PUBLIC HEALTH SYMPOSIUM

Friday, May 8, 2009
8:00 am - 1:30 pm
Fluno Center
601 University Avenue
Madison, Wisconsin

Department of Population Health Sciences
8:00 am  Registration/Coffee/Continental Breakfast
2nd Floor Break Area

8:30 am  Symposium Welcome
F. Javier Nieto
Department Chair, Population Health Sciences

8:50 am  State of the MPH Program (Room 203)
Patrick Remington
Director, MPH Program
Director, Population Health Fellowship Program

9:00 am  An Application of Social Marketing Concepts to Juneau County Parenting Programs
David Lunney

9:20 am  Working With What We’ve Got: Connecting Caring Communities to Support Older Adults in Aging-in-Place
Carrie Henning Smith

9:40 am  Childhood Lead Screening Intervention
Jared Collins

10:00 am  Cost-Effectiveness of Five Different Smoking Cessation Medication Treatments
Melissa Natzke

10:20 am  BREAK (2nd Floor Break Area)
Wisconsin Geriatric Psychiatry Initiative: Meeting the Need of Wisconsin Older Adults

Linda Buel

Preceptor/Mentor:
Timothy Howell, MD, MA, Consultant, Wisconsin Geriatric Psychiatry Initiative; Geriatric Psychiatrist, Madison VA Hospital; and Associate Professor, Department of Psychiatry, UW-School of Medicine and Public Health

The projected growth in the population of older people with mental illness in the coming decades, coupled with inadequate services, is anticipated to result in a major public health problem. While effective treatments exist for many late-life mental health problems, there is a gap between current mental health services and the infrastructure necessary to meet the coming demand. The ability to provide effective mental health treatment to older persons is limited by a shortage of healthcare providers with adequate training in geriatrics and mental illness. Efforts are being undertaken on the state level to shape the limited geropsychiatric resources into a viable infrastructure for addressing geriatric mental health and substance abuse services in Wisconsin. Mobilizing geropsychiatry professionals and devoting some of their time to providing indirect care meets some of the needs of this rapidly growing population of older adults. Evidence-based consultation/teaching using the approach developed by the Wisconsin Geriatric Psychiatry Initiative (WGPI), called the Wisconsin Star Method, integrates holistic and linear-causal perspectives enhancing provider proficiency in the delivery of comprehensive care. The key to dissemination of this innovative approach will be in demonstrating favorable outcomes for the system, service delivery team, and the patient.

Linda Buel is a Registered Nurse and Certified Professional in Healthcare Quality with clinical background in acute care, public health, and behavioral health in rural and urban health care settings. In addition, she has over 25 years experience applying quality improvement principles to assist organizations and programs meet their goals and objectives. For several years, Linda participated in a program, guided by a community coalition, organized around improving the quality of life of older adults in rural northern Wisconsin. And now, as part of Linda’s MPH program, she is fortunate to partner with the Wisconsin Geriatric Psychiatry Initiative (WGPI). Through her field experience, she explored evaluation methods to demonstrate the effectiveness of the Star Method approach to providing mental health services to the geriatric population in Wisconsin and beyond.

Block II -Room 201
Moderator– Jim Vergeront

9:00 am Working to Eliminate Racial Disparities in Healthy Birth Outcomes of Wisconsin: A Report on Three Projects
Janelle Wells

9:20 am Strategic Plan on Reducing Health Disparities in Wisconsin
Yeng Vang

9:40 am Investigation into Two Blastomycosis Clusters in Humans in Northwestern Wisconsin, 2008
Ben Stading

10:00 am Financing Governmental Public Health in Wisconsin
Traici Brockman

10:20 am BREAK (2nd Floor Break Area)

Block III -Room 203
Moderator– Jonathan Patz

11:00 am New Uses of Technology for Teen Sexual Health Education
Ellen Selkie

11:20 am Comparing Policies on Health Industry Conflicts of Interest at Academic Medical Centers: Peer Pressure’s Positive Power
Branden Pfefferkorn

11:40 am Providing Clean Syringes to Injection Drug Users: A Look at 3rd Year Pharmacy Students’ Knowledge & Beliefs on Individual and Structural Factors Affecting Their Decisions to Sell Syringes to this Population
Sahar Abdelrahman

12:00 pm Patient Perception of Physician Commitment Affects Quality of Life in Cancer Survivors
Rachel Greenup
Adelante, El Proximo Paso: A Practical Application of Moving Beyond Health Education
Amanda Schultz

