term, pro-health behaviors in patients with cardiovascular disease (CVD) and the at-risk population.

Methods: As the Program Manager for HHFL, my role involved overseeing all aspects of the HHFL Lifestyle Program development, including the leadership and coordination of the executive team. The deliverables consisted of the creation of a program logic model, project timeline, website, and curriculum draft.

Results/Outcomes: Various logistical and programmatic limitations were encountered along the way that required the project timeline to be adjusted, resulting in a delay of program implementation. As a result, the evaluation materials have not been robustly developed, but are expected to be compiled in the coming months. The curriculum has experienced significant alterations and continues to be amended through the added expertise of a dietician, exercise physiologist and YMCA staff. Despite the shortcomings, the project is gaining momentum as more potential partners and community members seek to provide support and collaborate on developing and delivering the program. The program development is nearing the final stage of completion and is set for a pilot launch at the Metro-West YMCA in the Spring of 2014.

Name: Bresee, Kaitlin

Practicum Site: Metamovements - Move4Health

Location: Boston, MA

Title: Engage through the Arts practicum Intern for Metamovements Latin Dance Company

Introduction: MetaMovements Latin Dance Company promotes health through several community dance performances, workshops, and events. Their program weaves public health education into arts activities to captivate the attention of audiences who may be in need of information and skills, but who wouldn't normally attend such public health education events. The purpose of this practicum was to prepare youth performing artists to more effectively disseminate health promotion messages through dance, spoken word poetry, and theatre.

Methods: Activities included: 1) Youth performers were trained in community building exercises and classroom management skills to effectively engage children, teens, and adults in urban and latin dance workshops in a variety of setting; 2) Instruction and facilitation about public health communications skills through theatrical performances, spoken word, and MC-ing, improved youth capacity to disseminate creative healthy messaging at community events throughout Boston.

Results/Outcomes: This practicum enhanced existing physical activities sponsored by MetaMovements by their youth employees and reframed them as a fun and low cost health promotion strategy. Several resources were developed including poems, reflection exercises, and skits that encourage community members and teens to reflect on their health in a meaningful way. Additionally, the practicum illuminated the value of the rehearsal and performance process as beneficial to the mental and physical well being of the youths themselves.

Name: Bright, Riley

Practicum Site: Massachusetts Department of Public Health - Division of Epidemiology and Immunization

Location: Boston, MA

Title: Local Health Intern - Chelmsford, MA

Introduction: The Chelmsford Board of Health (CBoH) seeks meaningful ways to provide essential health promotion and disease prevention services. The CDC recently identified access as one of the largest barriers to receiving appropriate and timely mental health services. The purpose of this practicum was to assist the CBoH community communication and outreach efforts, including the availability of a specific service related to mental health for local residents.

Methods: As the communication intern, I was tasked with two specific responsibilities: 1) first a list of local health care providers was compiled, then, physicians from the list were then contacted in order for the Board to distribute and promote a mental health provider referral resource for patients in need of mental health services (the resource is called MSPP Interface); 2) a Facebook page was also developed to increase public awareness of available services, public events and emergency preparedness protocol; and 3) a user manual was created to ensure sustainability and upkeep of the website.

Results/Outcomes: These community outreach strategies have increased the communication services from the Board to its residents. Informal observation indicates that there is an increase in residents at events that have been publicized. There was also an increase in the utilization rates of MSPP Interface with referrals from primary care practitioners.

SOCIAL & BEHAVIORAL SCIENCES

Name: Cho, Margaret

Practicum Site: Boston University Center for Future Technologies in Cancer Care

Location: Boston, MA

Title: A clinical needs assessment on barriers to cancer screening in the primary care setting

Introduction: The Center for Future Technologies in Cancer Care focuses on the identification, prototyping and early clinical assessment of innovative point-of-care technologies for the screening, diagnosis, treatment and monitoring of cancers. The purpose of this practicum was to assist identify needs and barriers to cancer screening that occur in the primary care setting. This will better enable engineers to create point-of-care technologies that provide meaningfully impacts that complements a physician's work and increases ease/access/convenience for patients.

Methods: Activities included: 1) a thorough literature review including gathering cancer statistics through MassChip, SEER data, and hospital reports, 2) creating a preliminary report of findings, 3) researching best practices, interviewing physicians, and meeting with experts to create an online questionnaire, 4) contacting outlets of distribution, and 5) IRB preparation and submission.

Results/Outcomes: An online questionnaire, utilizing the information extracted from stakeholder and expert interviews, was developed. An IRB application was approved, allowing for the Center to launch the primary care physician survey. The Center will then collect, analyze, and summarize this data in a final report that will inform its biomedical engineers.

