

Boston University School of Public Health

Student Practicum Abstracts

Spring 2013



BUSPH STUDENT PRACTICA SPRING 2013

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

Where in the world were BUSPH spring practicum students?

26 Cities and Towns

5 States across the U.S.

9 Countries

Cameroon

India

Namibia

Nepal

Nicaragua

Tanzania

Uganda

Ukraine

Zambia

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Name: Julianne Burns
Practicum Site: Boston University School of Medicine
Location: Boston, MA
Title: A study of Latent Tuberculosis Infection in the Elderly Using Two Different Diagnostic Tests

Introduction: Tuberculosis is a contagious bacterial infection that affects approximately 32% of the world's population. Tuberculosis is common in older adults, though waning immunity in the elderly leads to difficulties with disease detection. Two common diagnostic tests for Tuberculosis include the Tuberculin Skin Test (TST) and the Interferon-Gamma Release Assay (IGRA). Studies suggest that IGRA results may be more reliable than TST results in the elderly. The Boston University School of Medicine conducted a study to compare the results of these two diagnostic tests in 38 elderly subjects living in nursing homes. The purpose of this practicum was to aid the Principle Investigator with the analysis of data and drafting of the manuscript for this study.

Methods: I worked with the Principal Investigator of this study: 1.) to quality control the study data; 2.) to perform univariate and multivariate analyses on the data in order to obtain descriptive statistic and test the study objectives; 3.) to conduct a comprehensive literature review for inclusion in the introduction and discussion sections of the manuscript; and 4.) to aid in the drafting of the manuscript.

Results/Outcomes: This study demonstrated that testing for Tuberculosis in the institutionalized elderly is complicated by discordance between TST and IGRA diagnostic testing. These findings suggest that the use of TST in elderly nursing home populations may need to be reconsidered.

Name: Divya Nair
Practicum Site: Boston Medical Center - Cardiothoracic Surgery Department
Location: Boston, MA
Title: Outcomes of Thermal Ablation of Lung Tumors (Comparing outcomes of RFA vs MWA)

Introduction: Lung Cancer is the leading cause of cancer related-death in the United States and the second most common malignancy in men and women. Surgical treatment options for patients with lung cancer revolve around lobectomy or pneumonectomy, however for high risk patients with early stage lung cancer alternative therapies have been engineered which include stereotactic body radiation therapy and radio frequency ablation (RFA) or microwave ablation (MWA). In this study we wanted to evaluate the outcomes of patients who have undergone thermal ablation for lung cancer.

Methods: The dataset for the study was created in IBM SPSS and included all patients who underwent thermal ablation from 2005 to 2012. All of these patients were followed up until an endpoint was met (death, recurrence). Various tumor characteristics, patient characteristics and treatment characteristics was included in the dataset. The dataset included a patient dataset and nodule dataset where each nodule was assigned a unique nodule id and was treated as an independent case in the dataset.

Results/Outcomes: Data available as of 9th April 2013 (ongoing study) suggested that outcome for RFA was just as good as outcome for MWA, contrary to the popular belief. This study is also a good start to identify the ideal tumor characteristics for treatment with RFA and we also hope to get an idea of how cost effective RFA is when compared to MWA.

Name: James Shay
Practicum Site: DM-STAT, Inc.
Location: Malden, MA
Title: Intern - Fetal Alcohol Spectrum Disorders project

Introduction: Prenatal alcohol exposure (PAE) is a global public health concern and leads to long-term adverse outcomes. The rates of Fetal Alcohol Syndrome (FAS) are critically alarming in the Western Cape of South Africa (SA) as compared to the United States (US) (SA: 65.2-74.2/1000, US: 0.5-2.0/1000). Fetal Alcohol Spectrum Disorders (FASD) encompasses morbidities following PAE, including neurodevelopmental deficits and FAS. Children with FASD are often not diagnosed until 4-7 years of age, when interventions are less beneficial. The objective of this research was to compare US normative values of the Behavior Rating Inventory of Executive Function - Preschool version (BRIEF-P) to a cohort of SA children.

Methods: A cohort of 45 children and their mothers with various levels of PAE were recruited from the Prenatal Alcohol in SIDS and Stillbirth (PASS) Network's study in Cape Town to determine the feasibility for early detection of FASD and the effects of PAE. The BRIEF-P was collected at 24 months of age. The BRIEF-P assesses executive function in children 2 to 5 years of age. Indexes, composite scores, and validity scales were generated and standardized utilizing US normative values. Statistics were generated using SAS 9.3.

Results/Outcomes: The results are reported in the poster only. It is anticipated that these SA children will have lower executive function in comparison to the US due to differences in PAE. Other reasons and potential confounders should be explored further in future studies. Bivariate associations with potential confounders are expected to be generalizable to the US population.

ENVIRONMENTAL HEALTH

Name: Amy Budahn

Practicum Site: Environmental Protection Agency - NE - Office of Environmental Stewardship

Location: Boston, MA

Title: Integrated Chemical Management in the Boston Public School System

Introduction: The Boston Public School (BPS) system houses accumulated legacy laboratory chemicals from the 1940's including mercury, naphthalene and p-dichlorobenzene. The lack of a chemical management system and teacher training in chemical safety is demonstrated by teachers pouring RCRA waste down the drain and conducting labs with broken fume hoods. BPS and the Environmental Protection Agency (EPA) formed a partnership to reduce the risk associated with exposure to potentially hazardous chemicals and poor laboratory safety conditions. This Practicum will develop an integrated chemical management (ICM) program; including cradle-to-grave monitoring of stock chemicals in secured stock rooms accompanied with active inventories.

Methods: As an EPA team member we gave on-site assistance to 29 high schools and systematically searched all laboratory classrooms, removing chemicals and documenting laboratory conditions. Chemicals listed as RCRA waste were collected for proper disposal and expired chemicals were neutralized and disposed on site. Remaining chemicals were consolidated, organized according to chemical compatibility in a centralized stock room and logged on an interactive database.

Results/Outcomes: Implementation of ICM led to a 33.5% chemical reduction in BPS with 1,387 lbs solid chemicals disposed, 501 liters of liquids disposed and 398 lbs of RCRA hazardous waste removed. The database will be used by BPS to evaluate chemicals used in laboratories and aid teachers in tracking inventory. The top ten classroom safety issues observed were reported to the BPS superintendent. The information gathered will be used by BPS to create a chemical hygiene and safety manual and train science teachers.

Name: Katherine Sours

Practicum Site: Massachusetts Department of Public Health - Occupational Health Surveillance Program

Location: Boston, MA

Title: Influenza Vaccination and Prevention Programs in Massachusetts Hospitals

Introduction: The Occupational Health Surveillance Program (OHSP) collects, analyzes, interprets, and disseminates information on work-related illnesses, injuries, and hazards in Massachusetts. One OHSP project focuses on healthcare personnel (HCP), including a recent activity that addresses influenza vaccination and prevention programs in hospitals. Influenza affects patients and HCP alike. The Healthy People 2020 goal is for 90% of all HCP to be vaccinated annually against influenza. Vaccination is one strategy used to prevent the spread of influenza in hospitals, but little is known about the characteristics of HCP influenza vaccination programs in Massachusetts hospitals. As part of this project, I assisted in developing an institutional-level survey of current influenza HCP vaccination programs in MDPH-licensed hospitals.

Methods: I worked with the project's research team to (1) identify literature describing comprehensive influenza vaccination and prevention programs, (2) identify available surveys that gathered institutional data about influenza prevention programs, (3) learn how to develop a survey instrument, (4) develop and deploy a survey for hospitals, and (5) analyze available results in SAS to describe program characteristics including mandatory vaccination, use of declinations, location and number of vaccination clinics, and educational information provided to HCP.

Results/Outcomes: Hospitals use various methods to control the spread of influenza, including vaccination of HCP, respiratory hygiene, cough etiquette, and adherence to multiple infection control practices. Vaccination of HCP is just one component of a comprehensive influenza prevention program. Findings of this survey will help to identify practices that are currently used to protect health care personnel from influenza.

Name: Sophie West

Practicum Site: Massachusetts Department of Environmental Protection

Location: Boston, MA

Title: MassDEP Food Manufacturer and Processor Waste Reduction Researcher

Introduction: In 2010, food waste comprised more than 25% of Massachusetts Solid Waste of 4.7 million tons. MassDEP created a Solid Waste Master Plan to reduce disposal of 2 million tons annually by 2020. A part of the master plan, the Organics Action Plan, focuses on diverting an additional 350,000 tons of organic food waste annually from businesses. MassDEP maintains a database of MA food manufacturers and processors, but lacks specific information on food waste generation in this sector.

Methods: My goal was to identify manufacturers and processors that generate large amounts of food waste. I attended meetings at Harvard's Recycling and Waste Services, RecycleWorks, etc. to learn about the industry and current trends. I organized a large amount of data from MWRA, MassDEP and other resources, and began placing phone calls gathering waste management trend information. I have compiled a large spreadsheet listing businesses, locations, waste type and projected amount, when obtainable.

Results/Outcomes: Recycling, on-site composting, anaerobic digestion, and resale as pet feed for example, have become increasingly commonplace over the years. However, there are still many businesses needing improvement on organic waste diversion. In the end, I will prepare a qualitative report about market trends, identifying areas for waste management improvement, as specific waste amounts and business names are often considered confidential. As a result of my research, MassDEP will be able to provide informed technical assistance to manufacturers and processors to help effectively manage their recyclable food waste, therefore diverting it from solid waste and landfills.

Name: Abdulkabir Adegoke

Practicum Site: Boston University School of Public Health

Location: Boston, MA

Title: Use, Knowledge, And Attitudes Toward Nicotine Replacement Therapy Among Smokers In Boston Public Housing

Introduction: Kick it For Good is a group randomized research study designed to test whether public housing residents trained as Tobacco Treatment Advocates (TTAs) can increase (1) utilization of existing smoking cessation programs and (2) smoking cessation rates among smokers in Boston public housing characterized by low socioeconomic status, and overrepresentation of racial/ethnic minorities.

Methods: Knowledge, attitudes, and prior use of nicotine replacement therapy (NRT) were assessed at baseline among 354 adult smokers ages 18-79 who were residents of Boston Housing Authority developments and planning to quit smoking within the next 30 days or thinking about quitting within the next 6 months. I participated in primary data collection, created a SAS (Statistical Analysis Software) dataset and code book, and generated descriptive statistics for presentation at the 2013 SRNT (Society for Research on Nicotine and Tobacco) conference held in Boston.

Results/Outcomes: This analysis of knowledge, attitudes, and prior use of NRT is one of the first conducted among a group of low-income smokers who have expressed active interest in quitting. In our study population, 82% of residents reported at least 1 previous quit attempt, and half of those residents reported having used NRT. Despite the fact that prior quit attempts had not succeeded in those who used NRT, half of the nicotine patch users stated that they were satisfied or neutral about their experience. Prior experience with using the patch also resulted in more positive attitudes and less suspicion, suggesting that providing smokers with a first opportunity may increase the likelihood of subsequent utilization.

Name: Anthony Akinbami

Practicum Site: Boston Medical Center - Center of Excellence in Sickle Cell Disease

Location: Boston, MA

Title: Research Assistant

Introduction: Previous studies have shown that Hydroxyurea is beneficial in the management of sickle cell anemia in reducing the complications of the disease such as the frequency and severity of crisis as well as prolonging the life of such patients. However, it is unknown if certain biochemical parameters serve as prognostic factors in predicting the frequency of admissions among Hydroxyurea users.

Methods: I examined certain laboratory parameters for a sample of Hydroxyurea users to determine if there is any correlation between those parameters and the number of admissions. The parameters include Lactate dehydrogenase (LDH), Hemoglobin concentration (Hb), Mean Corpuscular Volume (MCV) and White Blood Cell count (WBC). These parameters are indicators of the severity of the disease and/ the degree of response to Hydroxyurea treatment.

Results/Outcomes: It is an ongoing study and given the number of patients examined so far, the interim results are still inconclusive in showing any correlation between certain laboratory parameters and the number of admissions for SCA patients on Hydroxyurea.

Name: Flor Amaya

Practicum Site: Chelsea Collaborative - Chelsea STAR Project

Location: Chelsea, MA

Title: Data Collection Intern

Introduction: The Chelsea STAR (Science To Achieve Results) Project is an EPA-funded research partnership between the Chelsea Collaborative and Boston University School of Public Health. The primary objective of the research is to increase public and scientific understanding of the combined effects of social and chemical environmental hazards on human health.

Methods: Two-Hundred Two residents were recruited via door knocking in previously identified demographically diverse census tracts. Informed consent was obtained prior to one resident from each household being interviewed in either English or Spanish. I will analyze 202 interviews using SAS 9.3. to perform, Chi Square Test, and T Test to gather descriptive statistics and Multiple Logistic Regression Model to determine which independent variables are significant predictors of 'Recycling Practices' among the sample of Chelsea residents recruited during Summer 2012.

Results/Outcomes: The final analysis of the data is still in progress.

EPIDEMIOLOGY

Name: Kerlly Bernabe

Practicum Site: Doctors Without Borders/Medecins Sans Frontieres

Location: New York, NY

Title: Antimicrobial resistance in bacteria in West Africa: a review of the published literature 1990-2012

Introduction: MSF is an international, medical humanitarian organization that provides independent and impartial assistance to people whose survival is threatened by violence, neglect, or catastrophe. In resource-limited settings, antimicrobial resistance (ABR) to simple antibiotics is emerging as a problem threatening the success of MSF interventions in malnutrition, pediatrics and surgery. In particular, MSF projects experienced the impact of ABR in West Africa. Data on ABR in this region is sparse. Therefore, the purpose of my practicum is to assist the MSF medical team conduct a systematic review of studies on ABR in West Africa. Findings will inform treatment with empirical antibiotics to achieve optimal outcomes in MSF patients.

Methods: I am working with the Infectious Disease advisor of MSF to 1) calculate the prevalence of ABR in invasive infections in West African patients and 2) identify time trends by year in the prevalence of ABR. I developed a strategy for the literature search and created a tool to standardize the method of reviewing and collecting data from studies. In addition, I started building a database of reviewed studies with primary focus on studies of adults and children with the following invasive infections: pneumonia, meningitis, acute diarrhea, urinary tract infections, and bacteremia/septicemia.

Results/Outcomes: We intend to calculate the mean resistance rate for each organism / antibiotic pair for the above disease processes, using key organisms and essential antibiotics described by the WHO. Further analyses will involve producing CI around estimates of ABR rates, comparing resistance by country and identifying risk factors for multidrug-resistance.

Name: Jamie Branco

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

Location: Boston, MA

Title: Healthy Families Data Collection Manager

Introduction: The Partners in Health and Housing Prevention Research Center (PRC) works with Boston public housing residents using community-based participatory research to identify areas of concern within their communities and to carry out the research process. The PRC works to promote community-wide health and well-being and to reduce health disparities common in public housing residents. Since the start of the new PRC core research project "Healthy Families," I've been working as the project's data collection manager. Healthy Families is a study looking at the baseline prevalence of obesity in mother-daughter pairs living in 10 Boston public housing developments and the resulting change in weight, healthy eating, and exercise habits of the residents throughout the course of a 2-year environmental intervention. We enrolled 210 mother-daughter pairs, measured their height and weight, and conducted a survey with the mother concerning her health, food choices, exercise habits, and perceptions of her neighborhood.

Methods: I worked with the P.I. and project manager to create data collection forms, study protocols, and interviewer handbooks. I worked with the project manager to hire and train 10 data collectors who I then supervised throughout the 6-month baseline data collection process. A 6-month follow-up survey is currently being finalized.

Results/Outcomes: The results of this study will help identify interventions that are effective on a community level in decreasing the rate of obesity and health-related disparities in public housing residents.

Name: Meghan Bratton

Practicum Site: Boston University School of Medicine - Department of Obstetrics and Gynecology

Location: Boston, MA

Title: HPV Vaccine Study Intern

Introduction: Research shows that about half of girls who start the three shot Human Papillomavirus vaccination do not complete the series, while others fail to initiate. Only 35% of girls have actually completed the series. This research study is being conducted to understand parent's views on the vaccine to help increase initiation and completion rates.

Methods: Parents were approached in waiting rooms to assess eligibility for participation and to sign the consent form. 20 minute interviews were then administered to parents of girls aged 11-18 at both public and private sites. Questionnaires were tailored to daughter's completion status as the following: uninitiated, incomplete, complete, and unsure. Three race categories including white, black, and Hispanic were recruited from in order to get a broad range of cultural, religious, economic issues that could encourage or inhibit vaccination against this sexually transmitted disease. The research team met weekly in order to collaborate on qualitative research analysis techniques including coding and thematic analysis.

Results/Outcomes: At this point in the study recruitment is still occurring at all three sites. The knowledge gained thus far will be helpful in reaching target vaccination rates by addressing perceived barriers and educating doctors on how to better communicate and educate parents and daughters on the importance of completing the series.

Name: Elise Gorseth
Practicum Site: Beth Israel Deaconess Medical Center - Division of Gastroenterology
Location: Boston, MA
Title: Evaluation of a fingerstick test for celiac disease

Introduction: The Celiac Center at BIDMC conducts research related to the diagnosis and treatment of celiac disease. In the United States, celiac disease is believed to be highly underdiagnosed, with only 10% of patients identified. A new fingerstick point of care test for identification of potential celiac disease is approved in Canada and Europe and is in the final stages of evaluation for potential approval by the US FDA. Use of this new fingerstick serologic test gives the possibility of reaching more potential patients and conducting more efficient studies of celiac diagnosis.

Methods: The Celiac Center is in the process of distributing ~500 fingerstick test kits to first degree relatives of patients diagnosed with celiac disease. Subjects agree to test themselves using the protocol included with the test kit and to report their interpretation of the results in addition to returning the kit to the Celiac Center for secondary interpretation. Data analysis will be primarily descriptive and include the proportion of kits returned, the proportion of positive tests, and the correlation between demographic and clinical factors recorded on the survey form with test results.

Results/Outcomes: This study is still in progress.

Name: Jody Grundman
Practicum Site: Boston Public Health Commission - Child, Adolescent, and Family Health Bureau
Location: Boston, MA
Title: Intern, Father Friendly Initiative, Boston Public Health Commission

Introduction: The Father Friendly Initiative is a program run by the Boston Public Health Commission. The program targets men with low to no income living in the Boston area, and aims to make them more responsible members of their families and community. As a student intern, my duties were focused around evaluating the program's reputation among clients and within the community, as well as its efficacy at achieving projected outcomes.