Preceptor:
Barbra Beck, PhD, City of Milwaukee Health Department
Ana Paula Soares Lynch, Proyecto Salud
Sherri Ohly, Proyecto Salud

Social determinants of health have quickly become the new “buzz-words” of public health discourse. Listening sessions, interactive websites, and discussion toolkits have proliferated our listservs; however, it is often difficult to envision the immediate translation of broadly focused concepts in organizational frameworks that are often still built to conduct classic health education and promotion. This presentation will attempt to share an innovative model of approaching social determinants of health on the community level by recognizing the importance of moving beyond health education to raising consciousness, building capacity, and creating change.

Adelante, El Proximo Paso (Moving Forward, the Next Step) is an interactive curriculum focused on identifying and actively working to address social determinants of health at the grassroots level with primarily Spanish speaking residents in Milwaukee’s Near Southside. This project builds upon Prochaska and DiClementi’s Transtheoretical Model, by incorporating Frierean praxis and Community Organizing’s Locality Development to extend the concepts of contemplation, action and maintenance from individual responsibility to the collective community. Adelante is in the formative process and its ecological development is the first step in shifting norms and power relations. This presentation will focus on processes of bridging theory, community engagement and lessons learned.

Amanda Schultz is completing her second year in UW Madison’s Population Health Fellowship program in Milwaukee, Wisconsin. She has spent the last 2 years working with both the City of Milwaukee Health Department and Proyecto Salud, a joint collaboration between Aurora Walker’s Point Community Clinic and CORE/El Centro. During her time in both organizations Amanda assisted with a city-wide community health assessment, she developed leadership and internal capacity within the Milwaukee Latino Health Coalition, and she is currently working to facilitate the grassroots development of an interactive curriculum focused on social determinants of health and creating change from the community level. After her fellowship, Amanda plans to continue working with Proyecto Salud before moving to rural Honduras to live and work with community health promoters. Amanda’s interests lie in community and educational psychology and she looks forward to working in an interdisciplinary environment devoted to social change.
Establishment of an Electronic Health Surveillance Program,
Hillside Health Care International, Punta Gorda, Belize

Matt Gigot

Preceptor:
Jeff Hartman, DPT, MPH, Director of Operations, Hillside Health Care International

Mentor:
Lori DiPrete-Brown, Assistant Director, UW- Center for Global Health

As our world becomes increasingly globalized, and health professionals are gradually more willing and eager to serve overseas – the practice of short-term medical operations, both in the form of facility-based care and mobile clinics has increased. In many of these settings patient histories are recorded, but due to limited resources the data is often times difficult to analyze. Patient data can be used to accurately characterize clinic utilization, high volume conditions, and preventable conditions in the populations and sub-populations being served. The ability to consistently collect and analyze patient data enhances the ability of medical operations to characterize their patient population and deliver high quality care.

The goal of this project was to streamline the process by which patient data is organized and analyzed at Hillside Health Care International, Punta Gorda, Belize. While in Belize an Epi-Info database was established to track clinic usage. The data collection focused on demographic and health measures, and was drawn from a year’s worth of patient log data. This project provided Hillside Health Care with an electronic record of their patient population, and more importantly established an electronic tracking system that the clinic will use in the future.

Matt Gigot is a second year student in the MPH program and will be graduating in August 2009. During the summer of 2008 he did his MPH field work with Hillside Health Care International, which is based in Punta Gorda, Belize. Throughout his time in the MPH program he has had a strong interest in global health as well as chronic disease prevention. In addition to his field work, he has also worked with the Wisconsin Collaborative Diabetes Quality Improvement Project, which aims to improve chronic disease care for Wisconsin’s managed care population. At this point, Matt’s plans beyond graduation remain undecided.

Special Thanks to...