Name: Doyle, Reina

Practicum Site: Blackstone Elementary School-Based Health Center/South End Community Health Center

Location: Boston, MA

Title: Community Based Research Assistant

Introduction: The Blackstone Community Center (BCC), a facility of the Boston Centers for Youth and Families (BCYF), provides services for residents of all ages in the South End and Lower Roxbury neighborhoods. This practicum involved partnering with the BCC to understand the motivations and barriers facing young adults, adults, and families related to using the fitness and wellness resources within the BCC. Feedback from community members would lead to a better understanding of how to encourage more individuals to utilize BCC resources. This in turn could lead to a healthier community and increased quality of life.

Methods: Key informant interviews were conducted with community members, BCC staff, and BCC board members in order to understand perceptions and beliefs about BCC programming and facilities. Interview participants were recruited through outreach at local events and through recommendations by BCC directors. Results from the key informant interviews were used to generate a questionnaire, which will be distributed to current BCC members and will help inform future BCC programming. An IRB application for this was developed.

Results/Outcomes: Several themes emerged throughout the interviews, including the need to increase knowledge about BCC resources and the need for better facilities. Lessons were learned about conducting community based research, including the importance of engaging a liaison to generate community interest in the study and the importance of always keeping the primary research question at the forefront of the project because stakeholders can easily sway the focus of the discussion.

Name: Gormley, Katelyn

Practicum Site: Boston Public Health Commission - Start Strong Initiative

Location: Boston, MA

Title: Graduate Intern

Introduction: The Start Strong Initiative is one of the largest national initiatives aimed at preventing teen dating violence among 11-14 year olds through the promotion of healthy relationship behaviors. In Boston, the Start Strong Initiative trains 20 high school peer leaders to educate middle school students about healthy relationship behaviors throughout the academic year. Additionally, high school peer leaders educate parents, teachers and other community members on how to talk to teenagers about issues relating to teen dating violence.

Methods: As an intern for Start Strong, my duties include: 1) Assisting in creating components of a tool kit that would accompany each episode of a new web series; 2) Working directly with peer leaders in afternoon workshops to facilitate ice breaker activities, work on promotional materials for the web series, and assist with workshop planning; 3) Supervise and support teen leaders at community sites; 4) Creating a list of unhealthy and healthy relationship songs for the Sound Relationship Nutritional Chart that will be featured on the BPHC website; 5) Conducting necessary activities to help with ongoing projects such as literature reviews and organizing training sessions.

Results/Outcomes: Through peer education, Start Strong is able educate Boston youth on the importance of healthy relationships and help prevent teen dating violence. An average of 45 middle school students receive weekly education from high school peer leaders. Ongoing evaluation using pre and post-test measures will determine the effectiveness of high school peer educators influence on youth.

SOCIAL & BEHAVIORAL SCIENCES

Name: Gottsegen, Jessica

Practicum Site: Boston University School of Public Health Tobacco Treatment Advocates in Public Housing - Department of Epidemiology

Location: Boston, MA

Title: Graduate Research Assistant

Introduction: Overall smoking rates have declined substantially over the past 40 years, but smoking prevalence remains significantly higher among low-income populations. Differences in smoking cessation rates among low and high-income smokers (30% and 53% respectively) are a major reason for this discrepancy. Without effective interventions to improve quit rates, low-income smokers will face an increasingly disproportionate burden of smoking-related morbidity and mortality. The Tobacco Treatment Advocates in Public Housing study is a group-randomized trial among public housing residents. This group is characterized by low income and education levels, and overrepresentation of racial/ethnic minorities -- all factors associated with lower use of smoking cessation treatments and less success in quitting. The aims of the study are to determine whether the use of Tobacco Treatment Advocates (TTAs) can increase (1) the utilization of smoking cessation programs and (2) quit rates among public housing residents.

Methods: My work included the following activities: (1) manage participant contact and oversee scheduling for all data collection; (2) administer 3, 7, and 12 month follow-up questionnaires; and (3) develop and implement 22 questions for follow-up questionnaires for a new deliverable on the role of social engagement (social media/cellular technology) in smoking cessation.

Results/Outcomes: Preliminary data from these 22 new questions will be used in a NIMHD grant proposal, "A Facebook Intervention for Smoking Cessation among Public Housing Residents." The findings from the current study and the proposed intervention will help to further define effective smoking cessation interventions to increase quit rates and ultimately, decrease the health burden of smoking among low-income populations.

