MPH Practicum Showcase
Student Abstracts
August 16, 2019
The Master in Public Health (MPH) Program at Wayne State University is pleased to present the Spring/Summer 2019 student practicum abstract book highlighting students’ public health practice experiences. We would like to express our gratitude and appreciation to all of the organizations, agencies and businesses that hosted and supported our students and provided them with practical public health experiences. The MPH Program would like to congratulate the students for their hard work, accomplishments and contributions to the local public health community.
Radha Patel

SITE: Advantage Health Centers
TITLE: Quality Process Improvement at Advantage Health Centers

INTRODUCTION: Advantage Health Centers (AHC) is a Federally Qualified Health Center (FQHC). They provide medical, dental, as well as behavioral health services to patients regardless of their ability to pay. The project went through the performance improvement related to strengthening the Uniform Data System (UDS) quality measures, especially diabetes. With over 40% of diabetic patients with HbA1c over 9%, there was a strong emphasis on the clinical workflow of diabetes care throughout the sites. Proper diabetes management is essential to control blood glucose, reduce risks for complications and prolong life. The goal was to promote healthy lifestyles and get people involved in their own health care. This would create an environment that makes it possible to live a healthy life and therefore strengthens community participation.

METHODS: We used the Plan-Do-Study-Act (PDSA) method to examine our workflow project. PDSA cycle is part of the Institute for Healthcare Improvement Model for Improvement, it’s a simple yet powerful tool for accelerating quality improvement. The PDSA cycle is shorthand for testing a change—by planning it, trying it, observing the results, and acting on what is learned. The goal was to test one small change at a time and then measure the effects to see if the interventions are helping to move toward our goals.

OUTCOMES: The recommendations would help AHC review the operational workflow to implement changes to improve quality improvement and strengthen the UDS quality measures for not only diabetic patients but the health of all AHC patients.

Mayuri Aivale

SITE: Detroit Health Department-Environmental Health Division
TITLE: Communicating Detroit Food Safety inspection information to the public

INTRODUCTION: The Detroit Health Department (DHD) has been providing important public health services to Detroiter for over 100 years. The aim of the HD’s food safety unit is to protect the public from contaminated food and foodborne illness. The DHD’s mission is to work in partnership with Detroiter to protect and promote their health, well-being, safety and resilience, and to respond to every public health need with exceptional policies, programs, and services.

METHODS: The proposed public posting of inspection reports and restaurant scoring/grading system has been designed and developed for the HD. After reviewing inspection methods from different cities, few modifications have been suggested to the current food establishment inspection process. A new restaurant scoring/grading system has been developed for the City of Detroit. An assessment and evaluation of the impact of the restaurant scoring program would be done before and after between program is implemented.

OUTCOMES: There are a variety of methods that have been used by HD in the U.S. to provide information to the public about food establishment’s inspection and relative safety. The most common methods are 1) Public posting of inspection reports and 2) A restaurant scoring/grading system. DHD aims to follow a point scoring system to score restaurant inspections. An inspections score would be based on an evaluation of the last three inspection reports for each risk category and scored restaurant based on out-of-compliance violations.
David Cicala

SITE: University of Michigan Center for Socially Engaged Design
TITLE: Ecosystem Research of Regenerative, Responsive, and Resilient Community Infrastructure Systems

INTRODUCTION: Technology advancement and failing infrastructure services (e.g., water, power, mobility, food) are the inspiration for a new effort at the University of Michigan to establish a new Engineering Research Center focused on enhancing community wellbeing. The research center looks to accomplish this by improving the efficiency and effectiveness of these infrastructure services through socially-engaged design and the implementation of information technology. In order to frame the landscape of questions, challenges, and opportunities that can be brought together in these public sector services, an intern team at the Center for Socially Engaged Design (CSED) explored who the key stakeholders were, the communities they serve, and the issues they face.

METHODS: In order to achieve our goal of understanding and empathizing with public sector services, and consequently the community of Southeast Michigan, we strove to connect a variety of stakeholders in four identified sectors. We conducted stakeholder 81 interviews over the 12 weeks, conducted secondary research, synthesized, and analyzed our findings using the creative problem solving process.

OUTCOMES: From our synthesis process, we arrived at 11 key insights that we grouped into 5 themes of Trust, Cost & Funding, Education & Awareness, Scale, and Windows of Opportunity. For each key insight, we then identified implications for researchers to be aware of and opportunities for themselves and their work to engage with these insights. We also created a stakeholder map framework, table of desires and needs, workshop playbook, and example interview protocol to continue our work going forward.