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Heather Cote
Elisa Derickson
Barbara Duerst
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Patrick Remington
Lesley Wolf
Patient Perception of Physician Commitment Affects Quality of Life in Cancer Survivors

Rachel Greenup

Preceptor:
Amy Trentham-Dietz, Associate Professor, UW- School of Medicine and Public Health

Mentor:
Alysandra Lal, Assistant Professor of Surgery, Department of Surgery, Medical College of Wisconsin

As survival rates improve, cancer has become a chronic disease for many patients, and quality of life following treatment becomes an issue of major importance. Multiple studies have evaluated the quality of life in cancer survivors; yet, few studies have looked at the impact of the physician-patient relationship during treatment and how it may affect a patient’s quality of life after cancer treatment is completed. Patient perception of physician commitment and concern may impact patient quality of life following treatment completion. Between May of 2006 and April 2007, 1841 subjects consisting of breast (n=602), colorectal (n=530), lung (n=154), and prostate (n=555) cancer patients of all stages were chosen from the Wisconsin Cancer Reporting System, and approached for study participation. Patients completed the Assessment of Cancer Care and Satisfaction (ACCESS) survey following cancer diagnosis. Patient perception of physician commitment and concern was measured through the FACT-TS-PS instrument, assessing interpersonal experiences during care, access to providers, perceived physician concern, trust and overall satisfaction with care. Quality of life was assessed through the validated FACT-G instrument evaluating physical, social/family, emotional and functional well-being. After controlling for age and stage, physician availability, demonstration of genuine patient concern (P<0.001), understanding patient needs and values, respect for patient opinion, and overall confidence and trust in physician recommendations were significantly associated with an improved quality of life after treatment in all four cancer groups. (all p-values < 0.01).

Rachel Greenup is a surgical resident in Milwaukee who is interested in clinical research, epidemiology, and maternal and child health. She plans to complete the MPH program this May and return to her surgical residency where she hopes to utilize her public health perspective to maximize the care of each individual patient.

Public Health in Practice

The Master of Public Health Program, established in 2005, provides multidisciplinary graduate education and training in public health concepts and methods to health professionals and students through a focus in service learning. Close connections with the community, through the Wisconsin Division of Public Health, the City of Milwaukee Health Department, and other health care and not-for-profit agencies, enable students to apply their skills in a real world setting. The MPH program’s vision is to develop a workforce that is competent to advance the well-being of the citizens of Wisconsin and beyond.

The Master of Public Health Program is a unique educational experience that focuses on public health applications. The MPH degree is supported by a strong core of departmental faculty as well as a program faculty spanning a broad array of departments including Family Medicine, Biostatistics and Medical Informatics, Nutritional Sciences, Nursing, Pharmacy, Veterinary Medicine, Social Work and several other departments across the Medical School and the University of Wisconsin– Madison campus.

Rachel Greenup is a surgical resident in Milwaukee who is interested in clinical research, epidemiology, and maternal and child health. She plans to complete the MPH program this May and return to her surgical residency where she hopes to utilize her public health perspective to maximize the care of each individual patient.
Providing Clean Syringes to Injection Drug Users:  
A Look at 3rd Year Pharmacy Students’ Knowledge & Beliefs on Individual and Structural Factors Affecting Their Decisions to Sell Syringes to this Population

Sahar Abdelrahman

Capstone Committee:
Betty Chewning, PhD, Professor, UW- School of Pharmacy
James Vergeront, MD, Adjunct Associate Professor, UW- School of Medicine and Public Health
Susan Riesch, PhD, Professor, UW- School of Nursing

Communicable diseases such as HIV/AIDS, hepatitis B and C have innumerable complications and can have devastating effects on patients as well as their families and friends. One population that is disproportionately affected by these diseases is injection drug users (IDUs), due to the practice of harmful behaviors including needle and equipment sharing, and high risk sexual behaviors. In an effort to reduce the spread of blood-borne pathogens in this population, a number of interventions such as syringe exchange programs (SEPs), have been developed. SEPs provide clean syringes for IDUs along with a variety of other services including HIV testing and counseling, and referrals to substance abuse treatment programs. SEPs have been an integral component in helping to reduce the disease burden among IDUs. Unfortunately, SEPs are not readily accessible and available everywhere, leading to the search for other options. The sale of syringes in pharmacies offers an alternate reliable, available, and accessible source of clean syringes. A number of studies assessing pharmacists’ attitudes towards providing this service have found a considerable amount of ambivalence and resistance towards providing this service. Few studies though, have examined pharmacy students’ knowledge and attitudes on this issue. Using the integrated behavioral model as a theoretical basis, a survey was developed and administered to 3rd year Doctor of Pharmacy students at the UW Pharmacy School to assess their knowledge and attitudes towards this practice. The intended results are meant to identify factors influencing pharmacy students’ decisions and whether these factors can be addressed through education and other avenues with the hopes of involving pharmacy students and pharmacists in the dialogue on this important public health issue.