Name: Hall, Emily

Practicum Site: Blackstone Elementary School-Based Health Center/South End Community Health Center

Location: Boston, MA

Title: Community Based Research Assistant

Introduction: The Blackstone Community Center (BCC) is a multiservice center that serves the wellness needs of the South End and Lower Roxbury communities. Boston University recently entered into a partnership with the BCC to build the BU Fitwell Center for BCC members as obesity has been identified as a health concern within the community. The goal of this practicum was to identify the motivations and barriers to young adults and families within the community concerning their use of the BCC's wellness resources. This information will help the BCC refine their outreach efforts and programming, which will ultimately improve the health of the community.

Methods: Key informant interviews were conducted among the BCC staff, board members, and community members to identify motivations and barriers to attending BCC programming and use of the BU Fitwell Center. Participants were identified by the BCC directors and by reaching out to community members at BCC events. Qualitative data collected through these interviews was used to develop a survey, which will be distributed to BCC members with the goal of informing the BCC's future programming and outreach efforts. An IRB application was developed.

Results/Outcomes: Analysis reveals that many community members are unaware of the BCC's programming, or are dissatisfied with the facilities. Challenges associated with conducting community-based research were identified. Lessons learned included the importance of adhering to the primary research question despite influence from stakeholders and establishing a liaison between the research team and community partner.

Name: Harrington, Stephanie

Practicum Site: New Bedford Health Department

Location: New Bedford, MA

Title: New Bedford Strategic Plan Projects

Introduction: The New Bedford Health Department aims to promote the health of the community through understanding the city's health needs. In order to increase this understanding and to continue to promote health, the Health Department identified projects including a short community survey, a community needs assessment and a new website design, as essential parts of the city's strategic plan.

Methods: A short electronic survey, City Pulse, was created which included questions regarding demographic information, satisfaction of the community's health and resident's top three health concerns. The survey was distributed via the mayor's newsletter, city email lists and community organizations. Data for the needs assessment was then compiled on a number of health outcomes/indicators from sources such as, the Massachusetts Community Health Information Program (MassCHIP) and the Youth Risk Behavior Survey (YRBS). The data was analyzed, compared to surrounding areas and compiled into a formal report. The website plan was developed by organizing current website information into a user friendly format.

Results/Outcomes: Survey findings indicate that residents are moderately or slightly satisfied with the health of New Bedford and top health concerns included substance abuse and safety followed closely by diabetes and obesity. The needs assessment mirrors findings found in the survey and provides information on the city's assets, barriers and most pressing health concerns. The New Bedford Health Department will use these results to allocate money for future programming that is geared toward the community's greatest needs and will use the new website plan as a platform for future health communication.

SOCIAL & BEHAVIORAL SCIENCES

Name: Krelko, Michelle

Practicum Site: Fenway Community Health - Lesbian, Bi Women's and Trans Health Promotion

Location: Boston, MA

Title: Research Assistant

Introduction: Health education materials that address the specific needs of the trans community are few and far between. In order to address the lack of trans specific materials, The Fenway Institute of Health created a short brochure on cervical screenings directed towards those on the trans-masculine spectrum.

Methods: Activities included: 1) Several in-depth interviews with individuals who identify as trans-masculine on the spectrum were conducted to better understand their past experiences with the Pap smear test, opinions on what information they needed and what providers could do to improve the experience; 2) Brochures were created to address the issues related to the use of gendered language (e.g. body dysphoria); instead of calling the test a Pap smear, the language was changed to Cervical Cancer Screening in order to avoid evoking negative reactions to the information presented by the brochure; 3) When creating the design of the brochure, a photo shoot was conducted to create diverse images of trans-men along the trans masculine spectrum.

Results/Outcomes: The newly created health education materials will be distributed. Focus groups will then be conducted to ascertain what impact the information presented and language used has.

Name: Larson, Carol

Practicum Site: Boston Children's Hospital - Program for Patient Safety and Quality

Location: Boston, MA

Title: Improve Care Now (ICN) Project Intern

Introduction: ImproveCareNow (ICN) is a national healthcare collaborative dedicated to improving the quality of care for children with inflammatory bowel disease (IBD), including Crohn's disease (CD) and ulcerative colitis (UC). Recently, a new disease classification system, the Paris criteria, was published that changes the clinical criteria used for classifying CD and UC based on disease location and behavior. The Paris system focuses on macroscopic disease, excluding microscopic evidence of disease, previously included in the Montreal criteria. The practicum goal was to reclassify the ICN IBD patients at Boston Children's Hospital (BCH) based on the Paris criteria and examine the impact of the reclassification process and outcomes on patients and providers.

