# Student Practicum Abstracts

Summer 2011



#### **BUSPH STUDENT PRACTICUMS SUMMER 2011**

The BUSPH Office of Public Health Practice is pleased to present the Summer 2011 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 are BUSPH summer practicum students?

10 U.S. States
51 Cities and Towns
24 Countries



Inside you will find a sampling of 100 of their projects...

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#### **BIOSTATISTICS**

Name: Debora Case

Practicum Site: Cardiovascular Science Foundation

Location: Boston, MA

Practicum Title: Assistant Biostatistician

**Introduction:** Cardiovascular Clinical Science, Inc. (CCS) is an academically focused contract research organization that specializes in cardiovascular clinical trials, phases 1-4. The project I assisted on was a follow-up analysis on a randomized, double-blind, international clinical trial that compared two doses of a given treatment\* and clinical outcomes in 3846 patients with heart failure. My duties as an intern included helping the president/CEO of the company and contracted biostatistician with analyses and reports. This included identifying outcome variables, SAS programming, and data cleaning. The reports were presented to the clinical investigation group.

**Methods:** My main task was to perform a secondary analysis examining the relationship between incident proteinuria and dose groups. The first step was to locate the appropriate variables and outcomes in the large database. I then had to clean the values for later analysis, as not all subjects had been tested and the outcome values were not uniformly reported. Once the data was cleaned, survival analysis was used with Kaplan-Meier Curves for the primary outcome and ANOVA and Chi-square test values to compare demographic variables. **Conclusion:** The project resulted in a report on the analysis from start to finish, including tables and figures, to be presented to the clinical investigation group. We concluded that there may be a negative relationship between dosing levels and proteinuria in individuals with heart failure. However, this relationship requires further study in future research. \* Confidentiality restricts identifying the treatment groups.

Name: Rebecca Fink

Practicum Site: Massachusetts Veterans Epidemiology Research and Information Center (MAVERIC)

Location: Boston, MA

Practicum Title: Development of automated tables for studies on antidepressants and opioids in the veteran population

Introduction: MAVERIC was established to promote VA-based population research and convert results into a format that Veterans Health Administration (VHA) providers and administrators can apply to improve patient care. My practicum work centered on two retrospective cohort studies being conducted by the center: 1) Antidepressants and the Risk of Self-Harm and Unintentional Injury among Younger Veterans and 2) Unintentional Poisoning from Prescription Drug Overdoses among Veterans. Each of these studies is using national, longitudinal administrative data for VHA-provided health care. My primary goal was to create a SAS macro that would automate the process of creating baseline demographic tables in order to describe the study populations.

**Methods:** In order to create the macro, I 1.) familiarized myself with Antidepressant and Opioid study protocols and performed a literature review on the topics, 2.) researched the use of the proc document procedure in SAS, 3.) updated existing SAS code to output demographic data to Excel, 4.) applied the macro to Antidepressant and Opioid study data, 5.) debugged the code as necessary, and 6.) taught other staff to use the macro and apply it to their own data.

**Conclusion:** The SAS macro can be used to efficiently streamline the process of creating demographic tables for study populations with large numbers of subjects and variables and minimize transcription errors. Researchers at MAVERIC will be able to use this macro to quickly output demographic tables to examine the distribution of their data and display this information in presentations and reports.

Name: Roanne Mejilla

Practicum Site: Boston Medical Center, Department of Family Medicine

Location: Boston, MA

Practicum Title: Reducing hospital readmission rates for ambulatory care sensitive conditions related to congestive heart failure

Introduction: In 2005, Medicare spent approximately \$15 billion on hospital readmissions, \$12 billion of which accounted for potentially preventable readmission episodes. The Agency for Healthcare Research and Quality identified 12 ambulatory care sensitive conditions (ACSC) believed to be preventable. It is believed that through proper patient care, ACSC can be properly treated outside of the hospital. This investigation examined diagnoses related to congestive heart failure (CHF), an ambulatory care sensitive condition. Using New York state hospital data acquired from the Healthcare Cost & Utilization Project (HCUP), I explored whether outpatient care for the ACSC CHF diagnoses is as good or better than readmission.

Methods: Using the open statistical program R, descriptive analysis was performed to compare readmission rates for CHF to non-CHF conditions across categories such as hospital type, payer, gender, race, and age group. Regression models were developed to determine which factors influence hospital readmissions. Exploratory data analysis was performed to determine whether the appropriate model was used to fit the data.

Conclusion: The preliminary regression model indicates that the number of primary care physicians and incidence of congestive heart failure diagnosis strongly influence the readmission rate in the state of New York. Next steps in the analysis include collaboration with practicing physicians for insight into the model developed and additional model fitting techniques.

## **BIOSTATISTICS**

Name: Sanjay Raju

Practicum Site: Boston University School of Public Health

Location: Boston, MA
Practicum Title: Data Analyst

**Introduction:** Patients with HIV/AIDS experience a wide range of symptoms from their disease and the antiretroviral medication treatments that can affect quality of life. Alternate therapies exist to alleviate these issues which include relaxation response and acupuncture. **Methods:** The effectiveness of these therapies was addressed in a four-arm double-blind randomized controlled trial. Participants were randomly assigned to one of the four study groups (2x2 design, the combination of acupuncture vs. sham acupuncture and relaxation response vs. health education). The data set from this study detailed the listening activities of the study participants between relaxation response and health education compact disks. For proper analysis to be conducted the data set had to be reorganized and made uniform between all the research subjects' responses. This was achieved through different procedures using SAS 9.1.

**Conclusion:** The final analysis of the listening activity of the study subjects showed no statistically significant difference between the relaxation response and the health education groups listening activity.

Name: Radha Sadacharan

Practicum Site: Boston Medical Center, Breastfeeding Center

Location: Boston, MA

Practicum Title: Data Analysis Intern

**Introduction:** The American Academy of Pediatrics recommends that a child be exclusively breastfed for the first six months of life. Among other benefits, breastfeeding decreases the risk of respiratory and ear infections. Advertising and a lack of education have been detrimental to the support of breastfeeding. In order to increase breastfeeding rates, we must have evidence of the effects of such barriers. The purpose of this practicum was to learn about breastfeeding advocacy, to understand the effects of hospital policy and education on breastfeeding, and to analyze data from studies conducted at the center.

**Methods:** Data cleaning and analysis was done for two separate studies: on formula company-sponsored bag distribution in the US, and a survey which gauged maternity ward workers' knowledge of the term 'Baby-Friendly.' The analyses of these studies aided in my understanding of biostatistics applications in healthcare, and allowed me to collaborate with members of an inter-disciplinary team.

**Conclusion:** There has been a significant downward trend in the distribution of sample packs across the US. Hospital policy on advertising must be addressed to continue this trend. There is also a dearth of knowledge among maternity healthcare workers in the US about the term 'Baby-Friendly.' The impact of this work is to identify the barriers to breastfeeding, to reduce clinical waste, and to begin to address the inequalities experienced among the US breastfeeding population.

Name: Aude Sicsic

Practicum Site: PROMETRIKA Location: Cambridge, MA

Practicum Title: Clinical Trial Protocol Development

**Introduction:** PROMETRIKA is a contract research organization (CRO) serving the pharmaceutical and biotechnology industries in the areas of clinical operations data management, biostatistics, medical writing, and regulatory submissions. My practicum project consisted of writing a mock protocol for a randomized clinical trial on ORLISTAT, an obesity management drug.

Methods: After understanding the extent of what a protocol should include, the first step in writing this protocol was to gather the background information: research the disease the drug is targeting (obesity), research the drug (ORLISTAT), find the safety limits of the approved drug. Since this was a mock protocol, I then determined the objectives and design of the trial (the phase, whether it would be superiority or a non inferiority trial, whether the trial would be blinded and/or randomized, the number of treatment groups, and the duration of the trial). Another important step was to determine, assessments of efficacy and safety, and the endpoints of this trial. Finally, in the statistics part of the protocol, I computed the sample size the trial called for, taking into account the number of treatment groups, the design of the trail, and the endpoints.

**Conclusion:** I developed a phase 4 non-inferiority protocol for 1320 subjects, I have become aware of the multiple considerations in designing a scientifically meaningful and practically feasible clinical trial protocol. A good protocol balances the need for advancement of knowledge about the product with concern and care for the health and needs of the subjects.

#### **BIOSTATISTICS**

Name: Tianzhong Yang

Practicum Site: Boston University School of Medicine, Clinical Epidemiology Research & Training Unit

Location: Boston, MA

Practicum Title: Programmer/Statistical Analyst

**Introduction:** My practicum was at the Clinical Epidemiology Research & Training Unit, a place whose mission is to perform and promote high-quality research using clinical epidemiologic methods to answer questions about the causes of, and therapy for, disease and disability. I assisted in a study assessing the long-term effect of environmental features on development of disability.

Methods: I worked closely with Professor Julie Keysor to learn more about disability, reviewing related papers, using ANCOVA, logistic regression, and sensitivity analysis to test our hypothesis, and assisted writing the statistical methodology and results in the manuscript. Conclusion: (1) Persons without disability at baseline who live in environments with more barriers will be more likely to develop incident disability at 30-months. (2)Persons without disability at baseline who live in environments with more facilitators will be less likely to develop incident disability at 30-months. (3)Person with disability who live in environments with more barriers will be less likely to show improvement in disability over 30-months than persons who live in environment with fewer barriers. Our results will be published in a manuscript.

# ENVIRONMENTAL HEALTH

Name: Patrice Barrett

Practicum Site: Framingham Board of Health

Location: Framingham, MA

Practicum Title: Site Assignment Documentation for Hazardous Waste Transfer Facility in Environmental Justice Community

**Introduction:** Framingham, MA has 68,318 residents and approximately 20,000 undocumented immigrants. The Board of Health meets the needs of all these residents. A major task for the BOH under CMR statutes is to issue a new site assignment for a hazardous waste facility, General Chemical Corporation (GCC), located adjacent to a public school and in an EJ community. The last agreement was issued in 1995.

**Methods:** I was part of a team identifying relevant data and information to inform the BOH for the site assignment. This involved reviewing federal, state and local regulations, past DEP facility licenses and corrective actions, company audits, environmental media testing on and near the GCC property, data on similar companies in Massachusetts and best practices for employee training and safety in other waste facilities. The environmental justice community and elementary school received special consideration. Additional goals were increasing citizen participation and risk communication about GCC operations. This research was shared with the team and health director. A draft assignment document is being prepared.

**Conclusion:** The site assignment process could go on for months. Public hearings begin in September 2011. The research provides an informational basis for the GCC site assignment. The document will contain conditions to protect Framingham citizens' health and safety from harmful environmental exposures, with attention to vulnerable populations, and provide more transparency regarding the company's waste operations.

Name: Kerrie Canavan

Practicum Site: Massachusetts Department of Environmental Protection (MassDEP)

Location: Boston, MA

Practicum Title: A Literature Review of the Toxicity of Rare Earth Elements

**Introduction:** Rare earth elements are a group of 17 elements used in a variety of modern technologies. Their current use and lack of toxicity data has caused them to be a potential "emerging" contaminant. By conducting a comprehensive literature search and compiling the data into database, information on the toxicity of rare earth elements is now available for use by the Massachusetts Department of Environmental Protection (MassDEP). Using the database, a toxicity report was created and the MassDEP Office of Research and Standards will be able to use the information to characterize and determine what management strategies are needed to address the emerging problem.

Methods: Using online databases, journals and the Boston University Libraries, articles were identified and obtained based on relevance to mammalian toxicity. Articles were read and relevant information was culled and entered into an EXCEL database. Entries for each element included toxicological endpoint, and route of exposure (oral, dermal and inhalation). The sorted data were used to prepare a summary of the toxicity.

**Conclusion:** The toxicity report describes a summary of rare earth elements and why they are to be considered emerging contaminants. Toxic endpoints are analyzed based on route of exposure and toxicokinetics are described. The toxicity report informs MassDEP about rare earth elements and their known or potential health effects on mammals. The decision to further study the elements, set standards and take further action to control the metals in the environment can be made based off of the information provided in the report.

Name: Sarah Doersam

Practicum Site: Environment Texas

Location: Austin, TX

Practicum Title: Research Intern - Water Quality in Texas Swimming Holes Report

**Introduction:** Swimming Holes provide for an escape from the rising Texas summer heat and the increase in use necessitates that swimmers be aware what they are swimming in and the potential health risks. As part of Environment Texas's Clean Water Campaign, an organization working for clean air, clean water and open spaces in Texas, we looked at documented E. coli counts in popular Texas swimming holes for the 2010 year and their compliance with state and national regulations in an effort to raise awareness of Texas's lenient water quality standards.

**Methods:** E. coli levels in Texas swimming holes were investigated by using past data provided by the water bodies' governing agencies and relevant literature. The results for the 2010 year were compared to E. coli regulations set by Texas and the EPA. The findings are to be distributed in a report to Environment Texas members and local environmental groups.

**Conclusion:** Investigating E. coli levels of Texas swimming holes allowed us to determine which areas are consistently clean and meeting standards set by the EPA and which areas were consistently above standards. We also discovered there is not a convenient public database where swimmers can see how clean their favorite swimming hole is, and there are no regulations ensuring constant and consistent sampling of E. coli. Environment Texas released our findings in an effort to raise awareness about Texas's lenient water quality standards.

#### **ENVIRONMENTAL HEALTH**

Name: Casey Godbout

Practicum Site: Foundation for Informed Medical Decision Making

Location: Boston, MA

Practicum Title: Maternity Intern

**Introduction:** The Foundation for Informed Medical Decision Making is a non-profit organization whose mission is to inform and amplify the patient's voice in health care decisions. The Foundation's Maternity Initiative, in partnership with Childbirth Connection, aims to inform women about many topics surrounding pregnancy so that they may play a central role in their reproductive decisions. This practicum examined the trends of obesity in women of reproductive age and used evidence-based research to identify interventions aimed to reduce adverse maternal and neonatal outcomes. These literature reviews focused on the topics of obesity in pregnancy and bariatric surgery and pregnancy

**Methods:** Comprehensive, peer-reviewed literature reviews were conducted, utilizing Medline and Cochrane databases, that concentrated on evidence-based outcomes and interventions for obese women who are pregnant, or planning to become pregnant. A detailed evidence document was compiled for each research question addressing the audience, geographic variation, patient perspectives, outcomes and interventions. Key messages, directed toward obese women (ages 18-45), were created and summarized based on the evidence. **Conclusion:** It is important for obese women to be given up-to-date information from a reliable source that they can use to make decisions before, during and after pregnancy. The research identifies significant associations between obesity and increased risks of many adverse outcomes for mother and child, and the importance of achieving a healthy BMI and lifestyle before conception. The key messages are presented and will be revised and translated by a medical editor to specifically address this population and will be made accessible to women via appropriate mediums.

Name: Sadie Richards

**Practicum Site:** The Permaculture Guild **Location:** Pine Ridge Lakota Reservation, SD

Practicum Title: Permaculture & Public Health: From the Plains of South Dakota to Urban Boston

Introduction: The Oglala Lakota Cultural and Economic Revitalization Initiative (OLCERI) is a pilot initiative designed to restore self-sufficiency and self-determination to the people of Pine Ridge Lakota Reservation, who currently face some of the highest rates of morbidity, mortality and poverty in the country. Launched in 2010 by an aspiring community land trust (Pueblo Boston), Egleston Community Orchard (ECO) is a neighbor-led effort for sustainable urban agriculture and community green space, promoting environmental justice and community ownership of land in Boston's Egleston Square. Despite differences, these two communities face many of the same challenges (food insecurity, poverty, high crime rates, youth gang activity, a history of environmental and social injustice) and they also share similar strengths (rich cultural heritage, a nascent sustainability movement, available vacant land). In both settings, permaculture offers a comprehensive, systems-based approach to address existing socioeconomic and environmental challenges.

**Methods:** After completing a Permaculture Design Certification course at Pine Ridge Lakota Reservation, I implemented permaculture techniques in conjunction with environmental health praxis on a plot of land tended by ECO. I helped coordinate and attended bi-weekly community workdays, tested soil, communicated findings and risks to the ECO community, and helped build a path, several raised beds and a rainwater catchment system.

**Conclusion:** I designed a permaculture plan for land on Pine Ridge Lakota Reservation, elements of which OLCERI is currently implementing. My permaculture designs also enhanced the multi-functionality of the ECO plot, which is rapidly transforming from an unsafe vacant lot to a cultivated community space.

Name: Jared Beaumont

Practicum Site: Boston Medical Center, Medical Information Systems Unit

Location: Boston, MA

Practicum Title: Telehealth Technologies to Improve Medication Adherence in Hypertension Study

**Introduction:** BMC's Medical Information Systems Unit (MISU) focuses on telecommunication-based systems to benefit the health of individuals. I assisted in a project studying the effect of new technologies on medication-taking behavior. The study uses a telephone-based platform and state-of-the-art electronic pill trays to help patients with hypertension consistently take their medication. The telephone platform offers reminders to take medication and overcome barriers that often prevent patients from taking their prescriptions, including cost, forgetfulness, and personal beliefs. The study investigates the impact of providing physicians with intervention support, based on their patient's blood pressure and medication-taking behavior.

