



ALTARUM
SYSTEMS RESEARCH FOR BETTER HEALTH

2007 Graduate Student Internship Program Summary Report



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The Maternal and Child Health Information Resource Center (MCHIRC) provides assistance to organizations in MCH epidemiology through the Graduate Student Internship Program (GSIP). The program provides graduate students with the opportunity to address specific, defined data or analytic issues to assist state and local health agencies in developing their MCH/CSHCN information systems.

In 2007, MCHIRC placed 14 interns in projects that are focused in the following three critical areas of MCH epidemiology: Data Analysis and Monitoring, Needs Assessment, and Program Evaluation.

- ***Data Analysis and Monitoring (9)*** Monitoring of diseases, injuries, and health conditions for their frequency, risk factors, consequences, and health service requirements, and analysis of epidemiological data sets are some of the projects included in this area.
- ***Needs Assessment (3)*** Projects in this area include the systematic analysis, assessment, and projection of health needs and resources in a given population or community.
- ***Program Evaluation (5)*** This area includes the monitoring, collection, and analysis of data to determine the effectiveness or outcomes of a particular program or project.

This report summarizes the internships describing the issues addressed, data sources and methodologies used, and findings of the interns' projects.

DATA ANALYSIS AND MONITORING

Data Analysis and Monitoring projects accounted for more than half of the internships in 2007. This summer and fall, nine interns performed data analysis on a variety of subjects including unintended pregnancies, birth defects, physical activity and adolescent death using a variety of data sources including PRAMS and other state data sources. This section provides a brief description of the nine projects. Final reports and materials produced by the interns are included in Appendix A.

Arkansas Department of Health

The intern at Arkansas Department of Health used Pregnancy Assessment Monitoring System (PRAMS) to understand the relationship between unintended pregnancies and poor birth outcomes such as low birth weight and preterm delivery. The intern used both descriptive and multivariate analysis. Her research did not find an association between unintended pregnancy and low birth weight. The intern disseminated materials through a news journal article and a newsletter.

Columbus Public Health

The intern at the Columbus Public Health Department performed a community health assessment of women, infants, and children by looking at insurance and wait time to receive prenatal care appointments for pregnant women, infant mortality, and analyzing data obtained from focus groups and surveys on barriers to care. Wait-time, Perinatal Periods of Risk (PPOR), and barriers to care survey analyses were conducted.

DeKalb County Board of Health

Mothers Offering Resources and Education (MORE) program uses a lay health worker model, pairing trained Resource Mothers with pregnant women who are at risk for poor health outcomes. The GSIP intern used the CDC Evaluation Framework to conduct the first formal evaluation of the program. The program evaluation found lower than expected contacts and continuity of care but found it to be successful at targeting and addressing the emotional needs of program participants.

Duval County Health Department

County death certificate records were used by the Duval County Health Department intern to report on leading causes of adolescent deaths in the county from 1996 to 2006. The trend analysis revealed that unintentional injuries—75 percent of which were caused by vehicular crashes—were the leading cause of death among adolescents.

Oregon Public Health Division, Office of Family Health

This year, two interns were housed in different departments in Oregon. The first GSIP intern in Oregon used PRAMS to look at physical activity in post partum women. Survey data analysis found that self-reported postpartum depression was significantly associated with insufficient physical activity.

Oregon Public Health Division, Office of Family Health

The aim of this project was to evaluate the relationship between physical activity levels and mental health status among 8th and 11th grade adolescents in Oregon using data from the 2006 Oregon Healthy Teen Survey from 2006. BMI and self-perception of weight were variables evaluated as modifiers of the PA-mental health relationship. Grade and sex were thought to be possible confounders.

Pennsylvania Department of Health

The Department of Health in Pennsylvania began a pilot phase on a Universal Newborn Hearing Screening and Intervention Program in the last several years. The GSIP intern conducted analyses and monitoring of the project looking at referral rates and loss to follow-up rates. Through her analysis, she was able to identify the hospitals that are not correctly identifying the Primary Care Physician.