Methods: Practicum activities included: 1) conducting a literature review to assess relevant social behavioral theories applicable to fathering interventions, as well as determinants of male involvement; 2) Designing surveys and conducting informant interviews with referring services and clients; 3) Writing a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis report of the interview findings.

Results/Outcomes: The literature revealed that father involvement programs must aim to increase time fathers spend with their children, improve fathers' self-perceptions and employment status, and strengthen relationships with the child's mother. The Father Friendly Initiative can use the SWOT analysis report to adjust current procedures in order to be better aligned with the program's objectives.

Name: Stanislav Henkin
Practicum Site: Brigham and Women's Hospital - Department of General Medicine
Location: Boston, MA
Title: Attitudes of third and fourth year medical students towards electronic health records

Introduction: Electronic health records (EHRs) have become a key issue within health care. In 2009, the federal government established an incentive program (HITECH Act) to encourage the adoption of EHRs by physicians, whereby eligible health professionals may receive incentive payments from Medicare and/or Medicaid by following regulations for the meaningful use (MU) of EHRs. Surveys of a random sample of physicians in Massachusetts showed that physicians vary in their attitudes and use of EHRs. However, research into medical students' attitudes towards EHRs lack.

Methods: Based on a survey previously used to study the attitudes of physicians towards EHRs, we built an anonymous survey geared towards medical students using REDCap, a web-based secure application that is also able to capture responses. The survey link was e-mailed to the third and fourth year medical students at Boston University through class list serves.

Results/Outcomes: Eighty two medical students responded to the survey. 41% of respondents believe that they did not get sufficient EHR training. While the majority of students believe that EHRs have the ability to somewhat positively or very positively affect the costs (73%), quality (85%), and efficiency (80%) of health care, 76.9% of respondents somewhat or strongly agreed that EHRs have created new opportunities for errors. Nevertheless, 73.1% of medical students strongly or somewhat disagree that the EHR they use has created more errors than it has prevented. 45% have heard of MU and of those, 62% are not at all or slightly familiar with MU requirements. More data is necessary.

EPIDEMIOLOGY

Name: Lindsey Kreutzer
Practicum Site: John Snow, Inc - Boston International Division
Location: Boston, MA
Title: International Division Intern

Introduction: John Snow, Inc. is a public health management consulting and research organization that provides technical and managerial assistance to public health projects worldwide. The Boston headquarters focuses on bi-lateral projects which are usually implemented in one country as opposed to implementing the same program across multiple countries.

Methods: I am working with members of the international division on proposals and new business development. Responsibilities include: working with a team to create a knowledge sharing portal for work in Burma, writing sections of proposals, participating in new business developing in India meetings and preparations for a conference in May

Results/Outcomes: At the conclusion of this practicum, I will have contributed to writing five proposals, assisted in creating a knowledge sharing portal, and helped coordinate new business development meetings and a conference in India.

Name: Katherine Loya
Practicum Site: New Hampshire Department of Health & Human Services - Division of Public Health Services
Location: Concord, NH
Title: Evaluating the Impact of Budget Cuts to State Funded STD Care and Treatment in New Hampshire

Introduction: Beginning in FY2011, New Hampshire became the first state in the country to eliminate 100% of state funding for STD diagnosis and treatment. As a result, dedicated STD clinic hours were closed, and state subsidized testing and treatments were eliminated. The NH Bureau of Infectious Disease Control, in conjunction with the Centers for Disease Control (CDC), is interested in determining the impact of these budget cuts on both patients and providers in New Hampshire.

Methods: We cleaned surveillance data from 2010-2012 for reported cases of chlamydia, gonorrhea and syphilis in NH. We performed an analysis of the cases before and after the budget cuts went into effect on July 1, 2011 to determine what impact, if any, the loss of funding had on incidence of disease and facility type where patients sought treatment. Cases were also stratified according to variables such as age, race, sex and county of residence. Additionally, we worked with CDC to develop a detailed provider survey to investigate how different facilities handle STD cases both medically and financially, and any real or perceived barriers to diagnosis or treatment.

Results/Outcomes: Data analysis is still in progress. The results of the surveillance analysis and the provider survey should give us a better idea of where the strains on the system are, and how we should allocate limited resources in the future.

Name: Nabila Mirza
Practicum Site: International Society for Disease Surveillance (ISDS)
Location: Brighton, MA
Title: Steps to Sustainable Surveillance - A Guide for Decision Makers

Introduction: More than a decade into the 21st century, our ability to effectively forecast, detect, and respond to disease outbreaks and other events of public health significance remains a major challenge. During Summer 2012, I assisted ISDS in developing a policy brief making the compelling case to decision makers and public health officials for the value of sustainable public health surveillance.

Methods: I searched the literature for evidence on the value of public health surveillance in promoting population health, maintaining economic stability, and enhancing national security; to identify the challenges that these surveillance systems face, why these challenges need to be met, and how they can be met; and to identify strategies for building, strengthening, and maintaining effective and sustainable surveillance systems in the long run. I used these findings to inform the drafts, and also met with a workgroup of public health practitioners on a biweekly basis to obtain their feedback on the drafts. These drafts were then reviewed and edited by ISDS staff, members, and its Board of Directors.

Results/Outcomes: I found that public health surveillance systems in the United States face multiple challenges, including structural and financial instability. In order to overcome these challenges and achieve sustainable surveillance in the long run, we need to first recognize the importance of surveillance as a core public health function, and subsequently provide systems with adequate and consistent financial support and political commitment so that they will effectively alert and trigger a response to the changing and growing threats to population health.

Name: Ellen Nagami

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

Location: Jamaica Plain, MA

Title: Enhanced Surveillance of Infants with Hepatitis C Virus (HCV) Exposure in Massachusetts

Introduction: The Massachusetts Department of Public Health (MDPH) has seen an increase in cases of hepatitis C virus (HCV) in the 15-25 age group. Approximately half of these infections are among women of child-bearing age. Vertical transmission of HCV occurs in 2-5% of births. The aims of my project were to characterize infants reported to MDPH with HCV infection, to better understand provider reasons for testing infants for HCV, and to determine whether enhanced surveillance of infants could identify HCV-infected women not previously reported to MDPH.

Methods: Data was collected for infants born in 2011 who were reported to MDPH with laboratory evidence of past/present exposure to HCV infection. An outbreak module was created in the Massachusetts Virtual Epidemiologic Network (MAVEN) to track the infants in this cohort. Phone interviews were conducted with healthcare providers from January-April 2013. Data were entered into MAVEN and analyzed using SAS 9.3.

Results/Outcomes: In 2011, MDPH received reports of 80 cases of HCV infection in infants ≤ 18 months of age. Full interviews with healthcare providers were completed for 53 cases. The main reason reported for HCV testing in infants was maternal HCV infection ($n=46$, 86.8%). Thirty-seven cases (69.8%) had appropriate follow-up testing for diagnosis of HCV infection, 7 of which had confirmed infection according to the CDC case definition. The mothers of 33 infants (62.2%) were previously reported to MDPH with HCV infection. A better understanding of provider reasons for infant HCV testing and of maternal case-finding was achieved in this surveillance effort.

Name: Abigail Newby-Kew

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

Location: Lusaka, Zambia

Title: Data Coordinator; Saving Mothers Giving Life

Introduction: Saving Mothers Giving Life is a pilot initiative that aims to reduce maternal mortality by 50% in four districts in Zambia. ZCAHRD is working to implement a package of interventions in 34 health facilities in the district of Kalomo. This package includes clinical mentorship, supply distribution, and a referral system to help facilitate clinic to hospital transfers. ZCAHRD is also involved in tracking facility improvements and monitoring the capacity of individual clinics to perform emergency obstetric and newborn care (EmONC).

Methods: As data coordinator, I conduct routine data collection to monitor key EmONC signal functions, and assist in aggregating and analyzing these data as reports are needed. I work closely with the mentorship team to monitor and improve the referral system and general documentation at the facilities. Together we also report on the challenges and successes of each health facility.

Results/Outcomes: Although SMGL is still in the pilot stage, there have been many improvements in the district. Maternal mortality has been reduced, the number of facility births has increased, the referral system is in use, and more healthcare workers are capable of recognizing and managing obstetric complications. ZCAHRD is working to expand the program into three additional districts this year.

Name: Nguyen Nguyen

Practicum Site: DM-STAT, Inc.

Location: Malden, MA

Title: Fetal Alcohol Spectrum Disorders (FASD) Project Intern

Introduction: Fetal Alcohol Spectrum Disorders (FASD) describes the spectrum of neurobehavioral, facial and growth abnormalities resulting from Prenatal Alcohol Exposure (PAE), with Fetal Alcohol Syndrome (FAS) at the most severe end. The Western Cape of South Africa has the highest rates of FAS in the world (SA: 65.2-74.2/1,000 US: 0.33-2.2/1,000). Children are often not diagnosed until 4-7 years of age and would benefit from early intervention. The objective of this study was to determine the feasibility of early detection of FASD, which could lead to earlier intervention.

Methods: The Prenatal Alcohol in SIDS and Stillbirth (PASS) Network was established to investigate the role of PAE in adverse pregnancy outcomes. A cohort of 45 women and their offspring from the PASS Phase I study in Cape Town, South Africa were evaluated at 18, 21 and 24 months. At 24 months, live and photo dysmorphology evaluations were performed and preliminary FASD case determinations were made based on standard methods (e.g., facial abnormalities and growth deficiencies). Analyses were performed using SAS 9.3.

Results/Outcomes: Nine live and 43 photo evaluations were collected. No FAS but 1 Partial FAS case determinations were made. The case determinations were for research only, not clinical diagnoses, because neurodevelopment and PAE were not incorporated. Due to limited sample size, concordance evaluation between live and photo assessments was not possible. Trends in abnormal growth and facial features provide preliminary data for a larger study to detect early markers for FASD, which would be needed to determine if early detection is feasible.

EPIDEMIOLOGY

Name: Alexander Su

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

Location: Boston, MA

Title: Boston Child Health Study Internship

Introduction: The Boston Child Health Study is a three-part study of child health being conducted in Boston under the joint leadership of the Boston Public Health Commission and Boston Children's Hospital to provide data on parents' perceptions about their children's health and healthcare resources, the relationship between environmental issues and child health, and patterns of diagnosis, health care utilization, and treatment in Boston neighborhood clinics. The study is comprised of a phone survey, an environmental neighborhood assessment, and an analysis of Medicaid claims data.

Methods: The main component of this practicum involves both the neighborhood assessment and phone survey portion that focuses on environmental and household risk factors in Boston communities that impact child health. Responsibilities to date include survey preparation for environmental data collection, mobile survey app development, promoting data quality, conducting research on child health issues and the environment, collecting, cleaning and compiling data collected at the geographic level, attending project meetings, and additional projects as they emerge.

Results/Outcomes: Compilation of citywide environmental, mapping data collected by residents of specific Boston neighborhoods with guidance from a BPHC Geographic Information System (GIS) analyst, collaboration with an epidemiologist in the BPHC research and evaluation office to monitor data collected to identify potential issues related to data validity and reliability, and compiling a final report of the Boston Child Health Study phone survey findings by creating and interpreting charts/graphs based on analyses conducted using Statistical Analysis System (SAS), as well as a narrative interpretation of the analyses.

Name: Neha Suneja

Practicum Site: Genzyme - Global Evidence Generation and Value Development (GEVD)

Location: Cambridge, MA

Title: Global Evidence Generation and Value Development (GEVD) Fellow

Introduction: GEVD provides global health economics and outcomes research deliverables addressing payer/Health Technology Assessment evidentiary needs that are subsequently customized at the country level. The department supports the value differentiation of Genzyme products throughout the development life-cycle. One of my projects at Genzyme was to support EVD activities for a product in the pre-launch phase in the Multiple Sclerosis (MS) business franchise. The project summarized key clinical trial data for currently marketed disease modifying therapies (DMTs) for MS.

Methods: A review of the literature was conducted to gather evidence from trials on Tysabri (Natalizumab), Gilenya (Fingolimod) and Rebif (Interferon β -1a). Some of the variables of interest included: efficacy, safety, choice of endpoints, comparators, duration of study and frequency of safety monitoring.

Results/Outcomes: The value drivers and challenges of DMTs must be considered in order to evaluate their overall clinical value. Tysabri and Gilenya provide superior efficacy relative to interferon, however each poses significant safety concerns. The risk of Progressive Multifocal Leukoencephalopathy, a potentially fatal disease increases with increasing duration of use and requires that Tysabri be made available exclusively through a special distribution program, thereby limiting patient access and long-term use. Gilenya requires frequent lab monitoring and clinical consultations contributing to high patient-care costs. The evaluation of current DMTs brings to the forefront, the unmet need in the area of MS. Patient access, safety concerns and high costs all point to the need for a novel therapy that is effective and safe while still being affordable and accessible to patients.

Name: Jacqueline Vuong

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

Location: Jamaica Plain, MA

Title: Health Education Needs Assessment Workgroup Intern

Introduction: In Spring of 2012, the MDPH TB Division initiated an initiative "Treat to Stop TB" with the goal of encouraging neighborhood health centers (NHC) to provide TB screening, evaluation, and treatment to persons at high risk for TB. Educating patients and medical providers about TB risk, diagnostic, evaluation and treatment is an integral part of Treat to Stop TB initiative. The RIHP/TB Health Education Needs Assessment Workgroup was formed to develop educational materials that can be used by medical providers and patients at the NHC.

Methods: I attended weekly meetings with the TB/RIHP Health Education Needs Assessment Workgroup to evaluate MDPH's current TB/RIHP written health education materials used for patients with TB disease and clinicians tending to TB patients. I took meetings notes that were later used to help write a formal report on findings and recommendations for improving the current health education materials. I developed template worksheets used by the workgroup to evaluate gaps in the materials. I developed a checklist for evaluating and creating health education materials and piloted the checklist on MDPH's current materials.

Results/Outcomes: The workgroup coordinators used the information found during the needs assessment to write a report on findings and recommendations. They presented a summary of the findings and recommendations to the TB/RIHP senior managers on March 27, 2013. Our recommendations were embraced by the senior managers and they recognized the tremendous amount of work accomplished by our workgroup within a short amount of time.

Name: Anna Wielgosz
Practicum Site: Cambridge Public Health Department - Epidemiology and Data Services
Location: Cambridge, MA
Title: Epidemiology at a Local Health Department

Introduction: The Division of Epidemiology and Data Services at the Cambridge Public Health Department is tasked with monitoring the health of the city by monitoring disease, identifying health issues, implementing surveillance systems, and analyzing public health data. During this practicum, I worked for the manager of the division on a variety of projects that are typical in the daily functioning of a local health department.

Methods: I worked on long- and short-term projects which required skills such as: responding to data and research requests; writing and revising SAS code for data analysis; writing and revising data reports to be publically disseminated; maintaining an ongoing surveillance system.

Results/Outcomes: During my practicum, I assisted in producing data reports, like Cambridge Health Indicators, Youth Dental Surveillance, and posters for National Public Health Week. I contributed writing and data analysis using SAS to the production of Youth BMI Surveillance reports. I implemented and monitored an ongoing surveillance system for flu incidence among private school students, which included communicating with schools, collecting and organizing the data, and writing appropriate SAS code for analysis. I responded to data requests (both from within and from outside the division), for example collecting all known alcohol use data for Cambridge. The variety of projects reflects the ongoing work done at a local health department that allows it to fulfill its key public health functions in the community.

Name: Julie Wright
Practicum Site: CYCLE Kids
Location: Cambridge, MA
Title: Data Analysis Intern

Introduction: CYCLE Kids is a nonprofit that promotes healthy lifestyle choices in children by introducing them to the bicycling through a curriculum used in physical education classes. Through bicycling and bike safety education, CYCLE Kids empowers children to develop positive, safe, and active lifelong habits.

Methods: I performed quantitative and qualitative analyses on questionnaires obtained prior to implementation of the curriculum and after completion on 289 students. With the findings, I developed a report for the City of Cambridge on the impact of the CYCLE Kids program in 12 elementary schools. I conducted focus groups to evaluate the program in schools from the perspective of the administration and teaching staff, as well as former students.

Results/Outcomes: I found that gender disparities in health competencies at baseline were attenuated at follow-up. For example, at baseline, boys showed greater competency in taking their heart rate compared with girls, RR = 0.62 (95% CI: 0.39, 0.98). However, this discrepancy was eliminated at follow-up, RR = 0.99 (95% CI: 0.77, 1.29). The results will be used to adapt the curriculum, write grant applications, and further the impact of CYCLE Kids in new schools. My findings showed that the curriculum is effective in bridging health knowledge gaps among males and females. It also showed that students are more confident, more likely to bike to school, and have increased knowledge of bicycle safety following the program.

HEALTH LAW, BIOETHICS, & HUMAN RIGHTS

Name: Suparna Bandyopadhyay

Practicum Site: Boston Medical Center - Office of Patient Advocacy

Location: Boston, MA

Title: Patient Advocacy Intern

Introduction: The Office of Patient Advocacy (OPA) at Boston Medical Center (BMC) helps maintain effective communications between the patient, family, and care team. In addition, the Patient Advocate works to inform patients about their rights, empowering them to engage in their care, while also providing support to BMC staff.

Methods: As an intern at the OPA, I was able to participate in many different activities. I answered daily calls regarding unmet expectations from patients and various staff members, recorded grievances on intake forms, followed-up on cases or referred them to Advocates or other hospital staff. To evaluate current satisfaction with care, I made rounds on the floors asking patients to describe their experience at BMC. In addition, I worked as the Operating Room (OR) liaison providing a clear line of communication between the patient's family and the preoperative and post-anesthesia staff. I was also involved in the ethics consult service. My role consisted of observing the discussion, taking notes, and providing the team with current literature pertinent to the case. Finally, I helped develop and administer a survey to evaluate the effectiveness of the ethics consults.

Results/Outcomes: This internship has allowed me to better understand the interactions between hospital policies, state and federal health laws, and patient's rights. Patient advocacy constantly works within these realms to improve care and facilitate communications for the patients at BMC.