**Methods:** My responsibilities include 1) evaluating appropriate recruitment procedures and determining recruitment estimates, 2) creating electronic logs to keep track of and organize study participants, patient contact, participant incentives, and study letters to be mailed, and 3) editing and maintaining Institutional Review Board documentation and amendments using the Integrated Network for Subject Protection in Research (INSPIR).

Conclusion: I helped to develop a study recruitment plan (that includes recruiting residents as well as attending physicians), to create a system to organize and maintain study participants and materials, and to maintain an up-to-date, accurate IRB application. This work will allow MISU to further efforts to evaluate and improve use of telecommunication technologies to improve public and individual health. Increased use of systems such as these should increase medication compliance, decrease ambulatory care burden, and decrease cost of health care in the United States.

Name: Meredith Black

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

Location: Brookline, MA

Practicum Title: Local Public Health Intern

Introduction: At the Brookline Health Department, I worked with the Public Health Nurse to conduct case investigations of communicable diseases occurring within the Brookline community. I became trained and certified to use MAVEN, Massachusetts' online disease surveil-lance database. Additionally, I played an active role in the investigation of a pneumonia cluster that developed at a local elementary school

**Methods:** To conduct disease investigations, I contacted the suspected case and I obtained all relevant information to fill out the case report form. I performed follow up procedures and I imputed the information into MAVEN to complete the investigation. I also used MAVEN to obtain statistics of communicable diseases in Brookline to create the 2011 fiscal year report. For the pneumonia investigation, I maintained a spreadsheet to track the cases that were occurring, and with this information, I created demographic graphs, plotted the cases on the school's floor plan, and created an epidemic curve to determine any potential distribution patterns.

Conclusion: The case report forms, fiscal year report, and pneumonia investigation all demonstrate the benefits of the strong surveillance system that exists within the Brookline community. The completed case report forms will be essential in creating future disease reports, and the 2011 fiscal year report provides important information about local disease trends. Additionally, to conclude the pneumonia investigation, I created a detailed report of the cluster. However, no conclusions could be drawn identifying the specific causative agents, which demonstrates the challenges that arise when conducting an investigation with minimal laboratory evidence.

Name: Carolyn Borsch

Practicum Site: Oregon Health & Science University

Location: Portland, OR

Practicum Title: Research Assistant

**Introduction:** Within the department of Cancer Survivorship at Oregon Health & Science University's School of Nursing in Portland, Oregon, I assisted in launching the second phase of a two-part research study. The overall goal of the study is to compare physical function between breast cancer survivors (BCS) and cancer-free controls. Previously, physical function was objectively measured in a large cohort of BCS (n=180) in a randomized, controlled exercise trial. The second phase of the comparison study will obtain the same measurements on a cohort (n=130) of cancer-free women. The information obtained will aid in evaluating the extent to which cancer treatment affects physical function in BCS and the underlying determinants of functional decline and disability. Through this practicum, I helped organize and develop aspects of the study.

**Methods:** I worked with the Principal Investigator and Project Director to 1.) develop electronic databases for surveys; 2.) create and organize a filing system for paperwork accrued throughout the study enrollment; 3.) brainstorm recruitment strategies regarding identifying target population, recruitment catchment, various social media outlets, and advertising mediums; 4.) design study flyers and mailers used to recruit cancer-free women and subsequently 5.) write and edit recruitment documents to be submitted to the Institutional Review Board (IRB).

**Conclusion:** The development of the databases, filing systems, recruitment strategies, flyers, and completion of the IRB modifications will ensure that the research team will be able to continue the rest of the study in a timely, efficient, and organized manner.

Name: Allison Bryant

Practicum Site: Dana Farber Cancer Institute

Location: Boston, MA

Practicum Title: Predictors of Decisions to Undergo Prophylactic Mastectomy in Women with BRCA1 and BRCA2 Mutations

Introduction: Mutations in the tumor suppressor genes BRCA1 and BRCA2 are associated with an increased risk of breast and ovarian cancer. These hereditary mutations have been linked to as high as an 85% lifetime risk of breast cancer. Studies have suggested that prophylactic mastectomy is effective in significantly reducing the risk of first breast cancer or recurrence in women who are BRCA mutation carriers. Despite the current evidence, the decision to undergo prophylactic surgery is not an easy one. There may be many factors such as age, reproductive history, perceived risk, and lifestyle factors that influence the decision-making of women with BRCA mutations.

Methods: Prevention and Observation of Surgical Endpoints (PROSE) is an ongoing, multi-site observational study conducted in a cohort of women with BRCA mutations. Baseline and yearly follow-up questionnaires are administered to collect data on medical history, cancer reduction strategies, and lifestyle factors. Practicum tasks included data collection and data management for the study, which involved questionnaire mailing and tracking, data entry into Access, and data cleaning. I will perform descriptive statistic analyses and logistic regression to determine the predictors of prophylactic mastectomy in the sample of BRCA mutation carriers.

**Conclusion:** Prophylactic mastectomy, while effective in reducing breast cancer risk, is a difficult decision to make. The findings from my analysis may help to understand the barriers and shed light on the motivations behind decisions to undergo preventive surgery.

Name: Rachel Burns

Practicum Site: Partners in Health

Location: Boston, MA

Practicum Title: Project Manager for "Keep Us Honest" Hotline

**Introduction:** Partners In Health (PIH) is a non-governmental organization that utilizes a community-based approach to deliver health care in over eight countries. It is implementing an international hotline that would allow employees world-wide to report inappropriate use of funds, fraud, and conflicts of interest, among other forms of unethical conduct. The purpose of the practicum was to manage the Keep Us Honest hotline, which is a call center and web-based hotline, from design through implementation.

**Methods:** I worked with senior staff to 1) organize the layout of the website and the script for both the call center and website, both of which are operated by a third party 2) develop a branding strategy and design marketing materials to inform PIH employees of the hotline 3) coordinate translation of website and marketing materials 5) test the hotline 6) oversee the roll-out to PIH employees and 7) incorporate user feedback into the hotline to account for cultural differences and ease of use among international PIH employees.

**Conclusion:** The hotline was implemented in the United States on August 10th and is expected to go live in the remaining countries soon. Although it is too soon to know how many cases will be reported, PIH expects the hotline will save money through reducing misuse of funds and other inappropriate conduct. This will allow it to have greater accountability and provide better care to its patients.

Name: Emily Carroll

Practicum Site: Invest in Yourself: City of Newton Employee Wellness Program

Location: Newton, MA

Practicum Title: Massachusetts Department of Public Health (MDPH) Student Intern - Newton Department of Health & Human Services

**Introduction:** Newton, Massachusetts is a community with over 2,500 city workers. A panel of key individuals from Newton Health and Human Services, Parks and Recreation, and Human Resources was established to identify obstacles, develop, and launch an employee wellness program that meets the current needs of Newton workers. When successfully implemented, evidence-based employee wellness programs have been found to reduce healthcare costs, increase productivity, reduce incidence of sickness and absenteeism, and enhance employee morale.

**Methods:** As a first step, all Newton employees were asked to participate in an anonymous wellness survey developed by the panel consisting of questions pertaining to the type of program activities, classes, and incentives they would be interested in.

Conclusion: Of the 113 employees who completed the survey, the main responses expressed the desire for stress reduction, personal training sessions, and local cooking workshops. Ultimately, the results led to the development of the Invest in Yourself employee wellness program launching in September 2011. The Invest in Yourself program will assist and reward Newton employees for having a work-life balance by promoting and providing tools to maintain a healthy lifestyle. Participants will receive free access to group fitness trainings, nutritional workshops, and health education seminars. All workers who opt to participate in the program will be asked to fill out an anonymous pre- and post-program questionnaire. The results from the questionnaires will provide a baseline for comparison and facilitate future adjustments and updates to program design for the continued success of health and wellness programs in Newton.

Name: Carrie Christensen

Practicum Site: Brookline-Quezelquague Sister City Project, Inc.

**Location:** Quezelquague, Nicaragua **Practicum Title:** Community Health Worker

**Introduction:** As part of the Brookline Sister City Project, I participated in screening individuals for hypertension in 24 communities surrounding Quezalquaque, Nicaragua. An increase incidence of chronic kidney disease has occurred in Quezalquaque. It is relevant to screen for hypertension since both chronic kidney disease and hypertension may exacerbate one another. The goals of the practicum were to educate individuals about prevention of hypertension, to screen individuals for hypertension, and to refer these individuals with higher blood pressure levels to the local health center for further follow-up.

**Methods:** Three other BU students and I took individuals' blood pressures with automated blood pressure monitors. A positive referral occurred after two blood pressure readings were above 130/90. A flyer was given out to participants to explain ways to lower their blood pressures.

**Conclusion:** Out of the 1727 individuals screened, 115 individuals were referred to the local health center for further follow-up to monitor their blood pressures. It is important that these individuals with elevated blood pressure levels are followed up by the local health center to obtain a clear diagnosis of hypertension or any other complications that may have occurred due to elevated blood pressures.

Name: Ogechi Emeruem

Practicum Site: American Venous Forum, Medical Registry

Location: Beverly, MA

Practicum Title: Research Assistant

Introduction: An Inferior Vena Cava (IVC) filter is a therapeutic device used in the management of venous thrombo-embolism (blood clots) in patients that have contraindications for use of traditional anti-coagulation therapy. A prospective cohort study was designed to monitor and measure patients outcomes through standardized collection and analysis of clinical information. I assisted with data collection, review and entry of data into a registry for Boston Greenfield Filters. The primary end points of the study include: Identification of complications of the filters, such as IVC wall perforation, embolization and filter migration in patients 18 years or older that has been placed with an IVC filter; Identification of the retrievable rates of temporary IVC filters in patients after 14-20 days or after patient has been documented as low risk for developing blood clots.

**Methods:** To date, 3000 patients 18 years or older who has been placed with an IVC filter have been enrolled into the study. Data from patients are reviewed for clinical relevance, such as date of filter placement, pre and post complications and follow up information. Once reviewed the data is then entered into a web-based registry.

**Conclusion:** Upon complete review and entry of data into the IVC filter registry, statistical analysis of the results will be done to compare patient outcome. The information obtained from this analysis will be used to direct efforts to improve patient care and public health.

Name: Brittany Fisher

Practicum Site: Vertex Pharmaceuticals, Global Patient Safety

Location: Cambridge, MA

Practicum Title: Patient Safety Intern - Hepatitis Comparisons: Evaluating the Past to Understand the Future

**Introduction:** Vertex is a biotechnology company and their first medication, Incivek<sup>™</sup>, was approved by the FDA on May 23, 2011 for the treatment of Hepatitis C Infection. Incivek is an add-on therapy which must be taken in combination with existing treatments. My objective for this project was to compare the Adverse Event Profile of the current standard of care for Hepatitis C using the FDA Adverse Event Reporting System database (AERS).

Methods: I utilized the signal detection software Empirica™ Signal in order to accurately detect and assess safety signals in AERS using the Empirica Bayes Geometric Mean (EBGM) statistic and the 90% confidence intervals. For the purposes of signal detection at Vertex, any event with an EB05 >2 is considered a potential signal.

**Conclusion:** Based on disproportionality graphs, Vogt-Koyanagi-Harada (VKH), a rare condition, was significantly elevated in all three drugs with an EBGM > 50. It was discovered that even though VKH was not listed as a possible adverse event for any of the medications, the symptoms of the syndrome were. For comparison purposes, I also analyzed anemia, an event listed on all three product labels. It was determined that anemia has a much larger public impact due to its larger case series as well as the potentially fatal outcomes associated with the disease. Vertex will now be able to track adverse event data and compare visually drug-event reactions for various medications.

Name: Qing Gu

Practicum Site: Slone Epidemiology Center

Location: Boston, MA

Practicum Title: Research Assistant

**Introduction:** Asthma is among the most common serious medical problems in pregnancy, estimated to affect between 3.7% and 8.4% of pregnant women. Furthermore, population data suggest that these rates may be increasing. Management of asthma in pregnancy poses a dilemma for both physicians and their pregnant patients: asthma may itself present risks to the fetus, such as low birth weigh and premature delivery, but the fetal risks of medications used to treat asthma are largely unknown. Recently, there has been increasing concern about the risk of asthma-related birth defect from use of fluticasone in pregnancy. This case control study assesses the relative risk of fluticasone exposure in pregnancy and defines potential confounders

**Methods:** Study participants were 1548 mothers of nonmalformed infants and 742 mothers of cardiac defect infants between 1998 and 2006. Structured interview within 6 months of delivery was used to determine the use of fluticasone in the first four months of pregnancy. **Conclusion:** The use of fluticasone in the first four months was not associated with a significantly increased risk of cardiac defect (OR=0.9, 95%CI=0.35,2.3)

Name: Leilani Hernandez

Practicum Site: Slone Epidemiology Center, Black Women's Health Study

Location: Boston, MA

Practicum Title: Research Assistant

**Introduction:** BWHS is the largest follow-up study that investigates the health of black women with ~59,000 women enrolled at baseline. Questionnaires are sent every two years to update information on factors that change over time. Participant's height and weight were obtained at baseline and weight is continually updated every cycle. Information on participants' median neighborhood household income was previously obtained by linking participant residential addresses to the 2000 US Census data. My objective was to investigate the association between SES and weight fluctuation in a nationally representative cohort of black women.

**Methods:** I cleaned the weight data by checking changes in weight of 50+ lbs between questionnaire cycles. Women not pregnant at baseline, not missing SES data, and not missing two consecutive years weight responses were used for analysis (n=35,980). A single year's missing weight was assumed to be similar to the prior cycle. Using SAS 9.2, I calculated BMI at baseline and every two years after until 2009 to categorize weight changes: 1) stable obese 2) stable non-obese 3) weight gain 4) weight loss 5) weight fluctuation. I then averaged the neighborhood household income for each category.

**Conclusion:** In a 14 year period, 45.75% of women gained weight, 6.60% lost weight, 1.15% were stable obese, 9.87% were stable non-obese, and 36.63% had fluctuating weights. Non-obese women with stable weights had the highest average neighborhood household income. Obese women with stable weights and women who lost weight had the lowest average neighborhood household income.

Name: William Jackson

Practicum Site: Lineberger Comprehensive Cancer Center, Carolina Breast Cancer Study

Location: Chapel Hill, NC

Practicum Title: Research Assistant

**Introduction:** The Carolina Breast Cancer Study (CBCS) is a population-based case control study focusing on breast cancer disparities between African Americans and white women in North Carolina. The current practicum conducted a pilot study to evaluate the quality and clarity of an endocrine therapy (ET) survey. Once finalized, the survey aims to describe adherence patterns, understand barriers, and to identify contributors to low ET therapy adherence among breast cancer patients in NC.

**Methods:** Included in the pilot study were 12 estrogen receptor positive breast cancer patients screened from the UNC cancer clinic that are currently on ET. The women took the survey and gave feedback on the questions. Cognitive interviews were conducted with the women to discuss the survey, their feedback, and to ensure that women understood the survey and had no difficulty reading or answering the questions as written.

Conclusion: The original survey was tested on eight patients and it needed to be changed drastically. Women did not understand a number of the questions, they had trouble appropriately estimating their risk of breast cancer recurrence, and the wording of certain response choices was confusing. After modifications, four additional women took the survey. The final questions will be added to the existing CBCS-II follow-up. Long term, data on ET adherence behaviors, treatment-related symptoms, and patient-reported reasons for non-adherence in breast cancer patients will expand the CBCS. Researchers will use ET survey data to propose an intervention to improve therapy adherence among breast cancer patients.

Name: Jessica Long

Practicum Site: Boston University School of Medicine, Pulmonary Center

Location: Boston, MA

Practicum Title: Study Coordinator

**Introduction:** The Vitamin D Antenatal Asthma Reduction Trial (VDAART), funded by the NIH, is a multisite double-blind clinical trial to determine if vitamin D supplementation during pregnancy is associated with reduced incidence of asthma, allergies, and eczema in children during the first 3 years of life. Women are enrolled in the study between 10 and 19 weeks gestation and randomized into one of two groups. The control group receives prenatal vitamins and a placebo pill, while the study group receives a prenatal and a vitamin containing 4,000 IUs of vitamin D. The women are then followed throughout their pregnancy and until the child is three years of age. I worked as the Boston site coordinator as the study transitioned from the enrollment phase to maintenance and follow up.

**Methods:** My duties included maintaining a database of participant information, interacting with the IRB, controlling study spending and balancing the budget, managing a team of research assistants and overseeing patient visits. I collaborated with the Principle Investigators and data coordinators to maintain data quality control, determine if updates were necessary to study protocol, and report site-specific results

**Conclusion:** The study hopes to find a lower incidence of asthma, allergies, and eczema in children exposed to the increased vitamin D dose during fetal development. This result could have broad implications regarding future vitamin D recommendations during pregnancy. I assisted in moving the project to the next phase of long term follow up and retention of study participants.

Name: Hollis McLellan

Practicum Site: California Family Health Council

Location: Berkeley, CA

Practicum Title: Research Assistant

**Introduction:** The California Family Health Council, research department, facilitates sponsors to bring rapid development of safe and acceptable, products and methods that provide contraception and/or prevent the sexual transmission of HIV/AIDS and other diseases. In my five months there I was involved in a comparative, open-label two period crossover study of up to 425 couples at CFHC to complete both periods. The study provided data on the functional performance, vaginal semen exposure, safety, and acceptability of two female condoms. The primary objective of the study was to compare the PATH Woman's condom (WC) to the currently available FC2, as assessed by self reported total clinical failure and its components (breakage, slippage, misdirection, and invagination).

