Public Health Practice

Stories from the Field
The University of Texas School of Public Health
Student Practicum Experiences
Spring 2012 – Biostatistics & Epidemiology
The practicum experience is an integral part of the MPH curriculum. Public health students are provided with the opportunity to apply their classroom knowledge to real world settings through which they make a meaningful contribution to a public health organization.

Under the guidance of a community preceptor and faculty sponsor, students from all divisions gain a deeper understanding of public health practice, interact with professionals in the field, and expand their repertoire of professional skills.

This seventh-edition e-magazine showcases student practicum experiences throughout the Spring 2012 semester. (Prior semesters may be accessed through the e-book, a collection of student abstracts and e-magazines describing their experiences.)
**Practicum Topics**

Serving Size: 1 Practicum per Student  
Servings per e-Magazine: 18

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**Epidemiology**

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Bhutanese Refugee Population

Health Needs Assessment of resettled Bhutanese population in Houston

By: Priyanka Acharya

The City of Houston, Department of Health and Human Services (HDHHS), in partnership with Academic General Pediatrics at Texas Children’s Hospital and Baylor College of Medicine conducted the research on the needs of the Bhutanese refugee population in Houston. I spent the spring semester helping the HDHHS in this project as a part of my practicum experience. This study assessed the needs of the resettled Bhutanese refugee population by focusing on the health of the community. My main duty involved collecting information through face-to-face interview using structured questionnaire. I also assisted HDHHS in data cleaning, data analysis and preparing the final report of the study.

Special Practicum Duties:

• Conducted data collection among the Bhutanese community in Houston through face-to-face interview.

• Assisted HDHHS in data cleaning and data analysis.

• Helped HDHHS in preparing the final report of the study.

Public Health Significance

My practicum experience falls under the “Health Assessment” in the core function and essential services of public health. This study collected, analyzed, and made available the information on the health of the Bhutanese refugee population, including health data, community health needs, health risks and problems and the resources available in this community. This project also helped in identifying trends in major issues such as health problems, access to health care and access to health insurance among the resettled Bhutanese refugee population.

HDHHS is involved in all aspects of public health practices, such as local disease surveillance; nutrition education and counseling; enforcing range of environmental services relating to air and water pollution, occupational health and food establishments etc. and utilizes numerous innovative methods to fulfill the community’s need for public health services.

“The United States’ offer to resettle 60,000 of the 106,000 Bhutanese refugees in Nepal might offer a solution to the protracted refugee situation. Resettlement may not be a perfect solution but after 16 years of exile refugees may well choose it as the best option available”.

A diverse team of doctors, pharmacists, microbiologists, public health personal and researchers working in an integrated manner to provide solutions to a public health problem.

Public Health Significance

Monitor the health of the community. Because c. diff is a nosocomial infection, our team, through visits and recruitment of susceptible patients for c.diff, monitor the health status of patients in the Intensive Care Unit (ICU) on broad spectrum antibiotics to determine if they will develop c.diff infection whilst in the hospital.

Diagnose and investigate health problems and health hazards in the community

Our teams is able to diagnosis through laboratory cultures of patients’ stools, the incidence of c.diff and, investigate results to identify the hazards of acquiring c.diff in a hospital setting.

Inform, educate, and empower people about health issues

Our team makes regular publications on the incidence of c.diff in health settings because this infection has great public health significance. During my practicum experience, I gave a presentation during our journal club meeting on new studies relating to c.diff infection in developing countries.

Link people to needed personal health services and assure the provision of health care when otherwise unavailable

Diagnosis and treatment for c.diff is readily available to patients because, our research team takes a proactive approach of testing for c.diff in elderly patients in the ICU on broad spectrum antibiotics.

Working on a systematic review on incidence of c.diff in developing countries, planned for publication in July 2012.

Because most c.diff infections are resistant to antibiotics and can be recurrent, our research team is looking into new research using fecal transplantation as an innovative solution to solve the problem of reinfection and recurrent c.diff infections

A diverse team of doctors, pharmacists, microbiologists, public health personal and researchers working in an integrated manner to provide solutions to a public health problem.