Name: Laura Huber

Practicum Site: Spaulding Rehabilitation Center - Quality & Management, Compliance

Location: Boston, MA

Title: Development and Implementation of a Failure Modes and Effects Analysis (FMEA) of the Patient Hospital Move Processes

Introduction: The Joint Commission requires accredited hospitals to conduct a Failure Modes and Effects Analysis (FMEA) for a high-risk process within each 18-month accreditation cycle. Spaulding Rehabilitation Hospital will undergo a high-risk process on April 27, 2013 with a move of 132 patients and all hospital operations to a newly built hospital in Charlestown. I conducted the FMEA for this move to satisfy the hospital's Joint Commission requirement. The goal of the FMEA is to identify the highest-risk processes and sub processes in this move and to prospectively identify where changes in the processes are indicated to mitigate potential safety events prior to their implementation.

Methods: Working with the Director of Quality and Compliance, I 1) conducted multiple meetings with Move Committee sub group teams to map out processes in detail, 2) held a brainstorming session to review each process and sub process with the committee to identify potential failure points and their effects, 3) analyzed this information and determined a Risk Priority Number for each process, 4) collaborated with the committee to revise the four highest-risk processes to mitigate the identified risks, and 5) created an overview and summary of the FMEA to present to The Joint Commission .

Results/Outcomes: The FMEA processes will be implemented by the hospital during their move to ensure the highest level of patient safety.

HEALTH POLICY & MANAGEMENT

Name: Natasha Amjed
Practicum Site: Partners in Health
Location: Boston, MA
Title: PIH—Engage National Team

Introduction: Partners in Health is a non-profit organization which seeks to improve the access of medical care in third world nations. The organization is based on Boston and started in the 1980's by Dr. Paul Farmer and Ophelia Dahl. PIH is currently working in other countries including Haiti, Rwanda, Malawi, and others. PIH aims to raise money in order to build hospitals in nations that are in dire need of care due to HIV, cancer, and malaria.

Methods: The method employed in order to gain more awareness include developing a National Team of about 10-15 individuals. The teams are broken into Data and Communications, Support, and Campaigning. Each team supports the Regional Organizers and Community Coordinators in different fashions. One-on-one coaching calls, having weekly update meetings and reports, establishing reachable campaigning goals, and creating bi-weekly newsletters centered around PIH | Engage for the Community Coordinators all serve as ways of support.

Results/Outcomes: The National Team is very dedicated in aiding the Regional Organizers and Community Coordinators. As of April 2013, the monetary goal has not been reached. However, many events have organized and taken place, such as film screenings and information sessions. The development of a PIH | Engage Team has greatly helped PIH broaden its scope and increase awareness of the importance of advocating for a social movement of distinguishing health is a human right.

Name: Jacqueline Byrd
Practicum Site: Children's Hospital Boston - Office of Government Relations
Location: Boston, MA
Title: Advocating for Child Health: Priority-Setting and Relationship-Building

Introduction: The Office of Government Relations at Boston Children's Hospital advocates at the city, state and national levels for policies to improve child health. The Hospital's legislative priorities include injury prevention, access to behavioral health services, Medicaid issues, and funding for the training of pediatric specialists. While Boston Children's Hospital is a destination for advanced and high quality care for patients from Massachusetts and around the world, it is also a leader in advocating on behalf of children.

Methods: I am working directly with the staff of the Office of Government Relations to initiate and track legislation. Responsibilities include researching and tracking all House and Senate bills identified as important to child health, summarizing bills for staff and clinicians, tracking the state budget process, and attending meetings with outside agencies and advocacy organizations. A primary focus of this semester has been planning a breakfast briefing at the State House to connect with legislators and their staff while showcasing the hospital's innovative work in prevention and care delivery redesign.

Results/Outcomes: Our biennial breakfast briefing, "Innovation in Child Health: A Breakfast Briefing," took place on April 12. This event provided an opportunity for hospital clinicians and staff to reach out to their legislators and the "child health heroes" within the legislature about issues important to them. This event introduced legislators to the unique challenges of pediatric health care delivery and the specific initiative being undertaken by the hospital and the legislature to continually improve child health.

Name: Katelyn Carey
Practicum Site: Boston Medical Center - Cancer Center
Location: Boston, MA
Title: Cancer Center Intern

Introduction: In 2006, Boston Medical Center (BMC) opened its Cancer Care Center, which now provides comprehensive, multi-specialty team-based care in the diagnosis, treatment and follow-up of patients. The Cancer Care Center is in the process of branding and promoting the program to both attract new patients and provide existing patients with an informative resource for research and reference purposes.

Methods: I am working directly with the Director of Operations for Cancer Care Services to create a more robust, user-friendly website specifically for gynecologic cancers. Responsibilities include 1) meeting with cancer care specialists to collect information regarding the types of clinical services offered 2) meeting with patient navigators, nutritionists, support group facilitators to collect information regarding the patient support services offered 3) summarizing findings and uploading them to the Cancer Care Center's website and 4) administering a survey to current patients at BMC's Cancer Care Center to determine whether the website information is likely to provide a benefit to patients.

Results/Outcomes: The website is intended to provide patients with a forum to assess the clinical and patient support services and provide BMC with enhanced marketability to the general public in order to attract new patients. At the conclusion of this practicum, the gynecologic oncology portion of the website will provide a starting point for the branding of the Cancer Care Center, while the survey will evaluate the effectiveness of the gynecologic oncology material and offer suggestions for the unfinished portions of the website.

HEALTH POLICY & MANAGEMENT

Name: Caitlin Farrell

Practicum Site: Massachusetts Department of Public Health - Bureau of Health Care Safety and Quality

Location: Boston, MA

Title: Intern Massachusetts Department of Public Health Bureau of Healthcare Quality and Safety

Introduction: The Bureau of Health Care Quality and Safety is the regulatory arm of the Massachusetts Department of Public Health that aims to achieve an optimal health care delivery system that ensures safe, effective, high-quality care for all. Chapter 224 of the Acts of 2012 is the health care cost-containment statute that was recently passed in the Commonwealth, which aims to increase health care quality through transparency and efficiency. The Chapter 224 legislation directly delegated responsibilities to the Department of Public Health, including the development of regulations regarding end-of-life and palliative care. The Bureau of Health Care Quality and Safety is therefore directly responsible for these activities, which shall be presented to the Public Health Council for approval and later implemented throughout the Commonwealth.

Methods: My role as an intern at the Department of Public Health was to aid in the development of these regulations. Through literature reviews, research on the practices prevalent in neighboring states, and discussions with policymakers, clinicians, and key stakeholders, key regulations regarding end-of-life care in the Commonwealth have been developed.

Results/Outcomes: The end-of-life regulations are currently undergoing a final review before being presented to the Public Health Council. Through the development of these regulations, patients throughout Massachusetts will have access to critical information about their health care options.

Name: George Gennis

Practicum Site: Dana Farber Cancer Institute - Hematologic Malignancies

Location: Boston, MA

Title: Financial Management Intern

Introduction: As the Financial Operations Intern for the Hematologic Malignancies department at Dana Farber Cancer Institute, the goal of my practicum is to provide day-to-day administrative support for departmental operations. To meet this goal, the Hematologic Malignancies sub-department provides clinical care as well as research initiatives, and as the financial operations intern it is my responsibility to learn, understand and master both clinical and research-based financial operations.

Methods: To fulfill my responsibilities as the Financial Operations Intern for the Hematologic Malignancies department I work closely with the Financial Operations Manager for the Medical Oncology sub-department, Hematologic Malignancies. I create requisitions, manage orders, present expense reports, provide monthly budget offsets, as well as projects focusing on cost-savings. I attend weekly meetings for administrative personnel and I represent our department by managing the purchasing mailbox. Under the guidance of my supervisor, we created an innovative system for department orders, which will cut cost in the upcoming months. I am also working on a project to standardize the departments toner orders to cut expenses.

Results/Outcomes: By providing support for the professionals in the Hematologic Malignancies department I've gained insight and experience to become a stronger public health professional as I begin my career. Financial operations within the department are ongoing and dynamic, so my responsibilities extend beyond standard 9 to 5 hours.

Name: Ida Habibi

Practicum Site: Children's Hospital Boston - Department of Cardiology

Location: Boston, MA

Title: Quality Improvement Research Assistant

Introduction: Current quality improvement metrics for the pediatric cardiology department at Children's Hospital require that the preoperative echocardiograms for each patient undergoing cardiac surgery be reviewed by a second cardiologist and this review be documented in WF, an MS-DOS system separate from the main electronic medical record system, EMERIS. The objective of this project was to measure the current performance level of preoperative secondary reviews of echocardiogram images.

Methods: I conducted a retrospective analysis of a sample of 1887 patients who underwent cardiac surgery from 2009 to 2011. The review of patient data allowed us to breakdown secondary review documentation by reviewer, patients for whom the reviewer was responsible, and the number of echocardiograms the reviewer was able to and required to document.

Results/Outcomes: Secondary reviews were documented in 21% of reviewed charts. Surgical complications occurred in 9% of patients who received secondary review and in 11% of those who did not. These results had major patient safety implications and also indicated a culture of noncompliance in documenting secondary reviews. This data was presented to the hospital's information technology department with hopes to relocate the secondary review process to EMERIS. Recommendations included adding software functionality which would flag and track all echocardiograms that need preoperative secondary review. Additionally, the pediatric cardiology department requested that morbidity and mortality data be tracked and kept within EMERIS. This functionality would allow staff to locate discrepancies between presurgical diagnostic findings and postoperative notes for all cardiac surgeries.

HEALTH POLICY & MANAGEMENT

Name: Mariam Jabbour

Practicum Site: Children's Hospital Boston - Pediatric Physicians' Organization

Location: Boston, MA

Title: Quality Improvement Initiatives for Learning Communities

Introduction: Pediatrics Physicians' Organization at Children's uses quality improvement initiatives to improve the delivery of care in all their participating pediatric offices. PPOC organizes Learning Communities for the practices to attend in order to improve their delivery of care and efficiency within their offices. One Learning Community was focused on increasing and promoting the value of well-child care visits to be better utilized, hence increasing wellness in patients.

Methods: The Learning Communities for Well Child Care visits had already met 3 times before I began my practicum. Working directly with the coordinator of this specific learning community I began to dissect the feedback from previous meetings and coordinating topics for future ones, while also attending them. Not all practices could participate in this Learning Community and in order to share the benefits developed from these meetings, I embarked on creating a self learning module that practices could use without having to attend or enable them to catch up and participate in future ones. Supplemental tools needed further development so practices could utilize all the information taught through the Well Child Care visit Learning Community.

Results/Outcomes: A self-learning module was created, with portions explaining process mapping and PDSA cycles, for distribution and utilization by practices in Learning Communities. In addition a PDSA cycle worksheet was developed for distribution throughout the entire PPOC and all practices, not just ones participating in Learning Communities. The developed tools will improve pediatric practices in the PPOC and increase wellness through value adding health care delivery.

Name: Charles Jose

Practicum Site: Boston Medical Center - General Internal Medicine

Location: Boston, MA

Title: Motivations and Benefits of Overdose Education and Naloxone Distribution for Family Members of Opioid Addicts

Introduction: Since the 1990s, opioid-related overdose deaths have increased dramatically in the United States and, in Massachusetts, exceeded the number of deaths a year from motor vehicle crashes. Overdose education and naloxone distribution (OEND) for drug users and bystanders is an effective strategy to prevent and manage overdoses. The innovative Massachusetts based support program Learn to Cope provides OEND to family members of opioid users. This practicum examined motivations behind refusal and receipt of OEND by family members in Learn to Cope.

Methods: Regular meetings with physicians in the Section of General Internal Medicine took place regarding overall study design, drafting and submission of an IRB protocol, survey development, data collection, and data analysis. This cross-sectional study captured descriptive characteristics of family members who attend the support group; both those who receive overdose prevention training and those who do not. Family members were asked about OEND motivations and benefits using questions that captured their demographics, relationship to the opioid user, and overdose education and naloxone history.

Results/Outcomes: We hypothesize that predictors of not receiving OEND training include: having never witnessed an overdose, not living with the opioid user, no family history of drug or alcohol addiction, or having attended 2 or fewer meetings. These data will provide an understanding of how OEND programs can be better adapted as an overdose prevention tool among family members of opioid users and provide other communities with a model for creating similar programs across the country.

Name: Davina Lewis

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

Location: Boston, MA

Title: Database Manager - Centering Program, BMC

Introduction: The Centering Program at BMC is a program that explores a model of group-care delivery for pregnant mothers. The goal of the program is to provide well-rounded care and education to expecting mothers in groups of 8 – 10 women, where they can discuss their prenatal care and experience with a healthcare provider. It provides a supportive atmosphere where the doctor can assess their progress during their pregnancy. The program has shown to have positive health and birth outcomes.

Methods: As the Database Manager for the program, I was tasked with managing the database of centering patients and carrying out monthly and quarterly analysis and sub-analysis for patient health and demographics. In addition, I performed analysis for patient satisfaction scores, patient attendance rates, dropout rates and created productivity reports. By observing these trends of patient outcome and satisfaction, the team brainstorms to come up with methods and strategies to improve the patient experience. It also helps determine methods of obtaining optimal data to assess the patient population. I also created and manage a database for the control group of patients who get traditional pre-natal care.

Results/Outcomes: This data analysis and monitoring helps track the progress of the program and help determine the trends of patient outcomes for a two-year period. The analysis will be utilized towards creating a final grant report. The program has show positive results in birth outcomes and better overall health of the mother and child.

HEALTH POLICY & MANAGEMENT

Name: Elyse Linson

Practicum Site: Massachusetts Medical Society - Health Policy Department

Location: Waltham, MA

Title: Public Health Intern at the Massachusetts Medical Society

Introduction: As a public health and government relations intern at the Massachusetts Medical Society I have been able to work on numerous current healthcare issues that span both of these sectors. Researching many topics such as the lack of collaboration between dentists and physicians on oral health, why men lag behind women in almost every category of health, the reimbursement issues associated with weight loss management, and the regulatory issues surrounding the recent passage of the medical marijuana statute is allowing me to get involved with these matters from a public health perspective. In addition using that research to write-up legislative fact sheets and reports, and participate in legislative briefings and hearings is allowing me to get involved with these issues from a government relations perspective.

Methods: I just completed my most recent fact sheet on, "The Act on Obesity," the soda, confectionary, and candy tax. The MMS co-sponsored the, Reality Medicine Event, along with The Committee on Diversity in Medicine on April 5th. I helped organize this event that raised awareness on many healthcare issues including the public health implications due to the lack of both minority and primary care physicians.

Results/Outcomes: Researching these public health topics and engaging in government relations activities has allowed me to take the skills I have learned from many of my courses at BUSPH, such as the Health Policy and Politics course I am currently enrolled in, and implement them into real world situations.

Name: Morgan Maglich

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

Location: Boston, MA

Title: Meaningful Use Initiative and Surgical Scheduling Process Evaluation and Improvement

Introduction: In an effort to improve patient care, Medicare and Medicaid's EHR Incentive Program offers financial incentives for the "meaningful use" of EHR technology. To obtain the incentive payment, providers must show "meaningful use" of EHRs by reaching thresholds for specified objectives. Brigham and Women's Hospital is strongly pushing for compliance, and physicians were tasked with achieving compliance by meeting the specified thresholds. Additionally, I evaluated the entire surgical scheduling process; an incredibly complex and multifaceted process plagued with inefficiencies causing surgical delays, insurance denials and patient/provider dissatisfaction.

Methods: I worked with the care team to implement modifications to clinical practices to increase the electronic transmittal of prescriptions, maintain the problem list and provide visit summary reports. The surgeon and I identified the inefficiencies in the scheduling process and developed a surgical database that tracked the surgical status, created a surgical scheduling checklist and worked closely with the department to modify the surgical booking slip to include CPT codes and to develop spine patient education materials to address common questions.

Results/Outcomes: Achieved compliance status for the "meaningful use" of EHR. The evaluation of surgical scheduling had several significant results, including (i) development of a database, postoperative instructions, scheduling checklist, modified booking slip and education materials, (ii) department-wide implementation of the scheduling checklist, and (iii) utilization of the booking slip and educational materials. Additionally, the checklist and booking slip have resulted in a more efficient booking process with fewer common errors. Finally, an increase in patient/provider satisfaction, accompanied by a decrease in pre/post surgical questions.

Name: Monica Malowney

Practicum Site: Boston Medical Center/Boston University School of Public Health - Emergency Department

Location: Boston, MA

Title: Research Assistant

Introduction: Since 2009, BMC has offered free rapid HIV testing in its emergency room and urgent care center. HIV Counseling, Testing, and Referral (CTR) staff offer free tests to all patients in the BMC ED. When the study began, CTR staff estimated that 60% of patients refused this service. The goal of this qualitative examination was to interview patients who refuse free rapid HIV testing in the BMC ED to better understand their reasons for refusal. I am interested in whether patients who refused would have accepted if they had been given information about why they could be at risk. The purpose of this practicum was to assist in the recruitment and interviewing of participants, and to learn and use qualitative research methods to analyze collected data.

Methods: I worked with the Study Coordinator and PI: 1.) to recruit participants and help improve recruitment strategy; 2.) to conduct semi-structured interviews with participants; 3.) to code interview transcripts and create a preliminary codebook; and 4.) to participate in a preliminary qualitative analysis of interview data.

Results/Outcomes: A preliminary analysis of the first twenty coded interviews revealed that the vast majority of recruited patients (17 of 20) refused the offer of a free HIV rapid test in part because they did not believe they were at risk for HIV. All of these participants had knowledge about how HIV was transmitted and many personally knew others with HIV or who had died of AIDS. Several participants said that the lack of context for the test offer contributed to their decision to decline.

HEALTH POLICY & MANAGEMENT

Name: Jeremy Mand

Practicum Site: Boston Medical Center - Pediatric Clinic

Location: Boston, MA

Title: Quality Improvement Intern

Introduction: The Comprehensive Care Program (CCP) at Boston Medical Center serves as a medical home for many children from underserved communities with special care needs and who require a greater intensity of services. For children with special healthcare needs (CSHCN), seeing their physicians on a regular basis is critical to ensuring that their health and well-being is maintained. BMC's CCP program performs the critical function of coordinating care among providers across numerous disciplines. Improving follow-up with recommended specialty referrals will help the CCP better understand patient's unique clinical and social needs and enhance the quality of coordination of care for patients in the medical home.