**Methods:** 1) Participant recruitment and screening; obtained consent 2) provided instruction to participants to teach them how to perform study protocols 3) Scheduled and conducted appointments for study participants 4) Reviewed questionnaires for completeness and accuracy; checked for inconsistencies and coded open ended questions 5) Input data using database software.

**Conclusion:** The results of the comparative study are still being compiled and reviewed, as the study only ended in May. An efficacy study for the WC has begun. In addition, I am bound by a confidentiality agreement.

Name: Amira Mithavavani

Practicum Site: Boston Medical Center, Infectious Disease Clinic

Location: Boston, MA

Practicum Title: Epidemiology Intern

**Introduction:** Operating since 1988, Boston Medical Center's (BMC) Center for Infectious Diseases (CID) one of New England's largest HIV programs, serves approximately 1,400 patients annually; it is the top reporter of AIDS cases statewide. An understanding of the CID and the BMC patient population is vital to providing patients appropriate treatment and access to resources, given the transient nature of the patients and the variability in their providers.

**Methods:** I compared demographic characteristics of CID patients with BMC overall. I also summarized the experience of CID patients regarding exposure categories to HIV (MSM, heterosexual contact, drug use, etc.) and clinical parameters (CD4 counts (blood test indicating strength of immune system) viral loads (blood test of virus level before or during treatment). Analyses were done using SAS 9.1 (for univariable frequencies), electronic medical record, and Excel.

**Conclusion:** The majority of CID patients are male (66% vs. 46% BMC); Black or African-American (50% vs. 35% BMC); not Hispanic or Latino (81% vs. 82% BMC); speak English (77% vs. 76% BMC); pay with Medicaid (52% vs. 40% BMC). These results are not similar to the overall BMC patient population with the exception of ethnicity. In addition, most patients in the CID are exposed to HIV through heterosexual contact (46%) and have income levels less than or equal to poverty (67%). Understanding the characteristics of the patient population will allow the CID to better serve their needs by improving patient follow-up and creating effective programs that cater to their racial and cultural background.

Name: Kathleen Noddin

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

Location: Boston, MA

Practicum Title: Epidemiology Program Tickborne Disease Internship

**Introduction:** Human granulocytic anaplasmosis (HGA) and Babesiosis are two emerging tickborne diseases in Massachusetts. Epidemiologists have observed rises in confirmed cases over the last decade, however accurate counts have not been possible due to a lack of clinical information reported by physicians. Because suspect cases cannot be confirmed until established clinical criteria are met, enhanced surveillance is necessary to determine accurate counts of confirmed HGA and Babesiosis cases. In this practicum I conducted enhanced surveillance on 2010 HGA and Babesiosis suspect cases in Massachusetts.

**Methods:** Data for 2010 suspect cases of HGA and Babesiosis (as determined by lab reports) were extracted from the Massachusetts Virtual Epidemiologic Network (MAVEN). Phone calls were made to cases' physicians, nurses or infection control personnel to gather clinical information (symptoms) during the time that they were tested. Letters and reference manuals on tickborne diseases in Massachusetts were also sent to those physicians whom I was unable to contact via telephone.

**Conclusion:** As a result of enhanced follow-up on all 2010 suspect cases of HGA, confirmed cases rose from 62 to 77 (a 24% increase). Babesiosis cases rose from 73 to 79 (an 8% increase). Obtaining accurate counts for HGA and Babesiosis is an important factor in determining the true incidence rate and disease burden on the state. Enhanced surveillance allows us to estimate the true risk and is essential in educating the public and appropriately allocating resources for prevention.

Name: Andrea Pinzon

Practicum Site: Boston University School of Public Health, Partners in Health and Housing Prevention Research Center

Location: Boston, MA

Practicum Title: Research Assistant

Introduction: Research has shown that residents of public housing developments are more likely to exhibit cardiovascular risk factors, and have an increased risk for developing chronic diseases. The main goal of this practicum is to get public housing residents the care and education they need for chronic health conditions. The Prevention Research Center screens residents at four Boston public housing sites for select chronic health conditions, including hypertension, diabetes risk, overweight/obesity, smoking status, and known hypercholesterolemia and/or diabetes. Depending on the site, those residents who screen positive for at least one chronic condition are connected with a Resident Health Navigator (RHN) or Resident health advocate (RHA) to give them information on risk reduction and available health care or community programs.

**Methods:** The PRC is determining the effectiveness of RHN's on improving Boston Public housing residents' access to care. An RHN guides residents through the process of finding the care they need, overcoming the barriers they may encounter, and ensuring that the resident receives the needed care, whereas an RHA only gives the residents the information they need to find the care. My duties as a research assistant consisted of setting up the health screening sites, administering the health screenings, and subject enrollment. **Conclusion:** Although the study is still ongoing, the projected outcomes of the study anticipate that those residents of sites with an RHN will have an increased number of completed visits to health care, reduced barriers to care, and improved chronic health outcomes as compared to residents of sites without an RHN.

Name: Alee Rowley

Practicum Site: Pathways to Wellness

Location: Boston, MA

Practicum Title: Research/Data Management Intern

**Introduction:** Substance abuse is a major health problem particularly among veterans and traditionally practiced treatment is rarely effective. A randomized control pilot study was conducted to evaluate effectiveness of acupuncture and relaxation response in reducing craving and anxiety, and improving quality of life among homeless veterans recovering from substance abuse disorders. The practicum purpose was to derive variables to indicate frequency of home practice and types of the relaxation response techniques.

**Methods:** Study participants, recruited from a VA Domiciliary rehabilitation program, had self-reported substance abuse/dependence problem and had remained in the domiciliary for at least 10 weeks after study entry. They were randomized to one of three study groups: acupuncture, relaxation response (5 types of techniques), or usual care. Subjects in the relaxation response group kept daily logs of time of practice, techniques practiced, number of abbreviated techniques, and comments.

**Conclusion:** Fourteen of 23 (61%) participants completed study, practicing an average of 4.9 days/week. Diaphragmatic breathing was the most frequent technique, practiced on average, 14.4 times over the 10 weeks. Body scan and counting were practiced least (average of 7.1 times). Some participants reported that relaxation response-eliciting techniques in the morning helped prepare for the day; some reported it helped them sleep. Others reported that techniques worked better with more practice, and when they were open-minded and willing to let the response take effect. Future analyses will assess the association between the amount of weekly practice and changes in the degree of substance craving, anxiety, and quality of life.

Name: Ankura Singh

Practicum Site: Everett Health Department, Mass DPH Local Board of Health Summer Internships

Location: Everett, MA

Practicum Title: Media and Communications Specialist for Everyone Eats Healthy in Everett

**Introduction:** Many residents of Everett, MA lack access to healthy, affordable food and opportunities to participate in physical activities. While the state of Massachusetts has an obesity rate of 23.0%, the rate of obesity in Everett is 33.6%. Energize Everett (EE) and Everyone Eats Healthy in Everett (EEHE) are programs funded by grants from Mass in Motion and the Boston Public Health Commission that aim to ensure the availability of local healthy eating and exercise options, and reduce racial disparities in healthy food access. Project activities include a farmers' market, backyard growers' alliance and educational workshops. My role was to increase community awareness of and participation in these activities.

**Methods:** I needed to increase website traffic and ensure that project goals and accurate content were prominently displayed. I accomplished this through organizational and structural changes to their website. I also developed an EEHE newsletter in order to communicate information about EEHE activities to members of partner organizations and Everett residents. Newsletter content includes meeting notes, tips from educational workshops, and details of past and upcoming events.

**Conclusion:** Site traffic increased 104% this past month because of its rank in search results and external links from partner organization websites, which we hope will attract site visitors from our target population. Attending community meetings and workshops has helped those involved learn ways to best communicate the importance of healthy eating and racial justice to Everett residents. Monitoring local obesity rates and changes in eating habits should now be done to determine whether or not the intervention has been effective.

# HEALTH LAW, BIOETHICS AND HUMAN RIGHTS

Name: Stephanie Cox

Practicum Site: Healthworks Corporate Office

Location: Boston, MA

Practicum Title: Healthworks Community Health Events Marketing and Advertising

**Introduction:** Healthworks Fitness Centers for Women is a company dedicated to creating a community centered on leading healthy lifestyles and leading women from both urban and suburban neighborhoods in female fitness and wellness. The aims of this internship were to organize and promote community health events designed to increase participants' perceived value, satisfaction and happiness with their own state of physical fitness through increased physical activity and a greater care for self.

**Methods:** By planning and executing appropriate community health events while utilizing the proper Social and Behavioral theories, we were able to engage a portion of the Boston population in being physically active and improving their view towards physical activity. Events included our Workout to Win program, weekly free Zumba classes on the Esplanade and free Rebounding classes at Copley Square. This required identifying how the activity would achieve its intended outcomes for the target population, organizing cosponsorships with appropriate businesses, effectively promoting the event through thoughtfully crafted flyers, web pages, posters, magazine ads and press releases and seamlessly executing the event.

**Conclusion:** Through my work the Healthworks brand was furthered by becoming more involved in the community and introducing over 500 women to new and exciting ways to be physically active. Through the Workout to Win program club attendance rates continued to rise, demonstrating the fact that the commodity of health can be marketed and promoted just as other goods.

Name: Steven Ralston

Practicum Site: American College of Obstetricians and Gynecologist

Location: Washington, DC

Practicum Title: Chair, Ethics Committee, American College of Obstetricians and Gynecologists (ACOG)

**Introduction:** Ethics committees serve a variety of functions and roles within institutions. Professional organizations charge their ethics committees differently and allow them varying degrees of independence. My goal was to compare and contrast the functioning of the ethics committees of 3 different professional organizations.

**Methods:** As Chair of the Committee on Ethics for the American College of Obstetricians and Gynecologists (ACOG), I ran a semiannual meeting at the College for 2½ years and attended as a liaison member the Ethics Committees of the American Society of Reproductive Medicine and the American Academy of Pediatrics. Over my tenure, I have attended a total of 10 meetings and have been able to observe and participate in deliberations and manuscript preparation for a variety of bioethical issues.

**Conclusion:** The degree of independence Ethics Committees exhibit depends partly on the organizational structure and bylaws present, but also on historical and political events that influence how the Board or Executive Committees view the work of the Ethics Committees. Moreover, the conclusions that these committees come to are often highly influenced by the membership of the committees as well as the goals and priorities of the organizations themselves.

Name: Joy Aigbogun

Practicum Site: Whittier Street Health Center, Department of Quality Assurance and Performance Improvement

Location: Boston, MA

Practicum Title: Clinical Case Manager

**Introduction:** Obesity is a multi-factorial disease with multiple co-morbidities. It is a major public health problem that affects people of all ages worldwide. Blacks and Latino women are more likely to be overweight and obese than Caucasian women. The objective of the bariatric program is to assist patients with a BMI >40 or BMI of 35 along with co-morbidities such as diabetes, HTN, etc to lose weight and be able to keep the weight off.

**Methods:** As a case manager, my primary responsibility was to 1) Recruit patients who are overweight into the bariatric program, 2) To track patients' process in scheduling necessary required appointments, assisting in scheduling appointments whenever necessary, and ensuring that they go for these appointments. 3) Communicating patient's challenges to the doctor and solutions back to the patient.4) Documenting patient's response during bi-weekly follow-up which is important in the monthly meeting with the coordinating physician and other team members. 5) Plan and prepare monthly bariatric information session for all patient in the program 6) Send out letters of invitation for a support group meetings to patients who has had the surgery.

**Conclusion:** Through continual correspondence with the patients and proper documentation of communication with patients, I was able to provide information, support, and assurance for patients who are anxious about the process as well as provide information about patient progress during team meeting.

Name: Nissa Askins

Practicum Site: Boston Medical Center, Department of Pediatrics

Location: Boston, MA

Practicum Title: Research Intern

Introduction: As part of the research program at Boston Medical Center, I am assisting the WE CARE (well-child visit, evaluation, community resources, advocacy, referral, education) Project, a study of the effectiveness of a screening tool designed to help pediatric primary care providers, address their patients' basic social needs. This is a follow up study to one conducted by the principal investigator, Dr. Arvin Garg, at a large urban teaching hospital. The follow up study in Boston is testing how well the tool works in smaller, non-academic, community clinics. Both studies are based on various other research findings that children whose families have their basic social needs met, are more likely to have better developmental and health outcomes.

**Methods:** I am working with the We Care research team to: 1) Complete IRB Study of Human Subjects Protection Certification training. 2) Enroll eligible mothers to participate in the study. 3) Collect data. 4) Prepare data for final entry into the database by the research assistants.

**Conclusion:** The enrollment of study participants and the collection of high quality data are essential for the WE CARE researchers to complete their analysis of the screening tool.

Name: Sophia Barberich

Practicum Site: Newton-Wellesley Hospital, Operations Management Services

Location: Wellesley, MA

Practicum Title: Ambulatory Services Intern

**Introduction:** Over the past several years, Newton-Wellesley Hospital has acquired five primary care practices, which are overseen by the Ambulatory Services Department. As the delivery of primary care in the U.S. shifts towards a more comprehensive model with improved communication, coordination and continuity of care, the hospital seeks to implement the 'Medical Home' model. Thus, an initial evaluation of the practices' current standing was necessary to determine what work will need to be done for Medical Home implementation.

**Methods:** My role was to evaluate the 'readiness' of the Newton-Wellesley Family Medicine at Waltham practice using a survey tool designed by The National Committee for Quality Assurance (NCQA). In order to conduct the evaluation, extensive research on the Medical Home's philosophical and conceptual framework was necessary to be able to speak with key stakeholders about their practice. The evaluation consisted of a series of meetings with physicians and the practice manager to determine which NCQA standards and elements the practice currently meets, and which will need to be satisfied going forward.

Conclusion: An analysis of the NCQA evaluation resulted in a score of 20/100 for the practice. Lack of written documentation and formal policy and process is responsible for a significant percentage of unearned points, while a smaller percentage require changes in clinical workflow and some system redesign. An assessment matrix was developed to identify the standards and elements that can be addressed on a hospital or systems-level versus a practice-level, as well as standards and elements that are focused on process or documentation, versus clinical workflow or information systems.

Name: Sevan Chorluyan

Practicum Site: Veterans' Affairs Boston Health Care System

Location: Boston, MA

Practicum Title: Health System Administrative Trainee/Intern

**Introduction:** Hospitals, including those in the VHA Boston Healthcare System, have been struggling in the past few years with increasing number of backordered medications. In addition to the obvious negative effects backorders have on patient care, they also create logistical communication difficulties. Previously, backorders were ineffectively and sporadically dealt with, resulting in poor communication between purchasers, pharmacists, and physicians. The goal of the project was to create a systematic notification system that allows communication of backorders in an efficient manner to eliminate wasted time and effort.

**Methods:** Through interviewing different parties I determined that using the VA's EMR during the ordering of prescriptions was the best method. This was selected because it would act as a reminder at the time of ordering and because of the extreme difficulty of reaching physicians be other forms of electronic communication. I then charted a chain of events that reports the information from the purchasing agents to the clinical coordinator of the pharmacy to the chiefs of the medical services and finally to the physicians. The clinical coordinator now manages an excel sheet that is accessible via the desktop of every computer in the Boston healthcare system giving information on the backordered medication and more importantly the available alternatives to the backordered medication.

**Conclusion:** Physicians will less likely prescribe backordered medications but instead refer to the desktop excel sheet to choose an alternative medication. This will allow the physician to make this clinical decision when still with the patient.

Name: Sandy Cohen

Practicum Site: Massachusetts State House, Joint Committee on Mental Health and Substance Abuse

Location: Boston, MA

Practicum Title: Legislative aide on health policy with the Massachusetts Joint Committee on Mental Health & Substance Abuse

**Introduction:** Mental health and substance abuse disorders significantly impact the Commonwealth's population, economy, criminal justice and health care systems. One in ten Massachusetts residents experiences drug or alcohol dependence, yet only 15-20% of them access treatment services annually. The committee on Mental Health and Substance Abuse considers matters regarding behavioral health treatment, overdose and suicide prevention, homeless mentally ill, Mental Health Department oversight, and other related issues as they are referred. The committee's activities include analyzing proposed legislation, educating legislators on relevant topics, and promoting collaboration between government and industry stakeholders.

**Methods:** The committee arranges hearings to review legislation and educate legislative staff, inviting industry experts and advocates to participate. The House and Senate chairs perform outreach with their legislative districts to promote constituent knowledge and participation in political developments. To keep legislative leadership informed, committee staff conduct research and track current policy developments to disseminate information among involved parties.

Conclusion: I analyzed 41 bills re-filed from the previous legislative session that have been referred to this committee. I have assisted in executing the committee's first informational hearing, which included expert academic and stakeholder testimony, and will soon assist its first legislative hearing, which will review several bills relating to children's mental health. I regularly researched current events in state politics, behavioral health services, and health care policy to inform the Chairwoman for her public presentations. I gained understanding of the functions and culture of state politics, including constituent activities, stakeholder and public relations, and effective strategies for advancing health policy.

