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 thirteenth-edition e-magazine showcases student practicum experiences throughout the Spring 2014 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: 12

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## Management, Policy & Community Health

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Suboptimal utilization of operating room can increase hospital cost and compromise health care delivery. Methods to increase operating room efficiency are important.

We wanted to investigate the different methods utilized to estimate surgical case length by VA hospitals and other teaching facilities.

In this project I was involved in conducting a survey among operating room schedulers asking them about methods for assigning operative case length.

Our studies major findings are illustrated in the figures included here. We identified 4 major methods of scheduling among VA hospitals. With no statistical significance found among facility volume and scheduling method.

Public Health Significance

The essential public health service mainly used during this project was research.

We evaluated methods for estimating surgical case length to gather data for a proposal that will lead to innovative methods for improving operating room efficiency.

The VA contributes to public health in several areas of public health; they are active on diagnosis and investigation of health problems affecting veterans. They are constantly trying to find methods to better serve the veteran populations. The care provided at the VA is multidisciplinary.
Analyzing Medication-Related Insurance Denials

Using a large claims denial data base to reduce medication-related insurance denials

Using a large medical insurance claims database, I was able to discern clinically related denials for medications over a 1-year period. The purpose was to identify practice-related or policy related opportunities to reduce drug denials from private and governmental insurance companies.

A sandbox data warehouse was created to house the over 1 million claims. Business logic was used to refine the claims to those related to the clinical use of the drug.

The product was a result of collaboration between myself, the Division of Pharmacy, and Patient Business Services. We were able to identify a trend for drug denial-related to an outdated insurance policy and are currently in discussions with the insurance company to change their policy.

Public Health Significance

Because most patients seen at our facility have some insurance coverage, it is important to both the hospital and the patient that the essential services needed are paid for by the insurance plan.

The Public Health Essential Service(s) (PHES) that most closely relates to my practicum experience is, “evaluate effectiveness, accessibility, and quality of personal and population-based health services.” If patients are receiving treatment that is of unknown effectiveness, then that affects the quality of their care and we identified some of those issues that we plan to address in the future.

On the other hand, if patients are receiving care that is high in quality but is not being paid for by the insurance company (i.e., they are responsible for the full amount), that affects the quality of care as well.

Ongoing Collaboration

- Through this practicum the Division of Pharmacy and Patient Business Services identified common goals related to drug denials.
- This collaboration has evolved into an ongoing partnership between the departments and with hopes for future success in denial management reduction.

Use your practicum as an opportunity to network and develop relationships with others in your field. It may help you out in the future!
Hospital Commissioning

Commissioning of Baylor College of Medicine McNair Campus

By: Nicole Jawanmardi

I worked as a team member of the Baylor College of Medicine Commissioning team responsible for bringing the new McNair Campus from the planning stages to Opening Day. I was able to see firsthand the negotiations and compromise between clinicians and hospital executives. A joint venture took place during my practicum with CHI & St. Luke’s, which exposed me to the process of due diligence. My main role during my time on the BCMMC commissioning project was to work with the project management group to map out several different processes and find ways to make them more efficient, this research led to improvements in the areas of: donations, contract keeping, and mail delivery.

Public Health Significance

Baylor College of Medicine is known for its premier research and clinical facilities, and The Baylor St. Luke’s Medical Center is no exception. The new hospital will link people to needed personal health services and assure the provision of health care when otherwise unavailable. As a project management intern, I was able to help in finding more efficient ways to help clinicians provide the best level of care to the community. Our goal is to be patient care driven and focus on what will make for a better patient visit. The 850-bed hospital will offer a wide range of specialties and partner with the Texas Heart Institute to offer Houstonians an exceptional healthcare experience.

Highlights

• Worked alongside administrative and clinical executives during planning phase of hospital construction.

Advice for Future Practicum Students

• Students will get as much out of a practicum experience as they put in. Don’t be shy to ask for more projects to gain extra experience.

• Make an effort to connect with others in the workplace – not just your community preceptor – these could potentially be your future coworkers!

Process Flow Diagram Template

Process flow diagrams are created & used frequently to see how a process can be improved.

Photo Credit: tmcnews.org
HEALTH INFORMATION EXCHANGE

The Value of Health Information Exchange Adoption

By: Michael Kavalerchik

Although I did not get to work at the Greater Houston HealthConnect as much as I would like, I was able to find some great information on HIE adoption and value by researching various databases and journals.

My assignment was to learn about the roles, values, and purpose of a health information exchange from a public health and health care delivery perspective.

Public Health Significance

Learning about the value of HIE adoption related to two Essential Services of Public Health the most.