Methods: Reclassification included: 1) analysis of clinical data; 2) creation of a manual of operations outlining the reclassification process; 3) design of a database to compare the previous disease classification to the Paris classification; 4) survey of providers through qualitative interviews; 5) tabulation of results using a summated rating scale that assessed the impact on their workflow and approach to patient care; and 6) implementation of a process evaluation to test the reclassification steps and address providers' perceived barriers to completion.

Results/Outcomes: A complete data set of patients reclassified in the Paris system, a manual of operations for the reclassification process and a provider feedback data report were completed. The report includes process level measures needed to implement reclassification of future patients, perceived barriers to completion and outcome measures of how providers understand their patients' disease under the new system.

Name: LeClerc, Ashley

Practicum Site: Fenway Community Health - Sidney Borum, Jr. Health Center

Location: Boston, MA

Title: Research Intern

Introduction: The Sidney Borum Jr. Health Center provides medical and behavioral health services to youth age 12 – 29 years, with special focus on those who are lesbian, gay, bisexual, and transgender. Research and clinical literature on transgender youth is limited and often lacks comparisons to non-transgender (cisgender) youth. The Borum's leadership in transgender young adult care means that data for the population are uniquely available via electronic patient medical and behavioral health records. This practicum's purpose was to create and analyze a data set for comparison of medical, behavioral, and psychosocial factors between transgender youth and their cisgender peers.

Methods: The data set was created through reviewing electronic medical records for 180 transgender and 180 cisgender youth matched by age, race, and gender identity. Youth included were age 13-29 years and seen for medical and/or behavioral health care between 2001 and 2010. My analysis was limited to cervical health related factors in transgender men, genderqueer youth assigned a female sex at birth, and cisgender women who were sexually active during the 10-year study period (n=147). Transgender/genderqueer participants (n=80) were compared to cisgender women (n=67) on sociodemographics and cervical health measures (Pap screening adherence; abnormal Pap result; HPV diagnosis; HPV vaccination).

Results/Outcomes: Significant negative associations were observed between transgender male/ genderqueer identity and Pap screening adherence (p=0.0134, OR=0.181 (0.047-0.702), abnormal Pap result (p=0.0061, OR=0.013 (0.001-0.292), and HPV Vaccination (p=0.0172, OR=0.259 (0.085-0.787)). No significant association was observed between transgender male/ genderqueer identity and HPV diagnosis. All tests of association were controlled for age and race.

SOCIAL & BEHAVIORAL SCIENCES

Name: Miller, Shannon

Practicum Site: Worksite Wellness Council of Massachusetts

Location: Boston, MA

Title: Worksite Health Promotion Resource Project Intern

Introduction: Health promotion is most effective when it occurs where people live, work and play. Worksite wellness promotes the health and wellbeing of employees through the implementation of policies, personal incentives, and environmental change where people are employed. The Worksite Wellness Council of Massachusetts (WWCMA) and the Massachusetts Department of Public Health have partnered to develop a resource guide to benefit mid-sized businesses. The purpose of this practicum was to produce a comprehensive toolkit that mid-sized business employers could use to identify strategies and resources to adopt and implement wellness initiatives in their workplaces.

Methods: A review of existing worksite wellness programs and relevant resources was conducted. Resources were divided into categories based on the type of program provided or health topic referenced. A visually appealing document was designed to incorporate all programs and resources in an easily searchable format.

Results/Outcomes: The final product, Healthy Workplace: A Resource Guide for Worksite Wellness, was produced and published for use on the WWCMA website. The published guide was presented at the WWCMA annual meeting in September 2013.

Name: Powell, Elizabeth

Practicum Site: Dorchester House Multi-Service Center

Location: Dorchester, MA

Title: Healthy Weight for Life Clinic - Program Supervisor

Introduction: Dorchester House is a community-based, health center in Dorchester, Massachusetts, providing affordable, accessible and high-quality health care and public health services. One such service, the Healthy Weight for Life Clinic (HWFLC) aims to reverse the increasing obesity trend in children. During the 4 to 6-month program, children ages 6-12 and their families learn to identify and overcome barriers to implementing healthier habits, sustained behavior change, and reduced BMI. The program, operating since 2009, had not been evaluated. Outcome data is needed to apply for grant funding and make informed changes to the program. The practicum goal was to design and implement an evaluation of HWFLC.