Highlights

1. In recent years, metronidazole has appeared to lose its effectiveness in CDAD management
2. Vancomycin is identified as a superior treatment in c.diff infections to metronidazole
3. Rates of c.diff are increasing, and the methods needed to slow down their transmission are uncertain

Clostridium difficile infection

Pathogenesis of Clostridium difficile infections

By: Mercy Abulu

Clostridium difficile often called C. difficile or C. diff, is a bacterium that can cause symptoms ranging from diarrhea to life-threatening inflammation of the colon. Illness from C. difficile most commonly affects older adults in hospitals or in long term care facilities and typically occurs after being on exposed to broad spectrum antibiotics.

I worked as a research student involved in the recruitment of patients into an ongoing study in St. Luke’s Episcopal Hospital “Host inflammatory and immune response to c.diff association diarrhea in relation to recurrent infections. I was a practicum research student in the team, involved in recruiting prospective study participants from the Intensive Care Unit who are on broad spectrum antibiotics. I participated in obtaining informed consent before enrolling participant into the study, carried out follow up after enrolment to collect information that would provide understanding of the pathogenesis of c.diff infection, assess the recurrence of c.diff and also study long term effects.

Clostridium difficile infection

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I look forward to each day with so much gusto, waiting for my instructor to beckon; “Tosin, it’s time for critical care unit” Here; it was more of listening, thinking and observing how ethical issues evolve and approaches to solving them. This foundation will help me to understand public health ethics better in my career. Disparities research is the section I concentrated on in the later part of my practicum. It is huge. I used to think it was all about race and fight for equity & justice. How wrong I was! I worked on chart and lit reviews for departmental projects. I noted how demographics & culture can predict health outcomes. “The solution to cancer cure might be in our diversity” echo that reverberate in my ears till date!!

https://www.google.com/search?hl=en&q=bluebonnets&bav=on.2,or.r_gc.r_pw.r_qf.,cf.osb&wd=tlif133513339502210&um=1

Public Health Significance
A touch of everything! Aren’t I lucky? The ethics component of my practicum centers on assurance. The moral justification of what ought to be done and what ought not. The “humane” side of medicine will continually be preserved as long as ethics did not fade. Assessment of cases is a daily routine. Ensuring competent workforce and due diligence in research involves participation in patient care and regulatory bodies such as the IRBs. I am able to translate this into a public health perspective where community protection and the common good of all is the order of the day.

Disparity research could result in policy change or development following a critical assessment of a public health problem. The changing demography in the US is a hot topic in the media and of high public health significance. I’ve been equipped with basic skills to address some peculiar challenges that emanates from such. Hopefully, by completion of my practicum, some of the projects am involved in might be expanded to tackle more research problems at the community level.

Don't get stuck with Hepatitis C

By: Swati Bansal

I worked at Texas DSHS region 5/6S on Hepatitis C project. HCV Infection is the most common bloodborne infection in the United States. Today, most people become infected with the Hepatitis C virus by sharing needles or other equipment to inject drugs. An estimated 3.2 million Americans are living with chronic Hepatitis C. 60%-70% of chronically infected persons have evidence of active liver disease.

Public Health Significance

Officials at the Centers for Disease Control and Prevention believe that approximately 40,000 new cases of hepatitis C infections occur every year. Therefore, a vaccine to prevent the infection would be an important breakthrough in controlling the spread of the hepatitis C virus. The PHES services offered at DSHS are – Monitoring, diagnosing & investigating, informing, educating & empowering, mobilizing community partnerships, developing policies, enforcing laws and evaluating effectiveness of health services.

My duty as an Intern, was essentially the ‘Disease Surveillance’ i.e. To investigate all the cases of Hep C in the communities which were reported to the Department and check whether they were acute or chronic. If acute, they were reported to the CDC. And an Epidemiologic record was maintained, of the chronic cases. The department works closely with the CDC and with all other local Health Departments in Texas, to control the spread of the Disease. Disease Reporting was an essential feature here. There are a lot of things that you should know about Hepatitis C. Like the fact, it can be treated!

The Public Health services/sources offered at DSHS to control Hepatitis C:

- Hepatitis infoline & Webpages
- Hepatitis C video lending library
- Hepatitis C educational brochures
- Hepatitis C conference booth and exhibits
- Hepatitis phone assistance and correspondence
- State plan and updates
- Ongoing Surveillance

HIGHLIGHTS

- Assessing the burden of disease (Hep C) in communities, while working at DSHS had been a great learning experience for me. It was interesting to note that this Disease is so easy to catch and so easy to prevent/treat.
- Most people do not know they have hepatitis C, but still transfer the infection to others. So, its control is critical.

