Public Health Practice

Stories from the Field
The University of Texas School of Public Health
Student Practicum Experiences
Fall 2013 – Management, Policy & Community Health
The practicum experience is an integral part of the MPH and DrPH curricula. 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 twelfth-edition e-magazine showcases student practicum experiences throughout the Fall 2013 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:** 11

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**Management, Policy & Community Health**

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Healthy Living Matters (HLM)

Practicum Highlights

- Traveling to the Baytown YMCA to sit in on a community forum for CHLI. It was interesting to see how different stakeholders in the community (i.e. parents, teachers, community workers) had different insight as to how they could improve the overall health of their community.

- Attending HLM Community Planning Team meetings and hearing all their plans for a building a healthier Harris County!

Advice for Future Practicum Students

- Choose a practicum that will let you learn more about things you are passionate about! I’m so fortunate to have been able to be a part of Healthy Living Matters because I have a particular interest in curbing childhood obesity. Every experience of my practicum solidified my desire to be involved with this grand effort.

HLM: A Houston/Harris County Childhood Obesity Prevention Collaborative

By: Candace Ashford

For my practicum with Harris County Public Health & Environmental Services, I was involved with HLM, an initiative to end childhood obesity. Specifically, I developed reports that summarized the main findings of the community assessments gathered using Community Healthy Living Index (CHLI). The goal of CHLI is to help communities transform themselves into ones that provide the best opportunities for individuals and families to be active, eat right and live healthier.

I was also responsible for developing an executive summary report of the HLM Early Child Care Survey. The survey was designed to examine the challenges faced by early childcare providers when providing healthy nutrition and physical activity opportunities to children in their care. I summarized the major findings of the report and included policy recommendations for improvements to increase the opportunity of healthy living for children in their care.

Public Health Significance

HCPHES and HLM both cover a wide range of the Essential Services of Public Health. However, the Public Health Essential Services that most closely relate to my practicum experience include monitoring health status to identify community health problems, diagnosing and investigating health problems and hazards in the community, and developing policies and plans that support individual and community health efforts.

The projects I was involved with at HCPHES and with HLM contribute to public health by not only by identifying barriers to healthy living of communities, but by developing policy recommendations that will put plans into action.

Through my practicum experience, I’ve been able to witness a public health agency executing the goal of “assuring conditions in which people can be healthy” (IOM).
EMS to Hospital Critical Care Continuity

Effect of Therapeutic Hypothermia on survival and neurological outcomes of patients with out-of-hospital cardiac arrest secondary to Pulseless Electrical Activity or Asystole.
By: Steven Blake Baker

Post-cardiac arrest syndrome (PCAS) is a phenomenon that occurs from return of spontaneous circulation (ROSC) following cardiac arrest and is characterized by a combination of pathophysiological processes, which potentially lead to detrimental effects on patient mortality and morbidity. Therapeutic hypothermia (TH) has been shown to improve neurological outcome and survival in out-of-hospital cardiac arrest (OHCA). Our study is the first of its kind to examine this issue with a population large enough for statistical significance. In this project I assisted with data analysis, literary review, and drafting a manuscript. Hopefully, our findings will guide future care for EMS services nationally and globally.

Public Health Significance

Our project fulfilled many of the essential public health services and, in the future, will serve as a foundation for more. We monitored the state of out-of-hospital cardiac arrest (OHCA) events in the community. This helped us to diagnose this as a problem, leading us to implement this study to investigate the issue. We were able to mobilize a community partnership with the Houston Fire Department and use their database to achieve our goals. Our research will help us to elucidate best practices, specifically the use of therapeutic hypothermia (TH). The results of this study will be used to develop policies and plans to improve critical care from the EMS response in the field through emergency department and in-patient hospital care. Finally, our study and use of the HFD database will serve as a foundation to evaluate other aspects of EMS critical care outcomes.

Special events/duties/highlights during your practicum

- The best part was getting to interact and learn from my mentor. He is truly a public health physician and I learned so much from him.

Lessons Learned and Advice for Future Practicum Students

- Things may not always progress in a timely fashion. My project was delayed significantly. My advice is to not get discouraged, stick with it, and ask for support if you need it.
Health and Transportation Policy

Considering the Health Implications of Transportation Policy

By: Aaron Cano

My practicum was completed at Harris County Public Health and Environmental Services’ Office of Policy and Planning. The focus included a few different objectives. The first was familiarizing myself with the literature on transportation behaviors as they relate to population health. The second was identifying agencies that play a role in influencing transportation-related policy and learning about the processes involved in affecting policy change. HCPHES works in collaboration with local governmental agencies and community organizations to ensure the consideration of health in policy decisions. I developed a document to guide future HCPHES efforts to incorporate health into the decision making process. This document highlights information on key agencies, committees, and persons involved in transportation planning in Harris County and the City of Pasadena, in particular.