Sahar Abdelrahman has received both her undergraduate degree and doctor of medicine from UW-Madison. After completing her medical degree, she spent time volunteering in Sudan. With little prior exposure, she was immersed into the world of public health, and her experiences led her to come back and pursue an MPH degree. Upon completion of her MPH, Ms. Abdelrahman will begin a combined residency in internal medicine and pediatrics at USC. She is interested in urban, minority and international health and hopes to combine her medicine and public health training in her future career, in both local and international efforts.

The Wisconsin Population Health Fellowship Program is an extension of the student’s public health service and training. The two-year fellowship program, targeted to those who have completed masters programs, preferably in public health and allied sciences, provides applicants with practical field assignments in community based, non-profit, governmental and health service organizations.

The primary goal of the Wisconsin Population Health Fellowship Program is to develop the next generation of public health officials and administrators skilled in planning, implementation, and evaluation of public health programs. The fellows participating in the symposium are currently located at the Wisconsin Division of Public Health; the Milwaukee County Department on Aging and S.E.T. Ministry, Inc.; and the Milwaukee Health Department and Core el Centro, a non-profit natural healing center in Milwaukee.

The Certificate in Global Health is a collaborative offering from the schools of Medicine and Public Health, Nursing, Pharmacy, Veterinary Medicine, and the Division of International Studies. The certificate curriculum focuses on global health topics and health issues that transcend national boundaries, emphasizing health and disease in developing countries. Through a nine-credit program of course work and a global health field experience, students will be prepared to address health disparities in a context of cultural diversity. Certificate recipients may serve populations internationally or work among the increasingly diverse population of Wisconsin and the United States.

Through core courses and electives, students may focus their studies on health promotion, detection and treatment of disease, prevention and management outbreaks, health policy, environmental health or other interdisciplinary topics. Available as a Graduate Certificate to professional students in the health sciences, to graduate students in health-related fields, and as a Capstone Certificate to individuals with a minimum of a BA or BS in a health-related field, the Certificate in Global Health program is designed to assist traditional and non-traditional students with interests in global health. The program is based in the Department of Population Sciences of the UW School of Medicine and Public Health and is administered by the Center for Global Health at the University of Wisconsin-Madison.
An Application of Social Marketing Concepts to Juneau County Parenting Programs

David Lunney

Preceptor:
Barbara Theis, Juneau County Health Officer, Juneau County Health Department

Mentor:
Barbara Duerst, Associate Director, UW- Master of Public Health Program

According to the 2007 Wisconsin County Health Rankings, Juneau County ranked nearly last in Health Outcomes and in Health Determinants. This has raised local awareness and concern regarding the “health” of Juneau County. Identifying the need to improve local health, a grant was written to support a process to identify challenges and opportunities for improvement. A steering committee was formed to lend their expertise in addressing the county’s problems. Through a year-long process which included review of primary and secondary data and evidence based public health programs, the committee identified the county’s top priorities. Due to finite resources, the strong evidence-based supporting parenting programs and success with social marketing techniques, the group decided the most effective use of resources would be to apply evidence-based social marketing concepts to maximize the utility of existing parenting programs. The group felt that improving parenting skills would greatly improve birth outcomes and the health of the community. A social marketing tool-kit was developed for the purpose of providing an easy reference to apply social marketing concepts to maximize enrollment, utility and sustainability of parenting programs in Juneau County.

Dave Lunney is a lifelong resident of Dane County who has spent more than 15 years in health care practice and administration. A graduate of the UW Madison Physical Therapy program who practiced clinically and in research for nearly ten years, he became interested in policy level and upstream causes which impacted the clinical practice environment. For the past several years, he has been working in Quality Resources at the UW Hospital and hopes that his MPH degree will enhance his ability to make policy level decisions in health care systems to prepare for the challenges of the future. A proud father of three, he is grateful to the faculty, preceptor, mentor and fellow students for their encouragement and support while in the program.