"Hepatitis C doesn’t always present symptoms.”

- Karen Gonzales

Many people live under the impression that they are immune to Hepatitis C when vaccinated for Hepatitis A or B, which is not the case. There exists no vaccination for Hepatitis C so far.

Spring 2012 • Swati Bansal • Texas DSHS • Hepatitis C
HIV/AIDS and Smoking Cessation

The Effects of Progressive HIV-Disease on Smoking Status

By: Meredith Buchberg

The prevalence of smoking is higher among people living with HIV/AIDS (PLWHA) compared to the general population. As the life expectancy of PLWHA increases they are more at risk for chronic diseases and smoking-related illnesses.

The purpose of my project was to explore the effect of HIV/AIDS disease stage on smoking cessation outcomes, specifically length of smoking abstinence. I worked with Dr. Damon J. Vidrine in the Department of Behavioral Science at M.D. Anderson Cancer Center.

I hypothesized that progressive HIV-disease would serve as a teachable moment, thus participants with progressive HIV-disease would report longer lengths of smoking abstinence at 3-month follow-up.

Disease stage was determined using medical record abstraction and compared with the longest continuous length of smoking abstinence in days at 3-month follow-up.

Results:

Results from t-tests showed that the length of abstinence was greater for participants with progressive disease, but was not statistically significant (p=0.18).

Length of abstinence was significantly longer for participants with cardiovascular disease (p=0.0039).

Public Health Significance

Smoking among PLWHA is an issue of great public health significance. Currently, more PLWHA are dying from non-AIDS-defining illnesses than AIDS-defining illnesses. Having a better understanding of “teachable moments,” or times when individuals are most receptive to positive behavioral change has the potential to help improve the quality of life for PLWHA.

This project helped to research for new insight and understanding of a public health problem that is often given little attention. The data collected also helps to better monitor the health status in this population.

Dr. Vidrine’s research aims to use cell-phone based interventions as innovative solution to this health problem and to better understand the needs of this population.
Acute Febrile Illness in Uganda

CDC Project Describes the Epidemiology of Fevers in Uganda

By: Aleisha Elliott

I worked with the Center for Disease Control and Prevention (CDC) in Atlanta, Georgia, on a large, tri-phased, inter-agency project investigating the distribution and determinants of undifferentiated acute febrile illnesses (AFI) in three regions of Uganda (see picture below). Phase II, the prospective study, recruits patients with AFI from three clinics within the study regions, performs diagnostic tests to identify the illness, and then assesses risk factors via a standardized questionnaire.

My work contributed to the data cleaning and management of the ongoing prospective study. I identified potential errors in the data sets and helped develop a method for double data entry comparison using Excel, SAS and Epi Info. I also performed a literature review to identify leptospirosis rapid diagnostic tests (RDTs) to be used in a sub-study within the bigger prospective study. My final products include a table of RDTs for the study, a data set with identified errors, and a power point presentation of my experience.

Some Diseases and Risk Factors Studied:
- Diseases include malaria, leptospirosis, dengue fever, west nile, typhoid, and yellow fever
- Risk factors include occupation, environment and climate, residential surroundings, and population density

Public Health Significance

The Uganda Ministry of Health reported more than 12 million cases of malaria in 2010. As a result of malaria’s high prevalence rate in the region, someone with a fever is axiomatically considered to have malaria and often is reported as malaria by health providers. However, most times, no testing is done to confirm the diagnosis. As a result, the CDC estimates that 30%-60% of reported malaria cases may be misdiagnosed. In an age where drug-resistant malaria is rapidly growing, this study properly diagnoses acute febrile illnesses and obtains an accurate understanding of the diseases and risk factors causing fevers in the region. Measuring the baseline prevalence and seasonality of diseases causing acute febrile illnesses will aid medical professionals to properly diagnose patients and to better recognize when outbreaks occur. Also, further understanding the risk factors associated with particular febrile illnesses will help the Uganda Ministry of Health and health professionals to better educate the public on how to prevent infection and build policies to support preventative services.

Though the CDC contributes to all categories of essential public health services, this ongoing project specifically diagnoses and investigates health problems in the Uganda community.