Methods: We will provide physicians with comprehensive discharge forms to ensure patients understand where, when, and why they are being referred to a specialty doctor, with hopes of improving their scheduling adherence rates. We will use outcome measures, process measures, and balancing measures to evaluate the efficacy of the intervention in improving scheduling adherence.

Results/Outcomes: following appointment with CCP. We hope to scheduling rate by 20% within 1 month of initiating quality improvement program. We hope this leads to an increase in the number of completed specialty referral appointments.

Name: Ariana Mooradian

Practicum Site: Shands Hospital - University of Florida Internal Medicine at ACC

Location: Jacksonville, FL

Title: Quality Improvement Intern

Introduction: Congestive Heart Failure (CHF) is a leading cause of death and the most expensive diagnosis in United States hospitals. Differences in practice patterns lead to variations in treatment among teaching and non-teaching providers. The present study evaluated the outcomes of CHF patients in three service branches: teaching cardiology and internal medicine, and private non-teaching hospitalist. The purpose of this practicum was to gain experience in clinical quality improvement projects.

Methods: Crimson Clinical Advantage software was utilized to yield summary data, which in turn was subjected to statistical analysis to determine significant differences. We presented findings and implications in a manuscript to be submitted for publication.

Results/Outcomes: We found that while outcomes and readmissions do not vary among services and are on par with national averages, cost and average length of stay (ALOS) associated with each branch were different. The hospitalist service had a higher ALOS and higher case cost. This suggests that while quality improvement may not be feasible as far as reducing readmissions, cost containment measures may be possible by encouraging the lowest ALOS that does not compromise outcomes.

Name: Albert Nadjarian

Practicum Site: Boston Medical Center - Pediatric Emergency Department

Location: Boston, MA

Title: Health Promotion Advocate

Introduction: Health Promotion Advocate for Project ASSERT - Pediatrics Introduction: Alcohol use disorders are major national public health problems that are responsible for impaired health. The emergence of SBIRT (Screening, Brief Intervention, and Referral to Treatment) has potentially revolutionized the strategies used to reach the at-risk population of drinkers, specifically within emergency departments (EDs). As a health promotion advocate within Boston Medical Center's SBIRT Program, Project ASSERT, I assisted in providing comprehensive care and prevention by putting substance abuse in the context of other health and safety needs. My encounters provided patients aged 14-22 years with the opportunity to explore change through non-judgmental conversation and increased access to health and treatment services if desired.

Methods: I worked with the Pediatric Program Developer of Project ASSERT 1) to assist in screening patients within the Pediatric Emergency Department 2) to update current reference lists of services and treatment centers and 3) to develop brochure and other patient-friendly material related to substance abuse.

Results/Outcomes: The development of brochure for parents/family of adolescents and young adults who are potentially pursuing treatment for their substance use. This brochure will focus on providing information about what the treatment means, who to contact for support, and how to cope and stay healthy.

HEALTH POLICY & MANAGEMENT

Name: Natasha Neal

Practicum Site: Dana Farber Cancer Institute - Department of Medical Oncology

Location: Boston, MA

Title: Weather Related Preparedness for Clinical Operations; Graduate Intern, Ambulatory Practice Management

Introduction: Working within Ambulatory Practice Management at Dana-Farber Cancer Institute, I was responsible for creating a weather-related emergency preparedness document for clinical operations. This project was in direct response to the hospital's closure during Hurricane Sandy in October 2012. During a closure, all patient appointments must be cancelled and rescheduled in a timely manner, as many patients maintain a strict regimen for infusion and treatment, especially clinical trial patients. During Hurricane Sandy, the cancellation and rescheduling of appointments was disjointed and inefficient. In addition, individuals involved in the process were not provided with clear guidelines of roles and responsibilities, leaving much of the work to leadership.

Methods: Through research and interviews, I created a current and future process map, identified which employees within Dana-Farber's Disease Centers should be responsible for particular tasks, such as generating reports listing all affected patient appointments, and identified which staff should communicate with physicians and clinical nurse coordinators. I also identified appropriate use of technology in the process, such as automated cancellation calls, using Televox software. Finally, I validated the new report generator software that the hospital will be using to identify appointments that require cancellation, as they transition from Business Objects to Microstrategy software.

Results/Outcomes: The new software, Microstrategy, has been validated and approved for the use of Managers of Disease Center Operations during weather emergencies. Roles and responsibilities for all staff have been identified. A step-by-step process has been created for Managers of Disease Center Operations and back office scheduling staff to follow during weather emergencies.

Name: Caitlyn Nystedt

Practicum Site: Large Network New England Hospital - Medical Affairs

Location: Providence, RI

Title: Financial Dashboard for a Critical Department at Large Network New England Hospital

Introduction: The purpose of this project is to create a financial dashboard for a Critical Department at a large network New England hospital with the goal that this can be used as an example or template for other departments within the hospital. The dashboard is divided into two levels, the department level and the provider level. This project involved defining specific financial metrics, aligning data for dashboard metrics, developing dashboard template, and analyzing data from the dashboard for future performance improvement initiatives.

Methods: The first task was to research dashboards within the industry through a literature research and interviewing experts in the field. Next task was brainstorming a list of metrics for the dashboard, which was then narrowed based on the availability of data. Once we had the available financial data, we developed financial dashboards for the Department and individual providers within the Department. After the dashboards were developed, the data was analyzed for future performance improvement initiatives.

Results/Outcomes: The outcome of this project includes a well-developed dashboard financial tool that can be used in multiple departments within the hospital to set benchmarks and track progress of departmental and provider financial status. From this dashboard, areas of performance that need improvement are identified, and initiatives will be proposed for improvement in those performance areas.

Name: Kaori Sato

Practicum Site: Boston Medical Center - Department of Family Medicine

Location: Boston, MA

Title: Research Assistant & Education Coordinator

Introduction: I began working for the Back to Health (B2H) study in September of 2012 to lay down a strong foundation for my practicum in the spring. Currently, we are in the midst of treating our second of four cohorts. This clinical trial studying the effectiveness of yoga, physical therapy, and home education for chronic low back pain is a combination of all my interests – clinical research, access to care, integrative medicine, and rehabilitative medicine. As the Education Coordinator, I am responsible for the participants who are randomized into the home education treatment arm. My main responsibilities are to engage the participants in the education material and to collect compliance data.

Methods: During this semester, I have been able to accomplish several activities. I have collected compliance data for cohort 2, created four newsletters that summarize the entirety of The Back Pain Helpbook, and I have also helped with baseline, 6-week, and 26-week survey administrations. I have also recorded an audio version of The Back Pain Helpbook for a participant who is vision-impaired.

Results/Outcomes: Overall, I have learned a great deal about the importance of clear communication and proper planning. Without these elements, the number of participants lost to follow-up would likely increase and participants would have a greater chance of experiencing an adverse event. Due to the nature of a clinical trial, compliance and retention is of great importance; however, we also want to ensure that participants are safe and having fun.

HEALTH POLICY & MANAGEMENT

Name: Kayleigh Sullivan

Practicum Site: Edith Nourse Rogers Memorial VA Hospital - Department of Veterans Affairs/Veterans Health Administration

Location: Bedford, MA

Title: Expansion of Bedford VA Mental Health Services to other VA Medical Centers via Telehealth

Introduction: The Bedford VA is a long-term care facility that focuses on geriatric and psychiatric care. Bedford is renowned for its unique approaches to mental health services and is looking to expand one of its prominent programs via telehealth to other VA medical centers (VAMCs) that do not currently offer the service. The goal of this project was to identify the mental health services with the potential for expansion and determine financial feasibility of offering these programs elsewhere through telehealth.

Methods: The project thus far has entailed a great deal of networking to gather the appropriate information. We met with the mental health service line manager at Bedford to identify the mental health services that have the potential to be expanded, determine if the structure of the program is compatible with telehealth, and collect contact information for service line providers at other VAMCs to gauge their interest in the various programs. We also met with the director of telehealth to determine system capabilities and expansion opportunities for our program, as well as the business office to determine reimbursement rates and qualifications for telehealth visits.

Results/Outcomes: A business proposal evaluating costs and potential revenue is being developed to present to executives at Bedford. It is unlikely that the program would be implemented any time soon, however, because the telehealth department currently has a backlog of programs waiting to be launched. In the meantime, we will be assisting the telehealth department to move this potential program up in the queue.

Name: Chenlong Zuo

Practicum Site: Children's Hospital - HealthMap

Location: Boston, MA

Title: Informatics Intern (Chinese Feed Developer)

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

Methods: During my practicum at HealthMap, I worked primarily as an informatics intern and developed Chinese dictionary for the system to better target the meaningful news sources from China. Then I curated the collected news alerts to train the computer. Furthermore, I corrected some of the old data in the system that remained uncategorized like Newcastle disease, Avian Influenza, Tuberculosis and Hepatitis B.

Results/Outcomes: HealthMap's Chinese feeds database is better organized and the system is able to target the meaningful news more accurately due to the improvement of the Chinese dictionary. From the collected news alerts, study could be conducted on how the Chinese government would respond to the outbreak of infectious disease.

INTERNATIONAL HEALTH

Name: Catherine Beauharnais

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

Location: Lusaka, Zambia

Title: Integrating the AMANHI study within the Zambia Chlorhexidine Application Trial (ZamCAT)

Introduction: The Zambia Chlorhexidine Application trial (ZamCAT) has recently joined the Alliance for Maternal and Newborn Health (AMANHI), a multi-center study. Two objectives of AMANHI are: to determine the burden, causes and timing of maternal and neonatal deaths (Objective 1), and to estimate the prevalence of maternal morbidity, and its potential repercussions on neonatal health (Objective 2). The purpose of my practicum was to organize the launch of these two sub-studies by preparing data collection forms, and by organizing trainings on the new study procedures for 270 ZamCAT field monitors (FMs; data collectors).

Methods: I used the computer software, Teleform, to build the data collection forms for both objectives. I assisted with the development of the training materials (manuals of 90 PowerPoint slides, and handouts). I worked along with local staff to adapt the questionnaires and training materials to the local context. There were 3 trainings sessions (3 days each), occurring simultaneously in Choma and Mazabuka. I facilitated and co-facilitated sessions on how to appropriately fill out the forms, and on basic clinical skills, such as measuring blood pressure, proteinuria, and using a pregnancy wheel.

Results/Outcomes: Objectives 1 and 2 of the AMANHI study are now fully integrated within ZamCAT. The field monitors are currently applying the skills they learned in their communities. They are also acquiring information on maternal and neonatal morbidity and mortality in Southern Province. Data collection is ongoing; it has therefore not yet been analyzed.

Name: Lauren Bobay

Practicum Site: Center for Global Health & Development

Location: Zambia

Title: Validating a Community Guide to Diagnosing Umbilical Cord Infections

Introduction: The Omphalitis Community-Based Algorithm Validation Study (OCAVs), a sub-study of the Zambia Chlorhexidine Application Trial (ZamCAT), is examining whether community level health workers (Field Monitors) can diagnose cases of omphalitis as well as a medical doctor. If the algorithm is validated, community health workers can be deployed into communities to identify cases of omphalitis and refer newborns for care before the infection can cause serious illness or death.

Methods: I worked with the Field Director of ZamCAT and the larger ZamCAT team to: 1) Edit and finalize the data collection tool (to be deployed using the eMOCHA application) and informed consent forms; 2) Write and finalize standard operating procedures; 3) Edit and finalize training materials for Field Monitor trainings; 4) Conduct trainings for Field Monitors; 5) Start and coordinate ongoing recruitment of newborns; 6) Assist in the scale-up of OCAVs to multiple districts.

Results/Outcomes: Upon completion of the practicum all study materials (data collection tool, informed consent forms and standard operating procedures) were approved and in active use. Field Monitors were trained and recruitment for the study had begun in three districts. The total recruitment for the study at the completion of this practicum was 156 newborns.

Name: Meaghan Bradley

Practicum Site: Cameroon Baptist Convention Health Services

Location: Cameroon

Title: Pilot Implementation of a Hospital Performance Measurement Tool

Introduction: As a research assistant team member in a Participatory Action Research study for the development of a Hospital Performance Measurement (HPM) tool, I assisted in the pilot implementation of the tool in four Cameroon Baptist Convention Health Services (CBCHS) hospitals. The study goal examines whether a participatory process enhances understanding and uptake of a HPM tool. Prior to my practicum, the project team developed process maps with the CBCHS for selected hospital services and facilitated identification of key measurement points for indicator development.

Methods: Over a six-week period January - February 2013, I assisted with the pilot implementation phase. At each site, data collection training was organized by the hospital's HPM committee. During the implementation, we completed sixty observations of data collectors, forty-one cognitive debriefing interviews to assess understanding, and compiled the preliminary data report for each hospital's performance dissemination meeting. At the end of the six weeks, we met with the Central Action Committee of the CBCHS to identify goals and objectives, plan a baseline implementation, and develop recommendations for the director to ensure successful implementation of the tool.

Results/Outcomes: The qualitative data analysis of the observations and interviews is currently underway. We are also developing a training manual, building an analysis instrument, and refining indicators for future hospitals. The CBCHS will proceed with implementation as determined in the final meeting.

INTERNATIONAL HEALTH

Name: Alyssa Childs

Practicum Site: Boston Medical Center - Center for Infectious Disease

Location: Boston, MA

Title: Evaluation of Recruitment Efficiency for HIV Studies at Boston Medical Center

Introduction: The purpose of this practicum is to provide the Infectious Disease Clinical Research Unit (IDCRU) at Boston Medical Center with data showing the effectiveness of current recruitment practices and identifying demographic differences between those enrolled in studies versus those who decline enrollment. In the past year, The IDCRU hired study recruitment officers to assist in the identification of potential study participants from a pool of HIV positive patients at Boston Medical Center. I will conduct an analysis to assess whether hiring these officers has increased recruitment efficiency.

Methods: I will work with the IDCRU Regulatory Coordinator: 1) to develop a detailed plan for the project; 2) to attain IRB approval to conduct the study; 3) to conduct an evaluation of current recruitment practices; 4) to provide suggestions for future practices; and 5) to develop a database to track potential research subjects.

Results/Outcomes: To date, items that have been completed for this practicum include: 1) IRB submission resulting in permission to proceed; and 2) development of a database to streamline recruitment. Items that will be completed by July 2013 include: 1) completed study with a summary of results; and 2) list of recommendations for changes to recruitment practices.

Name: Caitlin Christie

Practicum Site: Superemos Foundation

Location: Esteli, Nicaragua

Title: Domestic Violence Initiative Assistant and Public Health Promoter

Introduction: Superemos is a non-profit foundation located in Esteli, Nicaragua that is devoted to women's education, with an overall mission of improving the socioeconomic status, health and standard of living of communities in northern Nicaragua. To address the significant problem of domestic violence in the surrounding communities of Esteli, an initiative called ISIS was started. The activities of this initiative include an emergency shelter for women and children who are seeking refuge from abuse, domestic violence awareness workshops in communities and schools as well as individual case management. A medical delegation also partners with Superemos once a year to provide acute medical care and public health education to these communities.

Methods: I worked mostly with the ISIS team to 1) assist in the outreach to and case management of victims of domestic violence 2) help facilitate the domestic violence awareness workshops held in local schools and communities 3) debrief these experiences and workshops in order to identify areas for improvement and knowledge gaps. I also worked with the medical delegation to conduct public health promotion in the community.

Results/Outcomes: A series of presentations on topics identified by ISIS staff such as communication and self-esteem in addition to regular debriefing sessions after each workshop will help the ISIS team to improve dynamics within their organization, the curriculum and structure of their workshops as well as the counseling delivered to individual clients. My own public health promotion skills were also greatly enhanced and intended to help make a positive change in the health behaviors of these communities.

Name: Shari Davis

Practicum Site: Boston University Center for Global Health and Development - Zambia Southern Province Technical Internship

Location: Kalomo, Zambia

Title: Operationalizing the Aspirational: Implementing SMGL in Zambia to reduce Maternal Mortality

Introduction: Saving Mothers Giving Life (SMGL) is a service delivery project under ZCAHRD, which aims to reduce maternal mortality in the Kalomo district of Zambia. Working with several partners in the district, SMGL focuses on providing clinical mentorship, procuring and distributing supplies and equipment for safe deliveries, and improving communication and transportation systems.

Methods: During my practicum, I fulfilled the role of Logistics Coordinator for the SMGL field office. I managed daily logistics of project operations, including vehicle maintenance, drivers schedules, and distribution of medical supplies and equipment. Other duties included managing daily project expenses, retirement of funds and the preparation and submission of the monthly field budget. I coordinated all administrative duties of the office, including producing weekly meeting agendas, editing monthly mentorship schedules and attended various meetings at the District Health Office (DHO).

Results/Outcomes: 1.) Designed and implemented a supply distribution and electronic recording system in coordination with DHO. 2.) Collaborated with the team producing a revision of data collection tools and mentorship visit forms. 3.) Coordinated an obstetric ultrasound training for 18 clinicians in the district. 4.) Assisted in the hiring and training of a new Logistics Coordinator. 5.) Currently producing a policy memo for the Principle Investigator and Project Director on recommendations for the clinical mentorship program, in preparation for scale-up in two additional districts.

INTERNATIONAL HEALTH

Name: Michael Esang

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

Location: Boston, MA

Title: The Efficacy of Mantram Repetition on Mental Health Outcomes in Susceptible Populations: A Review of Literature

Introduction: Mental illness is a well documented phenomenon among US veterans and people living with HIV/AIDS. Mantram repetition offers a low-cost portable technique in reducing psychological stress and does not require extensive training for either care-providers or their clients. However, there is a paucity of published literature on the application of mantram repetition as an intervention in mental illness. This practicum involved a literature review on the efficacy of mantram repetition as an intervention in the mental health of US veterans and HIV positive persons in the US.

Methods: Relevant search terms were used in a search for published articles in PubMed and similar databases. Inclusion criteria consisted of studies published from 2003 to the present, studies that involved exposure to mantram repetition or its application as an intervention, and studies conducted on US veterans and HIV positive persons in the US. The findings were summarized in a table and rated based on a number of criteria.

Results/Outcomes: The search revealed 19 articles on mantram repetition, but only five of these involved US veterans and HIV positive persons. Mantram repetition was shown to be statistically significant in improving mental health outcomes in all five. Four out of the five studies were randomized controlled trials. Limitations included small sample sizes and a short follow-up period, for all five studies.