Comparing Policies on Health Industry Conflicts of Interest at Academic Medical Centers:
Peer Pressure’s Positive Power
Branden Pfefferkorn

Capstone Committee:
Sarah Davis, JD, MPA, Clinical Assistant Professor, Center for Patient Partnerships and UW- Law School
Mark Wegner, MD, MPH, Chronic Disease Medical Director, Bureau of Community Health Promotion, Division of Public Health, Wisconsin Department of Health and Family Services
Lee Vermeulen, MS, RPh, Director, Center for Drug Policy, Department of Pharmacy, UW- School of Pharmacy

Health industry influences on health care professional behaviors are well documented. These conflicts of interest have received increasing attention, with a number of prominent groups and individuals providing recommendations. These recommendations, together with Congressional investigations and other public attention, have encouraged academic medical centers to assess their conflict of interest policies. In 2008, the American Medical Student Association (AMSA) developed a Scorecard to evaluate the conflict of interest policies at the nation’s 151 medical colleges using five domains: 1) gifts and individual financial relationships with industry; 2) pharmaceutical samples; 3) purchasing and formularies; 4) access of industry sales personnel to the medical school or hospital; and 5) industry influences in medical education. In 2008, 115 schools (76%) participated in the evaluation. About 13% of schools had policies that scored an A or B. Nearly a quarter of schools indicated that their policies were being revised. The 2009 Scorecard uses the same methodology, with added survey questions to assess institutional experience with new or revised policy implementation and compliance with adopted policies. The Scorecard provides an annual assessment of conflict of interest policies at the nation’s medical schools. Schools with model policies can serve as examples for other institutions to emulate. The next phase in the Scorecard project will be to determine how these written policies translate into compliance with the stated guidelines.

Branden Pfefferkorn is a 2008 graduate of the MD program at the UW School of Medicine & Public Health, who has been involved in pharmaceutical policy issues since his first year of medical school. In June, he will begin a family medicine residency at Swedish Medical Center and the Seattle Indian Health Board, a community health center in Seattle’s International District. He plans to practice family medicine in diverse community health center settings, where he can use his public health training to improve the health of underserved communities. He also will continue to advocate for curbs on health industry influence in medicine and access to needed drugs in both domestic and international markets.
Working With What We’ve Got: Connecting Caring Communities to Support Older Adults in Aging-in-Place

Carrie Henning-Smith

Preceptor:
Robert Frediani, President, Institute for Collaborative Health Interventions, Inc.

Connecting Caring Communities was first developed in Milwaukee in 2004, with funding from the Robert Wood Johnson Foundation’s “Community Partnerships for Older Adults Program” and leadership from the Milwaukee County Department on Aging. Currently, there are active partnerships in seven neighborhoods throughout Milwaukee County, each operating under the guiding principles that communities are healthier, richer places when older adults are able to remain in them, that older adults should be supported if they chose to “age-in-place,” and that everyone benefits from a sense of connection to their community.

By connecting older adults with community-based organizations, neighborhoods have seen positive changes in the areas of communication, safe gathering places, and a sense of connection among older adults. This presentation will focus on the Amani neighborhood as an example for how the Connecting Caring Communities project is implemented, including the successes and challenges that accompany developing a community partnership. The Amani partnership began in 2008, with the identification of a lead agency and key contacts within the neighborhood. Qualitative data was gathered through a series of focus groups consisting of older adults living in Amani, who were asked about their perceptions of the neighborhood and what would help them to remain there, should they so choose. Several key priority areas were identified through this process, including the condition of the neighborhood; safety; concern for youth; and, a lost sense of community ownership. Several neighborhood assets were also identified and have been used in subsequent activities designed to address the priority areas.

Carrie Henning-Smith is a second-year Population Health Fellow, placed at the Milwaukee County Department on Aging and S.E.T. Ministry, Inc. Her work includes education and community-building programming for residents of public housing, coordination of a county-wide wellness council, and implementation of Connecting Caring Communities in the Amani neighborhood.

Her undergraduate degree is in International Relations and Gender Studies from Claremont McKenna College. After college, she worked as a social services case manager in Washington, D.C., before attending the University of Michigan, where she received Master in Social Work and Master in Public Health degrees, as well as a Specialist in Aging Certificate. Following the Fellowship, she is looking forward to teaching for a year in Shanghai before heading to the University of Minnesota to pursue a Ph.D. in Health Services Research, Policy, and Administration.

New Uses of Technology for Teen Sexual Health Education
Ellen Selkie

Capstone Committee:
Meghan Benson, MPH, Dane County Education Programs Manager, Planned Parenthood of Wisconsin
Richard Brown, Associate Professor, UW– School of Medicine and Public Health; and Clinical Director, Wisconsin Initiative to Promote Healthy Lifestyles
Megan Moreno, MD, MSEd, MPH, Assistant Professor, Pediatric and Adolescent Medicine, UW– School of Medicine and Public Health.