Methods: Working as a team with one other BUSPH student, input and guidance was provided by HWFLC program staff. Quantitative analysis of demographic and BMI data from all HWFLC participants was conducted, and focus group and individual interviews were conducted with participants' parents and program staff to gather qualitative data.

Results/Outcomes: The evaluation demonstrated that while participant BMI decreased during the program implementation, this progress was not sustained. Parents and children had difficulty maintaining the behavior changes they made during HWFLC after the program was over. The results are used in grant applications as well as to inform changes to the program. In addition, recommendations were made to program staff about continued collection and organization of participant data and feedback.

Name: Ragasa, Justin-Ben

Practicum Site: Massachusetts Health and Relationships Project MassHARP

Location: Boston, MA

Title: Research Assistant

Introduction: The Massachusetts Health and Relationships Project (MassHARP) studies the relationship between marriage and health decisions and outcomes. To do this MassHARP listens to stories of heterosexual and same-sex married couples of all ethnic and racial backgrounds from the Greater Boston area. Massachusetts and the Greater Boston area was used as Massachusetts was the first state in the United States to legalize same-sex marriage. This practicum focused primarily on recruiting participants for the study.

Methods: Participants between the ages of forty and sixty and who have been together for at least seven years were recruited. Flyers were distributed in various neighborhoods in the Boston area instructing interested couples to contact the study coordinator. Additionally, demographic information collected from vital records and tax information was used to create a database for prospective participants. Each spouse was interviewed separately for approximately 60 minutes. Audio files of in-depth interviews with gay, lesbian, and straight couples were transcribed and analyzed.

Results/Outcomes: MassHARP is ongoing collection of demographic information and recruiting participants. Data collected from the practicum are currently being analyzed. This information will be used to inform health policy by shedding light on how dynamics around health and health care vary in gay, lesbian, and straight marriages.

SOCIAL & BEHAVIORAL SCIENCES

Name: Ramirez, Angelica

Practicum Site: Los Angeles County Board of Supervisors- 1st District; Office of Gloria Moline

Location: Los Angeles, CA

Title: Student Professional Worker

Introduction: Los Angeles County is divided into five districts. Each district elects an individual to represent them on the Board of Supervisors; the governing body of Los Angeles County. Each Supervisor has a team of staff members, each of which is assigned to a specific field. For example, the Health Deputy reviews any policy presented by the three health departments (Department of Public Health, Mental Health, and Health Services) and advises their Supervisor whether to approve/reject any policies. In addition to recommendations, the Health Deputy also oversees any health initiatives created by the Supervisor. The purpose of this practicum was to serve as a staff associate for the First District.

Methods: Practicum activities included: 1) preparation of memoranda; 2) research related to wellness activities (nutrition and physical activities) that supported monetary grants to various municipalities and school district jurisdictions; 3) review of board letter requests from the Departments of Health Services, Mental Health and Public Health; 4) engagement of relevant departmental personnel to identify relevant data related to proposed health policies or initiatives; 5) drafted memoranda with a policy recommendation of whether to support or oppose the request; and 6) created a website for a wellness center that will serve the First District of Los Angeles County.

Results/Outcomes: The monetary grants will be distributed at the end of November 2013; the results of which will be evaluated in November 2014. Recommendations were made to approve, reject or modify and implement. The website will go live before the opening of the wellness center in 2014.

Name: Scalzo, Michael

Practicum Site: Fresenius Medical Care - Department of Integrated Care Analytics

Location: Waltham, MA

Title: Stop and Smell the Roses: A Multivariate Analysis of FMC Clinical Dialysis Data

Introduction: Renal failure is a life-threatening disease in which the kidneys fail to adequately filter toxic byproducts in the blood. It is commonly treated by dialysis, the artificial replacement for compromised kidney function in individuals with kidney disease. Kidney disease is the 8th leading cause of death in the United States and an estimated 31 million people (10% of the population) have chronic kidney disease. It has been posited that there are various social and behavioral factors, based on geographical location, that contribute to dialysis patient's clinical outcomes. Fresenius Medical Care underwent a statistical review of a large dataset to assess the relationship between these factors. The purpose of this practicum was to aid in this multivariate analysis.

Methods: I worked with the Director of Integrated Care Analytics to: 1) run statistical analyses on the dataset using R modeling software; 2) create graphical comparisons between specified clinical groups; and 3) to draw clinical conclusions about certain predisposing social and behavioral factors.

Results/Outcomes: Though an ongoing project, the results of this analysis suggested that certain social and behavioral factors did effect clinical outcomes in dialysis patients. Factors such as geographical location, driving time, and income correlated with epogen dosing, common laboratory values, and interdialytic weight gain. Further investigation would allow dialysis companies to maximize targeting of patients in need.