“In Uganda, people think every illness is malaria. If you have a fever, it’s malaria. If you sneeze or your stomach growls, it’s because you have malaria. If the doctor says it’s not, then they think he doesn’t know what he is talking about.” – Aleisha Elliott
Improving HIV Care

Making a Difference: Linking Patients to Care

By: Natarsha D. Horton

This semester, I had the privilege of working with the HIV/STD program in DSHS Region 6/5S. The HIV/STD program director developed a strategic plan to reduce the incidence and prevalence of HIV while improving services for current patients. A needs assessment was deemed a necessary component of the strategic plan. As a student intern, I had the opportunity to participate in this process. The main goal of this project was to develop tools for a comprehensive needs assessment. To accomplish this goal, I worked with the staff to develop a questionnaire focused on improving services for newly diagnosed HIV patients. I plan to continue working with the organization to advance the process.

Public Health Significance

This practicum was most closely related to Essential Service 7: linking people to needed personal health services. Since newly diagnosed HIV patients are covered by the Ryan White Act, the HIV/STD program is concerned with linking them to HIV care services and making sure they stay engaged. To assist them with this effort, I designed a questionnaire that will be used to identify barriers to care and level of HIV knowledge. In the future, I hope to develop a needs assessment tool related to Essential Service 9: evaluate the effectiveness, accessibility, and quality of personal and population-based health services. This needs assessment tool will be a provider questionnaire that will evaluate adherence to CDC screening recommendations and evidenced based HIV practice standards. The hope is to use all of this information to improve services offered by the HIV/STD Program.

Special Events:

- Participated in Disease Intervention Specialist training
- Developed a needs assessment tool designed to improve services for HIV patients

“I am only one, but still I am one. I cannot do everything, but still I can do something; and because I cannot do everything, I will not refuse to do something that I can do.”

-Helen Keller
Catheter Associated Bacteriuria Outcomes

Highlights of Practicum
- Data Abstraction and entry
- Data Analysis
- Trying to make sense of the analysis!!!
- Starting to write my manuscript!!!

Picture on right: Source; Buzzle.com – smelly urine causes

Quote From the Distant Past
“Learning without thought is labor lost; thought without learning is perilous.”
Confucius

Bacteremia and Mortality after Catheter Associated Bacteriuria
By: Quratulain Kizilbash

The primary goal of my project is to reduce inappropriate antimicrobial use for catheter associated bacteriuria since this is the most common healthcare associated infection. This will not only reduce the development of resistant microorganisms which may spread to the community but also reduce many of the adverse effects which result from unnecessary antimicrobial use.

We planned to do this by studying the 30 day clinical outcomes in terms of bacteremia, mortality and Clostridium difficile infections in patients with catheter associated bacteriuria, both symptomatic and asymptomatic, and whether treatment of the bacteria in the urine made a difference or not in terms of these outcomes.

So far our results indicate that treatment of the bacteria in the urine made no difference in the clinical outcomes.

Public Health Significance

The Public Health Essential Service that most closely relates to my practicum experience is research for new insights and innovative solutions to health problems. This is because my practicum is research with the goal of reducing inappropriate antimicrobial use by determining that treatment for catheter associated bacteriuria should only be used sparingly and under certain circumstances.

The organization at which my research is being conducted, the Houston Center for Quality of Care and Utilization Studies, mainly participates in the delivery of public health by conducting research mainly in the health services sector. The goal of the center is to participate in research in novel ideas and solutions to improve health care delivery to patient populations.
EMDARE

A prospective randomized trial to study the Effect of Music on Adenoma Detection Rate amongst Endoscopists

By: Dhananjay P. Kulkami

My practicum opportunity at the University of Texas medical School in the Division of Gastroenterology, hepatology and Nutrition started in January this year and what an experience has it been! Under the guidance of my faculty mentor, Dr. James Hixson community preceptor Dr. David Wolf, I undertook this project to formulate the protocol, establish relevant ground work and start data collection on a clinical trial objectively measuring effect of exposure to music on an endoscopist’s adenoma detection rate which is the prime quality indicator of colonoscopy.

I was co-investigator on this study and chief liaison with the IRB at UTHSC.

Public Health Significance

Colorectal cancer (CRC) is the third leading cause of mortality in the US among both males and females. It is estimated that 141,210 men and women (71,850 men and 69,360 women) will be diagnosed with and 49,380 men and women will die of CRC in 2011 which represents a significant public health burden attributable to cancer associated morbidity and mortality.