Name: Gloria Esoimeme

Practicum Site: PharmAccess Foundation

Location: Namibia

Title: Increasing Access to Healthcare via Telemedicine and Task

Introduction: Mister Sister mobile clinics in Namibia provide primary healthcare to people in remote areas. The health services are provided by two nurses; a registered and an enrolled nurse, and a driver who also performs administrative duties. To scale up the services to include management of chronic diseases, I was asked to evaluate the quality of the current services being provided, create a telemedicine model which can be used in the clinics and then make recommendations on how to include HIV, TB and antenatal care to the services they provide.

Methods: I did a random evaluation of about 100 patient's consultation notes to assess nurses' adherence to the National Treatment Guidelines (NTG) in patient care. I reviewed different telemedicine models used in different parts of the world and then a telemedicine model for the mobile clinics. I also met with Staff of Ministry of Health, Mister Sister Mobile clinic and other NGOs to discuss the feasibility and national policies on task shifting and telemedicine. I also visited Mobile Clinics to observe practices.

Results/Outcomes: I prepared two reports, one on my evaluation of nurses' adherence to NTG. It included a new list for diagnosis using the diagnosis in the NTG and my recommendations on how the clinic can add Antenatal care, HIV and TB management to the services being provided via task shifting. The second report was my proposal of a telemedicine model for the mobile clinics.

Name: Sara Gille

Practicum Site: Center for International Health and Development

Location: Choma, Zambia

Title: ZamCAT/OCAVS

Introduction: Infection of the umbilical cord (omphalitis) is a common source of infection in neonates, and often leads to death in the developing world. The Omphalitis Community Based Algorithm Validation Study (OCAVS) is a sub-study of ZamCAT (the Zambia Chlorhexidine Application Trail) to test the validity of an algorithm used to diagnose omphalitis. After obtaining guardian informed consent, newborns aged 1-10 days presenting to a health facility for routine or sick visits undergo two independent, parallel evaluations; first, by a community level worker and second, by a Zambian medical doctor. Their responses are compared to check for concordance. The study is based in 14 clinics in four districts.

Methods: The duration of this practicum was six months. The main tasks included 1) Supporting the implementation of the Omphalitis Community Based Algorithm Validation Study (OCAVS). 2) Assisting with data cleaning and management for ZamCAT, both in the field and in office.

Results/Outcomes: Infants will be enrolled until May 31st. It is hypothesized that community health workers are capable of accurately diagnosing umbilical cord infection as well as a trained medical doctor, using the study algorithm. This practicum gave me experience coordinating a community based research study in a developing country. I also learned the data management and cleaning procedures for a large clinical trial (ZamCAT).

INTERNATIONAL HEALTH

Name: Eric Goodwin

Practicum Site: Tiny Hands International

Location: Kathmandu, Nepal

Title: Human Trafficking Prevention Through Healthcare

Introduction: 2,600 girls and women in the first stages of human trafficking will be intercepted in 2013 by one organization in Nepal, most along the border with India where this organization has 16 safe homes. These girls and women will be given basic knowledge about human trafficking and sent home. Those with obvious morbidities may see a medical professional. Implementing healthcare from intake screening through two year follow-up in the 16 safe homes could increase their health and capabilities, empower them through knowledge and relationships, and establish ongoing relationships between them and the organization. Providing medium/long-term care to this transient and disempowered community within the contexts of poverty, patriarchy, and low education presents challenges.

Methods: A proposal for program creation and implementation was developed based on two sets of data: 1. semi-structured interviews with organization leadership and staff, safe home residents in two homes, safe home sub-committees in four locations, two Nepali mental health providers, and two potential collaborators; 2. quantitative information from the organization's 2012 safe home healthcare expenses, key informant information on healthcare costs in four border towns, and national healthcare data. Information was collected via two-day visits at four border monitoring locations that varied in location and volume, and meetings in Kathmandu.

Results/Outcomes: This proposal will be used in creating the organization's healthcare program, which will open the door to long-term relationships between the organization and the victims/survivors. In turn, this will enable community-based intervention planning and implementation.

Name: Rebecca Greene-Cramer

Practicum Site: Cameroon Baptist Convention

Location: Cameroon

Title: Cameroon Participatory Action Research Study

Introduction: The CBCHB oversees 5 hospitals, 24 integrated health centers, 50 primary health centers and a pharmaceutical plant. While striving to offer quality the CBCHB lacks a means to evaluate their performance effectively. Introducing a performance measurement instrument would give them a means to assess their work internally. Over the course of two months last summer, a team from Boston University School of Public Health collected information at CBCHB health facilities to begin the process of instrument development. Individually, I mainly focused on identifying measurement points within the pharmacy and supply chain at the various health facilities.

Methods: The research comprised clinical observation followed by discussion with appointed departmental representatives. Over several days process maps were developed and discussed with small focus groups. The BUSPH team completed this process at each of 4 separate facilities. My focus was in the pharmaceutical supply chains at each facility. I completed over sixty observation hours, worked on 9 process maps and facilitated 3 focus group discussions.

Results/Outcomes: Instrument development and analysis remains an ongoing process. At the completion of my practicum we had collected specific measurement points of interest to the CBCHB and developed a preliminary tool for onsite testing. The completed instrument will help CBCHB achieve their mission of providing quality care to their patients and healthy work environment for employees.

Name: Eliza Hatch

Practicum Site: Focus on Tanzanian Communities

Location: Sukenya, Tanzania

Title: Assessing Health Needs Among Maasai in Northern Tanzania

Introduction: The purpose of my practicum was to conduct a health needs assessment of the catchment area for a dispensary FoTZC plans to build in Sukenya, Tanzania. The results of the health needs assessment will be used to help plan the services that will be offered in the new dispensary.

Methods: I conducted seven key informant interviews and six focus groups (n=52). In each interview and focus group I discussed the local health needs specific to this area. Topics covered included general health, women's health, men's health, children's health, and sexually transmitted diseases. During these sessions, I also covered what the interviewees identified as their priorities for health services that will be offered at the new dispensary.

Results/Outcomes: The top five health issues identified in interviews and focus groups were pneumonia, maternal health, gonorrhea, joint pain, and fevers. This data will help inform the district government on what type of health workers would be most useful in this area, as well as what type of medications would be most useful and cost-effective to send to the new dispensary. Gonorrhea will be particularly challenging to address in this area, as the Maasai are polygamous and have a sexually permissive culture. FoTZC will now begin fundraising for the construction of the dispensary and staff housing, and will work with the district government to staff and supply the dispensary appropriately.

INTERNATIONAL HEALTH

Name: Zehra Husain

Practicum Site: Boston Public Health Commission - Policy and Planning & Intergovernmental Relations Division

Location: Boston, MA

Title: Boston's Local Public Health Systems Assessment

Introduction: The BPHC, in partnership with the Boston Alliance for Community Health, undertook the planning and undertaking of Boston's first city-wide Local Public Health Systems Assessment as a part of the National Association of County and City Health Officials' (NACCHO) Mobilizing for Action through Planning and Partnership (MAPP) program. The assessment was completed by 118 participants on February 2, 2013.

Methods: As an intern, I developed a database of key public health stakeholders in the community to invite to the Assessment retreat; planned, attended, and followed-up on internal planning committee meetings; created and disseminated Assessment informational materials to be sent to planning committee members and retreat participants; helped develop talking points that incorporate racial justice, health equity and social determinants language within the public health conversation; provided support to facilitators of the Assessment retreat workgroup; and compiled data from the facilitators and notetakers from the retreat. The data was collected by recording participants' votes on assessment questions and the results were sent to the CDC, who produced a summary results report.

Results/Outcomes: The results of the Assessment will be used to identify key strengths and weaknesses of Boston's public health system and will help provide baseline information for the formulation of goals and strategies as a part of the MAPP process. The BPHC hopes to repeat this process every 3-5 years to ensure that public health system is working towards optimal efficiency.

Name: Rebecca Lee

Practicum Site: Children's Hospital Boston - Pediatric Physicians' Organization

Location: Boston, MA

Title: Project Intern

Introduction: Under the direction of the Director of Quality Improvement and direct supervision of a Senior QI Consultant, I worked with the PPOC to assist in identifying and defining strategic objectives and priorities for quality and operational improvement of member practices. As part of the onboarding process of new member practices, transition registries from old EMR (electronic medical records) to monitor the quality improvement measures during acclimation to the PPOC's EMR system were developed. My primary objective as the project intern was to develop a centralized system for monitoring and reporting on all PPOC quality initiatives, including standardizing the process by which the practice utilizes the registry to measure their performance for a group of onboarding practices.

Methods: I worked with the Senior Quality Improvement Consultant to 1) help develop registry reports for new practices using codes in the HEDIS Guidelines for Quality Measures to determine care delivered, 2) assist in updating monthly reports based on data received from practices, 3) assist in developing the existing PPOC Access Database to incorporate additional fields for tracking purposes. Additional opportunities for familiarizing myself with the work at the PPOC included attending a Learning Community session, practice/site visit, and meeting with the biostatistician team to learn about their role and accomplishments at the PPOC.

Results/Outcomes: The development and updates of the monthly registry reports and additional fields in the ACCESS database will be used to improve the onboarding process of the new practices into PPOC membership.

Name: Supreet Maniktala

Practicum Site: Sahaita, Inc,

Location: India

Title: Program Management Intern

Introduction: As the elderly population in India rapidly expands, chronic illnesses are reaching epidemic proportions. Confronted by extreme financial distress from ongoing treatment costs, millions are experiencing a lower quality of life. Sahaita, an organization specializing in health and education, is addressing this need with a 3-week mission to provide medical services to thousands in India.

Methods: As member of this year's team, I served as a translator, peer educator, and coordinator. My responsibilities entailed: Creating health education materials, conducting mini-workshops on hypertension, diabetes, epilepsy, and dental health; counseling people with epilepsy on stigma and seizure prevention; and serving as translator between medical staff and patients. Most patients attending the camps suffered from hypertension. Some were unaware of their condition while others had abnormal blood pressure (BP) despite previous diagnosis. Other common diagnosis included cardiac problems, diabetes, arthritis, and cataracts. I spoke to patients on how poor dental health, high BP, and diabetes gradually damage patients' bodies.

Results/Outcomes: Many found the camps as an opportunity to obtain short-term relief. However, the camps' greatest achievement may be delaying or preventing health consequences related to poorly managed diseases. Aside from offering 3-month medication, we discussed the importance of treatment adherence. One patient told me that while she was familiar with her disease's symptoms, she had never known how the disease damaged her body. Patients eagerly listened and practiced flossing during my dental health workshops. Additional data is needed to determine if patients adhered to regimens prescribed and made lifestyle changes after the camps.

INTERNATIONAL HEALTH

Name: Kristina Mumby
Practicum Site: Health Leads
Location: Boston, MA
Title: Strategy Fellow, New Region Expansion

Introduction: Health Leads (HL) is a national non-profit organization that works with clinic partners to treat the non-medical factors that impact patient health. Through student volunteers (Advocates) at HL desks, patients are connected to basic resources like food and heat that are a vital part of standard care but are not provided as part of the standard healthcare system. HL is in the process of expanding to 10 new desks, two of which will be in a new geographic region. My practicum involved helping HL develop the criteria for selecting a new region and creating tools to make this expansion more scalable.

Methods: I began my practicum by meeting with internal stakeholders to identify the key requirements for expanding into a new region. Using the data I collected from these interviews and subsequent team meetings, I worked with HL to create a criteria checklist against which to rate a potential new region. I also created a work plan for the team to use for this and future new region launches. Lastly, I collaborated with the team to design a series of marketing one-pagers for HL to use with new partners.

Results/Outcomes: HL used the criteria checklist to select their new region and they are currently negotiating next steps with potential medical institutions, philanthropic leaders and university partners. They are using the one-pagers as part of their standard marketing materials and they will use the work plan for future expansion.

Name: Chukwuemeka Osondu
Practicum Site: Boston Medical Center - Department of Obstetrics and Gynecology
Location: Boston, MA
Title: Research Intern, Centering Pregnancy Group Medical Visits

Introduction: The CenteringPregnancy model of care is a form of prenatal care designed around the principles of assessment, education and support. It abolishes the traditional method of prenatal care by bringing women out of the exam rooms into a group setting with opportunities for interaction other pregnant women. As part of my practicum, I analyzed whether women who received prenatal care through the CenteringPregnancy program were more likely to breastfeed and use a method of contraception following childbirth.

Methods: I worked with the Principal Investigator of the study to: 1.) administer patient satisfaction surveys to participants and transferred data responses into the study database; 2.) track patients' attendance at sessions and follow-up with those who did not keep appointments; 3.) extract data from patients' medical records for comparison with data obtained from traditional care patients; and 4.) conduct a literature review on prenatal contraceptive counseling and its relationship to postpartum contraceptive use as part of the background to the study.

Results/Outcomes: Data for the study is still being collected and analyzed. The results of this study will help to inform current medical practice in terms of prenatal education and specifically for breastfeeding and contraception.

Name: Miranda Ouellette
Practicum Site: Boston Medical Center - Department of Pediatrics
Location: Boston, MA
Title: Research Assistant- The GEMS Study, The Effect of Social Situations on Girls' Puberty

Introduction: The Girls, Early Adversity and Maturation Study (GEMS) aims to investigate the effect of social experiences on growth and maturity. GEMS is a sub-study of the Child Health study and plans to recruit 200 mother-daughter pairs for an initial interview and a 12-24 month follow-up interview.

Methods: In order to be included, the daughter must be 4-7 years old and the mother must identify her as African-American. Recruitment was completed in the Pediatric Department while the child waited to be seen by a doctor. Informed consent was obtained and a series of questions related to social environment and stressors were asked. A follow-up call was arranged if the mother was unable to complete the interview in person. Biological samples were collected to test hormone levels. To maintain contact with the study participants, monthly newsletters were designed and mailed to participants. As a research assistant, I aided in recruitment and the completion of telephone interviews from February to May 2013, as well as designed newsletter templates for the upcoming months.

Results/Outcomes: At this time, 31 mother-daughter pairs have been recruited and templates for the first 4 newsletters have been created. Recruitment will continue until 200 mother-daughter pairs are enrolled. The information will provide clinicians with a better understanding of how social factors effect maturity and will provide background information for future studies investigating how to ensure proper growth in girls.

INTERNATIONAL HEALTH

Name: Danielle Payne

Practicum Site: Boston University Center for Global Health and Development - Institute for Community Health

Location: Boston, MA

Title: Engaging Fathers Initiative: Men's Health and Fatherhood Survey Analysis

Introduction: National data suggests a vast need for initiatives to promote responsible fatherhood, particularly in diverse communities. However, developing programs to promote positive fatherhood is challenging, partially due to a lack of data on the needs and fatherhood experiences of men in these communities. In response to this gap, the Men's Health League, a community-based chronic disease prevention initiative in Cambridge, MA built on its success in addressing health of men of color by engaging multi-sector, community-based partners in a Fatherhood Collaborative to collect data from fathers in Cambridge.

Methods: My main responsibility is to clean and analyze the data from the fatherhood survey, which the Fatherhood Collaborative developed and administered in conjunction with public health graduate students. This survey was embedded within a larger men's health questionnaire, and as such provides an opportunity to observe differences in fatherhood experiences as they relate to reporting health behaviors and outcomes. Following piloting, the survey was administered in-person and electronically to 377 men, ranging from 18 to 81 years of age, including 185 fathers of children <18 years old. Fatherhood questions addressed issues such as custody, parental roles, challenges, sources of support and interest in fatherhood programs.

Results/Outcomes: Responses demonstrated variability among fathers' experiences: 19% were responsible for non-biological children, 70% of fathers felt capable of parenting their children well, citing multiple challenges, and 59% felt they could use more support as fathers. Further analyses will be done to investigate differences in fatherhood experiences within different racial/ethnic groups and levels of education.

Name: Katherine Peterson

Practicum Site: Cameroon Baptist Convention

Location: Cameroon

Title: Research Assistant

Introduction: The practicum purpose is to develop a contextually appropriate performance measurement system using participatory research, to evaluate the quantity and quality of inputs, processes, and outputs of a district hospital system in Cameroon. With over 60 years of experience in healthcare delivery, Cameroon Baptist Convention Health Board (CBCHB) has designed this project to establish a routine system for collecting and analyzing essential performance data to facilitate quality improvements. Hospital administrators and directors will utilize this system to assess the functioning of clinical and administrative departments, financial performance, and allocation of resources in order to improve current practices. CBCHB hopes this will result in increased quality and efficiencies in healthcare delivery. The practicum will take two months and consist of data collection, identification of culturally appropriate indicators, and conceptualization of the system.

Methods: The current project is a quasi-experimental study using participatory research methods to design and implement the performance measurement system. Qualitative and quantitative data was collected at baseline using 43 semi-structured interviews, 5 focus group discussions, 215 surveys, and observation. Researchers travelled to four hospitals collecting data, developing process maps, identifying 200+ key measurement points, and presenting findings to administration. A conference with CBCHB was held at the end of the data collection period where the final 150 indicators were selected and the performance measurement system was conceptualized.

Results/Outcomes: This work resulted in the development of a hospital performance measurement system and draft manual describing the design and implementation process. These deliverables will be used to improve the quality of healthcare delivery at CBCHB.

Name: Steven Purcell

Practicum Site: François-Xavier Bagnoud Center - Health and Human Rights-Research Program on Children and Global Adversity

Location: Boston, MA

Title: Research Assistant, RPCGA

Introduction: Sierra Leone experienced civil war from 1991 to 2002 in which an estimated 28,000 children were associated with a fighting force. Research shows war-related violence disrupts the health and development of youth, with evidence for impacts on adult functioning and interactions among future generations. Using a prospective longitudinal study initiated in 2002, three consecutive waves of participants to-date allows for analysis of long-term mental health effects of children's war experiences; wave four will explore how these disruptions are transmitted across generations through parents or caregivers. The Research Program on Children and Global Adversity (RPCGA) seeks to use applied research to address the gap between the realities of children facing adversity and informed mental health and development interventions.