Highlight/Special Event

• Attending the UH Community Design Resource Center’s “Community Design Charrette” which brought together planners, community leaders, and health professionals to collaborate on plans to create healthy communities.

Public Health Significance

Transportation systems and the policies shaping those systems play a vital, and often overlooked, role in public health. These systems influence the behaviors we engage in and, thus, health outcomes. For instance the decision to engage in active transportation (walking/biking) or to drive, though seemingly a simple autonomous choice, is influenced by the presence or absence of sidewalks, the connectivity of a street grid and the commercial and/or residential density among other factors, all of which are shaped by policy. Affecting transport-related policy change contributes to increased physical activity, safer facilities for pedestrians and cyclists, better air quality, and improved community social cohesion.

My practicum experience involved two Essential Services:

• Develop Policies and Plans
• Mobilize Community Partnerships

The two of these go hand in hand as I’ve learned. The development of policy and plans cannot progress without the buy-in and support of community partners.

Advice for Future Practicum Students

Accept working with those with differing views and ideas, even those in other professions. Successful partnerships and the public’s health rely on effective collaboration.

Source: City of Columbus Website

Complete Streets policies enable users of all modes of transport safe access to community resources, shops, restaurants and places of employment, encouraging physical activity and social cohesion.

Source: City of Columbus Website
Exploring MCH Mortality issues in Myanmar

By: Kristen DeCaires

I spent four weeks in Yangon, Myanmar as an intern with Relief International, an international non-governmental organization. My focus was to shadow health staff to get a better understanding of “lessons learnt” from a project that was recently implemented over a region of approximately 220,000 people. The project’s goals were essentially to reduce infant, neonatal and maternal mortality for women and children in the Ayerwaddy delta region, an area most affected by Cyclone Nargis in 2008. Interviewing RI staff, midwives, and voluntary health workers, the project touched on several issues in my public health coursework thus far: quality, management, health promotions, and methods of economic evaluation. Though my findings are still a work in progress, the ultimate output of my time there will be an economic analysis of resources spent on the project to see what enhancements can be made to make the project more efficient in other areas of Myanmar if replicated.

Public Health Significance

One of the essential services of public health is to inform, educate, and EMPOWER communities served. Through its educational components, regional clinic support, and emergency service referral support, the RI project most definitely embodied this service.

In terms of my own personal research, my project most aligned with EVALUATING effectiveness, accessibility, and quality of personal and population-based health services.

Many Ayerwaddy residents live in hard to reach areas only accessible by boat. Many times they cannot afford to pay for emergency care. The emergency referral service (ERS) RI provides a link to services by creating a village committee based fund to support transportation and medical costs for women and children in an emergency situation. The fund saved almost 2,000 lives during the project’s duration. This is just one example of the vital, life-saving services that RI provides in one single project.
Smoking as a Risk Factor for Bladder Cancer: What the Public Knows?

My project focused on assessing the public’s knowledge about smoking as a primary risk factor for bladder cancer. We developed a questionnaire to address this question by convenience sampling a population at LBJ. The final product will be a manuscript we will submit to a urology journal.

Public Health Significance

In trying to assess the public’s knowledge about smoking as a risk factor for bladder cancer, we are monitoring health status to identify community health problems. By assessing a knowledge gap we can research new insights and innovative solutions to health problems.

Essential Public Health Services:

Diagnose and investigate health problems and health hazards in the community.

Research for new insights and innovative solutions to health problems.

Advice for Future Practicum Students

Start early because there is always going to be more work than you plan for!

Practicum Highlights

- The development of a questionnaire
- Working for IRB Approval


http://en.wikipedia.org/wiki/Smoking_in_Iceland


PRACTICUM SITE

Development of a questionnaire to address question about public’s knowledge about smoking and bladder cancer.

LBJ and MD Anderson are both institutions that focus their research and clinical work for the benefit of the public.
Public Health Significance

The goal of my practicum is to assess the way community health clinics screen diabetic retinopathy. There can be a gap between a patient’s diagnosis with diabetes and when they first see an eyecare professional. This study assesses telemedicine as an effective monitoring tool that can be used by primary care physicians to determine when their patients need to be seen by an ophthalmologist.

This type of monitoring could improve the early diagnosis and treatment of individuals in the community. Screening patients at community health clinics will also provide demographic information that could aid in understanding the impact of diabetic retinopathy on the community, as well as, its prevalence in the city of Houston.