Our project focused on whether application of a simple intervention like playing music in the endoscopy suite will help in improving the detection of adenomas leading to better prevention of colorectal cancer.
Antibiotic Stewardship in the ED

By: Shannon McCarty

This semester, I am working with the Emergency Department (ED) at University Medical Center at Brackenridge in Austin, TX. The Infectious Diseases Clinical Pharmacy Specialist at the hospital has created a study that will retrospectively determine the effectiveness of an Antimicrobial Stewardship Program (ASP) for cystitis and acute pyelonephritis that was implemented in the ED.

Measuring the effectiveness of antibiotic stewardship in the ED

We will be assessing the consistency of physician adherence to the stewardship program. In addition, we will also review medical charts before and after the implementation of the program to compare the rates of readmission to the ED with UTI or pyelonephritis. So far, I have created a literature review for this study and currently I am working on the creation of a database for the data collection forms.

Public Health Significance

This antibiotic stewardship study will provide several of the Essential Services under the Core Functions of Public Health. This practicum concerns the public health issue of antibiotic resistance specifically in Austin; however, the design and results of the study could assist other researchers around the world. By determining the effectiveness of the intervention of an Antimicrobial Stewardship Program (ASP) at UMC Brackenridge, we will be investigating health problems and health hazards in the community. Further, by studying the consistency of the use of the ASP by physicians in the Brackenridge Emergency Department, we can determine the cause for any deviations in prescriptions. This assists in evaluation of effectiveness, accessibility, and quality of personal and population-based health services. Finally, I definitely feel as though I can inform, educate, and empower people about this health issue from the research I have completed to write a literature review for this study.

Major Events during Practicum

- Completion of my first ever literature review for a research study.
- Training to use hospital computer system for data collection.
- Using my knowledge of Epi Info from my Masters Program to create databases for this study.

“This practicum concerns the public health issue of antibiotic resistance... the design and results of the study could assist other researchers around the world.”
NEEDS ASSESSMENT OF A BHUTANESE COMMUNITY WITH A FOCUS ON HEALTH

By: Bal K Nepal

Research has been conducted to identify the health problems of the minority communities such as, Asian Indian, Cambodian, Korean, Vietnamese, Pilipino, and so on. Many researches, particularly in mental health, after expatriation from their home country- Bhutan, have been conducted in the Bhutanese refugee. However, health needs assessment of Bhutanese community has not been conducted yet especially after resettling in the United States. Considering this gap, Houston Department of Health and Human Services (HDHHS) conducted the research on Bhutanese refugee living in Houston, TX. As part of my practicum with MD Anderson Center for Research on Minority Health, field work was conducted with one of the projects of HDHHS. This project was primarily focused on “Needs Assessment of a Bhutanese Community with a focus on health” in which, I was involved in to test the questionnaire (pilot study), data collection, data cleaning, and analysis. Finally, I was also involved in to write a comprehensive report.

Public Health Significance

We were able to identify the various aspects of health and health-related problems of Bhutanese refugee residing in Houston, TX. Our target areas were to identify the access to the health care for adults, insurance, dietary habits, medication management, depression, child insurance, child access to health care, and so on. We were able to identify some of the health problems and health inequality this community is facing after coming to the United States. Although this is considered as a baseline study of Bhutanese community, it will be the foundation for future research and intervention.
I developed a complete database using statistical software required for a research study. After developing the database, I entered the pre-collected data and ran some preliminary analysis at last. So this project gave me experience in handling clinical data. I closely observed other clinical trials going on in my department as well.

The primary task of my practicum was to make one easily accessible database for a research study. This database has more than 500 variables and some variables have different categories.

**Public Health Significance**

- Research is one of the ten essential services a public health practitioner provides and it is the essential for development of any field. This institution is doing aggressive research to tackle cancer which is one of the biggest public health challenges. This project gave me in-depth knowledge of conventional research methodologies in public health specifically in the field of clinical trials.
- During my practicum, we also targeted at diagnosing and investigating the etiology through the quality research.
- All the findings of my practicum project would be communicated to general public through a scientific journal article.