Sexually transmitted infections (STIs) continue to pose a public health problem for teenagers, and teen pregnancy and births are on the rise in the United States. Teenage use of technology, such as text messaging and social networking sites (SNS), has become popular for communication purposes. This presents a novel opportunity for the public health community to reach out to teens for sexual health education purposes—however, little is known about the most effective ways to do so.

In collaboration with Planned Parenthood of Wisconsin (PPWI), a convenience sample of middle and high school students in Dane County, Wisconsin was recruited for participation in focus groups. Participants were given a short demographic survey and participated in 45-60 minute groups discussing use of SNS and text messaging for sexual health education. Results were subsequently transcribed and analyzed for common themes. The data emerging from this study should help inform clinicians, health educators, and community leaders on ways to make use of technology to more effectively educate teenagers about sexual health. In the future, the data will specifically be used by PPWI to create SNS pages, a text messaging program, and an educational program dedicated to online safety for teens.

Ellen Selkie received her MD from the University of Wisconsin in August 2008. Her interests within public health include health education and advocacy, with a focus on adolescent health. She hopes to use her MPH to continue exploring innovative methods for reaching out to teens, a population often overlooked by the health care system. She will pursue a residency in Pediatrics at the University of Minnesota beginning this summer.
**Childhood Lead Screening Intervention**

**Jared Collins**

**Preceptor:**
Jacob L. Bidwell, MD, Assistant Professor, UW- School of Medicine and Public Health
Dennis J. Baumgardner, MD, Professor, UW- School of Medicine and Public Health

**Mentors:**
Patrick Remington, MD, MPH, Director, Master of Public Health Program; and Professor, UW- School of Medicine and Public Health
Susan Zahner, DrPH, MPH, Assistant Professor, UW- School of Nursing and UW- School of Medicine and Public Health

This study is a clinical quality improvement project done in scholarly fashion. The study question to be answered is on the effect of including lead screening in a statewide immunization registry on rates of recommended lead screening in an urban community clinic. This will be a cohort study of children age birth to 6 years of age. The estimated number of subjects needed based on a preliminary power study is 300. This estimate includes 150 subjects both pre- and post-intervention. Baseline lead screening data as well as age, ethnicity, gender, and zip code will be collected using chart reviews and information from the Wisconsin Immunization Registry, a statewide immunization database. From the chart data, we will enter the lead screening information into the database. As children come to the clinic to be immunized, we will use this data to determine the need for lead screening based on Milwaukee County Public Health screening rates using the database. At the end of the study period, we will conduct post-intervention follow-up chart reviews and perform statistical analysis to determine if the intervention followed chart reviews and perform a statistical analysis to determine if the intervention (tracking lead screening with the immunization database) had an affect on lead screening rates. The results of this project will improve our understanding of how to better meet immunization and lead screening guidelines for our pediatric patients.

**Jared Collins** is a second-year student in the MPH Program and is working as a Project Assistant at the Population Health Institute. He holds a BS in Electrical Engineering from San Jose State University and a MS in Biomedical Engineering (BME) from UW-Madison. Upon completion of the MPH program in summer 2009, Jared will begin medical school. He would like to use the MPH degree to focus on improving care for entire communities by focusing on disease prevention and the initial causes of disease such as tobacco use, improper diet, and physical inactivity. His career goals include becoming a primary care, public-health physician, and opening a medical practice in a low-income, medically underserved community. In addition, Jared’s ultimate plan is to serve in a community-level administrative/policy position where he can shape economic and social policies and improve the health of disadvantaged communities.

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**Financing Governmental Public Health in Wisconsin**

**Traici Brockman**

**Preceptor:**
Thomas Sieger, Deputy Administrator, Division of Public Health

Many studies have described the financing of public health systems as insufficient and steadily declining. In spite of those two descriptors the duties or intensity of services that need to be provided by governmental public health are not decreasing. Concern over a study released by Trust for America’s Health ranking Wisconsin 47th in state public health expenditures precipitated this examination of the financing of governmental public health. Analysis of state and local public health department expenditures from 1995-2005 to determine mix of funding streams, funding increases and decreases, and determination of areas needing further analysis. Most local public health department expenditures (>50%) are financed by local tax levy followed by federal government grants; state funding of local public health is less than 10% and is low compared to other regional states. Funding from most sources has also been relatively flat over the years. Most state health department expenditures (~75%) are financed by federal government grants followed by program revenue. Further analysis should be performed regarding what programs and services are most funded and what unmet needs exist by program or health plan priority area because of a lack of funding.