Name: Caroline Donahue

Practicum Site: Massachusetts Health Connector

Location: Boston, MA

Practicum Title: Wellness Initiative Intern

**Introduction:** The Health Connector was given the task through recent legislation of enacting a wellness program for their small group population. I assisted with the launch of this program, Wellness Track, by helping to create: presentations, work flows of the registration processes, program communications, Terms & Conditions, Policies & Procedures and reporting. I have also assisted in the preliminary steps of planning the launch of the non-group version of the wellness program.

**Methods:** I completed these tasks by working closely with numerous teams at the Health Connector. I worked closely with our legal team in creating Terms & Conditions, as well as our Policies & Procedures. I also worked alongside the Commonwealth Choice Operations team to create trainings for our sub-connector staff and customer service representatives. I worked as well with our Sales & Marketing team on creating communications for the public, as well as for presentations on the Wellness Initiative for Brokers.

**Conclusion:** We have encountered challenges with enrollment due to the restrictive definition of an eligible employer group by the legislature. I do see more groups signing up in the future because the Wellness Program is a great value add for small businesses. I also see a large portion of members signing up for the non-group wellness program due to the program being an added benefit for our members who buy their own health insurance.

Name: Jennifer Dutcher

Practicum Site: Boston Veterans' Affairs Healthcare System

Location: Boston, MA

Practicum Title: Health System Administrative Intern

**Introduction:** VA Boston is a large tertiary healthcare system with three main campuses and five Community-Based Outpatient Clinics. It is one of eight medical centers which comprise the VA New England Healthcare. VA Boston is committed to improving the health and wellness of America's Veterans through delivery of quality care, compassion, and patient advocacy.

**Methods:** For this practicum I am working alongside the Associate Medical Center Director. Some of my responsibilities include organizing and co-leading meetings for an improvement project, conducting research for and preparation of an improvement report submitted to a Network Committee, participating in Environment of Care rounds to identify hazards, and holding meetings with leaders throughout the organization. I will conduct research on the Administrative Fellowship program hosted here and develop a handbook for the Administrative Fellow and their Preceptor.

**Conclusion:** For Administrative Fellows entering VA Boston, it is important that they understand VA Boston, Veterans Health Administration, and VA New England Healthcare systems at large. It is also essential that the fellow and the preceptor understand the process to be conducted throughout the fellowship and deliverables required. Upon completion of this practicum, the handbook will: 1) Present a timeline of the entire fellowship; 2) Display contact information for all necessary personnel; 3) Discuss background information on VA Boston, Veteran Health Administration, and VA New England Healthcare System; 4) Examine projects, committees, and organization policies; 5) Recommend a system of updating the handbook.

Name: Zhandra Ferreira-Cesar Suarez

Practicum Site: Boston Medical Center, Department of Pediatrics

Location: Boston, MA

Practicum Title: Care Manager & Project Administrator

Introduction: Project Solve's ADHD Care Management Study looks at ways to provide children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), with effective clinical services and care management. Studies have reported that among low-income and minority children, ADHD is less likely to be diagnosed correctly, or treated successfully, than it is among more affluent or white populations (Silverstein, MD). As a result of this, the leading physician, also principal investigator, proposed a randomized study to compare the effectiveness of two care models on ADHD outcomes.

**Methods:** I worked directly with the families and care managers who are trained in the Principles of Parent Management, specifically Triple P (Positive Parenting Program). I collaborated with care managers involved in the enhanced arm of the study, and with the involved panel of physicians to standardize the parent management course by introducing a booklet which simultaneously aims to standardize the collection of qualitative data. I assembled the Care Management (+) booklet to act as a guide for the care managers when delivering the parenting program. The standardization of this guide provides care managers with a clear guide to perform their responsibilities.

**Conclusion:** The product of these discussions, and continuous reviews, culminated in a guide that aims to standardize the training process for current and incoming care managers; standardize the qualitative data collection, and provide mothers with a readily available and organized tool kit that helps the parent/guardian navigate the parent management program.

Name: Anna Fydrych

Practicum Site: Abpro Labs, Business Development

Location: Lexington, MA

Practicum Title: Strategic Market Assessment and Pharmaceutical Demand Analysis for a Specific Biotechnology Platform

Introduction: The former market model in which novelty biotechnologies and pharmaceuticals were standalone entities, is rapidly changing. Within the new market landscape, pharmaceutical giants and biotechnology platforms horizontally integrate to support R&D capacities. Specifically, this integration is examined in Iain Cockburn's Health Affairs publication, "The changing structure of the Pharmaceutical Industry", where he discusses the biotechnology sector's evolving and vital role in the pharmaceutical industry. Abpro Labs is a biotechnology company that has streamlined the major steps to producing recombinant proteins using a high throughput method. By mechanizing the production of this major pharmaceutical drug discovery tool, the process of developing new therapeutics is greatly accelerated. The market model is applicable in this case, as an industrialized gene to protein platform directly improves research efficiency and drives innovation, resulting in a new age of pharmaceutical discovery. In order to support the launch of this high throughput platform, several strategic market positioning analyses are necessary.

**Methods:** The strategic market assessment was completed in a series of steps including, identifying major players in the market, assessing specific product demand, gathering competitive data, competitive mapping, and segmenting the market accordingly. To further understand the customer process assessment from the pharmaceutical side, an LP analysis on customer data generated a process analysis model

Conclusion: Completed full market assessment report and produced a customer process analysis model.

Name: Jermie Gandhi

Practicum Site: Health Resources in Action, Public Health Policy and Strategies Center

Location: Boston, MA

Practicum Title: Health Policy Intern

**Introduction:** Health Resources in Action (HRiA) is an organization that provides consulting services to a wide range of clients interested in resolving health inequalities through policy, research, prevention, and health promotion. The Policy and Strategies Center is currently working on costly health conditions in an attempt to resolve these issues by considering social and community inequalities. Specifically, the Data-by-District initiative, hopes to present tailored data and information to legislators about the health status and health characteristics of the communities that they represent, through the dissemination of individualized fact sheets and policy briefs.

**Methods:** The goal of the Data-by-District project is designed to provide useful information and data to state senators in Massachusetts on the most pressing community health needs in their districts, as a way to help them develop more awareness, concern, and leadership on public health issues and thus, become interested in developing effective policies that will enable them to effectively table their community's problems. With the creation of a data portal, I researched particular issue's cause, impact on the community, current policies, and potential future policies to tackle this issue. With this information, as well as relevant academic literature and reports published by the Policy and Strategy Center, I created policy briefs outlining significant information pertaining to this health issue, such as mental health.

**Conclusion:** The Data-by-District project's data portal will provide simple public health data and information to Massachusetts legislators. Creation of policy briefs has established a foundation on which the Data-by-District project will be built, including future personalization to specific state senators.

Name: Elizabeth Havener

Practicum Site: Department of Health and Human Services, Office of the Inspector General

Location: Boston, MA

Practicum Title: Program Analyst

Introduction: As an intern Program Analyst at the Department of Health and Human Services, Office of the Inspector General, Office of Evaluations and Inspections, I am conducting research as part of the pre-inspection phase of a study titled "Informed Consent and Privacy Protection Procedures for National Institutes of Health (NIH) Grantees Conducting Genetic Research." This topic is of concern to us because of the large amount of genetic research being funded by NIH and the level of risk to human subjects participating in this type of research. The objectives of this study are to determine the extent to which NIH grantees conducting genetic research comply with regulations and guidance on informed consent procedures, and also to determine the extent to which they ensure that human subjects' private information stored in biobanks is protected.

**Methods:** The purpose of the pre-inspection phase is to gather information and to develop a study design. During this phase I am working with a senior Program Analyst to gather background information on informed consent procedures and privacy protections for human subjects participating in genetic research. We have reviewed relevant literature, attended a conference, and we are currently in the process of interviewing academic and industry experts, researchers, and government officials.

**Conclusion:** We hope to identify human subject vulnerabilities in genetic research, and to make recommendations for enhancing the protection of human subjects.

Name: Vijeta Limbekar

Practicum Site: Boston Veterans' Affairs Healthcare System, Executive Office of Administration

Location: Boston, MA

Practicum Title: Health Systems Administrative Internship

**Introduction:** The Veteran's Affairs Boston Healthcare System is committed to providing the highest quality health care and to expanding the boundaries of medicine through research. Within the Executive Office there is a standard of procedure for checking credentials and granting privileges for all new providers. The goals of the Credentialing and Privileging project were to decrease the amount of time it takes to grant privileges for providers and increase the security and validity of checking credentials.

**Methods:** The first step of this project was gaining an understanding of the current method of credentialing and privileging of providers. This method was a paper based format, sent around to various stakeholders for review of the provider via postal mail. This method was costly to the hospital in terms of time, as well as efficiency. To solve this problem, it was my duty to convert these paper forms into electronic fill-able, secure documents. I also developed a process map, flow sheet, and multiple sets of instructions for the stakeholders in order to implement this new process. Later, I presented the process that I developed to the various departments of the hospital to teach them about it's use.

**Conclusion:** As a result, I created and developed a process for electronic fill-able documents that are secure, timely and more efficient. This process will be implemented among all departments for the hospital. The completion of these projects makes us innovators in technology and leaders in our field. We hope to spread this process on a national level to all other VA Hospitals.

Name: Sheela Nimishakavi

Practicum Site: Massachusetts Department of Public Health, Bureau of Substance Abuse Services

Location: Boston, MA

Practicum Title: MASBIRT Intern

Introduction: Behavioral health screening questions are typically not considered a part of routine primary care. Rather, physicians tend to focus on physical screening methods, such as temperature and blood pressure measures, during the limited time they have with their patients. There has been increasing evidence that behavioral health screening questions integrated into primary care could prevent major diseases resulting from issues such as alcohol, tobacco, and other drug use, as well as depression and intimate partner violence. These screening questions open the door to discussing unhealthy behaviors and patients' options for change. The Massachusetts Screening, Brief Intervention, and Referral to Treatment (MASBIRT) program is a statewide initiative to encourage community health centers to implement behavioral health screenings into primary care.

**Methods:** As part of the project, a behavioral health survey was conducted with all patients who were seen during fiscal year 2009 in 27 different community health centers around the state of Massachusetts. The survey included questions concerning risky alcohol use, drug use, tobacco use, intimate partner violence, and depression and mental health. After aggregating the positive screens from the various community health centers, the totals were compared by region and totals for each individual health center were compared to the state total.

**Conclusion:** This data represent two important results. First, the number of positive screens was higher in some areas of the state as opposed to others. More importantly, the numbers indicate the total positive screens that would have gone undetected if the screening questions were not implemented.

Name: Andrew O'Connell

Practicum Site: Brigham and Women's Hospital, Department of Surgical Services

Location: Boston, MA

Practicum Title: Administrative Intern

**Introduction:** As the Surgical Services Administrative Intern at Brigham and Women's Hospital, I performed analyses and helped lead process improvement initiatives that supported surgeons, nurses, and administrators in improving patient flow and utilization of perioperative resources.

Methods: I worked extensively with Excel in order to analyze data that could be used to define baseline and trended performance outcomes across a variety of perioperative metrics. Metrics were used to inform decision making on staffing levels, appropriate operating room capacity, etc. Data was made available by the Center for Clinical Excellence or via other institutional resources. Data would be manipulated in Excel and key findings summarized in PowerPoint for bi-weekly subcommittee meetings and a monthly Perioperative Governance Committee (PGC) meeting chaired by the Surgeon in Chief. Any recommendations that were made based on analyzed data would need to be approved by the PGC. Initiatives resulting in proposed policy changes were delegated to me for formalization into hospital policy format and submitted to committees for approval. In addition to those various analytical and process improvement projects, I provided program management support that sought to improve and expand the audio/visual capabilities in the operating suite.

**Conclusion:** Throughout my internship I was able to assist in a broad range of decision making based on compiled data. This ranged from staffing models to policy development. Additionally, we advanced the operating room's audio/visual program with fundamental work that will enable more secure, provider specific policies and procedures to record, store, and stream video recorded intraoperatively.

Name: Diana Trebino

Practicum Site: RTI International

Location: Waltham, MA

Practicum Title: Research Analyst for Coordinating and Technical Assistance Center-RTI International

Introduction: Currently, children's health care quality measurement is applied unevenly across settings and is often limited and incomprehensive. The CHIPRA of 2009 authorized the national Pediatric Quality Measures Program to fill some significant gaps in children's health care quality measurement, in which 7 Centers of Excellence were chosen as one part of the program to help with this process. RTI was contracted to be the coordinating center in this process and identify measure criteria on which to evaluate specific pediatric measures.

Methods: I conducted a comprehensive scan of existing measure evaluation criteria from sources such as NQF, CMS Measures Management System, Institute of Medicine report on pediatric quality measures, etc. I helped to select relevant sources that could enhance or augment existing criteria and synthesize a definition of each criterion (validity, reliability, etc.) that reflects the priorities from children's quality measures developed under the Pediatric Quality Measures Program. I assisted in coordinating workgroup meetings of experts to gather feedback

**Conclusion:** We produced a draft report of enhanced measure criteria which were based on the NQF measure evaluation criteria that will guide measure evaluation. Workgroup meetings of experts were conducted to review and collaborate. AHRQ developed a template in which the Centers of Excellence will complete with their quality measures and provide rationale of how each measure satisfies these certain criteria. This will all be presented at the September panel of experts meeting.

Name: Alayna Tress

Practicum Site: Tufts Center for the Study of Drug Development

Location: Boston, MA

Practicum Title: Collaborations of AMC Medical Schools and Pharmaceutical/ Biotech Companies/ Research Assistant

**Introduction:** Tufts University Center for the Study of Drug Development (CSDD) was asked by the Pharmaceutical Research and Manufacturers of America (PhRMA) to examine the current and expected socioeconomic and scientific impacts of American accredited medical colleges (AMCs) collaborating with pharmaceutical and biotechnology companies. Past analysis reveals that when such collaborations occur, the industrial companies can save costs during the drug discovery stages of Research and Development. Industry can also rely on the academic partners to contribute their expertise in a particular clinical area. In return, the academic partner benefits from grant money from industry, and could potentially add more jobs to the respective department in which the collaboration is taking place.

**Methods:** The technology transfer websites of 150 AMCs were accessed to find technology transfer contract reports. Ideal reports listed the pharmaceutical/biotechnology company, the money granted to the university, and the project assignment. Not every college made this information public, or kept a master report of this information, therefore press releases announcing collaborations were searched via Google News and the press release section of industry websites. A literature review was conducted to examine the socioeconomic and scientific benefits of such collaborations.

**Conclusion:** Case examples from colleges that had comprehensive databases were selected which highlighted benefits to the college including job creation and increased financial strength to the surrounding community along with the discoveries that the industrial side was able to benefit from. A database was created for PhRMA to review to provide more focus for future projects.

Name: Meredith Wallace

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

**Location:** Geneva, Switzerland **Practicum Title:** Data Collection Intern

**Introduction:** Ensuring access, availability and quality of essential medications around the globe is a key priority of the World Health Organization (WHO). WHO aims to develop internationally recognized norms, standards, and guidelines for medicines regulation. Between 2009-2011 the Pharmaceutical Country Profile project empowered countries to develop a pharmaceutical profile and make data available at a national level. This preliminary analysis compares regulatory policies and practices across WHO member states by region and World Bank income group.

**Methods:** Data was collected using the Pharmaceutical Country Profile survey questionnaire, with additional data drawn from the 2010 pilot study and publically available sources. Fifty-four countries submitted questionnaires in time for inclusion in this analysis, and demographic and health expenditure data on 137 additional countries was included to provide a more comprehensive picture of current practices. This report is an extension of work done by Paul Ashigbie (BUSPH MPH'11) from the 2010 pilot study. Data stored in Access was exported and analyzed in Excel.

**Conclusion:** Most countries have regulatory structures in place for the pharmaceutical sector. However, the complexity of regulatory systems varies widely across countries studied. While most countries have basic policies and frameworks in place, fewer report regulation of clinical trials. Additionally, it is difficult to assess the extent to which policies are implemented. No significant trends in regulatory practices emerge across regions. Variation within individual countries indicates a national commitment is more important than national wealth in establishing a functioning regulatory system, though several indicators do seem influenced by economic status.

Name: Lindsay Andrus

Practicum Site: Physicians for Haiti

Location: Boston, MA

Practicum Title: Summer Intern

**Introduction:** Physicians for Haiti (P4H) is a group of Boston-area physicians and other healthcare professionals who have committed themselves to inspire, empower, and support the development of leaders among Haiti's next generation of health professionals. P4H has partnered with St. Boniface Hospital in Haiti and the Fleming Class of new physicians based in Haiti to coordinate educational initiatives and a mentorship program.

Methods: I joined the P4H Steering Committee and helped write the Brigham and Women's Hospital (BWH) Support for Excellence in Educational Development (SEED) grant application. This entailed conducting background research, developing an evaluation study design for the Fleming Class Mentorship and Education Program, and creating the budget and justification. In addition, I researched general program grants, travel grants, and Haitian events and organizations in the Boston area. I also co-authored the "Creating Access to Continuing Medical Education in Haiti" abstract for the Global Health Education Consortium (GHEC) conference. Finally, I organized a strategic planning meeting to help P4H focus their future activities.

