Chronic Disease

Assignment Description

This assignment provides opportunities to focus on surveillance and epidemiology for chronic diseases and related risk factors. In addition to the more traditional epidemiologic training opportunities offered by the individual risk factor and chronic disease programs, two integrated projects would provide the Fellow with an opportunity to become steeped in the science of environmental, systems and policy change to foster healthy behaviors and improve the quality of healthcare. These projects also provide opportunities for understanding complexities of working within community and primary care settings. The first project, Healthy Communities Project, builds local capacity for policy, systems and environmental changes to support healthy behavioral choices. It focuses on healthy nutrition, physical activity and avoidance of tobacco use, areas identified as "winnable battles" by CDC. Currently, twelve communities are engaged in this work, all with populations that have high levels of chronic diseases, risk factors, and sociodemographic risks. The second integrated project is the Patient-Centered Medical Home Collaborative. This is a quality improvement program that aims to improve systems for coordinated health care for prevention and management of chronic diseases. Thirty-two primary care clinical practice teams across Washington are engaged in this two-year intensive process.

Day-to- Day Activities

Day-to-day activities include working with supervisors, coworkers, and external partners to plan surveillance, epidemiology and evaluation projects; develop and implement study protocols; analyze and interpret data; and prepare, review and present findings. Much of this work would be conducted at WS-DOH with opportunities for fieldwork depending on the projects selected. Activities generally would require that the fellow conduct literature reviews; work with advisory committees and stakeholders in local communities and clinical practices; analyze routinely collected data; design and implement program evaluation studies; and present findings in written reports and oral presentations to technical and lay audiences. In addition to working as a team member, the Fellow would be expected to take a leadership role for some aspects of project implementation.

Potential Projects include:

Potential projects may include, but are not limited to:

Physical Activity, Nutrition, Obesity and Tobacco

1) Work with the CWP epidemiology team to provide assessment and evaluation support to the Healthy Communities project by participating in one or more of the following activities:
a) Analyze questions from the BRFSS module on perceptions of built environment features related to nutrition and physical activity, including comparing results for five oversampled counties with statewide estimates, and assessing the relationships between perceived features, use of neighborhood features, and reported physical activity and nutrition behaviors.
b)Identify local sources of data that can be geocoded to map indicators of the built environment as described in CDC's "Recommended Community Strategies and Measurements to Prevent Obesity in the United States." Test the feasibility of mapping indicators in rural and urban settings, sharing findings with the Washington Environmental Health Indicators workgroup. c)Use the Kingdon model of policy

development as a framework to conduct a qualitative analysis of narrative reports related to policy development in five Healthy Community counties.

2) The School Health Profiles Survey (Profiles) is a biennial survey that monitors school policies and programs related to physical activity, nutrition, and tobacco-use. The Fellow could analyze the 2010 Washington data, compare 2010 and 2008 results, and update fact sheets that WSDOH and schools use allocate resources, guide professional development, and improve school health programs and policies. Profiles could be linked to the Healthy Youth Survey that provides self-reported, health-related information from students in grades 6, 8, 10, and 12. By linking these datasets, the Fellow could assess the associations of school policy with student reports of physical activity, nutrition, and smoking.

3) Evaluate the Healthy Youth Survey (HYS)as a surveillance system for collecting information on health and related behaviors from youth in Washington. HYS is a school-based survey that includes most questions from the CDC's Youth Risk Behavior Survey (YRBS). Data from the survey will be available in March 2011. The evaluation could include an analysis of potential bias in responses to the asthma, physical activity, and nutrition questions due to school or student non-response. If available, the Fellow could compare results from HYS and YRBS that is being administered in a random sample of King County schools.

Cancer
1) Assess factors related to risk of breast cancer, such as age at first birth and alcohol use, as well as factors related to cancer diagnosis, such as mammography, to cast light on why incidence rates are relatively high compared to other states. The Fellow could present findings in a number of venues given the interest in this phenomenon in Washington.

2) Evaluate the Breast and Cervical Health Program's administrative database as a source of routine surveillance data for breast and cervical cancer among low income women. Cardiovascular 1) Collect and analyze data to evaluate a statewide intervention to improve the emergency cardiac and stroke system of care. Specifically, assess the impact of changes in time from symptom onset (or EMS response) to appropriate treatment on outcomes for heart attack, stroke, and cardiac arrest. Study design would be developed in consultation with several stakeholder groups representing emergency medical services and hospitals. Results of this project would be of interest to stakeholder groups and cardiologists in Washington, as well as other states working on similar projects.

Diabetes
1) Refine the analytic approach used to evaluate the effect of the Washington State Collaborative for Diabetes on costs by stratifying on insurance type (Medicaid and private) and including the baseline year as a covariate. Results of the analysis would be used to inform the design of the next Patient-Centered Medical Home Collaborative, which will attempt to capture more Medicaid clients in rural communities.

2) Participate with a team to develop an assessment plan to determine what type of trainings are most effective in motivating clinics and physicians to adopt elements of the Patient-Centered Medical Home Collaborative model; implement portions of the plan. Cross-cutting Assess feasibility of obtaining Medicaid data and explore how it complements existing surveillance data for asthma, diabetes, heart disease and stroke. This would involve include identifying steps to gain access to Medicaid data, including developing data sharing agreements and determining how health information exchange among providers under health care reform affects data access and use. Finally, use lessons learned to create a plan for incorporating Medicaid data into existing surveillance activities Cluster Investigations

and Outbreaks WSDOH receives about 18 inquiries annually regarding clusters of chronic diseases with the majority being cancer. The Fellow would be involved in responding to these clusters. The Fellow could work with a local health department on an infectious disease outbreak, if required by CSTE.

Preparedness Role

NICE supports several WS-DOH programs in responding to natural disasters, pandemics, and industrial or terrorist events. Last year, NICE provided assistance with several components of the H1N1 influenza surveillance. For example, our EIS Officer received training to use and evaluate data for rapid influenza tests reported by laboratories and local health jurisdictions. In the absence of a real emergency, the Fellow can participate in table top exercises and receive training in handling emergency medical materials and in staffing the public emergency call center.

Assignment Location:	Olympia, Washington
Primary Mentor:	Juliet VanEenwyk, PhD, MS State Epidemiologist-Non-infectious Conditions Washington State Department of Health
Secondary Mentor:	Marilyn Sitaker, MPH, MS Lead Epidemiologist Washington State Department of Health