John Nelson

SITE: MIU Men’s Health Foundation
TITLE: Evaluation of a Large-Scale Survey on Men’s Health

INTRODUCTION: MIU Men’s Health Foundation provides free blood tests, education and other healthcare services. In order to improve education and healthcare, a survey was conducted specifically for men in Southeast Michigan. The aim of this survey was to provide information on men’s health, develop additional educational material, and identify areas for future investigation including health disparities.

METHODS: The survey was very large with 1038 participants ranging in age from 17-88 on September 29, 2018. It contained a wide range of health questions in areas such as sleep, stress, marital status, race, and diet and included blood collection for testing. Data were analyzed.

OUTCOMES: The survey provided several important results on how race, marital status, number of children, and activity levels related to the incidence of hypertension, depression, regular office visits, and restful sleep. First, there was an extremely high prevalence of hypertension with evidence of racial disparity. The incidence of hypertension with African-Americans was much higher. Second, married men with children had lower scores on Patient Health Questionnaire (PHQ) suggesting better mental health. Married men were more likely to see a physician regularly and have private insurance. Married men with private insurance were also more likely to see a doctor regularly. Third, improved sleep was associated with increased activity as less time sitting and participating in weight lifting, walking, running, swimming, or biking. Men’s educational material should be directed at ways to lower blood pressure and increase physical activity. Future studies need to examine knowledge levels of preventing hypertension, improving sleep, and levels of social activity. Survey should include more Hispanics as alarming levels of hypertension were observed albeit in a very small sample size.
Chelsea Needham

**SITE:** Advantage Health Centers  
**TITLE:** Marketing and Reading Literacy: The Health Care Barriers We Can’t Ignore

**INTRODUCTION:** Since 1982, Advantage Health Centers (AHC) has expanded its reach and service to a diverse population. Currently, the organization has five health centers located through Detroit and Warren. AHC provides medical, dental, and behavioral health care to everyone, regardless of their ability to pay. In the midst of expansion, AHC has been met with several barriers.

**METHODS:** The goal was to explore marketing and advertisement as it pertains to the community the clinics serve. There were several primary research questions: Does marketing and advertisement of AHC effect participation in healthcare services? Are marketing materials creating barriers for the patient population Advantage Health Center serves? What is the reading level of the population AHC serves? Through the use of surveys, patients seen at Advantage Health Center were able to provide information to help answer these questions.

**OUTCOMES:** About 74% of patients stated they read at a 12th grade level or higher but many patients may not be familiar with their true reading-level. Furthermore, only 59% of patients correctly identified the definition of the word advantage. Information obtained from the surveys open the door for more research and may inspire other public health professionals to research this material further to advance the field of public health.

Timothy Michling

**SITE:** Western Wayne Family Health Centers  
**TITLE:** Get It Together: Evaluating an Integrated Care Model to Improve Patient Outcomes and Population Health

**INTRODUCTION:** Western Wayne Family Health Centers (WWFHC) is a Federally Qualified Health Center (FQHC) operating 3 locations in Wayne County, Michigan, and serving communities that face substantial health risks from factors like socioeconomic inequalities, childhood trauma, and various behavioral factors. In recent years, WWFHC shifted to an integrated care model of health care service delivery, yet seamless integration of services and any resultant effect on patient outcomes remains difficult to achieve and even more difficult to measure and evaluate. I endeavored to establish a framework for evaluating this integration that could be adopted as a continuous model of program improvement. My integrated care model assumes that behavioral health services are the nexus that connects the sphere of health care services to exogenous health determinants (like health behaviors and sociocultural environments).

**METHODS:** I utilized the health program evaluation framework from the U. S. Centers for Disease Control and Prevention (CDC) and employed multidisciplinary process improvement strategies (e.g., TQM, Six Sigma). This meant convening meetings with stakeholders, shadowing work within the health center, and meeting patients. After formulating a working description of care integration and identifying stakeholder priorities and concerns, I conducted a systematic review of relevant literature in the domains of health care integration and service quality evaluation (with specific focus on dimensions of patient experience and satisfaction).

**OUTCOMES:** Evidence from the literature review—in combination with stakeholder feedback—led to recommendations for improving service delivery and integration, as well as for measuring patient outcomes.