

Maternal and Child Health

Assignment Description:

The MCH Epidemiology office has been working hard over the past decade to expand the state's MCH data infrastructure. We are particularly pleased with the success of the PRAMS project, which is now in its 13th year of data collection. To date, NE PRAMS has produced trend reports and fact sheets on topics of special interest (http://dhhs.ne.gov/publichealth/Pages/prams_reports.aspx). However, at the October 30, 2012 statewide PRAMS steering committee meeting, considerable interest was expressed in taking these reports to a higher level, specifically, compiling PRAMS and other statewide data to produce issue briefs specifically designed to outline particular health problems, their risk factors and outcomes, and the costs and benefits associated with prevention. The steering committee's immediate focus was on chronic disease risk factors during pregnancy, as this is a strong fit with our focus on life course health. However, there are multiple other target areas that can also be included.

Our unit struggles with best ways to present our data in clear, meaningful, and usable fashion, particularly so that they can be used in decision making. We also have not worked on cost/benefit before, so this will be an important learning opportunity for all of us. For example, Lifespan Health is implementing the home visiting components of the Affordable Care Act, and in the process trying to integrate other existing, scattered state-sponsored home visiting projects. "Making the case" for the benefits of home visiting can be based on national models, but also must be centered on Nebraska data for community leaders to make data-driven decisions. We envision the MCH Epidemiology Fellow as developing these reports on two or more areas, and working out "templates" that can be used for further issues in the future.

Day-to-Day Activities:

Day to day activities include: 1) develop an understanding of and familiarity with Nebraska's MCH and other public health-related datasets; 2) Accumulate "best practices" from the literature and public health contacts on presentation of data for advocacy; 3) acquire, analyze, synthesize and interpret data; and 4) prepare epidemiologic reports.

Potential Projects:

The Nebraska MCH Epidemiology Section provides an ideal training opportunity to an MCH Epidemiology Fellow (MCH-EF). This is a small office with two seasoned professionals. However, because of this limited staffing, the office is currently unable to address many proposed or desired projects thus allowing the MCH-EF ample opportunity to pursue projects in his/her areas of interest. Possibilities include:

- The DHHS Vital Records Unit is in the beginning stages of designing a quality improvement plan for the Birth Defect Registry, and would be appreciative of additional expertise. A formal surveillance system evaluation is possible.
- Producing profiles of WIC and/or Medicaid clients and outcomes by linking PRAMS and birth certificate respondents to the WIC and/or Medicaid databases, with a secondary goal of validating WIC/Medicaid participation reported on PRAMS questionnaires and on Nebraska birth certificates.
- Conducting a formal analysis of maternal mortality, involving linking death certificates to women of reproductive age with birth certificates, and assessing the sensitivity of our existing passive systems of detecting maternal mortality. This matching typically involves use of a data

linking software application (currently LinkageWiz) but a considerable amount of hand inspection of matches is also required. Exploratory review/analysis of individual medical charts is also possible. Analytic tasks for this project include basic regression and descriptive statistics and interpretation of data for policy development.

- Continuation of two previous, now out-dated, projects on perinatal regionalization in Nebraska; the goal is to understand how/whether perinatal regionalization is working in the state and what improvements should and can be made.

Many other projects are conceivable and feasible, based on the actual interests and skill sets of the MCH-EF and the rich datasets available at DHHS.

Preparedness Role

The MCH-EF is not expected to be involved in the state's emergency preparedness operations. However, the Emergency Preparedness staff are located in the same area as the MCH Epidemiologist, and they have some interest from in assessing the completeness of the preparedness response for pregnant women and newborns. Additionally, CDC's "Reproductive Health Assessment after Disasters" may be a starting point to work with local health departments. The MCH-EF could engage in related projects given sufficient interest from all parties.

Assignment Location: Lincoln, NE

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