**Conclusion:** The SEED grant application was submitted to BWH and accepted, giving P4H \$7,000 to evaluate the Fleming Class Mentorship and Education Program. The GHEC conference abstract was submitted, and I plan to attend the conference in November if the abstract is accepted. Finally, the strategic planning meeting took place and the Steering Committee completed an overall Logic Model for P4H.

Name: Amanda Bartholomew

Practicum Site: Brookline-Quezalguaque Sister City Project, Inc.

Location: Quezalguaque, Nicaragua

Practicum Title: Researcher and Health Educator in Quezalguaque

**Introduction:** The basic infrastructure of the community health worker program in Quezalguaque, Nicaragua still exists, but after various political changes, the program has not been well maintained. With a new health director and possible funding from the Brookline Sister City, the community health worker program has the potential to be revitalized.

**Methods:** In order to assess the feasibility of revitalizing a community health worker program in Quezalguaque, focus groups were conducted to understand how current Casa Base leaders viewed their roles, work, and challenges. After conducting the focus groups, personal interviews were conducted during village visits to find out what kind of medical supplies and personal experiences Casa Base leaders have had.

**Conclusion:** The focus groups and personal interviews with casa base leaders provided valuable insight into the current challenges and goals faced by the leaders, lending credence to the feasibility of restoring and fiscally supporting the Casa Base program. The data collected also provided insight as to where possible monetary support should go, which was not necessarily what the health center or casa base leaders expected.

Name: Kathleen Bell

Practicum Site: Boston University School of Public Health, Center for Global Health & Development - Zambia

Location: Southern Province, Zambia

Practicum Title: Intern at the Zambia Center for Applied Health Research and Development (ZCAHRD)

Introduction: Despite Zambia's efforts to scale-up the implementation of co-trimoxazole prophylaxis in children and infant services, the nation continues to face multiple challenges related to the early initiation of co-trimoxazole. Globally, partners estimate that in 2008 only 8% of children exposed to HIV were initiated on co-trimoxazole by two months of age. Boston University's Prevention of Mother to Child Transmission of HIV Integration Project (BUPIP), in partnership with the Zambian MoH, provides ongoing training and technical support in Southern Province to ensure all HIV-exposed infants are commenced on co-trimoxazole within the first two months of life. Despite efforts targeted at the facility and community level, many HIV-exposed infants do not receive the potentially life-saving co-trimoxazole prophylaxis within the first two months of life.

**Methods:** During May-June 2011, a qualitative and quantitative data audit and survey was conducted in 7 of the 8 BUPIP districts in Southern Province, Zambia. The data audit looked at facility level antenatal care, early infant diagnosis, mother baby pair follow-up and data management with regards to commencing infants on co-trimoxazole within the first two months of life.

**Conclusion:** Survey and data audit findings indicate programmatic deficiencies in the area of facility-level data management and a lack of functioning and systematic community-based interventions used to prevent mother/ baby loss-to-follow-up. Programmatic recommendations were made which could prove crucial in decreasing loss-to-follow-up, hence increasing the number of infants commenced on co-trimoxazole as well as strengthen facility-level data management systems in order to obtain accurate data related to commencement of co-trimoxazole.

Name: Samantha Brown-Stonbraker

Practicum Site: Boston Medical Center, Department of Pediatrics

Location: Boston, MA

Practicum Title: Reducing Child Maltreatment in Families with Newborns

Introduction: Project DULCE, Developing Understanding and Legal Collaboration for Everyone, is a research study coordinated through Boston Medical Center aimed toward finding a method to reduce the incidence of child maltreatment in families with newborns. As a bilingual research assistant, I recruit participants through the pediatric clinic at Boston Medical Center, administer interviews and work with the research databases used for analysis

**Methods:** There are two study groups in the project. Families in the treatment group are paired with a family partner as an extension of their primary care services. Control group families receive a short safety training session on safe sleep and safe transportation for their new baby. After randomization, I connect the treatment group families with their family partner and arrange baseline interview appointments for both groups. All of the families participate in baseline and six-month follow up interview sessions. During the interviews, I help participant fill out a series of surveys pertaining to their feelings about being new parents.

**Conclusion:** We have randomized 121 families, 96 have completed baseline interview sessions and 10 families have completed both the baseline and follow up interviews. After more follow up interviews are completed, the data will be used to evaluate how parenting stress levels changed over the course of the study. Hypothetically, the family partner's services will reduce risk factors to child abuse and create more resilience among families. Ideally, the intervention will improve the quality of child development and reduce the incidence of childhood maltreatment among families receiving DULCE support services.

Name: Alicia Charleston

Practicum Site: Management Sciences for Health, Haiti, Leadership, Management and Sustainability

Location: Haiti

Practicum Title: Monitoring and Evaluation Intern

Introduction: Leadership, Management and Sustainability (LMS) actively promotes family planning methods throughout Haiti. The organization is made up of six units: Commodities, Community Mobilization, Capacity Building, Family Planning, Finance & Administration and Monitoring & Evaluation (M&E). Despite the transportation difficulties and ongoing recovery process from the 2010 Earthquake and cholera epidemics, these units work together to educate and engage the population about family planning methods. Making known the products available to the population and ensuring such methods are more easily available to them through countrywide distribution continues to be the main goal of LMS Haiti.

**Methods:** I worked primarily with the M&E unit, conducting site visits to monitor the monthly and quarterly programming and distribution of products. Visits at the two sites in Cité Soleil included analyzing reports and guidance of the program. I then visited six rural sites in conjunction with an annually required training program of clinic staff. Accuracy of records were also checked at these sites as was needed on-site training completed. I participated in workshops and meetings throughout the country on education, community mobilization and discussions regarding the project's success in different regions of the country.

**Conclusion:** The family planning program has been receptive by the population. Clinics are distributing materials regularly and continue to see in increase in new participants and retention rates. I worked with M&E to ensure accurate movement of materials. I tracked the program's progress over the two previous quarters, which overall showed improved statistics.

Name: Cathleen Cisse

Practicum Site: Catholic Relief Services (CRS)

Location: Antananarivo, Madagascar

Practicum Title: Infant and Young Child Feeding Practices and Perceptions of Malnutrition in the Central Plateau of Madagascar: A Quali-

tative Inquiry

Introduction: Madagascar has one of the highest prevalence of stunting (low height for age) in the world. Stunting leads to severe long-term consequences: poor cognitive function, lower levels of income, and shorter stature in adulthood. In 2008 ADRA, CARE, CRS, and Land 'O Lakes formed a partnership to implement a food security program. In 2009, their baseline survey showed the highest rates of stunting (WHO Height-for-Age Z score <-2SD) in the Central Plateau region. This was unexpected given that the Central Plateau has positive scores on risk factors commonly associated with stunting when compared to other geographic regions of Madagascar.

Methods: With guidance from the partnership, we undertook a qualitative study to understand perceptions of malnutrition, infant and young child feeding practices, and taboos. We conducted focus group discussions (FGD). FGDs were conducted separately with mothers, fathers, and grandmothers of stunted children (HAZ ≤-2) and relatives of non-stunted children (HAZ≥-1) between the ages of 6-24 months.

Conclusion: We conducted a total of 19 FGDs. Perceptions of malnutrition were similar for relatives of stunted and non-stunted children. All participants reported that a malnourished child has an impact on the household because the mother can no longer work in the fields. Some mothers of stunted children reported introducing liquids earlier and solids later than mothers of non-stunted children. Lack of dietary diversity was a problem despite access to various food groups. Hygiene was also a major problem. Participants reported that women drink alcohol, use chewing tobacco, and continue to drink coffee when pregnant and while breastfeeding. Results will be used to improve program delivery.

Name: Leslie Craig

Practicum Site: The Chronic Disease Centre, The Barbados National Registry for Chronic Non-Communicable Disease

Location: Barbados

Practicum Title: Research Assistant

**Introduction:** The BNR is a national surveillance system, being conducted by the Chronic Disease Research Centre of the University of the West Indies, on behalf of the Ministry of Health. It is made up of three registries: BNR-Stroke, BNR-Heart and BNR-Cancer, each of which collects data about new cases of cancer, stroke and acute myocardial infarction and produces statistics concerning incidence, mortality and survival.

Methods: As a research assistant for the BNR, I was directly involved in the collection of site-specific (i.e. breast cancer) data for BNR-Cancer, as well as the maintenance and updating of the CanReg5 database. For BNR-Stroke, I was involved in the data cleaning processes needed to maintain and accordingly update the registry database. Lastly, I worked with the Healthy Caribbean Coalition on their Get the Message (GTM) Campaign – a mobile text based advocacy campaign to support the United Nations Summit on Chronic Diseases. Conclusion: As with other information from the BNR, breast cancer data that I collected will similarly be used to inform public health policy and clinical practice and is an important resource for Caribbean researchers investigating the problems of chronic disease. The recommendations that I made to the cardiovascular disease (CVD) registrar will be used to update database errors and to provide guidelines to future interns. All support garnered for the GTM campaign, and received in the form of texts from the Barbadian community, signifies support for the United Nations Summit in the fight against chronic diseases.

Name: Elizabeth Crosby

Practicum Site: World Relief, Indonesia HIV/AIDS

Location: Papua, Indonesia

Practicum Title: Mobilizing for Life - Protecting Papua: Home Based Care and Maternal Child Health Assessment

Introduction: Papua has the highest HIV prevalence in Indonesia, 2.4% compared to 0.2%. World Relief, the only organization directly addressing HIV/AIDS in the high prevalence highland district of Tolikara, trains local church leaders in HIV prevention. Additional objectives include caring for those affected and infected by HIV through training church members as home based care volunteers and providing maternal/child health education. To assist in home-based care (HBC) program development, I conducted an assessment, provided recommendations, and trained staff. For maternal/child health (MCH) I assessed the community's need and interest in MCH.

**Methods:** I planned and carried out qualitative assessments for HBC and MCH through: 1) observing trainings, 2) key informant interviews with church leaders, 3) community meeting with training participants, and 4) focus groups with pastors' wives and community members. I used the results and literature review to formulate recommendations for HBC and next steps for MCH. Finally, I edited, compiled, and wrote materials to be used by HBC volunteers and trained staff in the content and use of materials.

**Conclusion:** Qualitative assessment including 3 key informant interviews, 1 community meeting, 25 surveys, and 2 focus groups, revealed church members are willing to make home visits. However, there remains limited knowledge leading to stigmatizing behaviors that must addressed including isolating people with HIV. Materials undergoing review and translation include volunteer manuals, training curriculum, and story flipchart. Fourteen parent focus groups at 7 churches demonstrated need for MCH interventions. This information will be used to plan the MCH pilot project.

Name: Natasha D'agrosa

Practicum Site: Boston Medical Center, Children's HealthWatch

Location: Boston, MA

Practicum Title: Research Intern

Introduction: Children's HealthWatch is a research and policy group based at BMC that works to improve the overall health and wellbeing of very young children. Through their research they strive to help children living in predominantly low-income households at a policy level. In 2006, the World Health Organization published new standards for children's growth charts based on data collected from 6 different countries around the world. In September 2010, the American Academy of Pediatrics recommended to use these standards for American children up to age two rather than the historically accepted Centers for Disease Control and Prevention/National Center for Health Statistics charts. These standards are based on how a child should grow rather than how the current population does grow – dissimilar to the CDC/NCHS charts' population base. Children's HealthWatch is working on a project to study the discrepancies between the two and how these differences affect children in the US who are classified as under weight for age using the different standards.

**Methods:** For my practicum I performed literature reviews of articles written on the CDC/NCHS growth references and the WHO growth standards and then compiled them into an electronic annotated list for further review. I attended weekly science meetings to discuss results and to plan for further research.

**Conclusion:** The projected outcome is that some children who would have been classified as underweight by CDC/NCHS references will appear normal by WHO standards. The Children's HealthWatch dataset has shown 1,245 children between the ages of 6 and 24months who were underweight by CDC/NCHS standards but not by WHO standards.

Name: Alla Dziuma

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

Location: Lusaka, Zambia

Practicum Title: Pneumonia Etiology Research for Child Health Project Assistant

**Introduction:** My practicum with the Zambia Center for Applied Health Research & Development (ZCAHRD) focused on the implementation of the Pneumonia Etiology Research for Child Health Project (PERCH). PERCH is an innovative project that aims to understand the etiology of pneumonia in order to drive new public health interventions, vaccines, and empiric therapy guidelines for pneumonia, while paving the way for novel pathogen discovery. My objective was to assist in the preparation of PERCH for piloting and enrollment of approximately 2.000 children.

**Methods:** To prepare PERCH for study kickoff, I assisted in the hiring and training of six PERCH nurses, in the ordering and managing of study supplies while maintaining inventory, and in finalizing standard operating procedures, case report forms, and other pending documents. Furthermore, I managed the Community Control Team to develop an improved methodology in the recruitment and enrollment of community and HIV+ controls by interviewing community members. We also defined the exact boundaries from which we would collect our sample by focusing on densely populated areas in Lusaka District and physically exploring Lusaka compounds.

Conclusion: My team and I created a data mapping system, defined a study catchment area, sensitized 25 health clinics in Lusaka, and collected data which indicated the most appropriate method for recruitment of community and HIV+ controls. PERCH is currently in its full scale pilot phase after which a two year enrollment period will begin.

Name: Theresa Lynn Feeley

Practicum Site: Red Crescent Society for Gaza Strip

Location: Gaza, Palestinian Authority

Practicum Title: Family Planning Researcher

Introduction: The population in the siege-stricken Gaza Strip is one of the fastest growing in the world; in an area 360 sq miles, implications for housing, disease, and diminishing resources are bleak. The Red Crescent Society is one of many NGOs whose family programs target women, but men make the final decision regarding contraceptives in most families. With studies suggesting that men's involvement can decrease the number of unintended pregnancies, the Red Crescent chose to explore implementing joint husband-wife counseling.

Methods: Working with the Red Crescent Society, UNRWA, Afaq Jadeeda, and others, I conducted six focus group discussions and nine interviews over three months. We recorded, transcribed, translated and analyzed data to determine barriers and motivators for men to attend joint family planning counseling.

Conclusion: Men and women perceive men as not attending family planning sessions currently because "it is women's business" and men don't have time. Most believe men will be more likely to attend awareness sessions and family planning counseling if: male-only classes are offered, sheiks are involved, and contraceptive use is part of a class also addressing finances and education. These findings will be used in conjunction with UNRWA statistics to determine target audiences and to implement joint counseling programs and male awareness classes.

Name: Dalit Gulak

Practicum Site: Asociación Vivamos Mejor

Location: Nahuala, Guatemala

Practicum Title: International Health & Maternal Child Health Practicum

**Introduction:** This practicum was designed to examine first-hand the state of maternal and child health in Nahuala, Guatemala. This region exhibits some of the highest maternal and infant mortality rates in the Western Hemisphere. Through observing direct care and participating in community activities, this practicum provided an opportunity for me to recommend strategies for improvement to Vivamos Mejor as well as enhance my skills and experiences in international public health.

**Methods:** In 2 months, I completed 11 visits to rural communities. I participated in and observed care of mothers and children. Through a literature review of national norms, tools used by Vivamos Mejor, and my experience as a women's health nurse, I created a tool to evaluate prenatal care providers. After approval by the ministry of health, I completed the evaluation of three prenatal care providers. In addition, I participated in the implementation of a grant to open 5 health posts, a conference on international models of public health and gave a presentation on public health in the U.S.

**Conclusion:** I presented a written summary of the evaluations with observations and recommendations for improvement. My findings indicated that the providers completed the minimum requirements of the prenatal care questionnaire, but did not perform the physical examination and patient education requested by the ministry of health. It is my hope that the recommendations I provided will assist Vivamos Mejor in improving their system of prenatal care and contribute to the reduction of maternal and infant deaths in communities throughout Guatemala.

Name: Mary Hanley

Practicum Site: Women of Means

Location: Boston, MA

Practicum Title: Homelessness and Healthcare: Evaluating a Model of Free Care

**Introduction:** Women of Means (WoM) is a non-profit organization that provides free healthcare to homeless women in Boston shelters. I assisted in the evaluation of the WoM healthcare delivery program. The two-year grant-sponsored evaluation will quantify the women's health status, including whether they have health insurance or a regular primary care provider, why those choose WoM over other options, and how often they receive regular care. This evaluation will inform WoM of the perceived quality of their services, barriers to care, and remaining unmet health needs, to ultimately make future improvements and quantify an effective model of care.

**Methods:** I worked with the Principal Investigator of the study to 1) observe staff/client interactions to see the standard of care 2) conduct and analyze focus group discussions of fifteen women in two shelters 3) create the survey to guide individual interviews and 4) analyze the reflections of student nursing staff.

**Conclusion:** The FGDs revealed that many women are very appreciative of WoM staff and services, yet wish that their hours of operation were extended. Additionally, the majority did not know of available WoM health specialists and were confused about the schedule. Analysis of 52 student nurses' reflections shows that most nurses believe that their interventions can improve the lives of the women. In the coming months, 100 women will be interviewed. A mixed-methods approach will be used to analyze the results of various data collected to complete the evaluation.