Utilizing Telemedicine as a Screening Tool for Diabetic Retinopathy

By: Jacob Gross

The current aspect of my project consists of designing and implementing a study to assess the use of telemedicine as a screening tool for disease, specifically diabetic retinopathy. Diabetes is a significant public health issue in the United States affecting approximately 25.8 million Americans. Further, it is estimated that 15 years following the initial diagnosis of diabetes the majority of individuals will have some form of retinopathy. The benefits of early detection and treatment are well documented and include a reduction in morbidity and mortality. Thus, the goal of my project is to assess the effect of telemedicine on improving detection and screening for diabetic retinopathy in individuals with diabetes. The Harris Health System is currently working to screen its diabetic patients.

Lessons Learned

• Research is an extremely valuable aspect of public health that can work on the community level to improve disease diagnosis and monitoring.

Telemedicine and Eye Disease

The anatomy of the human eye.


Practicum Highlights

• Developed a research protocol
• Gained a better understanding of the community health system

The automated non-mydriatic fundus camera present in community health clinics.

Food Policy in Houston

• Having the opportunity to volunteer at the first annual Houston Catalyst Awards, honoring members of the community whose service has improved our city, was a huge highlight of my practicum experience.

• Being offered a chance to work with the City of Houston’s Director of Sustainability on a thesis project for the spring was another highlight of my experience.

• One of the best pieces of advice I could give to future practicum students is to journal your experience, weekly. Opportunities will arise and you will meet people that will inspire you, and ask help, of which you are not sure you’re even qualified to perform. You are. You have the basic skills to find the answers, or find the person who has them. Go forward, confidently, and accept the challenges as they present themselves.

Where We Go From Here

By: Aria Jefferson

While working through Houston Tomorrow with the Houston Food Policy Workgroup, as their coordinator, I primarily worked on education, research, and collaboration pertaining to food access, insecurity, and distribution.

The organization is in a building stage, and deciding where our efforts will be focused moving forward, so a large part of my practicum experience was in strategic planning. I compiled data and revised many documents to finalize the goal-setting process and formalize bylaws for the group.

My final project for my site was an advocacy toolkit, based in my research on fruit trees in Houston. This project allowed me to assess where our city ordinances permit and prohibit the planting of trees in our city, and to compare neighboring counties in the same policies.

Public Health Significance

Food policy is increasingly important in public health, because approximately 1 in 5 children are food insecure. This means that they do not know where their next meal will come from, and this is generally a socioeconomic issue.

Knowing that fresh foods are not as readily available in low-income neighborhoods, as there are generally less grocery stores in these areas, research and policy initiatives that aim to reduce these disparities are imperative to ensure a healthier environment for all children.

My duties generally fell under the policy development spectrum of the essential services. Much of my work was encouraging collaboration amongst groups across Houston that also do work in supporting and promoting healthier lifestyles through food policy.

Through the fruit tree initiative, our organization aims to reduce the barriers to planting trees in neighborhoods. Our hope is that these trees may provide produce to those who have limited access, otherwise.

HFPW traveling meeting at the Prairie View A&M University gardens.

Photo Courtesy: Houston Food Policy Workgroup
Childhood Obesity Prevention

Being a CATCH Facilitator

By: Shamsha Lalani

CATCH (Coordinated Approach to Child Health) is an evidence-based, coordinated school health program designed to promote physical activity, healthy food choices and the prevention of tobacco use in children. The CATCH Programs cover kids from preschool through 8th grade and has been implemented in thousands of schools and after-school organizations across America.

I helped implement the CATCH program at HISD Elementary Schools. Some of my roles/responsibilities were: Understanding the structure of HISD, the curriculum of Physical Education and how it integrates CATCH activities and themes, attending a CATCH Facilitator training, arranging meetings with the P.E. coaches to understand how their CATCH efforts are going in their particular school, coming up with solutions for the problems they are facing in implementing CATCH.

Public Health Significance

My practicum experience related to these Essential Services:

- Monitor health status to identify community health problems.
- Diagnose and investigate health problems and health hazards in the community.
- Inform, educate, and empower people about health issues.
- Develop policies and plans that support individual and community health efforts.

CATCH, which is conducted by faculty with the Michael & Susan Dell Center for Healthy Living, transforms a child’s environment, culture, and society by coordinating child health efforts across all aspects of the educational experience: classroom, food services, physical education, and family.

CATCH originated as an elementary school-based program (CATCH Elementary), has now expanded to: CATCH Early Childhood, CATCH Middle School, as well as an after-school program called CATCH Kids Club.