Texas Department of State Health Services; Birth Defects Epidemiology & Surveillance/Texas Center for Birth Defects Research & Prevention

This intern provided analytic support for a study on major birth defects and parental nativity. The intern planned and designed an analytic approach, completed statistical analysis, producing summary tables, and manuscript writing.

Virginia Department of Health; Office of Family Health Services (OFHS)

There are six divisions in Virginia's Office of Family Health Services including Women and Infants Health, Child and Adolescent health, Oral Health, Chronic Disease prevention and Control, Injury and Violence prevention and WIC. A centralized "data mart" was created in 2005. For this project, the intern explored the uses of the new OFHS data mart by performing quality assurance of datasets, examining trends in cesarean birth, extracting Virginia-specific data from a national dataset, and identifying research topics. Specifically, the intern looked at birth outcomes for singleton births of WIC participants and non-WIC Medicaid participants in the state. The student found that pregnant WIC participants experience lower risks for poor birth outcomes than do Medicaid participants not enrolled in WIC

NEEDS ASSESSMENT

In 2007, four internships were aimed at assisting State and local agencies with needs assessment. The locations for these internships were in rural states: Iowa, Kentucky, Ohio, and Oklahoma.

Iowa Department of Public Health; Maternal and Child Health

The intern at Iowa Department of Public health conducted needs assessment of maternal and child health data capacity building. The intern used the MCH Questionnaire to look at quantitative variables such as database linkage, data use and dissemination, and qualitative variables such as the benefits of data linkage, potential data uses, and the strengths and weaknesses of various data sources. The needs assessment revealed that respondents use data for a number of purposes, including program planning and evaluation, grant writing, needs assessment and policy development. The intern presented her findings at an AMCHP round table discussion.

Kentucky Department for Public Health

The main goal of the Kentucky internship was to promote knowledge and experience of state public health agency activities and participate in the development, planning, and research to implement a PRAMS pilot project. Activities included the development of a questionnaire and supplemental materials, development of a sampling program, and proposal writing.

Ohio Department of Health

Ohio was one of nine states without a birth defects surveillance program just a few years ago. A pilot statewide birth defects information system has been in development since 2003. The intern in Ohio evaluated the sensitivity and positive predictive value of the system.

Oklahoma

In Oklahoma, the physician obstetrician survey was on hold for two years due to lack of staff to move the project forward. The GSIP developed of the questionnaire, administered it and collected data. The intern and State continued to work together after the completion of the internship to analyze the data.

PROGRAM EVALUATION

The primary focus for three GSIP interns was to participate in program evaluation. Two interns in this area worked in county health departments in California and one intern worked with Maine's WIC agency.

Los Angeles County Department of Public Health

The GSIP intern in Los Angeles participated in research, program planning, and program evaluation in the following projects/ programs: Soul Food for your Baby, Family Health Outcomes, LA Adolescent Health Collaborative, PPOR, and the Los Angeles Mommy and Baby project. Activities included developing focus group discussion guides and questionnaires, completing prevalence tables of birth outcomes and trend data, and leading a PPOR analysis of fetal and infant mortality data from linked birth and death files.

San Francisco Department of Maternal, Child and Adolescent Health

The intern performed data analyses, attended data consortium meetings, and worked on MCH projects. She worked on a research initiative that was set up to assess a group prenatal care, called "Centering Pregnancy". Centering is a type of group prenatal care that groups women according their due dates. Women meet together weekly to discuss various topics about their pregnancies and to get their prenatal check-ups. This cohort study was designed to assess if and how Centering affected birth outcomes, specifically preterm births and low birth weight compared to outcomes under standard prenatal care. In particular, this study was designed to analyze birth outcomes among racial and ethnic minorities.

Maine Department of Health and Human Services

The intern worked with the Maine's WIC agency on the first evaluation of its Breastfeeding Peer Counseling program. She completed an evaluation project that will be highlighted at a future WIC conference, and this may lead to further funding of the program.