Name: Cheryl Henrickson

Practicum Site: Boston University School of Public Health, Center for Global Health & Development

Location: Boston, MA

Practicum Title: Data Analyst

Introduction: The Center for Global Health and Development (CGHD) is a multidisciplinary research center that conducts global health research, advocating for improvement in the health of underserved populations around the world. The Longitudinal Orphans and Vulnerable Children (OVC) Study (LOS) provides data on OVC populations in Zambia, aiming to document changes in disparities and vulnerabilities between children that received support from FHI 360's Community Faith-based Regional Initiative for Orphans and Vulnerable Children (FABRIC).

Methods: I worked directly with the CGHD's International Research Coordinating Center which is responsible for data analysis support on CGHD projects. Specifically, I worked on LOS and my responsibilities included: managing and maintaining the LOS database, coordinating with the data entry team in Zambia to ensure correct data entry, producing data tables and developing data analysis code using Statistical Analysis Software (SAS). Round 1 and Round 2 data were collected, consisting of 1044 and 978 household surveys respectively.

Conclusion: The LOS findings provide longitudinal evidence of sustained outcomes of children and households who participated in these community-level programs. Results will inform future interventions and direct policy changes to improve lives of OVC. Through this practicum, I have developed a greater understanding of the magnitude and diversity of challenges faced in international research. I have learned some difficulties in maintaining data integrity and have mastered important SAS techniques used in cleaning and analyzing. Importantly, I have realized that international research is a field that has the ability to greatly inform, change and improve programs designed to positively impact peoples' lives.

Name: Raagini Jawa

Practicum Site: All India Institute of Medical Sciences, Department of Community Health - Infectious Disease

Location: New Delhi, India

Practicum Title: A Study on the Needs Assessment of Children Attending Pediatric OPD for HIV care at a Tertiary Care Hospital in New

Delhi, India

Introduction: As part of a public health project done by the Community Health Department of All India Institute of Medical Sciences in New Delhi, India, a tertiary care hospital dedicated to the healthcare of the nation, I assisted in a needs assessment for pediatric HIV patients. The goal of the needs assessment was to monitor the impact of HIV/AIDS on children, estimate the number of AIDS orphans, and finally to design a child centered prevention and rehabilitation policy. The purpose of this practicum was to learn more about pediatric HIV in New Delhi and assist the PI in putting together his final paper and analysis together so that ultimately the needs assessment results would be used to develop alterations to healthcare policies in order to provide more effective care to pediatric HIV patients.

Methods: I worked with the Principle Investigator of the needs assessment: 1.) to do an elective posting in Pediatrics and Community

Medicine departments; 2.) to conduct research for and draft an Introduction; 3.) to conduct research for and draft a Review of Literature.

Conclusion: The results of this practicum include gaining practical experience working in a pediatric HIV clinic, conducting research and drafting an introduction and review of literature for the needs assessment.

Name: Annie Kiel

Practicum Site: Ibis Reproductive Health

Location: Cambridge, MA

Practicum Title: Research Assistant

**Introduction:** Ibis Reproductive Health is a non-governmental research organization that aims to improve women's reproductive autonomy, choices, and health worldwide, with offices in Cambridge, MA (headquarters), Johannesburg, South Africa, and Oakland, CA. They accomplish their mission by conducting original clinical and social science research, leveraging existing research, producing educational resources, and promoting policies and practices that support sexual and reproductive rights and health. The purpose of this practicum was to make a significant tangible contribution to lbis, by providing research and administrative support, while simultaneously gaining skills experience for my personal/professional development.

**Methods:** I worked with a Senior Project Manager to: 1.) Complete a literature review to identify gaps in research regarding integrated service delivery of HIV and a full range of reproductive health services; 2.) Compose a brief/fact sheet to package the research methods, findings and implications of the study: "Improving young women's access to sexual and reproductive health services in South Africa: Addressing provider skills and attitudes"; 3.) Develop suggested protocols for Ibis to use in future individual donor and fundraising event initiatives

**Conclusion:** A comprehensive literature review to assist in steering the future research priorities of Ibis. Produced two comprehensive briefs packaging Ibis findings, for public distribution. Created an initiative for identifying, cultivating and soliciting potential donors; and developed a protocol for the planning process of an Ibis 10th Anniversary event.

Name: Jessie Klapper

Practicum Site: Francois-Xavier Bagnoud Center for Health and Human Rights, Harvard School of Public Health, Research Program on

Children and Global Adversity (RPCGA)

Location: Boston, MA

Practicum Title: A Feasibility Trial of the Youth Readiness Intervention (YRI)

**Introduction:** The RPCGA is guided by a "risk and resilience" framework, focusing on the core threats to the security of children. In intervention development, this approach seeks to understand and utilize naturally existing protective processes and supplement them with evidence-based services. The RPCGA uses the social-ecological perspective, wherein we work to address issues at the individual, family and community levels. To this end, a group psychosocial intervention, the Youth Readiness Intervention (YRI), was developed for use with war-affected youth in Sierra Leone, using the results of three waves of a longitudinal study with war-affected youth (2002 to 2009).

Methods: This practicum has covered aspects of work required for the launch of a feasibility trial of the YRI in Freetown, Sierra Leone. I carried out research into previous RPCGA work to draft an Institutional Review Board (IRB) Submission for Approval, and supporting documentation such as consent /assent forms and recruitment scripts. I managed the development of measures for the YRI evaluation. Along with extensive literature reviews of measures for proposed constructs, I created drafts of screening tools and eligibility criteria for participants, and coordinated the reviews and edits of previous surveys used with this population.

**Conclusion:** I have produced many deliverables, such as the IRB Initial Submission for Approval and supporting documentation, recently approved by the HSPH IRB. I also produced initial drafts of the YRI evaluation and youth satisfaction survey. I also collaborated on the creation of a draft of proposed constructs for the YRI evaluation and fourth wave of the longitudinal study.

Name: Carol Kopelman

Practicum Site: Kisumu Medical & Education Trust (KMET), OTP, Nutrition, and SFC Projects

Location: Kenya

Practicum Title: Sisterhood For Change Volunteer

**Introduction:** KMET's Sisterhood for Change (SFC) program empowers vulnerable young women from disadvantaged backgrounds by providing vocational training and reproductive health services while training them as peer educators and agents of change in their communities. Because many SFC participants have experienced or witnessed violence, SFC needed a permanent domestic violence (DV) awareness/healthy relationships curriculum for its 6-month program.

**Methods:** A baseline survey of 26 SFC women assessed their knowledge of and attitudes towards DV. Guided by the survey results, I customized a DV/Healthy Relationships curriculum for SFC, which I piloted in six daily workshops. An endline survey and course evaluation informed my development of a final curriculum tailored to the needs of SFC program participants.

Conclusion: SFC will incorporate the completed DV/Healthy Relationships curriculum into its program to raise awareness and enable the women to help themselves and others who have experienced violence. Ultimately, the goal is to challenge harmful gender norms and the widespread cultural acceptability of DV in their communities. Given existing – and deeply ingrained – cultural beliefs that a certain amount of violence towards women may be acceptable in intimate relationships, this will take time. Even among the SFC women surveyed, nearly one-third thought there were times when a woman deserved to be beaten, and one-quarter said that a woman should tolerate violence to keep her family together. It is encouraging, however, that not only did the women embrace the curriculum and the concept of non-violence in intimate partnerships, an overwhelming majority expressed interest in becoming peer educators and advocates of non-violence in their communities.

Name: Sarah Manahan

Practicum Site: Swasth India Services Private Limited

Location: Mumbai, India

Practicum Title: Intern at Swasth India

**Introduction:** Swasth India Services Private Limited is a social business looking to improve health in low-income urban and rural India. I had the opportunity to work with a team of four, including individuals fluent in Marathi, Hindi and English, researching a water purification program for urban slum dwellers, using Mumbai as the testing city. Although water is often piped or trucked in to these high-density areas, en route contamination often occurs leaving water unfit for consumption by the time it reaches individual households.

**Methods:** In this team, our primary role was in data collection and research of the current situation. We gathered information from residents in urban slums with random in-home surveys with questions including purpose, amount, and cost of their current water supply and current sterilization methods, if any, used prior to consumption. Additional questions were asked about family size, education level, and cell phone use. Four water samples were collected and in-depth cost-benefit analyses of both in-home and industrial strength water purification devices were developed.

**Conclusion:** Pending analysis, the information collected will be used to identify the possibility of developing a profitable water purification program based in urban slums. At this time, preliminary results indicate that there is a need for point-of-use filtration, although the necessity of this is not recognized throughout the slum community. This is a perceived barrier to success, however this program will ideally provide residents of urban slums water at a lower cost, providing an economic incentive for a solution to poor water quality involving point-of-use purification devices.

Name: Daisy Marchena

Practicum Site: Brookline-Quezalguaque Sister City Project, Inc.

Location: Quezalguaque, Nicaragua

Practicum Title: Brookline Sister City Screening for Hypertension-Quezalguaque, Nicaragua

Introduction: In collaboration with the Nicaraguan Health Ministry and the Brookline Sister City Project, a group of three BU students and myself conducted a community health project in the rural municipality of Quezalguaque, Nicaragua. The main component of the project was to screen the adult population for blood pressure and refer them to the local health center should they screen positive for hypertension. Chronic kidney failure (CKD) in Nicaragua, which has been linked to hypertension, has affected a large number of the working population. Thus, our focus is to inform the community on ways they can prevent hypertension while prolonging their life.

**Methods:** This project consisted in visiting twenty-four villages in the municipality and screening the adult population for hypertension using automated blood pressure cuffs. We set up a health clinic in a central location, while the rest of the team went door to door screening people in their homes. Two elevated screenings higher than 130/90 resulted in a referral to the local health center. During the screening we also conducted brief educational talks on how one could avoid the risks associated with hypertension.

**Conclusion:** A total of 1,727 people were screened for hypertension and 115 were referred to the health center. Referred patients are to be monitored for their blood pressure and enrolled in the health center's hypertension program to avoid further health complications. It is essential that these cases are followed-up by the local health clinic and that they seek proper medical attention.

Name: Jeremy Petruska

Practicum Site: Universal EHR Solutions

Location: Boston/New York

**Introduction:** Universal EHR Solutions develops, provides, installs, and maintains electronic health records systems for physicians, patients, hospitals, laboratories, and other health care organizations. Electronic health records are intended to supplant the paper record systems which have long been in use. The advantages of electronic health records is found it the ability to access data remotely and more readily. My practicum involved researching how these services can be improved to reduce costs for the company and consumers, and to improve health outcomes.

**Methods:** I performed literature reviews, reviewed emerging technologies, assessed features of the top 20 competing health care record systems, tested some of the systems and engaged with current users to find out how they were using the services and what they changes they wanted.

Conclusion: I compiled several document detailing recommendations of possible additions, changes, and potential new synergies capable of boosting productivity for review and consideration by Universal EHR Solutions. One such document details useful features missing from the current record systems yet are found in a few competitors'. Yet another document detail potentially beneficial improvements, such as inclusion of preventative health measures; many of which stem from suggestions and comments from current users, to various aspects (such as layout, accessibility, aesthetics, etc) of the record system. Most of these documents are and shall remain confidential for some time.

Name: Katie Poirier

Practicum Site: Boston Medical Center, Women's Health Unit, Section of General Internal Medicine

Location: Boston, MA

Practicum Title: Assessing Perceived Stigma from Previous Reproductive Events Among Post-partum Women at Boston Medical Center

**Introduction:** A large body of research on stigmatized reproductive events and their short-term impact on women currently exists, however little is known about how these events influence women's future reproductive events. This study, conducted by Ibis Reproductive Health at Boston Medical Center (BMC), investigates how U.S. women's experiences of pregnancy and prenatal care are shaped by the varied reproductive events in their lives. The study seeks to determine if previous abortions and miscarriages affect women's experiences in subsequent pregnancies, and if these experiences vary in relation to women's racial/ethnic identity.

**Methods:** I conducted 95 out of 155 in-person surveys with English- and Spanish-speaking women in the post-partum period at BMC that had just experienced their first live birth. A follow-up qualitative telephone interview is being conducted among a subsample of participants who have experienced abortion or miscarriage, to explore potential stigma in more depth.

Conclusion: The majority of women at BMC during the study period had previously experienced a live birth, did not speak English or Spanish, and some were younger than 18. Eligible Spanish-speakers were less likely to participate than eligible English-speakers. Though intended recruitment during the study period was 300 women, only 155 participated. Barriers to recruitment would make a large multi-site study difficult and time-consuming to conduct. Data from the surveys and interviews await analysis. The results will inform the feasibility of a future, large-scale, multi-site study that can assess these questions in a nationally-representative sample.

Name: Katherine Riley

Practicum Site: Brookline-Quezalguaque Sister City Project, Inc., Health Committee

Location: Quezalquaque, Nicaraqua

Practicum Title: Brookline-Quezalguaque Sister City Hypertension Campaign & "Casa Base" Assessment

**Introduction:** A volunteer-based community health worker system has existed in the rural municipality of Quezalguaque, Nicaragua for over twenty years. However, these volunteers have had varying degrees of involvement and support from the larger health system over the years, often dependent on local leaders and national politics.

**Methods:** This year's student project included a preliminary evaluation of the "casa base" system as it exists today. Individual surveys were conducted for over 1,000 project participants to assess their knowledge and use of the casas bases, which serve as a first-stop for basic medical needs in the local village. We sought to learn more about how often and for what services community members visited the casa base, as well as their overall experience with the casa base.

Conclusion: Several community members did not know a casa base existed in their community when indeed one did, and those who knew of the casas bases utilized them to varying degrees. However, over 90% of participants expressed that they would like to use or continue using the services of the casa base in the future. These findings, along with the results of focus groups and individual interviews conducted with the casa base leaders, will allow the Health Center of Quezalguaque and Brookline Sister City to address gaps in the system and strengthen this community-health worker model. There is potential for a more robust program in the future if certain weaknesses can be addressed, and we have shared these recommendations with the local leaders.

Name: Taryn Silver

Practicum Site: Kisumu Medical & Education Trust (KMET), OTP, Nutrition, and SFC Projects

Location: Kenya

Practicum Title: OTP and PAC Intern at K-MET

Introduction: The Kisumu Medical & Education Trust is a community based Kenyan NGO whose mission is to promote the development of underserved communities through innovative health and education programs. K-MET explores a wide range of public health issues under the scope of: maternal and child health, HIV/AIDS, education, and advocacy. For my practicum I worked with the outpatient therapeutic program (OTP), working to decrease the malnutrition of children under five, and with the post abortion care (PAC) program, which works to reduce abortion-related complications and unsafe abortion.

**Methods:** I worked with the OTP team to: 1) assess malnourished children; 2) evaluate mothers support groups on infant and young child feeding; 3) write a proposal to obtain funding for a program focusing on improving infant and young child feeding practices. I worked with the PAC team to create and implement a workshop to identify men's attitudes on safe abortion.

**Conclusion:** The results of the evaluation on the mothers support groups indicated a need for involving men in infant and young child feeding practices, more hands on activities for the mothers, trainings for the community health workers on how to conduct support groups and to provide economic opportunities for the mothers. A proposal will be submitted to Concern Worldwide to obtain funding on the challenges identified from the evaluation. The workshop on men's attitudes on safe abortion gave us a baseline of what men's attitudes are and how to move forward with the male involvement in safe abortion program.

#### INTERNATIONAL HEALTH

Name: Joni Waldron

Practicum Site: John Snow Inc / DELIVER Project

Location: Zambia

Practicum Title: Using Mobile Technology in M&E

**Introduction:** In Zambia, JSI is the implementing partner of the USAID DELIVER PROJECT which supports the Ministry of Health to strengthen the supply chain for ARVs, Reproductive Health Commodities, HIV Test Kits, Anti-Malarial Drugs and other Essential Medicines.

**Methods:** As a member of the monitoring and evaluation team, I was responsible for updating data collection methods. Using Episurveyor mobile technology, I transitioned our data collection tools to use mobile phone technology for more efficient collection and analysis during routine monitoring visits, as well as system evaluations. I conducted two all-staff trainings in use of the technology as well as providing technical assistance field visits to provincial staff. I also created two new forms used for routine monitoring; one used for tracking facility staff trained in logistics management, and the other for developing logistics performance improvement plans.

Conclusion: Collecting data through Episurveyor allowed us to have immediate access to data for analysis. After rolling out mobile technology for routine monitoring in January of 2011, we were able to use the data collected in our database to report to MoH and partner organizations during our 2nd quarter provincial and district supervisors meetings. Additionally, common challenges identified through analysis of the episurveyor data was shared with all facility staff through our newsletter. In March and April of 2011, we conducted an evaluation of the Zambia HIV Test Kit Logistics System entirely using mobile technology for data collection.