Methods: Eight measures of development were piloted by the RPCGA team in Sierra Leone in 2012. Data was collected by transcribing interviews, tests, surveys, and questionnaires to paper or via the mobile data collection platform Magpi. The purpose of the practicum was two-fold: 1) collect, clean, organize, and provide basic statistical analysis of the 2012 pilot data in Boston using Stata and MS Excel and 2) support a team of experts' exploration and adaptation of new measures of development for future use in Sierra Leone.

Results/Outcomes: In addition to writing a practicum based policy recommendation, results from the 2012 pilot will be used in consultation with experts in early childhood development, research methodology, and statistics, to inform decisions regarding effective, culturally relevant measures to assess psychological constructs for use in wave four.

INTERNATIONAL HEALTH

Name: Nina Rhim

Practicum Site: Brookline Department of Public Health - Division of Community Health

Location: Brookline, MA

Title: Intern

Introduction: The Brookline Department of Public Health (DPH) located in the center of the town, has the mission of protecting the health of Brookline residents, employees, and associates. The Division of Community Health is responsible for organizing programs and events that will promote health and wellness among the Brookline community. The scope of this practicum was to assist the Division director in planning programs and events, while cooperating with various groups and organizations in the town, raising awareness about issues such as seasonal flu, current health issues related to fitness and nutrition, and the impact of climate change on public health.

Methods: For this practicum, I was involved in developing, organizing, and promoting events for Car Free School Day, National Food Day, Climate Action Week, seasonal flu clinics, and National Public Health Week. This work required me to work closely not only with other Divisions of the DPH, but also with other public entities of Brookline, such as the public schools, the Departments of Recreation and Economic Development, Climate Action Brookline, Brookline on the Move, and Wellness in the Village.

Results/Outcomes: The public health events were successful in drawing attention to topical public health issues such as obesity, diet, and nutrition, health promotion, and disease prevention. The Community Health Division is also in the process of preparing a Health Talk for Korean women residing in Brookline. We anticipate an audience of Korean mothers who are not yet familiar with the health services and programs provided by the DPH.

Name: Michael Roxas

Practicum Site: Boston Medical Center - Department of Family Medicine - Program for Integrative Medicine & Health Disparities

Location: Boston, MA

Title: Back to Health Research Assistant - Analyzing the Relationship between Immigration Status and Mental Health

Introduction: Back to Health is federally funded research study at the Department of Family Medicine at Boston Medical Center. The study aims to compare the effectiveness of yoga, physical therapy (PT), and health education for chronic low back pain. Within the research team, I assisted in data collection and recruitment; my project within the study looked into the relationship between immigration status and mental health among the study participants.

Methods: I worked with the research coordinator to 1) administer and collect the data during baseline survey 2) enter data and assist the data research assistant in cleaning the data 3) perform univariate and multivariate analysis with SAS to determine the strength of the relationship between immigration status and mental health. To assess mental health the Generalized Anxiety Disorder item-7 (GAD-7) and a modified Patient Health Questionnaire (PHQ-8) was used.

Results/Outcomes: Data from 81 participants was collected and being entered. Analyses of the associations between immigrant status and mental health, controlling for BMI, alcohol and smoking status will be presented, which will occur within the week of April 15th to April 21st. Findings will highlight the need to increase immigrant access to mental health services. As the study progresses, an assessment of mental health improvement with participants involvement in treatment various treatment groups can be performed.

Name: Kira Skolas

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

Location: Lusaka, Zambia

Title: mHealth Program Intern

Introduction: In Zambia, 21% of all HIV infections occur from mother-to-child-transmission (UNAID, 2010) and the maternal mortality ratio is 440 maternal deaths per 100,000 live births (WHO, 2010). The Zambia Center for Applied Health Research and Development (ZCAHRD) employs mobile technology to improve Early Infant Diagnosis and facilitate communication, referral and emergency transport for Emergency Obstetric and Newborn Care (EmONC) through two mHealth service delivery programs. The practicum provided program support towards designing, implementing and monitoring Program Mwana and SMGL-SMS.

Methods: The practicum took place between July-December 2012 in Southern Province, Zambia. Main activities under Program Mwana included work planning, logistic coordination, budgeting and training to implement the National Program Mwana Scale-Up in Mazabuka and Monze Districts. This incorporated Technical Supervisory Support visits, continuous web tool monitoring, and user support. Under SMGL-SMS, main activities included the development of a web management tool, M&E Framework, and monitoring tools.

Results/Outcomes: mHealth is rapidly enhancing service delivery in Zambia. 150 District Health Officials, facility staff and community based agents in more than 50 health facilities received site assessments, training and technical supervisory support for Program Mwana. I led Ministry & District Health Officials in field activities and provided six feedback reports. The scale-up will be completed in the remaining five Southern Province districts by December 2013. Phase I system development for SMGL-SMS was completed and a protocol to conduct a Community Emergency Transport Assessment in Kalomo District was submitted to the IRB. SMGL-SMS will complete Phase II system development and scale-up by early 2013.

INTERNATIONAL HEALTH

Name: Catherine Stecyk

Practicum Site: International HIV/AIDS Alliance - Ukraine

Location: Kyiv, Ukraine

Title: Research and Analysis Intern

Introduction: Alliance Ukraine emerged in 2009 as part of the International HIV/AIDS Alliance and is the largest NGO in Ukraine presently working on HIV/AIDS issues. Some areas of focus include HIV prevention, treatment and support, TB-HIV coinfection, injective drug use, harm reduction, and substitution therapy. The issue of ARV for HIV-positive injective drug users (IDU) is an extremely relevant topic that is relatively unexplored at Alliance Ukraine. As an analysis intern, I assisted with research and development of materials for Alliance IDU programs.

Methods: Working alongside the technical support group at Alliance Ukraine, I was involved in the research and development of educational materials for its IDU programs. I researched strategies for getting ARV to IDU and keeping them on the treatment and helped prepare technical support materials for social workers working with IDU. I also proofread and streamlined several documents, including an online course in English.

Results/Outcomes: The IDU educational materials have been published and are ready for use in the field. Literature reviews will be used as a component of IDU program development at Alliance in order to formulate approaches to addressing the needs of this population.

Name: Lindsey Teichman

Practicum Site: Vestergaard Frandsen West Africa Ltd.

Location: Boston, MA

Title: BU Public Health Consultant for Vestergaard Frandsen

Introduction: Vestergaard Frandsen (VF) is a European-based international company whose “profit for a purpose” approach places humanitarian responsibility at the core of their operations. VF is most well known for their long lasting insecticide treated bed net (LLINs) the PermaNet®, and their point of use water filter, the LifeStraw® Family. They have combined these products to create a basic care package (BCP), they call the CarePack®, for people living with HIV (PLHIV). In collaboration with three other consultants, I helped to create an Excel model that analyzes the cost-effectiveness and health impact of distributing BCPs that include an LLIN and water purifier to PLHIV in Ghana.

Methods: The Excel model was designed using existing models from peer-reviewed and grey-literature. Some equations were modified and/or excluded when necessary. The Ghana specific key inputs and parameters included in the model were identified through literature reviews and in-person interviews. Key calculations included: episodes of fatal and non-fatal cases for malaria and diarrhea averted, DALYs averted, costs averted, delayed disease progression and increased HIV transmission.

Results/Outcomes: In sum, the model is designed to provide policy makers, donors, implementers and healthcare providers with an adaptable tool to help better understand the economic and health impacts associated with preventive, public health interventions aimed at reducing the burden of disease for PLHIV. The model is user friendly, malleable and adaptable for all countries and ranges in the burden of disease.

Name: Alexandra Turner

Practicum Site: Cohasset Board of Health

Location: Cohasset, MA

Title: Town of Cohasset community health assessment to guide future programming and policy making

Introduction: The Town of Cohasset is an affluent, rural community located approximately 20 miles southeast of Boston, MA. Health problems typically observed in this type of demographic include hypertension, high cholesterol, diabetes, and cardiovascular disease. The Cohasset Board of Health (BOH) provides environmental and public health related services and is responsible for health policies and initiatives to improve the health of Cohasset residents. The BOH intends to determine the current health status of Cohasset residents to identify areas of improvement, and develop targeted health improvement programming and policies.

Methods: I designed a questionnaire based on the Healthy People 2020 objectives, a nationwide initiative aimed to improve the health of all US citizens. To develop the questionnaire, I researched current Cohasset census data, conducted a literature review on health outcomes of communities of similar demographic, met with the Cohasset public health nurse, and studied the Healthy People 2020 objectives. I formulated questions around the Healthy People 2020 indicators in several relevant topic areas, including chronic conditions, nutrition, physical activity, and Lyme disease awareness. The survey was disseminated to all community members.

Results/Outcomes: The information obtained from the questionnaire will provide concrete data to compare the health status of Cohasset residents to state and nationwide health data. I will use the data to evaluate Cohasset’s level of achievement of Healthy People 2020 objectives and identify health gaps and priorities. Based on the outcomes, I will form intervention and policy recommendations for Town of Cohasset to implement in order to achieve these objectives.

INTERNATIONAL HEALTH

Name: Pablo Uribe Leitz

Practicum Site: Fundación Valle la Paz

Location: Boston, MA

Title: GIS Mapping for a Holistic Intervention to Promote Development in Highly Marginalized Communities of Valle de Bravo, México.

Introduction: Despite the efforts from the Mexican Ministry of Health to decrease the onset of chronic and re-emerging diseases, they continue to increase. For this reason, Fundación Valle la Paz A.C proposes a community development model targeting rural communities through a series of interventions related to nutrition, education, health through integrative medicine, agriculture, and improvement of sanitary and lifestyle conditions. I used ArcGIS, to map this intervention in four rural communities in Mexico's central highlands.

Methods: I have geocoded and mapped 168 households in 4 rural communities: 1) El Manzano (49 houses), 2) San José Potrerillos (9 houses), 3) Mesa Rica (77 houses), and 4) La Huerta (33 houses). Maps include nutritional parameters of children in the communities. We assessed water access to households, since adequate supply remains a challenge. I met with GIS experts to receive feedback and obtain essential information to develop the Maps.

Results/Outcomes: Thirty nine percent of children younger than 10 years old recorded mild malnutrition according to height for age, 15.4% moderate, and 2.2% severe. Twenty four percent of children have anemia. The maps developed will be key to detect critical points where specific interventions are needed the most, which will enable stakeholders to prioritize limited resources. Moreover, these maps will allow Fundación Valle La Paz to illustrate the impact of their interventions. Since the project started in 2012 the maps will also be key to demonstrate large-scale impact 10 years from now.

Name: Nicole Vandrovec

Practicum Site: Cameroon Baptist Convention Health Board

Location: Cameroon

Title: Cameroon PAR Study Research Team Member

Introduction: The Cameroonian Baptist Convention Health Board (CBCHB) operates 5 hospitals and a number of health centers throughout Cameroon. Analysis of clinical and crosscutting hospital domains and collaboration with CBCHB staff and administration led to development of a hospital performance measurement instrument to assess inputs, processes, and outputs for evidence-based management and quality improvement. My domains of focus included surgery and infection control.

Methods: Along with team members I worked to compile a list of potential hospital performance indicators based on an extensive literature review, and spent time on-site at 4 of the CBCHB hospitals recording observations, process mapping patient journeys, and creating PowerPoint presentations for focus groups discussions. Information gathered in Cameroon was used to create the instrument for hospital performance measurement data collection. Survey data is now being analyzed.

Results/Outcomes: The primary outcome of this project was the development of the hospital performance measurement instrument, which is now being implemented at all 4 study sites. Because health system strengthening in low and middle-income countries is largely dependent upon current, accurate data, a context-specific method for data collection and performance evaluation is essential for progress. Our goal is that this instrument will help improve the quality of services at CBCHB and that it be adaptable in the future in other low-resource hospital settings.

Name: Jessica Watson

Practicum Site: Massachusetts General Hospital - Initiative to End Child Malnutrition - Division of Global Health and Human Rights, Department of Emergency Medicine

Location: Rukungiri, Uganda

Title: Program Coordinator of Initiative to End Child Malnutrition

Introduction: Massachusetts General Hospital's Division of Global Health and Human Rights' Initiative to End Child Malnutrition (IECM) is a malnutrition inpatient and outpatient therapeutic care program in Rukungiri district, Uganda. The program aims to reduce malnutrition through prevention education, health systems strengthening, and treatment in collaboration with Karoli Lwanga Nyakibale Hospital. As Program Coordinator, I managed daily operations while working on various assignments that aimed towards reaching the program's goal of reducing malnutrition.

Methods: One objective of the program was to decentralize activities for future sustainability. I met with local authorities for approval of qualitative internal research, Village Health Team (VHT) nutrition trainings, and Child's Nutrition Days, conducted focus groups to define the underlying causes of malnutrition, and facilitated training for VHT members in malnutrition recognition, education, and referral. Following were mass screenings and cooking demonstration to ensure adequate knowledge and referrals. I attended Food and Nutrition Technical Assistance's Technical Working Group with Uganda's primary stakeholders to improve the use of IMAM protocol throughout the health system and improved the program's own monitoring, evaluation and reporting tools.

Results/Outcomes: The project trained 52 VHT members in two sessions that led to a mass screening of 96 patients in two sub-counties. Management of the program improved with the creation of field staff's daily reporting sheets and financial accountability sheets. Improved monitoring tools, including development of Excel databases for rapid retrieval of indicators needed at the district level, and up-to-date budget tracking resulted in improved program implementation and national support and recognition.

INTERNATIONAL HEALTH

Name: Kendall West

Practicum Site: Partners in Health - Zanmi Lasante, Non Governmental Organization

Location: Boston, MA

Title: Mental Health Systems Strengthening for Haiti

Introduction: Mental illnesses create great burdens on society. The World Health Organization has predicted that by 2030 depression will be the number one cause of disability in the world. In most developing countries 85% of mental health patients do not receive the care they need. Partners in Health and their sister organization Zanmi Lasante are currently creating a system to combat mental illness. Funded by the Grand Challenges Canada grant they are working to improve mental health diagnosis and care in Haiti. During my practicum I helped create a training curriculum and care pathways for the nursing staff in Haiti that were targeted at how to care for mental health patients.

Methods: I worked with the mental health team at Partners in Health based in their Boston office. I conducted a literature review to gain a background understanding of the project and gather content for the curriculum. We consulted with the Haiti nursing team and a local nursing consultant to draft protocols that will be implemented in the clinics and the new Mireblais hospital. The protocols are step by step guidelines for inpatient, outpatient, and agitated patient care including a depression screening.

Results/Outcomes: Once finalized, these deliverables will be presented to the Haiti nursing staff and training team. We hope through education and training we can reduce the stigmatization of mental health patients, increase awareness of various illnesses, increase accurate diagnoses, and improve treatment.

MATERNAL & CHILD HEALTH

Name: Salimata Bangoura
Practicum Site: Federation for Children with Special Needs
Location: Boston, MA
Title: Immigrant Outreach Volunteer

Introduction: The Somali refugee and immigrant population in Massachusetts has increased dramatically over the last few years, and the community located in Springfield, MA has a disproportionate number of families with children who have special needs. The purpose of my practicum is to create a community needs assessment tool that will be used to evaluate the immediate needs, priorities and resources available to Somali refugee families who have children with special needs in Springfield. The Federation for Children with Special Needs (FSCN), is a nationally recognized non-profit organization that serves more than 40,000 families and their children with special needs each year, by providing them with information about policies and laws, inclusion and transition, as well as training workshops.

Methods: I conducted research on needs assessment tools from the Maternal and Child Health Bureau, and other governmental agencies that work with families of children with special needs and immigrant families. I also conducted key stakeholder interview within the Somali refugee community of Springfield, local non-profit organizations that work with this population, as well as the Department for Development Services (DDS).

Results/Outcomes: Based upon the results of the community needs assessment, there will be a higher level of awareness about the needs of Somali refugee families who have children with special needs. The Federation for Children with Special Needs and local non-profit organizations will organize better targeted interventions, workshops and services to address the needs of this community in Springfield.

Name: Sommer Barnes
Practicum Site: Boston Medical Center - Adolescent Clinic, Teen and Tot Program
Location: Boston, MA
Title: Implementation of Centering Pregnancy in the Boston Medical Center's Teen & Tot Program: Adolescent Obstetric Patients' Satisfaction and Personal Experience with Group Prenatal Care

Introduction: Infants born to adolescents are at increased risk of being low birthweight or premature. Boston Medical Center's Teen & Tot Program is offering a group model of prenatal care in hopes of offsetting those risks. The adolescent-only CenteringPregnancy group is a first for BMC and its clinicians. As this group serves as a pilot, I became involved to assist in data entry, quality improvement, and internal research.

Methods: I first conducted an evidence review of Centering use by adolescents, with particular attention to the mechanisms at work in adolescent-only groups. I performed an in-depth review of STI prevention integration into adolescent prenatal care, for the purpose of providing recommendations. I also assisted in procuring supplementary materials for sessions tailored to adolescents. To prepare for data collection, I underwent CenteringCounts training. These data will be needed to demonstrate model fidelity for continued site approval, and will facilitate future research and quality improvement. Finally, I attended prenatal sessions as a participant-observer, from which I drafted qualitative reports.

Results/Outcomes: TTP plans to offer rotating groups on an opt-out basis, replacing mixed-age groups and traditional prenatal care for many teens. Thus, it has been important to provide third-party input and manpower. For underserved teens, a prenatal peer group may be more complicated than traditional care, but ultimately effective at improving outcomes. As Centering engenders community belonging, self-efficacy and -esteem building, it is a promising approach to prenatal care for this population.

Name: Madeline Bundy
Practicum Site: Families First Parenting Program
Location: Cambridge, MA
Title: Analyst

Introduction: Families First Parenting Programs is a non-profit organization that provides research-based parenting education workshops to families and professionals in the Eastern part of Massachusetts. The organization aims to promote healthy families and communities, by teaching parents effective strategies for strengthening their parent-child relationships. As part of strategic planning, the goal of this practicum is to determine which cities and towns in the current geographic region should be targeted in FY 14 (July 1, 2013-June 30th 2014).

Methods: During the months of June 2012 to March 2013, I conducted a gap analysis of parenting education programs across Eastern Massachusetts. In the first phase, quantitative data on community characteristics-family structure and income, childhood education, and child maltreatment- were abstracted on 121 cities in the region. Based on these indicators, the sample was reduced to 58 cities reporting the worst measures, as compared to State averages. In the second phase, qualitative data on parenting programs and resources in each area were collected through exhaustive internet research.