Lessons Learned

- Make sure you are determined in the goals and outcomes.
- I learned how to work with individuals that do not share the same vision as me and learned to combine their goals with mine to make the best outcome for the situation.
My project was to evaluate which outpatient infused medications required FDA mandated REMS and make sure the requirements were being adhered to. A spreadsheet with the list of medications that’s required REMS and their respective requirements as mandated by the FDA was created for staff to see. I pulled the information from the various websites on what medications required REMS. I created a spreadsheet with the list of medications requiring REMS with their respective requirements. Most outpatient infusion medications do not require REMS.

**Public Health Significance**

My practicum experience was very closely related to the essentials of public health because it promotes the safe use of medications in the community.

It was closely related to #6 of the essentials of public health service because it involved enforcing laws and regulations that protect health and ensure safety.

For example, all of the medications and biological products on the Risk Evaluation and Mitigation Strategy (REMS) list are to be used only when the benefit outweighs the risks. I created the list and spreadsheet to help health professionals know what and what is required by the FDA for each drug on the REMS list. This therefore can be used as a reference guide for health professionals who work at outpatient infusion centers to make sure they are adhering to the rules and regulations mandated by the FDA to promote public safety.
HIV Behavioral Surveillance

Facing HIV in Underserved Communities

By: Amir Pirzadeh

The public health challenges tackled in this practicum included HIV prevalence, psychosocial factors that drive risky decision making, and community awareness and knowledge of Human Papillomavirus.

We delivered a survey to gather information about risky sexual behavior and community awareness. We also conducted rapid HIV testing to gauge the prevalence of this disease in the community.

My main responsibilities during this project were to deliver objective questions to the populations we were involved with. Occasionally, I acted as a coupon manager. In this role, I scheduled appointments and monitored admissions into the study.

The final product will aim to address these disparities by developing further interventions in impoverished communities.

- What was most meaningful was being able to work at the “front-line” of this national epidemic.
- Disparity is REAL in these communities and this eye-opening experience has empowered me to face these challenges.
- I also enjoy that I learned a new public health skill: Rapid HIV Testing.

Public Health Significance

Monitoring was a core tenet of this practicum. In fact, the majority of our work, whether through HIV testing or collecting demographic/psychosocial data, was at its simplest community monitoring.

Being able to diagnose and investigate these issues was also strongly connected to this assignment. We went through this process similar to our monitoring.

I would argue by asking our participants questions about the sex behaviors and drug usage or even offering free protection it would definitely put into their actions into perspective. In this sense, I would hope that people would feel informed and (or) empowered about reforming their behaviors.

The last Public Health Service addressed in this project was linkage. Regardless of survey eligibility, we provided all participants with information on local clinics where they could seek STD/HIV testing and counseling, if necessary, in the future.

Lessons Learned [OR] Advice for Future Practicum Students

Approach all situations with an open-mind and believe that the work you are doing is meaningful and can ultimately have a huge impact on at-risk societies.

http://www.bchdmi.org/cchs/hiv
"LEAN/Six Sigma Strategies showed opportunities for Improvement in HPV Turnarounds" by Nydia Treviño

On 9/20/13, the University of Texas Medical Branch-Galveston (UTMB) Director of Pathology, met with a multidisciplinary team to discuss concerns and areas of improvement for the current Human Papillomavirus (HPV) reflex testing process.

As a result of this conversation, as the Process Improvement Intern, I was requested to perform direct observation in order to identify areas of potential improvement.

After observation utilizing Lean/Six Sigma templates, I was able to identify two opportunities for improvement.

Firstly, one step could be moved sooner to reduce turnaround by 4 days. Secondly, tracking of specimen could occur sooner to prevent missing PAPs. The results were presented to the team.

Public Health Significance

Of the 10 Essential Public Health Services, this practicum best could be defined as #2, Diagnose and investigate (See http://www.apha.org/programs/standards/performancestandardsprogram/resexentialservices.htm ).

My role as an intern was investigate the concerns raised by the multidisciplinary team in order to improve the availability of HPV testing results to providers and patients.

UTMB, as an institution, performs each of the essential public health services by way of its academic structure, research, administrative, and clinical services. It is a large institution with dramatic role in the local and global community.

Special events/ duties during your practicum

- Presenting findings
- Adjusting to a new work environment

Lessons Learned [OR] Advice for Future Students

- You may need to figure out how to perform your tasks with little initial guidance. Be sure to refer to previous coursework! I was grateful to have completed my practicum towards the end of my academic program.

Eternal Clock, a representation of ongoing turnaround for HPV testing.
http://upload.wikimedia.org/wikipedia/commons/4/4f/Eternal_clock.jpg

Example of prepped lab slides.
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/