Name: Stropp, Travis

Practicum Site: Boston Healthcare for the Homeless Program - Research Division

Location: Boston, MA

Title: Co-investigator, BHCHP Naloxone Program Field Action Report

Introduction: Boston Health Care for the Homeless Program (BHCHP) is an innovative community health center that provides comprehensive respite medical care and social services to homeless individuals in Greater Boston. The BHCHP Drug Overdose Task Force released recommendations on August 30, 2012 that addressed five areas of consideration to improve medical care delivered to a unique patient population of homeless individuals. One area involved reviewing issues related to the outpatient prescribing of intranasal naloxone for mitigating the risk of opioid overdose deaths. This recommendation follows the passage of Massachusetts Senate Bill 2125, which allows health care providers to prescribe intranasal naloxone to outpatients at risk of opioid overdose. The purpose of this retrospective study is to evaluate the implementation of the intranasal naloxone prescribing program and to describe the experience at a community health center.

Methods: A study protocol was developed, submitted and approved by the Boston University Medical Center (BUMC) Institutional Review Board (IRB) as exempt research using existing patient records. Data from the BHCHP Electronic Medical Record (EMR) database and Barbara McInnis House (BMH) pharmacy were analyzed. A Field Action Report manuscript was drafted for submission to a major public health journal.

Results/Outcomes: Implementation of this prescribing program as part of the standard of care for at-risk patients is a novel idea at a community health center and a positive step toward decreasing opioid overdose deaths in Boston. This information will be disseminated to the medical community via a Field Action Report in a major public health journal.

SOCIAL & BEHAVIORAL SCIENCES

Name: Testa, Lauren

Practicum Site: Boston Public Health Commission

Location: Boston, MA

Title: Preventing Obesity Among Youth of Color: Development of a Pilot Implementation Plan

Introduction: Overweight youth often become overweight adults, ultimately leading to health problems that may result in a shortened lifespan and lower quality of life. Similar to national averages, Black and Latino youth account for a disproportionate percentage of the 18% of overweight Boston residents under 18, as compared to White peers (20% vs. 11%). This practicum was created to help address this disparity by developing an implementation strategy for a pilot intervention designed to be implemented by the Boston Public Health Commission (BPHC) through their youth development program, Youth-to-Health-Careers (Y2HC). The goal of the intervention is to prevent Boston youth of color from becoming overweight, but a pilot is necessary to demonstrate the program's feasibility, effectiveness and sustainability.

Methods: The intervention was initially developed as part of a class project. Activities involved in developing the implementation plan included: 1) proposing how to integrate the pilot through the Y2HC program; 2) specifying program implementation activities and outreach strategies; 3) identifying related monitoring and performance indicators; 4) determining needed resources; and 5) formulating a budget.

Results/Outcomes: Hopefully, this implementation plan will be used to pilot the intervention during summer, 2014 as part of Y2HC. Successful implementation of the pilot will provide rationale to bring the intervention to scale, serve youth throughout Boston, and potentially contribute to an overall decrease in the number of overweight adolescents in Boston while reducing the disparity between White youth and youth of color.

INDEX BY STUDENT

Aebi, Megan	43
Agule, Katherine	23
Akhtar-Zaidi, Samera	29
Alderman, Max	49
Ambia, Tabassum	7
Anderson, Ashley	29
Atcheson, Katherine	43
Avakoff, Elizabeth	23
Bacon, Rachel	29
Bajracharya, Smriti	11
Bandyopahdyay, Jayanti	23
Beaudette, Abigail	30
Berkowitz, Jillian	30
Brandenburg, Christina	11
Braun , Natalie	43
Bresee, Kaitlin	49
Brierley, Leif	24
Bright, Riley	49
Buckley, Mary	11
Budwit, Samantha	44
Bussell , Corie	44
Butler, Jessica	12
Cho, Margaret	50
Chung, Seyoung	12
Coleman, Christina	12
Colizza, Alicia	24
Cuevas, Erica	24
Denning, Caitlin	30
Densley, Diana	25
Dighe, Shruti Girish	9
Doyle, Reina	50
Dwivedi, Pavitri	31
Feeney, Kristin	13
Flath, Taylor	31
Florea, Ana	13
Forman, Leah	13
French, Jessica	21