1. Linking people to needed personal health services - The Greater Houston HealthConnect provides a service that enables patients using different hospitals to have their health information easily shared with treating physicians.

2. Researching the value of HIE adoption - I was able to find empirical evidence of the benefits of HIE adoption.

My final product was to write a paper about the roles of exchanges and how HIEs are valuable to hospital CFOs.

I found that HIEs can save time and money by reducing duplicate testing and treatments while at the same time improve healthcare quality and patient satisfaction.

Lessons Learned [OR] Advice for Future Students

- Always remember the value of everyone’s time while working on your practicum.
- Securing face time with CFO’s is a lengthy process.

http://www.statschedules.com/HealthInformationExchange.html

http://www.chc1.com/About/EHR.html

Special events/ duties during your practicum

- Meeting Dr. James Langabeer
- Visiting the Greater Houston HealthConnect

Spring 2014 - Michael Kavalerchik - Greater Houston HealthConnect - The Value of HIE Adoption
Quality & Clinical Outcomes

Development of a patient registry to assess outcomes in spine surgery

By: Victor Lo

During my practicum, I worked with the Mischer Neuroscience Institute - University of Texas Department of Neurosurgery to develop and implement a registry for spine surgical patients.

Determining the true effectiveness of an elective surgical procedure can be challenging. From a physician’s perspective, symptomatic and radiographic improvement may indicate success. However, a patient may perceive the success of a procedure differently.

Given that it is the patient’s satisfaction with a surgical procedure is an equally important outcome indicator, it is essential to document and follow these findings over time.

I worked with the neurosurgeons, quality improvement team, and information technology team to determine the patient and surgical variables to be collected. The result of our efforts is an electronic interface and database that can collect patient data for future analysis.

Highlights

• Work with a multidisciplinary team to achieve a unified goal
• Appreciate a different perspective of clinical research

Public Health Significance

Back pain is a common health problem that affects a significant number of Americans. It can affect an individual’s activity level, work, and overall well being. In addition to conservative treatments, surgery is a common treatment option. The investigation of outcomes of spine surgery through patient registry serves several essential services of public health.

• Evaluate: Establishing a patient registry allows us to review our procedures and follow patient reported outcomes to determine efficacy.

• Research: By understanding how patients respond to different surgical procedures, it can help spine surgeons determine which operations are more effective for specific spine pathologies.

• Monitor: The patient registry also has the benefit of following the patient over a long period of time. This allows spine surgeons to assess whether patients have improved from a clinical and non-clinical (e.g. return to work, activity level, etc.) perspective.

Advice for Future Practicum Students

Choose a practicum that you may be interested in pursuing as a career. The time and experienced gained may give you a valuable head start.

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Advice for Future Practicum Students

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Health care needs of adolescents living with HIV in Houston

Practicum Highlights

- I had the opportunity to observe physicians provide health care to adolescents at the Harris County Juvenile Justice Center and the UT Physicians Adolescent HIV Clinic.
- I visited DePelchin Children’s Center to learn about the services offered.
- I had the opportunity to sit in on a support group.

Gems of Knowledge

- Teamwork is vital to improving health care and to the success of public health initiatives.
- Time management skills can always be improved.

Funding support groups for adolescents living with HIV in Houston

For my practicum, I sought to identify the needs of adolescents living with the human immunodeficiency virus (HIV), and did so via research, as well as observation at the Juvenile Justice Center (JJC) and the UT Adolescent HIV Clinic. In observing, I had the opportunity to witness the health care provided to this population, and to find where services are currently lacking. I also had the opportunity to interact with different professionals who work with those living with HIV in Houston, as well as those who provide services to children and adolescents in need but not necessarily living with HIV.

I decided to focus my research on the mental health needs of adolescents living with HIV. My research culminated in a white paper outlining the need for mental health services and support groups for adolescents living with HIV in Houston. The other end product of the practicum was a list of funding resources to help fill in gaps in healthcare services, especially mental health services, that enhance the well-being of adolescents living with HIV.

Public Health Significance

With the advances in treatment, HIV has been transformed from a terminal illness to a chronic condition. Consequently, HIV-positive children have psychosocial needs resembling those of chronically ill children, with the added complication of stigma associated with HIV. Mental health services, especially in the form of adolescent support groups, have been found to be beneficial yet are severely lacking in Houston.