**Special highlights during your practicum**

- Worked independently in a cancer research institution
- Got opportunities to apply concepts acquired during MPH curriculum in practical world.
- Worked in multiple research projects at the same time.
Health Services Research Practicum

Health services research experience in hepatocellular cancer

By: Yvonne Sada

During the practicum, I worked on a retrospective cohort study focused on utilization of surveillance and treatment in veterans with hepatocellular cancer (HCC). The practicum site was the Michael E. DeBakey VA Medical Center Health Services Research and Development (HSRD) Center.

The project required chart abstraction of veterans with HCC. We have reviewed approximately 1050 medical records to date. I worked on chart abstraction form design, database design, training chart abstractors, and data collection. I participated in weekly team meetings with biostatisticians, epidemiologists, physicians, and chart abstractors.

For the final product, I helped develop the chart abstraction form and training manual for chart abstractors. In addition, I made a summary of chart abstraction findings to date.

Public Health Significance

The Public Health Essential Services that relates to my practicum experience is evaluation of the quality of population-based health services.

The HSRD Center is dedicated to evaluation of the quality of health care delivery. This includes research in health care policy, clinical epidemiology and outcomes, communication, and patient safety.

My practicum was focused on evaluation of adherence to surveillance guidelines in veterans with HCC. The first part of the project involved identifying a cohort of patients with HCC based on chart review. The next step will be to determine receipt of surveillance and predictors of receipt of surveillance, such as demographic and clinical features. We will also determine the impact of surveillance on receipt of treatment and survival. This will contribute to our understanding of health care utilization and guideline adherence among patients with HCC.
Public Health Significance

Lines of evidence have shown that most prostate cancer patients are being diagnosed with organ-confined disease but the trend appears to have dwindled in recent years. African American men present with metastatic prostate cancer at initial diagnosis more than any other race. Given the high mortality rate among prostate cancer patient diagnosed with metastatic disease, it’s important to develop a predictive model that account for racial and individual variability. Based on the identification of genetic variants as predictors of aggressive tumors, a case comparison study of prostate cancer patients was designed to explore the association of genetic susceptibility loci with metastatic disease. The identification of genetic variants associated with metastatic prostate cancer will help to better understand the disease prognosis, improve prediction of aggressive prostate cancer, promote treatment optimization and increase patients’ survival.

American Urological Association recommends that all men aged 40 above be offered prostate cancer screening.
Periodontal Disease Diagnosis

Special events/duties during your practicum

- Reviewed approx 88 survey responses & 11,000 electronic patient records.
- Applied concepts from epidemiology and biostatistics to actual research data & generated results.
- Participated in research group meetings.

"The 1999 AAP classification is currently accepted and promoted by American Academy of Periodontology. However, schools teach a wide variety of disease definitions which leads to confusion."

Periodontal disease diagnostic criteria at U.S. dental schools

By: Khantil Shah

My practicum was a part of UTHSC-H School of Dentistry Dean’s Academy small grants program for innovation and research proposal 2011-2012. I contributed to a study conducted by faculties in the Dept. of Periodontics on “Assessment of periodontal disease diagnosis at U.S. dental schools.”

This was a cross-sectional study that investigated the diagnostic criteria and classification systems used and taught by U.S. dental schools and how the use of these may impact prevalence estimates and treatment of periodontal disease.

Periodontal (gum) disease is diagnosed primarily by pocket depth (PD) and clinical attachment loss (CAL). My duties were to perform descriptive statistical analysis of the survey data as well as UT-Houston AxiUm patient database.

I prepared a report describing the variation in prevalence of periodontal disease and its treatment based on PD and CAL.

Public Health Significance

According to the Surgeon General’s report “Oral Health in America” (May 2000), most adults suffer from periodontal disease, but it remains the silent epidemic. The consequences are tooth loss, low birth weight babies in pregnant patients, heart disease, and possible problems with overall health.

Utilization of different criterion for disease diagnosis is likely to impact estimates of disease prevalence, associations of disease with various risk factors, and ultimately treatment rendered.

The primary focus of this project was the core function: Assessment.

The results from the study will be used to improve consistency, accuracy and education in diagnosis and treatment planning among students, faculty and institutions, at UT as well as around the country. It will provide a base for future studies that focus on policy development and provide essential services that significantly advance public health.
Medicare Payment Denials

Highlights during the practicum:

- Attended the monthly St. Luke’s Hospital Executive board meeting with site preceptor to present findings on payment denials for 2011.
- Met with two physicians who experienced more than 8 denials in the previous year to offer solutions to prevent future denials.
- Helped streamline the process for cumulative radiation exposure reporting to hospital safety officer.