**Traici Brockman** is a Population Health Fellow with the University of Wisconsin’s Population Health Institute. As a fellow, Ms. Brockman’s service learning placement is with the Wisconsin Department of Health Services, Division of Public Health, Administrator’s Office. Ms. Brockman performs policy research and analysis for the administrator’s office. After the fellowship Ms. Brockman would like to continue working on public health prevention policy at the state or federal level. Ms. Brockman received her MPH with a concentration in Health Policy from Saint Louis University School of Public Health. She received her B.S. in Health Management from Howard University in Washington, D.C.
Investigation into Two Blastomycosis Clusters in Humans
In Northwestern Wisconsin, 2008

Ben Stading

Capstone Committee:
John Archer, MS, Epidemiologist, Bureau of Communicable Diseases, Wisconsin Division of Public Health
Jonathan Patz, MD, MPH, Professor and Director, Global Environmental Health Center for Sustainability and the Global Environments (SAGE), UW- Lafollette School of Public Affairs
Christopher Olsen, DVM, PhD, Associate Dean for Academic Affairs and Professor, UW- School of Veterinary Medicine

Blastomycosis is a fungal disease endemic to the central and northeastern United States, with the largest number of cases being reported from Wisconsin each year. Disease in humans can range from subclinical to disseminated and ultimately fatal infections. Though a series of epidemiological and experimental studies have been carried out previously, the specific ecological niche for the organism remains in question, partly due to the organism only rarely having been isolated from nature. In 2008, at least 18 cases of blastomycosis have been reported from two cluster areas outside the normal range of high incidence for this disease in Wisconsin. The purpose of this study is to examine these case clusters from both epidemiological and environmental perspectives in order to determine what conditions caused the observed increase in incidence of blastomycosis in these areas. The product of this research may assist in identifying environmental factors that modulate the occurrence of Blastomyces dermatitidis, and in improving public health awareness of relative exposure risks.

Ben Stading is an indigenous Midwesterner whose interest in biology started as a young boy, covered in duckweed, exploring the local ponds and creeks. In 2003, he received his bachelor’s degree in Ecology, Evolution, and Behavior from the University of Minnesota, which was followed by an internship at the Minnesota Zoo. The following year he was accepted into the University of Wisconsin - Madison School of Veterinary Medicine. There he focused his studies on the medicine of non-domestic and wildlife species, and his interests in population medicine and infectious diseases grew. To advance his training in these areas, he completed the dual DVM/MPH program. After completing the MPH program, he plans to apply his training toward a career in conservation medicine, with a focus on emerging infectious diseases and zoonoses, and ecosystem health. Ben has plenty of reasons to smile these days as he is getting married to his beautiful counterpart, Rachel Chiasson, this June. The two met in the summer of 2006 in Woods Hole, MA, at a program called Aquavet which focused on aquatic animal medicine.

Cost-Effectiveness of Five Different Smoking Cessation Medication Treatments

Melissa Natzke

Preceptor:
Megan Piper, PhD, Assistant Professor, UW– Center for Tobacco Research and Intervention

Mentor:
Douglas Jorenby, PhD, Professor, UW– School of Medicine and Public Health

The primary objective of this research was to examine the relative cost-effectiveness of three single pharmacotherapies and two combination pharmacotherapies using data from a randomized, placebo-controlled, head-to-head smoking cessation trial. This research utilized efficacy data obtained from a randomized double-blind, placebo-controlled clinical trial conducted at the Center for Tobacco Research and Intervention in Madison, WI from 2005-2008. Costs were determined for both a cash paying patient and for third-party payers. Cost effectiveness was determined at eight weeks and six months post-quit based on cost per quit. Costs varied from $151.96 to $489.58 per patient for the full course of pharmacotherapy for cash paying patients and from $53.87 to $277.62 per patient for the full course of pharmacotherapy for third-party payers. The six month cost per quit ranged from $1,245.57 for the nicotine patch to $4,450.73 for the combination of bupropion SR and the nicotine lozenge for cash paying patients. For third-party payers, the six month cost per quit ranged from $561.19 for bupropion SR to $2,228.56 for the combination of bupropion SR and the nicotine lozenge. Although there were higher initial quit rates with the combination therapies and a great sustained abstinence rate with the combination of the nicotine patch and the nicotine lozenge, the higher cost outweighs the additional efficacy gained. Monotherapy with the nicotine patch or bupropion SR provides the most cost effective means of smoking cessation for cash paying patients and third-party payers, respectively.