In conducting research regarding the gaps in health care for adolescents living with HIV in Houston, and in compiling a list of possible funding sources to help fill these gaps, this practicum has given me the opportunity to provide several essential services of public health. These include conducting research on and informing people about the health issues surround adolescent HIV, and helping to link adolescents to needed health care services.
Strategic Planning

Practicum Highlights

- Attending two annual symposiums at BCM and hearing stimulating lectures from prominent leaders in academic medicine.
- Sitting in on annual planning meetings where BCM President Dr. Klotman and other executives provided department chairs feedback for proposed strategic planning for their departments and research centers.

Strategies for Innovation at Baylor College of Medicine

By: Christina McCauley

As an administrative intern in the Office of the President at Baylor College of Medicine, I have had the unique opportunity to observe the various strategic planning initiatives the college takes to remain an innovative institution. This semester has been an exciting time for BCM, having recently entered a non-profit joint venture with CHI St. Luke’s Health, which gives Baylor partial ownership and joint control of a private, adult hospital. While interning at BCM, I conducted extensive literature research on existing joint-ventures between medical schools and hospitals to uncover best practices for the strategic operation of the academic health science center.

My experience in the Office of the President provided a comprehensive introduction to the multifaceted ways strategic planning aids in meeting the tripartite mission of education, research, and clinical care at BCM.

Public Health Significance

While BCM as a whole practices all 10 Essential Public Health Services, my practicum experience in the Office of the President most closely focused on developing policies and plans that support individual and community efforts.

I had the opportunity to take notes for multiple annual planning meetings that included presentations from various academic and research department chairs at BCM. A common theme of these meetings was the proposal of plans and policies that strengthened the work of each department.

In a complex and changing healthcare environment, BCM is taking important steps to meet the academic and healthcare needs of students and the community. During my time at BCM I observed a notable example of planning that supports institutional efforts through the expanded clinical platform that came from the CHI St. Luke’s joint-venture.

Training health care leaders of tomorrow begins with innovative and effective strategic planning efforts for each department at BCM today.

Advice for Future Practicum Students

- Be able to project manage yourself! Take ownership of your work and create quality outputs that you are proud of.
- This position provides a great opportunity to network with top BCM executives who might otherwise be difficult to reach.
Assessing Health Care Access among the Detained Youth

By: Martin Nguyen

For my practicum, I conducted need assessment surveys at the Juvenile Justice Center. The data was gathered from face-to-face surveys with the youth and telephone surveys with parents. We obtained detailed information on the youth’s insurance status, barriers to health care, and access to medical homes.

The CATCH-funded research, headed by Dr. Rebecca Beyda, aims to understand and address the need for medical homes among this demographic. The study is ongoing into the summer and possibly beyond. Therefore, I do not have a final product to report yet.

However, we have some preliminary data that agrees with previous findings from similar studies. For example, we have found that there is a disparity in racial distribution in the juvenile justice system as most of the detained youth are either African American or Hispanic.

Public Health Significance

As part of a multifaceted research project, my practicum experience relates to the Public Health Essential Services because it involved monitoring, diagnosing, investigating, and informing the detained youth on their access to medical homes and general health care.

Additionally, the overall research relates to other components which will include developing plans in linking individuals to medical homes as well as assuring and evaluating provided health services.

The needs assessment will help develop continuity of care for the detained youth in Harris County. The goal is work with the juvenile system and the medical community to improve access to care through medical homes once the youth are discharged from the Harris County Juvenile Justice Center.

Lessons Learned/Advice for Future Practicum Students

• You have to be flexible by utilizing your skills and applying it to the job/practicum.

• It is important to remain professional even when working with minors. There will be times when they will test your patience!

• Take initiative and volunteer for duties outside your comfort zone. It will expand your skills and help you become a more well-

Practicum Highlights

• Meeting youth with fascinating stories and talents

• Working with research and on-site individuals of different, unique skill sets - and being able to learn from each one

• Developing professional and communication skills

• Exposure to professional and medical ethical situations

Photo: Wolfgang Houston (http://www.panoramio.com/user/6072378)

Harris County Juvenile Justice/Detention Center (Downtown Houston)
Chemotherapy S.M.A.R.T
(Shared Medical Appointment and Readiness Training)

Shared medical appointments (SMA) are a novel approach to health care delivery. In lieu of the traditional provider - single patient visit, a healthcare provider engages of group of 6-10 patients with similar health care needs in an extended visit that allows more time for education, discussion and social support.

Practicum Highlights
- Lean/Six Sigma Methodology
- Presenting Project to the ovarian cancer and endometrial cancer support groups
- Leading a multidisciplinary project

Integrating group visits into cancer care
By: Lauren Prescott
As part of the clinical safety and effectiveness course, I am leading a quality improvement initiative to improve the current process of educating patients about chemotherapy. Currently patients are seen in the clinic for a 20min appointment which often takes significantly longer (median time 2 hours) and results in delays to both the patients who need to get chemo as well as other patients scheduled that day. We have developed the SMART program to combine group education with a multi-disciplinary approach to improve both our wait times in clinic and the value-added time for patients.