INDEX BY STUDENT

Frithsen, Brad	25
Fuller, Alyssa	31
Gonzalez Vanegas , Manuel	25
Gordon, Natalie	14
Gormley, Katelyn	50
Gottsegen, Jessica	51
Gyan, Efua	32
Haley, Corrie	9
Hall, Emily	51
Hariharan, Praveen	14
Harrington, Stephanie	51
Hegg, Lauren	44
Helpern, Jacqueline	32
Herzer, Lore	32
Huang, Qian	14
Ighile , Osadebamwen	33
Kennedy, Erin	9
Koritsanszky, Luca	33
Kourtisis, Panagiotis	33
Kponee, Kale	15
Krelko, Michelle	52
Kumar, Ramya	15
Lang, Elise	34
LaPointe, Emily	21
Larson, Carol	52
LeClerc, Ashley	52
Leonard, Hallie	21
Leveille, Claudel	15
Li , Jiahe	16
Ligo, Devon	45
Lopez, Emily	45
Marshall, Allison	26
McGrath, Matthew	26
McSparren, Deborah	34
Mehnickerdizadehseraj, Siamak	26
Mihos, Marissa	27
Miller, Shannon	53

INDEX BY STUDENT

Mokkarala, Sameera	34
Moore, Shannon	16
Morgan, Kimberly	35
Morrison , Kate	45
Mothi, Suraj Sarvode	35
Myles, John	16
Ndirangu, Kerigo	17
Ngo, Taylor	7
Ni, Jing	27
O'Connor , Lauren	46
Olsen, Maia	35
Olukoshi, Olufunmilayo	46
O'Neill, Allison	17
Osseiran, Alia	17
Palacholla, Ramya	36
Parnham, Taylor	46
Pechulis , Kristina	47
Perreault , Rebecca	47
Philip, Ancey	18
Pierce, Leslie	36
Pillai , Hari Krishnan	10
Pistole, Jennifer	18
Powell, Elizabeth	53
Price, Miles	36
Ragasa, Justin-Ben	53
Ramirez, Angelica	54
Reinen, Nichole	37
Ricklefs, Colbey	37
Riotto, Jade	37
Roche, Stephanie	38
Ryan, Erin	38
Scalzo, Michael	54
Scatena , Nicole	10
Scholl, Kenzie	38
Shergill, Karanpreet	18
Shriber, Elizabeth	19
Shrivastava, Aryendra	8

INDEX BY STUDENT

Siegel, Hannah	47
Soucy, Maura	39
Spite, Sasha	19
Stropp, Travis	54
Studenic, Amy	39
Sullivan, Brianna	48
Testa, Lauren	55
Thomas, Ashley	39
Tilimo, Milki	40
Tiwari, Stephanie	19
Trosclair, Katherine	40
Tucker, Robert	20
Ward, Lillian	40
Wiley, Aleta	48
Xia, Samantha	41
Yang, Ying	20
Yeshitla, Mahlet	41
Yusuf, Abdullah Adedotun	27
Zhang, Miao	20
Zirimwabagabo, Hubert	41, 42

INDEX BY ORGANIZATION

ACET Nireekshana	34
Aga Khan University - Department of Women and Child Health	29
AMOS Health and Hope	34
Association for Frontotemporal Degeneration	48
BAMSI Inc.	27
Beth Israel Deaconess Medical Center	35
Blackstone Community Center	40
Blackstone Elementary School-Based Health Center/South End Community Health Center	50, 51
Blue Cross Blue Shield of Vermont - Wellness Department	21
Boston Center for Refugee Health and Human Rights	37
Boston Children's Hospital - Children's Hospital Integrated Care Organization (CHICO)	25
Boston Children's Hospital - Informatics Program	14
Boston Children's Hospital - Program for Patient Safety and Quality	52
Boston Healthcare for the Homeless Program - Research Division	54
Boston Medical Center - Department of Radiation Oncology	7
Boston Medical Center - Atrial Fibrillation Study	46
Boston Medical Center - Children's HealthWatch	13
Boston Medical Center - Department of Family Medicine	15, 26, 45
Boston Medical Center - Department of Obstetrics and Gynecology	25, 43, 45
Boston Medical Center - Department of Quality Improvement	26
Boston Medical Center - Pediatric Adolescent Medicine	18
Boston Medical Center - Pediatric Ambulatory Center, Neurology Division	24
Boston Medical Center - Primary Care/Internal Medicine	23
Boston Medical Center - The Breastfeeding Center	43, 47
Boston Medical Center, Infectious Disease Clinical Trials Unit - Data Coordinating Center for TB CDRC	17
Boston Public Health Commission - Child, Adolescent and Family Health	36
Boston Public Health Commission - Start Strong Initiative	50
Boston Public Health Commission	55
Boston Scientific - Biostatistics Department	17
Boston University Center for Future Technologies in Cancer Care	50
Boston University School of Dental Medicine - Department of General Dentistry	14
Boston University School of Medicine - Vital Village Network	40
Boston University School of Public Health - Center for Global Health and Development	11, 31, 32, 41
Boston University School of Public Health - Department of Epidemiology	11, 15, 18, 19, 51
Boston University School of Public Health - Department of Environmental Health	10
Boston University, Sargent College - Genomics and Decision Sciences Laboratory	20
Brigham and Women's Hospital - Department of Biostatistics	7