"One of the signs of excellence in a manager is the ability to anticipate problems, not just react to them."
- Sir Liam Donaldson

Assessment of Medicare Payment Denials in 2011

By: Faisal Siddiqi

As an intern in the Cardiovascular Service Line Management, I gained a lot of experience in various aspects of healthcare management, including organization, finances, and flow of information through the hospital system.

My major project was to assess payment denials in the department of cardiology by Medicare in 2011, diagnose the reasons behind these denials, and communicate this information to the cardiologists to prevent future payment denials. Majority of the denials involved either misclassification of patient status or a scheduling error that was not caught before the procedure began.

To present these findings, I prepared a report for the Service Line director that she could use for her reference and to communicate the information to other physicians.

Public Health Significance

My practicum experience lines up most with two essential public health services: Assuring a competent public health and personal healthcare workforce and Evaluating effectiveness, accessibility, and quality of personal and population-based health services. By monitoring the activity of physicians in a hospital setting and making sure they are with the regulation guidelines, we make sure that patients are getting the most competent and necessary care.

One of the roles of the Cardiovascular Service Line is to communicate to cardiologists when their clinical practice does not meet national guidelines, such as high levels of radiation used during cases and discharged patients not meeting core measures set by Medicare. These services are essential for patient safety and efficient distribution of health services.
Multiple Myeloma

Special events/duties/highlights during your practicum

- I got a chance to fill in data for a multiple myeloma registry.
- I am planning to write a systematic review in myeloma with my practicum mentor.

“Almost all patients with myeloma relapses after having initial response to first line medications.”

By: Saurav Suman

I am doing my practicum at Lymphoma/Myeloma department of MD Anderson Cancer Center. I read bunch of literatures to truly understand the advances in myeloma and then I also started discovering the challenges associated with the various therapeutic options.

One of the challenges is to yet to solve is when is the right time to initiate maintenance therapy for myeloma?

Public Health Significance

Cancer is a major public health challenge. Individuals with cancer have greater health limitations and they have lower health related quality of life (HRQL). My practicum organization MD Anderson Cancer Center is pioneer in cancer research and thus immensely contributes to public health.

I am working on the electronic medical record database of MD Anderson Cancer Center and I am preparing a dataset. Further, we will analyze to see whether starting the maintenance medication (Revlimid) 3 month after Stem Cell Transplantation (SCT) regardless of serum or urinary myeloma protein level is any beneficial as compared to initiating maintenance medication on a later date as guided by serum or urinary myeloma protein level.

I am making a contribution to the field of public health by working in a research project that aims to evaluate the existing practice and if there needs to be a change suggested by the study we will inform, educate and empower both clinicians and patients about the latest evidence.

Thus, in terms of Public Health Essential Services the items that most closely relates to my practicum experience are item number 3, 9 and 10.
Data Mining and Visualization methodologies for Multi-modal Genomic Data

By: Suvendra Vijayan

Hi all. My name is Suvendra Vijayan. I am a second year student at the UT School of Public Health in Epidemiology division.

I am doing my practicum at MD Anderson Cancer Center in the Department Of Bioinformatics and Computational Biology. I am currently working with mesothelioma data.

What I am trying to do is build a data repository with an ACCESS front end to permit queries for multimodal genomic data. I am also working to develop methodologies to integrate various genomic data to find patterns that correlate with clinical findings.

Finally I have to write a detailed report on these efforts.

Public Health Significance

My part in this will be in the core area of assessment. I will be analyzing genomic data for ovarian and lung cancer patients. The analysis of these data will help us better understand the intricacies of cancer genome. Such an analysis and further interpretation may lead to better treatment planning. The analysis and subsequent research may lead to assurance of better treatment planning with fewer drugs and even more personalized treatments for patients based on their genetic makeup.

The building of an Access database for these datasets will further improve data mining operations. Analyses of the mining operations may lead to further discoveries. These operations can be replicated for other similar genomic datasets and further improve diagnosis and treatment.
For more information regarding
The University of Texas School of Public Health,
Office of Public Health Practice
and the practicum program, please visit:
https://sph.uth.tmc.edu/practicum/