Results/Outcomes: Our findings indicate substantial variation in the gaps between community need and parenting education resources across the sample (n=58). Among the cities with the poorest measures of community health, Brockton, Chelsea, and Fall River were described as resource saturated, while, Fairhaven, Holbrook, and Randolph, were resource scarce. The detailed results of the evaluation have been compiled into a single document for the organization's reference. In addition, recommendations based on the evaluation were included in an executive summary for organization's board of directors.

MATERNAL & CHILD HEALTH

Name: Laura Burnham
Practicum Site: Boston Medical Center - Division of Pediatrics-Adolescent Medicine
Location: Boston, MA
Title: NICU Breastfeeding and Donor Milk Studies Intern

Introduction: Breastfeeding results in better health outcomes for both mothers and infants, and especially benefits vulnerable preterm and critically ill term infants admitted to the Neonatal Intensive Care Units (NICU). The Baby-Friendly Hospital Initiative was developed by WHO to promote breastfeeding in hospitals, and Boston Medical Center (BMC) received designation in 1998. As a Research Assistant (RA) in the Division of General Pediatrics at BMC, I contributed to an evaluation of breastfeeding rates (initiation and continuation) among NICU infants 10 years after Baby-Friendly designation, assessing sustainability of NICU breastfeeding support practices.

Methods: I performed an extensive medical chart review of every NICU admission in 2009. I assisted with the design of the data collection form and extracted demographic and feeding data from multiple locations in the medical record. I supervised another RA who entered the data into Excel, and we worked together to clean and prepare the data for analysis. Chi-square tests were used to compare 1999 and 2009 data, and I helped to draft a manuscript disseminating these results.

Results/Outcomes: Comparing the data from 1999 and 2009, breastfeeding initiation increased from 75% to 85% ($p=0.04$). For Black infants, breastfeeding initiation increased from 58% to 86% ($p=0.01$). Any breast milk at 2 weeks of age increased from 66% to 80% ($p = 0.05$), but breastfeeding exclusivity at 2 weeks of age did not differ significantly. This research shows that at an inner-city, level 3 NICU improvements in breastfeeding rates were sustained 10 years after Baby-Friendly designation.

Name: Maliha Chgtai
Practicum Site: Boston Medical Center - Department of Obstetrics and Gynecology
Location: Boston, MA
Title: Research Fellow

Introduction: The Centering Pregnancy Program at Boston Medical Center's Obstetrics and Gynecology Department offers prenatal visits in a group with eight to 12 other pregnant women and a midwife or doctor. During the visits, women talk about having a healthy pregnancy, get to know other mothers, have their check-ups and share experiences. Group sessions offer unhurried time with the provider, approximately ten times more than a typical individual visit.

Methods: I evaluated patient's medical record for eligibility for attending group sessions and determined if patients met the required low-risk criteria and registered them for sessions based on patients' expected due date. I calculated absences and coded drop-outs accordingly and collected patient enrollment information from intake appointments that take place at the clinic at BMC. I calculated prenatal intake attendance, no-show rate, number of eligible and enrolled patients. Additionally I maintained monthly recruitment reports and created a data tool for retrospective patient chart extraction for comparison group of traditional care patients.

Results/Outcomes: Maintaining the attendance and survey completion tracking sheet allowed the team to proactively collect data and avoid tracking patients by phone to complete surveys and avoid lost-to follow up. For the retrospective chart extraction, data is still being collected. However, results from the analysis will inform medical practice of the benefits of CenteringPregnancy specifically in terms of breastfeeding duration and contraception counseling.

Name: Therese Claxton
Practicum Site: ROCA
Location: Chelsea, MA
Title: Young Mothers Program Educator

Introduction: Roca's mission "is to help disengaged and disenfranchised young people move out of violence and poverty." In fulfillment of this mission, Roca targets teen mothers living primarily within Chelsea and East Boston to help them out of poverty. Roca does this by providing them with health education, emotional support, ESL, GED, and job training.

Methods: As a Young Mothers Program Educator, I partnered with a Harvard fellow to teach the Power Source Parenting coursework, which was created to provide guidance and skills to at risk teen moms so that they are effective parents who raise happy and healthy children. Due a need to fit the program into the family night, I worked to adjust the program to fit the needs of Roca to better suit our teen mothers. I also partnered with a Youth Worker to create and run a Healthy Families parenting support group. This group's aim was to provide emotional support to these teen moms who are currently struggling with their new role.

Results/Outcomes: Overall, I provided Power Source Parenting education to approximately 35 teen and adolescent mothers and formed the program to fit the needs of the already existing family night model. I also created and ran a support group that served a steady group of 12 teen mothers each week in partnership with a youth worker, fulfilling a requirement from a grant received by the community center. This support group serves as a pilot program that will hopefully be replicated in the future.

MATERNAL & CHILD HEALTH

Name: Catherine Federowicz
Practicum Site: Boston Medical Center - Children's HealthWatch
Location: Boston, MA
Title: Children's HealthWatch Intern and Research Assistant

Introduction: Children's HealthWatch (CHW) was established to improve the health of very young children, often uniquely vulnerable to deprivation within the home. Unstable housing is one such condition that puts children at a significantly greater risk for adverse health outcomes. Across 5 cities, CHW is an on-going study focused on data collection from the front lines of pediatric care that contributes to policy-making and advocacy for the healthy development of all young children.

Methods: As a research assistant, I conducted a face-to-face electronic survey with caregivers of children less than age 4 in the BMC pediatric emergency room. Questions relating to housing conditions fostered the assessment of associations between housing-security as related to child development. Analyzing the presentation of data at weekly science meetings, linkages between child development and hardships such as frequent moves, over-crowding, housing instability and homelessness helped contribute to submissions in peer reviewed journals for the consumption of medical and public health professionals. In addition, the creation of policy briefs put empirical data in the hands of policy makers in the hopes that they can deliver change in a positive way.

Results/Outcomes: CHW's political and economic impact through the early identification of children with specific growth and nutrition problems will improve food and housing security, child development and child health status, as well as hospitalization rates. CHW research shows that stable, affordable housing improves child health and family well-being. Policy makers should therefore invest in affordable subsidized housing to reduce societal health care costs and improve overall health outcomes.

Name: Oluwaseyi Isehunwa
Practicum Site: Boston University School of Public Health - Partners in Health and Housing Prevention Research Center
Location: Boston, MA
Title: Research Assistant

Introduction: Obesity is a major public health issue globally. The purpose of my practicum was to provide data on children's perception on factors responsible for healthy weight alongside an ongoing research study assessing the impact of community interventions on obesity among mother-daughter pairs, residing in Boston public housing development. The primary goal was to know children's understanding on what is considered healthy or unhealthy weight, and influences of friends, parents, body sizes etc on their choices of food and habits of eating.

Methods: The development went through two steps. First I had to identify the best methods for interviewing children on sensitive topics. To do this, I conducted literature search on childhood obesity and on conducting interviews with the children specifically daughters between the ages of 8-15 years. The second step was to satisfy the regulatory requirements for IRB review and approval. I drafted an IRB application for the study and addressed their concerns with responses.

Results/Outcomes: Based upon my literature search, methods for conducting interviews among children differs by age bracket of children involved, the topic, nature and sensitivity of the question to be addressed. Therefore, an interview guide was designed using appropriate probes and visual aids in relevant questions. Furthermore, IRB application was completed, submitted and approved. I am currently in the process of conducting the interviews, approximately 20 one-on-one interviews with daughters and thereafter, I would analyze results. Through this study, more knowledge on children's perception to factors leading to obesity would be understood and effective programs and interventions can be implemented.

Name: Emily Jansen
Practicum Site: Boston Medical Center - Pediatric Adolescent Medicine
Location: Boston, MA
Title: HPV Disparity Study

Introduction: Recent research indicates that low-income and minority adolescents experience the lowest rates of complete vaccination for Human Papillomavirus (HPV). Less is understood about the contextual influences on vaccination, such as the barriers and facilitators of initiating and completing the HPV vaccine series. The HPV Disparity Study is a qualitative study designed to collect information on parent knowledge, attitudes and beliefs concerning the HPV vaccine. The purpose of the practicum was to recruit and enroll participants into the HPV Disparity Study at two sites: Boston Medical Center and Harvard Vanguard.

Methods: Research activities completed took place at the Adolescent and Pediatric Clinics at Boston Medical Center, and included: 1.) Recruiting, assessing eligibility and administering informed consent for prospective participants; 2.) Interviewing eligible parents who consented to participate; 3.) Transcribing completed interviews; 4.) Coding individual interviews and 5.) Contributing to the development of a code schema through consensus at team meetings.

Results/Outcomes: While the study is still underway, it is expected that the HPV Disparity Study will generate insight on how parents articulate barriers and facilitators to HPV vaccination, as well as their own attitudes and beliefs about the HPV vaccine. The HPV Disparity Study will also examine differences by clinical population and site (Boston Medical Center versus Harvard Vanguard). Finally, the study will provide useful data for the development of tailored, culturally sensitive interventions to improve HPV vaccine uptake.

MATERNAL & CHILD HEALTH

Name: Emily Johnson

Practicum Site: Massachusetts Alliance on Teen Pregnancy - Public Policy

Location: Boston, MA

Title: Public Policy Intern

Introduction: The Massachusetts Alliance on Teen Pregnancy is a Boston-based organization that works to prevent teen pregnancy and advocate for community and educational supports for pregnant and parenting teens in Massachusetts. Their public policy efforts focus on budget advocacy to ensure teen parent programs are sufficiently funded in each year's state budget and building support for new legislation that increases educational and economic opportunities for young people.

Methods: As a member of the public policy team, my main activities included budget and legislative analysis and drafting advocacy communications in the form of fact sheets, letters to policymakers and legislative testimony. I participated in meetings with community-based providers and state agency administrators in order to build consensus and ensure our policy priorities were informed by the true needs of the community. I also assisted in the data analysis and summary of the results of a statewide provider survey on teen parent homelessness and commercial sexual exploitation, which will be used to generate a report and inform upcoming advocacy efforts. Finally, I led advocacy trainings for youth and young parents statewide, and successfully organized and executed one of the largest State House lobby days for youth.

Results/Outcomes: In this practicum experience I gained valuable insight into several advocacy processes on multiple levels: the process of collaborating with stakeholders and collecting evidence to inform policy priorities, the development of strategies to effectively frame and garner support for these priorities, and finally the successful integration of advocacy efforts with the state budget process.

Name: Rachel Lum Ho

Practicum Site: Dorchester House Multi-Service Center

Location: Boston, MA

Title: Evaluating the Pediatric Asthma Nurse Case Manager Position at the Dorchester House Multi-Service Center

Introduction: Low-income, minority and inner city children are disproportionately burdened by asthma, a leading cause of chronic childhood illness and disability in the U.S. Despite established asthma guidelines and quality indicators, disparities in asthma outcomes persist. In 2009, Dorchester House (DH), a federally qualified community health center, implemented an asthma nurse case management program aimed at improving asthma care and outcomes for their pediatric patients.

Methods: Through a one-year MCH fellowship, I worked with another student to evaluate the impact of this program at DH. Quality care indicators were abstracted by chart review from a cohort of 189 patients with persistent asthma from 2008-2011. Case management began mid-2009. Thus, data captured asthma care and outcomes pre and post implementation. For my practicum, I continued my work by collaborating with another student to analyze and interpret results. I also presented findings to DH staff and am producing a final report that will include background/literature review, detailed evaluation methods, findings, and implications.

Results/Outcomes: Results show improvements in several indicators. Patients with updated inhaled steroid prescriptions increased from 72% to 84%; and at least one annual asthma-specific clinical visit from 55% to 68%. Patients with no Asthma Action Plan on record decreased from 23% to 5%; and having 1 or more asthma-related ED visits from 15% to 12%. Hopefully, my final report will assist DH in advocating for continued funding of the Asthma Nurse Case Manager, as well as add to public health literature on strategies to reduce pediatric asthma disparities.

Name: John McAteer

Practicum Site: Boston Medical Center - Cancer Center

Location: Boston, MA

Title: Department of Hematology & Oncology Intern

Introduction: The Cancer Care Center at Boston Medical Center (BMC) strives to provide excellent hematology and oncology services to residents living in the Greater Boston area. The recent emergence of Community Health Centers (CHCs) surrounding BMC has prompted the Cancer Center to investigate ways to expand its referral base to better include these local CHCs.

Methods: A literature review of physician referral surveys was conducted and a referral survey was developed under the supervision of the cancer specialists at BMC. The survey was designed to (1) understand reasons behind CHC referrals to BMC Cancer Center (2) evaluate perceived strengths and weaknesses of each cancer program and (3) consider overall improvements that could be made to the referral and consultation process. The survey was sent electronically on surveymonkey to local CHC physicians and the results are currently being analyzed by the department.

Results/Outcomes: The results of the analysis are ongoing and will provide the Cancer Care Center with invaluable information that can be used to improve their program and increase their referrals from local CHC physicians. Early analyses of the data suggest that the survey was a success and that the results will be helpful in determining what the next steps for BMC's Cancer Care Center will be.

MATERNAL & CHILD HEALTH

Name: Bianca Melo

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

Location: Boston, MA

Title: Evaluation of the Healthy Start in Housing Case Management Model

Introduction: Healthy Start in Housing (HSiH) is a collaboration between the Boston Public Health Commission (BPHC) and Boston Housing Authority (BHA) that addresses racial disparities in birth outcomes by providing affordable housing coupled with intensive case management to pregnant women at risk for homelessness. The case management component of HSiH was identified as a priority by both the BPHC and the BHA. BPHC saw a need to intensify case management services to achieve HSiH goals; BHA was concerned about the high failure rate of families with young children in public housing.

Methods: Building upon an existing BPHC perinatal home-visiting model, traditional case management services were strengthened in 4 critical areas: the addition of training on issues confronting homeless families; the development of a housing workshops during which HSiH participants complete the BHA application; a more intensive schedule of visits; and inclusion of an evidenced-based, empowerment intervention to improve client problem solving skills and increase motivation to meet goals. We are evaluating the implementation of this tailored case management model, focusing on its acceptability and feasibility from the perspectives of participants, and frontline staff.

Results/Outcomes: Data from HSiH case manager focus groups and interviews with 15 HSiH participants, who have received case management services. Analyses will document the feasibility and acceptability from multiple perspectives, as well as the types of problems addressed through the intervention to improve client problem solving skills. Understanding the feasibility and acceptability of this tailored case management model will support its replication and dissemination.

Name: Rita Murphy

Practicum Site: Children's Hospital Boston - Cardiovascular & Critical Care Nursing Research group

Location: Boston, MA

Title: The Nightingale Metrics: Monitoring Nursing Care in Pediatric Critical Care Units

Introduction: This practicum worked with a Cardiovascular & Critical Care Nursing Research group at Boston Children's Hospital (BCH) on the Nightingale Metrics, an ongoing audit of the hospital's intensive care units (ICUs). The Nightingale Metrics is an ICU wide quality improvement project designed to provide each unit's nursing leaders with data on nursing care activities. Data is collected on a tri-annual basis in seven units. Four units were completed during this practicum experience.

Methods: Four Nightingale audits were completed in Spring 2013: cardiac catheterization laboratory, critical care transport, acute care cardiac unit, and cardiac ICU. Audits are tailored to each unit and include retrospective data collection from electronic medical records (EMRs), bedside checks, and in-person surveys with nurses. EMR data collection records documentation of required nursing activities (ex: pain scoring, tube/drain care, pressure ulcer prevention, feeding). Bedside checks identify safety procedures in practice at the bedside. Practicum responsibilities included: surveying nurses to identify family centered care practices, cleaning data via retrospective EMR checks, developing SPSS databases, and completing analysis and reports.

Results/Outcomes: Descriptive statistics for EMR, bedside check and nurse survey variables were generated through SPSS. Reports with graphical data representations were developed for each of the four units. Reports were distributed to unit nursing leaders to facilitate decision making regarding patient care and nursing activities. Over the past nine years, Nightingale reports have provided information contributing to BCH's Joint Commission on Accreditation of Healthcare Organizations (JACHO) accreditation, Magnet designation, and other regulatory and quality related recognitions.

Name: Lauren Neelon

Practicum Site: Massachusetts Department of Public Health - Bureau of Family Health and Nutrition

Location: Boston, MA

Title: Home Visiting Initiative

Introduction: The Affordable Care Act includes a provision that authorizes funding to expand and enhance home visiting programs for the maternal-child health population. While this provision primarily supports evidence-based models, up to 25% of the funding can be used for "promising" new programs. With this funding, the Massachusetts Home Visiting Initiative is piloting Welcome Family in Boston and Fall River. Welcome Family will offer a universal, one-time home visit by a nurse to every mother who gives birth in those communities, within three weeks of delivery. The ultimate goal of the program is to connect families with needed community resources.

Methods: In order to standardize home visits, provide guidance for nurses and establish the template for an evaluation database, I worked with a small team to develop the Welcome Family assessment tool and accompanying manual. The assessment tool will be completed in the home by the nurse and incorporates screenings, brief interventions and referrals to treatment when appropriate. It focuses on five specific health domains: unmet health needs, maternal and infant nutrition, emotional health, substance abuse, and domestic violence.

Results/Outcomes: Welcome Family will begin at the two pilot sites in May 2013, so evaluation data is currently unavailable. However, similar programs across the country have shown promising early results. Baseline data will be compared to outcome data collected during a 6-month follow-up phone call. If the program is successful and demonstrate improved maternal and infant health outcomes, it will expand to the other 15 "high-need" communities across the state.

MATERNAL & CHILD HEALTH

Name: Emily Rath

Practicum Site: Boston Medical Center - Department of Family Medicine

Location: Boston, MA

Title: Project Re-Engineered Discharge (RED) Intern

Introduction: The aim of Project Re-Engineered Discharge (RED) is to reduce preventable hospital readmissions. Literature suggests that certain populations are more likely to frequently utilize healthcare services. The purpose of this project was to determine if patients' frequent utilization status changed after receiving RED. Additionally, we assessed characteristics of patients who were more likely to be readmitted.

Methods: I reviewed nurse discharge notes of patients who received Project RED on Boston Medical Center's Family Medicine unit from March 2012 through July 2012. I built an excel database that contains patient characteristics, discharge information, follow-up care, and pharmacy phone notes, from the 331 RED discharges that occurred during this time period.