INDEX BY ORGANIZATION

Brigham and Women's Hospital - Men's Health, Aging and Metabolism Research Unit	7
Brookline Health Department - Public Health Nursing/Epidemiology	19
Cambridge Public Health Department - Environmental Health Division	9
Cameroon Baptist Convention Health Board	29
Center for Future Technologies in Cancer Care - Clinical Needs Assessment Core	12
Center for Global Health and Development - Maternal Health, Community Healthcare System Development	33
Clinton Health Access Initiative	37
Committed Communities Development Trust	31
Cone Communications - Social Impact Department	47
CVS Caremark	16
Dorchester House Multi-Service Center	53
Fenway Community Health - Lesbian, Bi Women's and Trans Health Promotion	52
Fenway Community Health - Sidney Borum, Jr. Health Center	52
Fresenius Medical Care - Department of Integrated Care Analytics	54
Global Oncology (GO)	35
Green Healthy Homes Initiative	9
Harvard Medical School - C. Michael Gibson, MS, MD, Professor of Medicine	13
Harvard School of Public Health - François-Xavier Bagnoud Center for Health and Human Rights	47
Health Connector Authority - Mass Health Insurance Exchange	25
Healthy Hearts for Life, INC - Chronic Disease Prevention	49
Hope of Children and Women Victims of Violence (H.O.C.W)	30, 40
Indian Council of Medical Research - Department of Immunology and Research	9
Isabela Oceanographic Institute	12
Life Science Nation	8
Los Angeles County Board of Supervisors- 1st District; Office of Gloria Moline	54
MA Department of Public Health - Office of Community Health Workers	23
MA Department of Public Health - Division of Epidemiology and Immunization	31
Management Sciences for Health	39
Management Sciences for Health - Center for Leadership and Management	41, 42
Massachusetts General Hospital - Department of Emergency Medicine	14
Massachusetts Department of Public Health - Division of Epidemiology & Immunization	18, 49
Massachusetts Department of Public Health - Division of Tuberculosis Prevention and Control	20
Massachusetts Department of Public Health - School-Based Health Center Program	24
Massachusetts Health and Relationships Project MassHARP	13, 53
Massachusetts Medical Society - Health Policy Department	24
Massachusetts State House - Rep. Ellen Story and the Special Legislative Committee on Postpartum Depression	46
Medical University of South Carolina	32

INDEX BY ORGANIZATION

Metamovements	44, 49
mHealth Alliance	33
Municipal Secretary Of Health Office - Bunitis	44
NARAL Pro-Choice Massachusetts	21, 43
National Association for the Practice of Anthropology- Occupational Therapy (NAPA-OT) Field School	38
New Bedford Health Department	51
New England College of Optometry	17
Orange County Department of Health - Public Health Nursing	11
Our Bodies Ourselves	21
Planned Parenthood League of Massachusetts - Education Department Program	44
Project Bread	16
Public Health Institute - Global Health Fellows Program - II USAID Intern	39
Riverst State University of Science and Technology	15
Sacred Valley Health/Ayni Wasi	38
Safe Mothers, Safe Babies	45
Sister City Project	39
Slone Epidemiology Center	12, 48
Smith & Wesson	10
Sneha Care Home and Shining Star School	36, 41
Social & Scientific Systems, Inc.	27
Somphit Chinkam, Midwife	29
Swasti - HIV sector consulting Services Bangalore, India	36
Team Heart	34
Tunaweza Children's Centre	32
Uganda Village Project	37, 38, 46
United for Health Abyssinia	35
University of Miami Project Medishare	33
Veteran's Affairs Boston Health Care System	23
Whitaker Cardiovascular Institute	19
Wide Horizons For Children	30
Worksite Wellness Council of Massachusetts	53
World Health Organization - Department of Essential Medicines and Pharmaceutical Policies	20, 27
Yantaló Peru Vasquez Foundation	16
Zambia Center for Applied Health Research & Development - Lusaka Main Office	30