Name: Bryony Whipp

Practicum Site: Harvard Humanitarian Initiative

Location: Cambridge, MA

Practicum Title: Reintegration of Former Child Soldiers into Communities in Eastern DRC

Introduction: Over summer 2011, I did a research placement at Harvard Humanitarian Initiative, a multidisciplinary academic center that seeks to improve the effectiveness of humanitarian strategies through academic research and policy change. I was involved with a 'Women and War' project entitled 'Re-integrating former child soldiers into communities in Eastern DRC'. The project uses action research to investigate how diverse stakeholders are affected by the reintegration of former child soldiers. The goal is to create a set of recommendations and best practices based on collaborative research conducted with affected communities. In phase 1, the project uses 'Photovoice' and 'Body mapping' for participants to visually document their experiences. In facilitating group discussion and reflection, researchers can define research goals and select issues for further investigation. In phase 2, local partners will conduct key informant interviews and focus group discussions.

**Methods:** Working with the principal investigator and based in Cambridge MA, my role has been identifying appropriate validated methodologies, producing a curriculum for training local partners, and developing an advocacy plan.

**Conclusion:** During the placement, I consulted with the community-based participatory research team at Harvard and set up a training session for the project team; I produced a curriculum and training materials for a 6-day research skills workshop for 6 local organizations; I identified agencies concerned with child soldiers and conducted 8 informational interviews about current priorities; and I developed 4 advocacy-training sessions for a 6-day workshop in December 2011. The work highlighted the challenges of implementing action research, especially remaining committed to grassroots participation.

Name: Laura Whiteside

Practicum Site: Boston University School of Public Health, Department of International Health

Location: Boston, MA

Practicum Title: Exploring Open-Source Smartphone Technology to Facilitate Clinical Data Collection and Management in Resource-

Poor Settings

Introduction: Traditionally, clinical research studies conducted in resource-poor settings have collected data on paper forms, which are then keyed into a computer. Drawbacks to this method include the need to store and transport paper forms, the need for source data verification, and the delay from data collection to when data are available in electronic format for analysis. Electronic data capture (EDC) presents some solutions to these challenges, since data are digitized at the moment they are generated. During my practicum I worked with the BUSPH Department of International Health to explore the functionalities of OpenDataKit (ODK), an open-source suite of EDC tools that operate on the Android platform.

**Methods:** With a fellow student, I conducted research on ODK and determined which tools were appropriate for public health use. We tested and become familiar with the functionalities of ODK by creating a survey with a variety of question types (including photo, barcode scan, and GPS tag), populating it with mock data, and aggregating the data on a central server. We also explored free, open-source tools for displaying data, such as Google Fusion Tables to map GPS data.

**Conclusion:** The end result of my practicum was a presentation that I gave to an audience of about 30 at the BU Center for Global Health and Development on 24 May 2011. The presentation outlined the workflow and requirements for implementing ODK in a public health programmatic or research setting, demonstrated the functionalities of ODK, and suggested opportunities to use ODK to streamline data collection and management in current BUSPH projects.

#### INTERNATIONAL HEALTH

Name: Emily Winter-Wadsworth

Practicum Site: Physicians for Human Rights

Location: Cambridge, MA

Practicum Title: Supporting Justice for Survivors of Sexual Violence in Conflict

Introduction: Sexual violence is frequently used as a tool of war, perpetrated systemically to destroy families, destabilize communities, and displace populations. Perpetrators often act with impunity; obtaining justice is a challenge for survivors where lawyers and health professionals lack the skills and experience to support prosecutions. Physicians for Human Rights, a US-based non-profit, is developing a project to improve access to justice for survivors of sexual violence in five conflict-affected countries in Central and East Africa. The project involves conducting trainings for local medical, legal, and law enforcement professionals, and establishing a medico-legal professional network. In strengthening the cross-sectoral response to conflict-related sexual violence, the project aims to increase successful prosecutions and halt the prevailing widespread license to rape.

**Methods:** My primary activities included: 1. Identifying and outlining needs-specific curricula on forensic documentation of sexual violence, chain of custody procedures, in-court presentation of evidence, and cross-sectoral collaboration throughout the response process; 2. Creating the two introductory modules of the trainings; and 3. Consulting on incorporating the needs of male survivors into the project design. **Conclusion:** PHR will utilize the curriculum modules I developed in pilot trainings in the Democratic Republic of Congo and Kenya in fall 2011. Additionally, my efforts to include the issue of male survivors in the project will increase services to this neglected population, positioning PHR as a lead organization in recognizing and responding to male survivors' unique needs.

#### MATERNAL AND CHILD HEALTH

Name: Beza Ayalew

Practicum Site: Boston Medical Center, Department of Pediatrics

Location: Boston, MA

Practicum Title: Project Coordinator of the Infused Water Project

**Introduction:** Research on sugar-sweetened beverages has established a relationship between sugar-sweetened beverages (SSB's), obesity, and obesity-related diseases. Boston Medical Center seeks to inspire the people it serves to engage in health-promoting behaviors, such as drinking infused water. The BMC SSB task force was created to promote healthy drinking for its employees and patients, with support from the Boston Public Health Commission and a national health care advocacy group, Health Care Without Harm.

**Methods:** 1) Gathered information through a BMC-wide survey on the beverage environment of departments and the feasibility of providing infused water at meetings. 2) Marketed strategies for distributing educational materials at key locations and tabled at community events such as the weekly Farmer's Markets. 3) Partnered with the department Chef to introduce infused water at cooking demonstrations for FANtastic Peer Leaders and BMC patients. 4) Presented project updates and participated in meetings to strategize potential environment and policy changes at BMC.

Conclusion: Most departments have access to functioning water sources and are willing to serve infused water at meetings. The visibility of the SSB task force increased throughout the hospital. BMC constituents became aware of the importance of drinking healthy and learned how to make infused water. Most BMC constituents liked the taste of infused water and are willing to make infused water at home. Food and Services agreed to incorporate infused water in BMC catering to all the departments. In the following months, environmental and policy changes will be implemented at BMC.

Name: Katherine Flaherty

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

Location: Boston, MA

**Introduction:** The mission of the Child, Adolescent and Family Health Bureau is to address the public health needs of children, youth and families whose health is most affected by social inequities. The Child, Adolescent and Family Health Bureau collaborates with many community organizations to identify such inequities and implement programs to improve them. The Boston Public Schools Bridge Center Pilot Program was a collaborative effort between various community organizations participating in Mayor Menino's Autism Initiative to provide a four week day camp experience for students with Autism Spectrum Diagnoses (ASDs).

**Methods:** As an intern with BPHC, my objectives were: 1) coordinate summer enrichment plan for students ages 12-22 with ASDs in Boston Public Schools; 2) develop evaluation tools and conduct the evaluation of the summer enrichment plan; and 3) analyze findings and write an evaluation report for Mayor Menino's Autism Initiative.

Conclusion: The end goal of this practicum is to coordinate and evaluate The Bridge Center Camp Discover as a summer enrichment plan for children with ASDs. Through this alternative enrichment program we hope to advance new programmatic initiatives and evaluate ways in which we can improve summer programming for children with ASDs across the lifecourse. Ultimately, we hope that the program successfully meets Mayor Menino's Autism Initiative's goals to achieve optimal developmental outcomes for Boston children with ASDs and reduce the burden on families raising children with ASDs.

Name: Eliana Meirowitz

Practicum Site: Myers-JDC-Brookdale Institute, Smokler Center for Health Policy Research

Location: Jerusalem, Israel

Practicum Title: American Physicians' Experiences in Israel

**Introduction:** While interning at the Smokler Center for Health Policy Research in Jerusalem, I conducted a qualitative interview study to identify strengths and weaknesses of the American and Israeli health care systems from the point of view of physicians who have worked in both. This study is part of ongoing research to compare the two countries' health care systems for mutual benefit to policymakers. The director of the center oversaw all activities and provided support and guidance. The internship lasted 8 months; this project was the largest component of the work.

**Methods:** I designed, implemented and analyzed the data for this pilot study, interviewing 22 physicians, coding and analyzing the results, and writing up a report describing their opinions of both systems. The physicians were primarily pediatricians and internists, and many directly spoke about providing maternal and child health care.

**Conclusion:** This report could be a launching point for several kinds of studies on the American and Israeli health care systems, as well as a motivator for reform of the immigration and licensing processes. The report found several strengths and frustrations in both health care systems. Top comments about the American system were: exceptional resources for patient and physicians but unequal access, high costs, and hassles with insurers. Physicians said the Israel system has access that is more equitable and standardized electronic medical records, but pays physicians far too little and is not as responsive to their needs.

#### MATERNAL AND CHILD HEALTH

Name: Ann Peralta

Practicum Site: Marie Stopes Internacional Bolivia

Location: Bolivia

Practicum Title: Family Planning Education and Outreach

Introduction: The goal of this project was to provide Marie Stopes International Bolivia (MSIB) with a clear and concrete community out-reach process for their mobile units. MSIB wants to improve the way in which they work with partner communities in order to reduce the number of unwanted pregnancies in rural Bolivia.

**Methods:** Before traveling to Bolivia I researched best practices for mobile units and mobile clinics with a focus on those delivering sexual and reproductive health services. I then spent two weeks traveling with the Chuquisaca mobile unit and observing all of its related activities. I also conducted key informant interviews with the mobile unit staff and with the women served by the mobile unit.

Conclusion: I developed a formal written process for how each of MSIB's mobile units should work with each of its partner communities as well as a check list and form that will help make this process a reality. The recommended process includes: completion of a community needs assessment, strengthening community support, educational workshops, and improved mechanisms for follow-up to better support the clinical and promotional work of the mobile unit. I also produced a set of recommendations for the organization that will improve the quality of services provided by the mobile unit. The community outreach process and the set of recommendations for the mobile unit will better position MSIB's mobile unit program to provide more women with the family planning services they need while strengthening the units' relationships with the communities with whom they work.

Name: Gretchen Stoddard

Practicum Site: Northeastern University School of Nursing, Bouve College of Health Sciences

Location: Boston, MA

Practicum Title: Developing a Virtual Resource Portal for the National Preconception Peer Educator Program

Introduction: In 2007, the Office of Minority Health (OMH), Department of Health and Human Services launched the national A Healthy Baby Begins with You campaign to decrease infant mortality disparities. The campaign includes a Preconception Peer Educator (PPE) program that engages and trains college students to disseminate preconception health messages in order to positively influence knowledge, attitudes and behaviors of high-risk youth. Evaluation results from the initial training cohort of 274 students and expert contributions were used to inform revisions of the curriculum, training materials, and supporting manual.

**Methods:** To help inform the proposed revisions I reviewed and synthesized data from several sources including: the 2010 PPE program evaluation, the 360 page PPE training manual, contributions from Drs. Karla Damus (Clinical Professor/Boston PPE Faculty Advisor Coordinator), Isabel Estrada-Portales (Director of Communications/OMH), and Brian Jack (Vice- Chair Family Medicine Department/BUSOM), and input from the Boston-wide Health Disparities Student Collaborative Group. I created preliminary tools including developing a model PPE website to enhance utilization of program materials, creating templates for PPE training/tracking instruments, and planning for an integrated health platform.

**Conclusion:** Once the model website becomes active, the certified PPEs will be able to access course materials in the field, document and share knowledge and challenges, and benefit from the experiences of PPEs across communities. The virtual resource center will increase the PPE impact nationwide, resulting in improved preconception health that will translate to better perinatal outcomes and better health throughout life. Ultimately, the PPE program will decrease infant mortality disparities.

Name: Sarah Baker

Practicum Site: Boston University School of Public Health, Department of Community Health Sciences

Location: Boston, MA

Practicum Title: EnhanceFitness Boston NIA Grant

Introduction: According to the 2008 Federal Government Physical Activity Guidelines for Americans, older adults are the least physically active of any age, even though physical activity is associated with a multitude of positive health benefits, including: increased physical function, improved mental health, improved cognition, improved self-perceived health status and reduced mortality. Older public housing residents often experience disproportionate disease burden for many conditions thought to be effected by physical activity, including diabetes and cardiovascular disease and public housing residents have limited accessibility to places where they can safely exercise. There are established programs that have been shown to improve physical functioning in older adults, including EnhanceFitness is a nationally recognized physical fitness program specifically designed for older adults.

**Methods:** I worked with the Principal Investigator, Dr. Lee Strunin to: 1) research the need and potential benefits of a physical activity program for older adults in public housing; 2) develop a modified program to compare with the original EnhanceFitness; 3) design the evaluation of the program.

**Conclusion:** This research will demonstrate whether the current program or a modified program has better outcomes for physical activity, chronic disease, mental health, and cognition among adults aged 60+ living in Boston Housing Authority developments, and will indicate whether specific cultural factors affect participation.

Name: Alexandra Black
Practicum Site: CYCLE Kids
Location: Cambridge, MA

Practicum Title: Research Assistant

Introduction: The prevalence of childhood obesity has been steadily increasing and is associated with serious health complications and rising healthcare costs. According to NHANES 2007-08, nearly 20% of children aged 6-11 were obese and according to the Youth Risk Behavior Surveillance, 81.6% of them were not engaging in sufficient physical activity to meet public health recommendations. CYCLE Kids is implemented through Physical Education classes and teaches urban students in grades 4-6 bicycle skills, road safety and proper nutrition.

**Methods:** My role was to modify the CYCLE Kids nutrition curriculum to create interactive lessons and teach them in a PE class and afterschool program. Using field notes, I performed a SWOT analysis to determine the utility of teaching the nutrition lessons during PE class. Baseline and follow up student survey data were analyzed to assess program impact.

**Conclusion:** CYCLE Kids effectively increased the proportion of children who felt safe and confident riding a bicycle and who reportedly gained essential bicycling skills. At program completion, the proportion of children who reported exercising daily and knowing how to choose healthy foods also increased. The SWOT analysis demonstrated that teaching nutrition in the PE setting is not practical due primarily to time constraints with the length of PE classes and program duration. Ongoing efforts will develop nutrition lessons for the wellness classroom that will be simple yet highly specific for classroom teachers to implement. Project findings will guide curriculum development and grant writing.

Name: Adam Chu

Practicum Site: Regional Center for Healthier Communities, West Suburban Community Health Network (CHNA 18)

Practicum Title: RCHC intern/ CHNA 18 Needs Assessment Key Informant Interviewer

Introduction: The West Suburban Community Health Network (CHNA 18) is a coalition of public, non-profit, and private organizations supported by the M.A. Department of Public Health. CHNA 18 serves the communities of Brookline, Dedham, Dover, Newton, Needham, Waltham, Weston, Westwood and Wellesley. The RCHC provides support for a Community Health Assessment that is being conducted on CHNA 18. The goal of the assessment is to provide the constituent communities with information on health and quality of life that can be used to identify major health priorities and key areas of concern. Health is defined as more than what presents at a physician's office, and indicators regarding the influence of families, schools, workplaces, playgrounds, parks, and the air and water in the environment are included in the assessment. Quality of life includes the emotional, physical and spiritual components of people in the community. The purpose of this practicum was to conduct key informant interviews for the assessment.

**Methods:** My responsibilities included: 1) creating a computer based interview tracking system; 2) contacting interviewees; 3) scheduling and conducting interviews; 4) electronically managing and keeping records of interviews; 5) creating a coding database for, and coding, interview responses; and 6) providing general logistical support. I also assisted in identifying trends in the interview data for preparation of the needs assessment report.

**Conclusion:** The interview data will contribute to a needs assessment report that will be shared with the CHNA 18 communities to be used to inform and direct future program and funding activities.

Name: Ariana Coniglio

Practicum Site: Boston Public Health Commission, Start Strong Initiative

Location: Boston, MA

Practicum Title: Preventing Teen Dating Violence

**Introduction:** The Start Strong Initiative is a national program funded by the Robert Wood Johnson Foundation which aims to promote healthy behaviors in relationships and prevent teen dating violence. Start Strong trains employed high school peer educators who educate middle school youth, ages eleven through fourteen, on healthy relationship skills throughout the year.

**Methods:** Start Strong orchestrated a seven week long education initiative for peer leaders that taught healthy relationship skills and how to train their younger counterparts. Practicum activities included facilitation of workshops that focused on media campaigns, peer leadership training, professional development, and promotion of healthy relationship skills. Additionally, background research was conducted to identify workshop materials for two major events, the Virtual Break-Up Summit and the Break-Up Summit 2.0., which helped teens gain more knowledge surrounding healthy relationships and healthy break-up skills.

Conclusion: The summer institute improved awareness of teen dating violence and provided students with the tools and skills to promote and encourage healthy relationship behaviors. Utilizing their public speaking and peer leadership skills, teen participants outreached to hundreds of youth in the Boston area. This generated national media coverage. Evaluations indicate that Start Strong Initiative's sponsored workshops, major events, and media interviews improved youth capacity to effectively advocate and communicate the skills and tools that they acquired throughout the summer session. The peer educators will continue to be evaluated throughout the year as they educate within their community.

Name: Robert Coulter

Practicum Site: Fenway Health, Center for Population Research in LGBT Health

Location: Boston, MA

Practicum Title: Health and Behaviors of Sexual Minority Youth in Massachusetts

Introduction: One goal of the Center for Population Research in LGBT Health is to identify factors that contribute to sexual and gender minority health.

**Methods:** Practicum activities included: (1) participation in LGBT Youth Researcher Roundtable Meeting with researchers nationwide and members of the Massachusetts Commission on LGBT Youth; (2) data cleaning and merging of four waves of Massachusetts' Youth Risk Behavior Surveys (YRBS); (3) exploration of questions regarding bullying, cyberbullying, adult support, and psychological distress—including depression, self-injury, suicidality—among sexual minority youth from MetroWest Boston using data from the 2010 MetroWest Adolescent Health Survey.