Results/Outcomes: The mean rate of hospital utilization based on usage in the 6 months prior to the index hospitalization decreased for patients after receiving RED, although it was not significant. When patients with known substance abuse were excluded, this rate showed a stronger trend. After discharge, 8% of the encounters resulted in patients visiting the ED or being readmitted before their scheduled follow-up appointments.

Name: Jacquelyn Rose

Practicum Site: Cambridge Police Department - Personnel

Location: Cambridge, MA

Title: Project Coordinator

Introduction: The Cambridge Safety Net Collaborative is a partnership among the Cambridge Police Department, Cambridge Health Alliance, Cambridge Public Schools, and Department of Human Services Youth Programs. The mission of the collaborative is to foster positive youth development, promote mental health, support a safe school and community environments, and limit youth involvement with the juvenile justice system through coordinated prevention, intervention, and diversion services for Cambridge youth and families.

Methods: I primarily worked with the Youth and Family Services Unit (YFSU) of the Cambridge Police Department, which consisted of a Lieutenant, a Sergeant, six Youth Resource Officers, three Youth Outreach Officers, and two Juvenile Detectives. As the Project Coordinator, my primary responsibility was to conduct a needs assessment to identify ways the police department could enhance their role in the collaborative. This included a job analysis of officer duties and responsibilities, a review of past practices and trainings, semi-structured interviews with officers in YFSU, and meeting with collaborative partners to discuss the future and direction of the program.

Results/Outcomes: In response to identified needs, I coordinated twenty-two individual trainings and five group trainings for officers in YFSU, created a training profile for positions in YFSU, outlined a training manual for officers in YFSU, formalized collaborations with community-based agencies, updated the police department's record management system, participated in standardizing unit policies and procedures, developed quality assurance mechanisms including a parent survey, and facilitated preliminary data analysis.

SOCIAL & BEHAVIORAL SCIENCES

Name: Amanda Ayers

Practicum Site: Tufts University Health Services - Department of Alcohol & Health Education

Location: Medford, MA

Title: Peer Health Collaborative Coordinator

Introduction: The mission of the Department of Health Education at Tufts University is to support and promote campus efforts using proven strategies that reduce health related problems among members of the Tufts' community. At Tufts University there are over 20 student-run health organizations. Collaboration between the different organizations has historically been a struggle. Many contributors to this included lack of knowledge about other organizations, desire for autonomy, and lack of understanding the benefits of working together around health issues on campus. This practicum's goal was to create the best way for these student organizations to work together through exchanging resources, networking, and/or collaborating on specific events

Methods: The Tufts Peer Health Collaborative (TPHC) was created to foster collaboration between the many organizations. A liaison position was created and each group elected one member to be a representative in the Health Collaborative. Practicum activities included: 1) develop the liaison position 2) create logic model for collaborative structure 3) meet with the TPHC bi-weekly 3) meet with key stakeholders on campus to increase buy-in and awareness of the collaborative.

Results/Outcomes: The creation of the TPHC has helped many student health organizations work together in new ways. They have developed programs together, helped each other advertise, collaborated on events and activities, and shared experiences. They have also developed a community within the Tufts campus that they can now look to each other for help, advice, and support. The Health Collaborative's culminating project together was a weeklong event called Healthy Week, which was a great success.

Name: Nathan Brooks

Practicum Site: East Boston Neighborhood Health Center

Location: Boston, MA

Title: Let's Get Movin'

Introduction: Let's Get Movin' is a multi-faceted lifestyle change program designed to combat pediatric obesity. LGM includes multiple interventions to increase access to healthy foods in the East Boston community. The focus of this practicum was to conduct program evaluations for two of these community-wide interventions: a community garden and a community-supported agriculture (CSA) program. Goals included characterizing participants demographically, gathering data on the effects of participation on participants' nutrition, describing the participants' experiences with the program and developing suggestions for future improvements to the programs.

Methods: Working with LGM staff and informed by pre-existing data, focus group information and literature reviews, I created surveys in English and Spanish to be mailed to all program participants. Two weeks after sending surveys, I began calling participants who had not returned their surveys to complete the questions by phone.

Results/Outcomes: Overall, >75% of participants in both programs provided information. Data was compiled and analyzed using Microsoft Excel. I created a powerpoint presentation summarizing the data along with my suggestions and conclusions, and presented this information to LGM leaders. Findings: 1) Participants were demographically representative of the EB community, and the majority of households served had incomes <200% Federal Poverty Guideline 2) Nearly all participants in both programs reported an increase in fruit & vegetable consumption 3) Nearly all gardeners and almost 50% of CSA participants reported decreased household food expenditures and 4) Dissatisfaction with cost and produce variety were the primary reasons that many participants dropped out of the CSA program early.

Name: Alana Casciello

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

Location: Boston, MA

Title: Parental Alcohol Use among Mexican University Students

Introduction: Alcohol is the most commonly used drug among youth in both the United States and in Mexico. Research examining alcohol use among Mexican youth is important for the development of both Mexican and Mexican American youth prevention and intervention programs. This NIAAA funded study was conducted to explore alcohol use among Mexican youth and to increase knowledge about risk factors that contribute to drinking as well as protective factors against heavy drinking.

Methods: As a research assistant, my scope of work included: 1.) training on HyperRESEARCH™ to retrieve qualitative data from coded interviews with 117 university students in Mexico City; 2.) an analysis of similarities and differences between student and parental alcohol use and patterns in the students' perceptions of their parents' alcohol use, beliefs and attitudes; and 3.) a literature search to examine the role of family history (FH), cultural traditions and social norms on drinking behavior.

Results/Outcomes: While the literature suggests that a family history of heavy drinking may be associated with heavy drinking children, our findings do not support this. Students in all drinking groups reported having parents with drinking problems. In all drinking groups, mothers drank less than fathers. Occasional drinkers drank similarly to their parents while heavy and regular drinkers drank differently than their parents. The analysis of the patterns of past and present drinking in the home and family relationships among student drinking groups is ongoing.

SOCIAL & BEHAVIORAL SCIENCES

Name: Casey Cokkinias

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

Location: Boston, MA

Title: Special Projects Coordinator for an Underage Drinking Prevention Video

Introduction: The MA Department of Public Health (MDPH), Bureau of Substance Abuse Services (BSAS) is dedicated to creating and providing services and information about the prevention and treatment of substance abuse problems for targeted populations, including adolescents. The purpose of this practicum was to assist with evidence-based prevention research, script writing, and recruitment of youth and parents for the production of an Underage Drinking Prevention video aimed at parents of middle and high school youth. The goal of this MDPH and Substance Abuse and Mental Health Services Association (SAMHSA) sponsored project was to provide parents with evidence-based strategies to effectively communicate with their children about underage drinking.

Methods: Practicum activities included: 1) Collaborative brainstorm with BSAS staff about potential drinking prevention video content; 2) Formulate talking points for the Commissioner of the MA Department of Public Health's segment; 3) Create the script for parent/child dialogues using evidence-based underage drinking prevention strategies; 4) Develop a management and production plan for the video shoot.

Results/Outcomes: Upon its completion, the underage drinking prevention video aimed at parents of middle and high school youth that will be disseminated statewide at Town Hall meetings, the BSAS website, and via local prevention programs.

Name: Aisling Driscoll

Practicum Site: Dana Farber Cancer Institute

Location: Boston, MA

Title: SPORE Grant Application Project

Introduction: Dana-Farber Cancer Institute is a Boston-based organization dedicated to providing expert, compassionate care to children and adults with cancer while advancing the understanding, diagnosis, treatment, cure, and prevention of cancer and related diseases. I worked in the Hematologic Neoplasia division of Medical Oncology to assist grant management staff with the application for a National Institutes of Health (NIH) Specialized Programs of Research Excellence (SPORE) Grant in Multiple Myeloma. This \$12.5 million comprehensive clinical project consists of four Research Projects and three Cores, as well as Career Development and Developmental Research Programs. The goal of this practicum is to learn about the pre-award grant application process from a research administration point of view.

Methods: I worked directly with Grant Management Specialists to create timetables and checklists for the overall SPORE application and subsections, develop budget justifications, collect and edit administrative documents, gather researcher Biosketches, edit and format the 500 page proposal, and copy, collate, and mail the proposal to the sponsor.

Results/Outcomes: From this project I learned that several administrative planning and implementation skills are an integral component to the application process for a large-scale Federal grants for clinical and public health research. As this grant has been secured by Dana-Farber in the past, it is expected to be approved and funded, which will allow for continued generation of major contributions to the field of cancer research.

Name: Emir Duhovic

Practicum Site: Boston Medical Center - Department of Pediatrics

Location: Boston, MA

Title: Children's HealthWatch Intern

Introduction: Children's HealthWatch (www.childrenshealthwatch.org) is an ongoing cross-sectional study that examines the impact of economic conditions and public policies on the health of children ages 0-4 in five U.S. cities and advocates on children's behalf. Pediatricians and public health researchers use this data (N=47,888) to answer questions about how different policies affect the health and development of low-income children.

Methods: 1.) I interviewed caregivers who accompanied children at the pediatric BMC Emergency Department. The interview consisted of questions about the child's health and caregiver's experiences with government assistance programs, healthcare, housing, childcare, utilities, and food. 2.) I worked to improve outreach materials that are provided to families who have unmet needs. 3.) I helped with two manuscripts examining the impact of federal nutrition and housing subsidies on housing security. 4.) I conducted a literature review examining the relationship between food insecurity and obesity.

Results/Outcomes: I conducted 13 complete interviews with zero refusals. 32.7% and 4.3% of children in the Boston sample are experiencing moderate and severe housing insecurity, respectively; these children are at a higher risk for food insecurity, fair/poor health, developmental delay and poor weight gain compared to housing-secure children. Increasing the number subsidized housing options and providing nutrition subsidies helps to support housing security. Results from academic literature are mixed as to whether there is a positive association between food insecurity and childhood obesity, indicating a need for further research.

SOCIAL & BEHAVIORAL SCIENCES

Name: Ashley Galloway

Practicum Site: Brookline Health Department - Office of the Director

Location: Brookline, MA

Title: Intern to the Office of the Director

Introduction: The Brookline Department of Public Health (DPH) provides a variety of community, environmental, and clinical health services to improve the health and quality of life of those who live and work in Brookline. The Brookline Advisory Council on Public Health (ACPH) is a volunteer based board appointed by the Board of Selectmen to advise the Director of the Brookline DPH. The Friends of Brookline Public Health is a non-profit organization created to build a constituency to advocate for public health at the local level and educate the community.

Methods: The practicum activities included assisting the director of the Brookline DPH on a broad range of projects and activities. These included: staffing the ACPH, developing and implementing a hand washing curriculum, staffing the Town's diesel fume emissions committee and organizing the 18th Annual Public Health Policy Forum.

Results/Outcomes: The outcomes of the practicum consisted of: presentations at local daycare centers on hand washing, including an informal evaluation; a report to Town Meeting regarding diesel emission reduction plans; and successfully building a policy forum moderated by former Governor Michael Dukakis titled, "Implementing Health Care Reform: Challenges and Opportunities".

Name: Courtney Kaczmarzky

Practicum Site: Massachusetts Department of Public Health - Sexual Assault Prevention and Survivor Services

Location: Boston, MA

Title: Sexual Assault Prevention and Survivor Services Intern

Introduction: As a member of the Sexual Assault Prevention and Survivor Services (SAPSS) team at the Massachusetts Department of Public Health (MADPH), I supported a statewide mission to use evidence based prevention programs and to develop the capacity of Rape Crisis Centers. The purpose of this practicum was to collaborate with experts to provide the most current thinking in the field to service providers, assist the Governor's Council on Sexual and Domestic Violence, and develop and analyze surveys to inform the SAPSS statewide mission as per CDC requirements.

Methods: I worked with the Director of SAPSS to: 1) Manage the distribution of CDC required surveys to gather information about the evaluation capacity of Rape Crisis Centers receiving funding from the CDC; 2) Develop and distribute a statewide survey to assess the current impact of technical assistance provided by the state coalition on sexual and domestic violence; 3) Shepherd special projects as assigned from the Governor's Council on Sexual and Domestic Violence. In addition, I worked with SAPSS team members and coalition leadership to summarize and evaluate resources for services providers.

Results/Outcomes: A summary report and presentation of results from all statewide surveys, draft letter from the Lt. Governor to all college/university President's regarding the implementation of Title IX, updated version of the 'Healthy Relationships, Healthy Sexuality and Disability Guide' co sponsored by MADPH and the Department of Developmental Services, a summary of the inclusion of men in medical advocacy, and inventory of sanctioned e-learning resources for pre-service crisis counselor training.

Name: Thienanh Nguyen

Practicum Site: Children's Hospital Boston

Location: Boston, MA

Title: Program of Patient Safety and Quality Intern

Introduction: Patient safety and satisfaction is crucial for all hospitals in order to enhance the experience of all patients and enhance the quality of care they receive. Children's Hospital Boston is undertaking a revision of their patient satisfaction survey to engage patients, improve satisfaction, and enhance safety. The purpose of this practicum is to aid in the development and testing of survey modules for parents and patients in a pediatric inpatient hospital setting with regard to Needle Pain and Environment of Care (Support Services).

Methods: First, literature review and review of previous surveys were performed to see what other hospitals, specifically pediatric hospitals, have used to measure patient safety and satisfaction. Meetings were conducted with hospital stakeholders to determine what measures they desire and judge to be useful for improving parent/patient satisfaction. Surveys were then drafted. Cognitive interviews were done with parents and patients (if old enough) to validate the survey. Surveys were revised multiple times according to feedbacks from patients and patients. These results will be included to deliver the final survey draft.

Results/Outcomes: Data is currently not available for analyses. Collection of cognitive interview results and modification of the surveys are still underway. We hope to finalize and validate survey that will improve upon patient satisfaction and safety for the needle pain and environment of care modules.

SOCIAL & BEHAVIORAL SCIENCES

Name: Lysie Ranker

Practicum Site: Boston University School of Public Health - Office of Public Health Practice

Location: Boston, MA

Title: Spotlight on Obesity Evaluator: Blackstone Spring Break Challenge

Introduction: In Fall 2012, the BUSPH Practice Office launched Spotlight on Obesity, a two-year initiative highlighting the topic of obesity for BUSPH students through a series of education, research, and community engagement activities. Spring Break Challenge was a week-long Spotlight program providing students with the opportunity to practice public health in a real-world setting. Thirty-four participating BUSPH, School of Social Work (SSW) and Sargent students worked in interdisciplinary teams to assess factors that promoted healthy behaviors and motivated youth and seniors to use the FitWell center at the Blackstone Community Center (BCC). The purpose of this practicum was to evaluate the Spotlight Spring Break Challenge.

Methods: Evaluation activities included distributing surveys to participants and conducting follow-up informant interviews. Data was analyzed and a report was prepared to provide a comprehensive view of the program and identify areas for improvement. Final results were analyzed and presented to Challenge staff and stakeholders.

Results/Outcomes: Student post-program surveys and qualitative feedback suggest the program offers an innovative and valuable “real-world” experience. Noted strengths of the program include the opportunity to work in interdisciplinary teams, learn and apply skills in qualitative research and survey design, and engage with community members. While feedback was generally positive, results suggest opportunities to improve the program, including maximizing the use of the specialized skill sets of SSW and Sargent students. Going forward, key stakeholders of the program are considering implementing similar programs, continuing the research regarding barriers to use of the BCC, and developing additional programming for the center.

Name: Christian Sprang

Practicum Site: Quality Assurance Department in a Dental Academic Setting

Location: Boston, MA

Title: Evaluating Patient Experience in an Academic Dental Setting

Introduction: Dental care within an educational institution offers the unique opportunity to provide state-of-the-art dental care through teaching clinics and faculty practice. The Quality Assurance program provides oversight of continuous quality assurance efforts for both Pre-doctoral and Post-doctoral treatment centers, by ensuring the highest quality of care for the patients, and the best possible working and learning environment for their students, faculty, and staff. This program aims to foster a culture of continuous monitoring and improvement, oversee identification and assessment of risks in areas relevant to quality assurance, monitor and identify deficiencies within operational and clinical processes, policies, and procedures within the school, and suggest potential corrective measures. The purpose of this practicum was to work with the Quality Assurance Department to evaluate the patient experience for the dental treatment centers.

Methods: This project was completed in conjunction with the Director of Quality Assurance, and consisted of the following: 1) the comprehensive review and analysis of historical data on patient satisfaction at these treatment centers; 2) the development of an improvement plan for the Patient Satisfaction Survey based on this analysis; 3) a pilot of this newly-developed survey and an analysis of the results; and 4) a presentation of findings and relevant recommendations to the Quality Assurance Department.

Results/Outcomes: The development of a refined Patient Satisfaction Survey based on analysis of historical survey data. Recommendations stemming from the results of the pilot survey were made to the Quality Assurance Department. Based on these recommendations, the department will develop action plans and implement continuous improvement initiatives which will create a more patient-centered culture.

Name: Dimin Zhou

Practicum Site: Boston Medical Center - Department of Pediatrics

Location: Boston, MA

Title: Research Assistant - Vital Village Project

Introduction: Vital Village, a community engagement pilot project, strives to promote community wellness, prosperity, and resilience. The goal is to strengthen partnerships between local organizations and residents, build collective responsibility for its children and cultivate a community culture that optimally support children's well-being and protect them from neglect and violence. Vital Village, based on the Community Readiness Model, has been initiated in three Boston communities: Codman, Dudley, and Mattapan. The promotion of protective and mitigating factors in the face of early-life adversities will focus on three settings: pregnancy and prenatal care centers; peer-to-peer legal advocacy organizations; and innovation space for infants and toddlers in elementary education facilities.

Methods: An ongoing process evaluation, will determine the degree of successful implementation of the Community Readiness Model in each neighborhood. Data collection is conducted using qualitative community strategies: community readiness interviews, key-informant interviews, focus group, and other types of neighborhood assessments.

Results/Outcomes: Community readiness interviews were completed with key stakeholders within each of the three identified hubs of innovation. Interview transcripts will be scored and reviewed for consistent themes to identify the strengths and weaknesses of each innovative domain. Additional interviews and focus groups with organizational leaders and residents will occur. Efforts will reinforce a strong, interconnected network of communication and support between the innovative hubs within neighborhoods and between communities.

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