Melissa Natzke received a Doctor of Pharmacy degree from UW-Madison in the spring of 2009. She was also a member of the inaugural group of students to receive a Certificate in Global Health. In the fall, Melissa will be attending the UW School of Medicine and Public Health to work toward an MD while completing her MPH degree. She hopes the skills she learns through her experiences in the MPH program will allow her to better serve underrepresented population in her own community, reach out to and improve the health of entire communities outside her own, and contribute to the health of the entire population. She plans to work both globally and locally in a mixture of public health research, teaching, and active health care practices.
Racial disparities in birth outcomes have long been recognized as a public health problem and were specifically addressed in a report authored by the Secretary of Health and Human Services in 1986. However, racial disparities in birth outcomes continue to exist throughout the nation. This is especially true in Wisconsin, where the disparity has actually widened since that time. Currently, African-American infants born in Wisconsin are three times more likely to die than their white counterparts and Wisconsin ranks absolute last in the nation for black infant mortality. The tragic loss of life in the African-American infant population is largely preventable, as the top two causes of infant death in this population are due to complications of prematurity/low birthweight and sudden infant death syndrome (SIDS). In response to this health disparity, the Wisconsin Department of Health Services developed a state-wide framework for action to eliminate racial disparities in healthy birth outcomes. While there are many activities ongoing within this framework, this presentation will focus on three projects. The first project relates to outcomes of the evidence-based prenatal care workgroup. This workgroup was charged with examining the literature base for improving prenatal care in the African-American population. The second project relates to implementation and evaluation of a federally-funded social marketing grant for increasing public knowledge of the “life-course perspective” on healthy birth outcomes. Finally, the third project included in this presentation will discuss the implementation of a new prenatal care model at the MLK Heritage Health Center in Milwaukee, WI.

Janelle Wells received her undergraduate degree from Tulane University before beginning medical school at the UW School of Medicine and Public Health. During her medical school training, she developed an interest in public health, especially as it relates to maternal-child and women’s health. After graduation from the MPH program in May 2009, Janelle will be entering the family medicine residency program at Lancaster General Hospital in Lancaster, PA and eventually hopes to use her MD/MPH degrees to practice comprehensive family medicine in underserved communities.

Yeng Vang is a second year MPH student at UW-Madison. She received a B.S. degree in Resource Management and Psychology from UW-Stevens Point. Her previous work experiences include working with the Department of Health Services in addressing health disparities and with the Wausau Area Hmong Mutual Association and the Job Center as a Disability Program Navigator. Upon completion of the MPH program, Ms. Vang plans to find employment in health promotion and program planning in Wisconsin. She also wishes to continue her education in attaining a PhD degree in Psychology in addressing mental health in Southeast Asians.

Strategic Plan on Reducing Health Disparities in Wisconsin

Yeng Vang

Preceptor:
Mary Pesik, RD, CLE, CD, Nutrition and Physical Activity Program Coordinator, Wisconsin Division of Public Health

Mentor:
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To date, there is no strategic plan developed to identify and reduce chronic disease and nutrition, physical activity, and obesity related disparities in Wisconsin. Wisconsin received a “D” in health disparities according to the Health of Wisconsin Report Card. The quality of health care is an important factor; however, it is only one factor in maintaining good health. Health is determined by individual behaviors and social factors like income, education, and social relationships. Those with limited to no access to health care do not experience this quality. The Nutrition and Physical Activity program of the Wisconsin Division of Public Health set up a program goal to identify and eliminate nutrition, physical activity and obesity related disparities in Wisconsin. Data was collected from a variety of credible sources and departments, such as reviewing 15 other states’ and Wisconsin programs’ current disparity plans. Workgroup members representing diverse contingencies and expertise were identified and recruited. An environmental scan was performed to identify current efforts to address these factors. Current data and data gaps for disparity groups based on age, gender, education, income, race/ethnicity and location were created and reviewed. Data tables were developed from information of other states’ and programs’ disparity plans. Buy-in was gained from DPH administrators, Minority Health Leadership Council, Public Health Council, WI PAN and other key stakeholders to form a chronic disease and nutrition, physical activity and obesity related disparities workgroup. Elimination of health disparities continue to be a goal among many sectors of health in Wisconsin.