Conclusion: Initial action steps were identified to establish agenda priorities to improve LGBT youth health. A consolidated Massachusetts YRBS dataset was finalized to determine knowledge gaps regarding sexual minority youth health. Additional findings included: (1) bullying and cyberbullying victimization and psychological distress are significantly more prevalent among sexual minority youth compared with heterosexuals; (2) adult support outside of school is protective against all forms of psychological distress—more so than adult support at school. Recommendations are that future interventions target familial adults and other adult role models outside of school to help protect sexual minority youth. Further, because adult support only partially attenuates the risk of psychological distress, more research is needed on additional mechanisms of resilience among sexual minority youth.

Name: Melinda D'Ippolito

Practicum Site: Boston University School of Public Health, Department of Community Health Sciences

Location: Boston, MA

Practicum Title: Research Assistant, Project READY

**Introduction:** Project READY is a study which examines the association between teen dating violence and alcohol or marijuana use. The qualitative data collected will be used to develop an intervention to be implemented in the pediatric emergency department to reduce teen dating violence and alcohol and marijuana use.

**Methods:** Eligible 14-24 year old male and female patients are screened in the pediatric emergency department (PED) at Boston Medical Center. If patients agree to be screened, the screening process is described, confidentiality explained, and a booklet of resources is distributed from which to take information. Those who screen as having perpetrated violence toward a dating or sexual partner on a day that they have used either alcohol or marijuana are interviewed about that interaction, as well as queried about power and control tactics they use in their relationships. They are also asked about their opinions about the connection between fighting and alcohol and marijuana use. Qualitative interviews take place in the PED, and informed consent is reviewed with patient prior to the interview. Participants also complete a survey about the number and type of violent behaviors they have perpetrated against a dating or sexual partner.

**Conclusion:** Data collection is ongoing, and the results will be used to develop an intervention to be implemented in the emergency department targeting teen violence prevention and reduction. Participants give feedback about what components a successful program should

have to meet their needs.

Name: Heidi Elsinger

Practicum Site: Massachusetts Department of Public Health, Comprehensive Cancer Prevention and Control

Location: Boston, MA

Practicum Title: Massachusetts Comprehensive Cancer prevention and Control Program Intern

**Introduction:** The purpose of this project was to conduct background research that the Comprehensive Cancer Prevention and Control team could use to implement a CDC grant that focuses on policy changes aimed at primary cancer prevention in the cities and towns on the south coast of the state. The goal of the work was to enable a coalition of employees and residents of the south coast community to establish a policy agenda of 3-5 policies focusing on tobacco control, improving nutrition and increasing physical activity. The coalition has currently engaged the community in a discussion about an array of proposed policy options and a decision will be reached in mid-September.

**Methods:** After attending an initial planning meeting with the coalition, I worked with the staff of DPH and M+R Consulting Services to research and develop a list of possible nutrition and physical education policies. Particular attention was given to inform coalition members about Complete Streets, one of the proposed physical activity interventions. Working with public officials and policy advocates from across the country, a webinar training about Complete Streets, and how to advocate for its passage and implemented was developed.

**Conclusion:** The background research and training that I've done will be used in the September meeting to determine which policies make the agenda, based on what can impact cancer rates, is attainable and has community buy-in. The webinar training will also be used during the advocacy stage of the project, as it includes information on working with town and city councilors to get legislation/ordinances passed.

Name: Martha Friedman

Practicum Site: John Snow Research and Training Institute, Inc., Health Services Division

Location: Boston, MA

Practicum Title: Refugee Health Intern

Introduction: The Refugee Health Technical Assistance Center (RHTAC) is funded by the Office of Refugee Resettlement through the Massachusetts Department of Public Health (MDPH) and is dedicated to improving the well-being of refugees in resettlement. Recognizing that refugees have unique health needs, RHTAC provides web-based tools, resources, and support for health and mental health providers in order to better meet the physical and mental health needs of refugees.

**Methods:** This practicum has involved working with implementation team at JSI Research & Training Institute, Inc. on monthly webinars related to refugee health as well as on the development of the RHTAC website. Responsibilities include: 1) analyzing initial assessment data to determine potential website users; 2) evaluating viewership and webinar strengths and weaknesses; 3) researching and writing content for the RHTAC website on topics specific to the needs of resettled refugees; 4) gathering, revising and improving existing resources and tools for inclusion on website; and 5) working with the team at JSI and MDPH to determine the further direction of RHTAC as it enters its second year.

**Conclusion:** The RHTAC website launched in August 2011 and continues to add information and resources. To date, RHTAC has hosted three successful webinars and published monthly newsletters. RHTAC is currently working on incorporating new media into the website and on developing a gatekeeper training program for suicide prevention in specific communities of resettled refugees around the country.

Name: Danielle Hinchey

Practicum Site: Johns Hopkins Bloomberg School of Public Health, Center on Alcohol Marketing and Youth

Location: Baltimore, MD
Practicum Title: Research Intern

**Introduction:** The Center on Alcohol Marketing and Youth (CAMY) reviews the marketing practices of the alcohol industry. CAMY aims to reduce high rates of alcohol consumption, related injuries and deaths among young people by reducing the access and appeal of alcohol to individuals under the legal drinking age.

Methods: A literature review was conducted on African American youth exposure to alcohol advertising. An executive summary was developed for a radio report. A literature review was also done to develop an updated factsheet on the toll of underage drinking. Creatives, including those that violated Beer Institute and DISCUS codes were categorized, and a presentation was then developed to highlight examples of Code violations. Lastly, I helped garner coalition support for a SAFE MA resolution related to House Bill 851 in Massachusetts. Conclusion: The literature review will be used to create a report on African American youth exposure to alcohol advertising. The executive summary will be included in a radio report. The updated factsheet on underage drinking will be added to the CAMY website. Additionally, directors of coalitions will consider whether to sign the SAFE MA resolution. Coalitions that do sign the resolution will show their support as House Bill 851 moves to the House Committee on Ways and Means. Lastly, the Code violation presentation will be used in the future to provide examples of how the alcohol industry violates their voluntary Code.

Name: Karey Kenst

Practicum Site: Cambridge Mayor's Office

Location: Cambridge, MA

Practicum Title: Project Manager - GLBT Seniors in Housing & Health Care Project

Introduction: Disparities persist in access to and delivery of culturally appropriate health care and housing for gay, lesbian, bisexual, and transgender (GLBT) seniors. Service providers often fail to consider that their clients may be GLBT, and many GLBT seniors avoid seeking needed services due to fear of discrimination. The purpose of the practicum was to develop a project plan to address gaps in policies and practices that contribute to unequal access to housing and health care for GLBT seniors in Cambridge.

Methods: Current literature on housing and health care issues for GLBT seniors, as well as national, state, and community level needs assessments were reviewed and a map of potential collaborators. GLBT advocacy, senior service, and health and housing agencies developed. Key informant interviews were conducted with management and staff in housing and health care agencies to establish buy-in essential for project implementation. A multi-phase project plan will be used to advocate for additional city funding for project implementation. Conclusion: The GLBT Commission will implement the project plan, comprised of awareness raising, education, and advocacy activities at policy, institutional, community, and individual service provider levels. It is expected that mainstream housing, health care, and elder service agencies will update their policies and practices to improve access to the services that GLBT seniors need to maintain overall health, wellbeing, and dignity as they age.

Name: Kindra Lansburg

Practicum Site: Boston Public Health Commission, Start Strong Initiative

Location: Boston, MA

Practicum Title: Advocating and Promoting Healthy Teen Relationships

Introduction: The Start Strong Initiative is a nation-wide program which aims to promote healthy teen relationships and prevent teen dating violence. Through this initiative, high school students are trained to teach healthy relationship skills to eleven to fourteen year olds within their communities. These teen leaders are trained during the Healthy Relationships Summer Institute, where a large focus was put on promoting healthy break-ups this summer.

Methods: Practicum activities included serving as an institute trainer and contributing to the planning and implementing the Break-up Summit 2.0 that aimed to raise awareness about healthy break-up skills. I created and facilitated a workshop that focused on healthy break-up behaviors on social networks as well as facilitated an introductory workshop on healthy break-up skills. Additionally, I developed flyers, managed registration, gathered handouts and materials and created live polls for the event.

Conclusion: Over 350 teen leaders and adults in the Boston area as well as press attended the Break-up Summit 2.0. Participants learned a variety of healthy break-up skills and strategies. The summit received wide media coverage including The New York Times Magazine, The Early Show on CBS, NPR and the Boston Globe. This event continues to raise awareness and promote discussion about the way teens often breakup. Ongoing evaluation will determine whether the teen peer educators will continue to demonstrate effective facilitation and advocacy skills beyond the summer and throughout the school year.

Name: Sharon Odametey

Practicum Site: Health Resources in Action, Training and Capacity Building Department

Location: Boston, MA

Practicum Title: Process Evaluation of the Healthy Girls, Healthy Women (HGHW) program

Introduction: HGHW is an intervention program that trains and supports girls to lead their peers in workshops that empower them to enjoy better health and model healthy lifestyle behaviors. Training and workshop topics include nutrition, physical activity, body image, healthy relationships, health equity and advocacy. The purpose of this practicum was to conduct a process evaluation of the implementation of HGHW in order to strengthen and improve effectiveness of the program for the next phase of implementation.

Methods: Primary evaluation questions included 1) To what extend did the program implementation adhere to the intended protocol?; 2) Did individuals for whom the intervention was developed for receive adequate information, enroll, and participate in the program?; and 3) To what extent were participants satisfied with program activities? Methods to answer these questions included record analysis, selfreport obtained via surveys and interviews, and observation. Barriers and facilitators of implementation were identified.

Conclusion: The results indicate that most activities and elements of the program have been implemented as planned. However, due to participant recruitment challenges, a change in the program timeline necessitated reducing the amount of program content. Overall; participants were satisfied with program activities. Feedback to improve future implementation included recommendations that more time be allocated for program activities, and greater engagement with community coalition partners in order to facilitate better recruitment.

Name: Sarah Roberts

Practicum Site: Boston University School of Public Health , Department of Community Health Sciences

Location: Boston, MA

Practicum Title: A literature review exploring the impact of health-care based interventions on survivors of intimate partner violence

Introduction: Intimate Partner Violence (IPV) is a global public health concern, with numerous long-term consequences (Mitchell & Anglin, 2009). Approximately 25% of women and 8% of men experience partner abuse during their lifetime (Tjaden & Thoennes, 2000) and the health care setting is an important environment for disclosure and assistance. I performed a comprehensive literature search for IPV interventions in the health care setting, with intent to describe the impact of health care interventions on IPV survivors' safety and well-being.

Methods: I performed 16 unique searches on two databases, Web of Science and PsycINFO. All studies met the following inclusion criteria: peer-reviewed, English language, health care setting and outcomes beyond screening documentation. The searches yielded over 1800 abstracts, which I reviewed and sorted into categories by relevance. Ultimately, I narrowed the search to 17 interventions. I then organized these into a table summarizing each study and its key findings.

Conclusion: Of the 17 interventions, 10 were associated with significant changes in survivor outcomes such as increased safety behaviors, reduced IPV victimization, improved physical/mental health, and community resource utilization. Six interventions found no significant group differences, and one study (Kendall et al, 2009) did not report p-values for the outcomes of interest. Many studies showed improvements for control and intervention participants, a phenomenon worth consideration. Additionally, the length and depth of intervention involvement may be a meaningful factor. This information is important to integrate into the health care field given the high prevalence of IPV, and the recent IOM/HHS screening guidelines.

Name: Aayesha Siddiqui

Practicum Site: WBUR, On Point

Location: Boston, MA

Practicum Title: Production intern for WBUR's On Point with Tom Ashbrook

Introduction: WBUR is Boston's National Public Radio affiliate. On Point with Tom Ashbrook (syndicated to 200+ stations nationwide) is a live broadcast news program that airs for two hours daily. As a full-time intern, I was an integral part of the behind-the-scenes team that produces the show with in-depth research, relevant sound, prominent guests, and journalistic excellence. Learning the ropes of media is critical to being a public health professional—we need to effectively communicate to the lay public in a compelling way. I intend to go into science/health radio journalism, and the skills from On Point will allow me to bring public health issues to the media forefront, ensuring coverage and dissemination.

**Methods:** I assisted with the daily responsibilities of producing shows and was the lead producer on six shows. Activities included doing topical research, gathering sound, writing scripts, booking and pre-interviewing guests, and brainstorming with the team. All these make up the backbone for a radio show and ensure a seamless broadcast.

**Conclusion:** In addition to the shows that I produced myself, I contributed to every show in some capacity. Producers must rely on each other, and the shows are a testament to teamwork. The end result is a widely popular radio program that spans topics, lifestyles, viewpoints and serves the public radio mission of brining intelligent discussion and exploration to all. I learned the organizational, logistical, and technological skills needed for radio journalism.

Name: Eric Stratton

Practicum Site: Cambridge Prevention Coalition

Location: Cambridge, MA

Practicum Title: Social Marketing Intern for Cambridge Prevention Coalition

Introduction: As a part of the Cambridge Prevention Coalition, working under the Cambridge Department of Human Services and the Cambridge Health Department, I worked on the Reality Check Program as a social media and communications intern. The Reality Check program is a public health intervention targeting parents of teenagers, with a focus on reducing access to alcohol within the home and breeching the topic of the dangers of alcohol with teenagers. The goal of this practicum was to assist in the assessment of existing messaging channels and materials, as well as the creation of new messaging, as the Reality Check program enters its third phase.

Methods: I worked with the supervisor of the Cambridge Prevention Coalition and a fellow intern to do the following: 1) to recruit parents for three separate focus groups; 2) to organize and facilitate parental focus groups, with the goals of receiving feedback for current messaging and messaging strategies, as well as aspects that these topics that might prove challenging for parents; 3) to organize and report

saging and messaging strategies, as well as aspects that these topics that might prove challenging for parents; 3) to organize and report my findings from these focus groups; 4) to draft new messaging materials that addressed parental concerns; 5) to recruit parents and organize a photo shoot to assist in the newly created materials.

**Conclusion:** Outcomes included the successful completion of three focus groups, a report analyzing feedback from these focus groups, and the development of new materials to be used in phase three of the Reality Check program, and photographic materials to supplement new messaging materials. These will assist in providing more salient messaging to targeted parents.

Name: Hailey Tipton

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

Location: Boston, MA

Practicum Title: Attitudes Toward HPV Vaccination in Males

Introduction: HPV vaccination is new for males, and utilization has not been studied in high-risk populations. The BMC research team aims to identify differences between ethnic groups regarding knowledge, attitudes and health beliefs associated with acceptance or refusal of HPV vaccination in males. Study goals are to identify enablers and barriers in order to improve vaccination rates in high-risk populations

**Methods:** Semi-structured interviews were conducted in the following ethnic categories: Caucasian, African-American, Haitian and Latino. Eligible subjects were parents of boys ages 11-17 or young men ages 18-22 who spoke English, Spanish or Haitian Creole, and no prior HPV vaccinations. Interviews gathered demographic information, HPV knowledge, parental attitudes toward HPV vaccination, intention to vaccinate, and actual vaccination rates confirmed by medical records.

Conclusion: To date, 37 African-American and 21 Haitian parents participated in the study. Parent age, son's age, and years of education were similar, though Haitian parents reported more religious affiliation; over 90% of both African-American and Haitian parents expressed high levels of trust in physicians. On a test of HPV-related knowledge, 40.5% of African-American and 52.4% of Haitian parents were unable to correctly answer any questions, and only 18.9% and 23.8% scored above 75%. Despite low knowledge, 70.3% of African-Americans and 61.9% of Haitians intended to vaccinate upon physician recommendation. However, only 19.4% of parents were offered HPV vaccination, and only 10.8% of African-American and 23.8% of Haitian sons received vaccination. Therefore, physicians have a unique opportunity to improve HPV education and vaccination rates in these populations.

Name: Emily Wong

Practicum Site: University of North Carolina at Chapel Hill, Center for Health Promotion and Disease Prevention

Location: Chapel Hill, NC

Practicum Title: Student Intern for Childhood Obesity Interventions

**Introduction:** Childhood obesity is a preventable condition which also increases the probability of adult obesity, heart disease, and type 2 Diabetes. The purpose of this practicum was to serve as a member of the childhood obesity prevention research team led by Dr. Dianne Ward at the UNC Center for Health Promotion and Disease Prevention and assist in the implementation of intervention programs and research.

**Methods:** Primary activities included: 1) Development of a reliable and valid home environment assessment tool. Participating families from needed demographic categories were recruited over the phone and observational data was collected; 2) Two interventions, one that teaches effective parenting skills to encourage better eating and more physical activity and one that encourages children to try new foods and increase physical activity were implemented. A process evaluation was conducted. 3) A feasibility pilot was employed to discern the feasibility of a developing intervention that encourages child care home providers to engage in health promotion.

Conclusion: Recruitment strategies yielded enrollment of 111 homes needed for analysis of the research tool's reliability and validity, as well as the recruitment of the 5 child care homes needed to participate in the pilot project. The pilot project had a limited time frame due to IRB setbacks, but was completed on time with positive results.

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