Public Health Significance
Ovarian cancer is the second most common gynecologic malignancy, but is associated with the highest mortality and highest cancer-related costs of all gynecologic cancers. Our S.M.A.R.T program was developed with the third public health service issue in mind: to inform, educate and empower people about health issues. Shared medical appointments have been associated with improved clinical outcomes in other diseases and we sought to adapt this model to gynecologic cancer care. Part of my practicum experience was learning the tools necessary for quality improvement in health care. This process has great implications for improving the efficiency and effectiveness of the delivery of care. These tools include Lean methodology, process mapping, fishbone diagraming and leadership skills to lead an effective quality improvement team.

Image from MDAnderson photo library

Practicum Words of Wisdom: 10 characteristics of an effective leader by Dr. James Reinertsen
1. Leaders do not act like victims. They take a leadership stance
2. Leaders ground themselves in reality
3. Leaders don’t do a lot of improv theater. They use leadership frameworks
4. Leaders see their role as responsibility, not a title.
5. Leaders explain why and achieve a workable level of unity
6. Leadership requires courage
7. Good health care leaders always behave as if a patient were at their elbow
8. Leaders know that the measure of leadership is results, not popularity
9. Good leaders understand that their effectiveness depends on two factors: what you ARE and what you KNOW HOW TO DO
10. Effective leaders engage in all three activities (import knowledge, reflect on your experience, try it out in the field) necessary for personal growth

Assessing the impact of early Supportive Care among Lung Cancer Patients

By: Mwenenessi Tchalla Abalo

My practicum is at MD Anderson Cancer Center in the Supportive and Palliative Care department. MD Anderson Cancer Center offers education, research and treatment of cancer. The institution is ranked in 2013 as in most of the previous years the “Best hospital” by US News and World Report.

I work on a study that evaluates the impact of a supportive care intervention in lung cancer patients. The study will compare early to late supportive care regarding the cost of care and the quality of life. The study is in its early stage and during my practicum I was gathering the data that will be analyzed later. I will continue working on the study after my practicum time.

At the end, I will develop a report that will be submitted to my academic advisor and my community preceptor.

Public Health Significance

My practicum experience relates to the health services research and the evaluation of a clinical intervention. One hypothesis of the study is that the early intervention of supportive care during lung cancer patients’ treatment helps to reduce the overall cost on the overall treatment.

By proving this, the study contributes to ultimately change the clinical guidelines to require early involvement of supportive care teams in the treatment. This will be a cost saving measure that benefits the public health.
Gamma Knife Database

Creation of a Relational Gamma Knife Database

By: Khinh Voong

I created a new relational Gamma Knife database which will allow for retrospective review of outcomes of patients treated with Gamma Knife stereotactic radiosurgery.

There were three previous flat file databases. These 3 flat file databases were merged after accounting for differences in coding. Hence a common data dictionary was then created.

A new relational database was designed with the help of a post-doctoral fellow in bioinformatics. Data was then re-distributed into unique tables which stored patient characteristics, tumor characteristics and treatment design, and related to one another. This eliminated redundancies in coding and data entry.

Public Health Significance

Evaluate effectiveness, accessibility, and quality of health services.

Creation of the relational Gamma Knife database allows physicians to efficiently compile the data in a user friendly format.

Furthermore, review and analysis of the data will allow physicians to determine best use of Gamma Knife in treatment of intracranial lesions.

A data entry-user interface was then designed. The database was then updated to include all patients that treated from 2009 to 2013 and were not previously coded.

A retrospective review of outcomes of patients with a subset of brain metastases treated with Gamma Knife stereotactic radiosurgery was then performed. Risk factors associated with worse local control, survival and toxicity were identified.

Spring 2014 • Khinh Voong • MD Anderson Cancer Center • Creation of Gamma Knife Database
Public Health Significance

My practicum experience related to the **Essential Services of Public Health** in the following ways:

- **Monitor health status to identify community health problems** – screened employees for diabetes and hypertension.
- **Inform, educate, and empower people about health issues** – educated employees about diabetes and hypertension and recommended lifestyle changes.
- **Link people to needed personal health services and assure the provision of health care when otherwise unavailable** – helped employees find a primary care physician.
- **Evaluate effectiveness, accessibility, and quality of personal and population-based health services** – developed metrics and a timeline to assess effectiveness of a diabetes and hypertension employee population health project.
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/