Substance Abuse

Assignment Description

American Indian and Alaska Natives (AIAN) experience a lower life expectancy and a disproportionate burden of disease when compared to the overall U.S. population. However, measures of health disparities in this population may be underestimated, as several studies show that racial misclassification of AIAN, and subsequent undercounting of their health status in state health databases is a significant problem throughout the U.S. This fellow position is at the California Tribal Epidemiology Center (CTEC) housed at the California Rural Indian Health Board (CRIHB). Studies conducted by CTEC demonstrate a 30% to 50% race misclassification rate for AIAN in state vital statistics records and in administrative hospital discharge data. A method used to address the issue of racial misclassification of AIAN in health records is to link protected health information found in the Indian Health Service registrant data to state health records to determine more accurate estimates for mortality and hospitalizations among AIAN living in California.

This project involves the fellow requesting and linking data from the Indian Health Service patient registry to either data housed in the California Health and Human Services Agency (CHHSA), California Department of Public Health, Office of Vital Statistics to determine mortality rates from alcohol and drugs, or the Office of Statewide Health Planning and Development (OSHPD) to examine patient discharge data for hospitalizations associated with alcohol and drugs. Racial misclassification numbers and proportions will be calculated using linked data sets. Rates of AIAN mortality and the specific health conditions or events per 100,000 AIAN in the population with 95% confidence intervals will be calculated by the fellow using the enhanced dataset. Rate ratios comparing rates of incident or prevalent cases for AIAN to rates of incident or prevalent cases in the whole state database population will be calculated. An opportunity to conduct a process evaluation of each linkage may be provided to evaluate, modify and improve, if necessary, effective practices for subsequent linkages.

A report of findings will be developed by the fellow to raise awareness of health disparities in AIAN in California. Dissemination of findings to increase awareness of AIAN health disparities, issues with racial misclassification, and the importance of standardizing the collection of race and ethnicity data will be achieved by the fellow providing presentations and consultations at Indian Health Programs, state health departments, universities, local health departments, hospitals, and American Indian communities. More accurate health information on substance abuse related hospitalizations and mortality will assist CTEC, tribal health programs, tribes, and state health programs in prevention and control efforts in AIAN. The CTEC team that will assist the fellow with project activities consist of a PhD-level American Indian epidemiologist (Primary Mentor), a Medical Epidemiologist with EIS training (Secondary Mentor), two MPH-level Research Associates and a Program Coordinator indigenous to California.

Day-to- Day Activities

Duties includes: working closely with supervisors, coworkers, and partners to finalize study protocol; developing an understanding of and arranging access to epidemiology electronic data files from Indian health programs and state health agencies; storing and managing the collected data; generating analysis

plans; performing analyses; interpreting and synthesizing analyses and writing analytical reports providing recommendations; facilitating the dissemination of the report; and presenting findings and recommendations to state health workers, Indian health care providers and AIAN communities. Other duties may be assigned as needed. In addition, the fellow will have the opportunity to work with other CTEC and CRIHB staff on epidemiologic and evaluation projects, as necessary. As a standard at CTEC, cultural competency training will also be provided to the fellow specific to American Indians in California.

Potential Projects

The fellow could lead a project on racial misclassification and trends in alcohol- and drug- related mortality in AIAN in California, or a project on alcohol- and drug-related hospitalizations in AIAN in California. The AIAN communities have identified drug and alcohol abuse as top health concern in California based on tribal consultations conducted between 2008 and 2010. Furthermore, substance abuse is known to be higher for AIAN nationally, although due to potentially high race misclassification rates in California, the extent of the problem is unknown. These projects are critical in understanding the health outcomes related to substance abuse in AIAN communities. The fellow will request and link data from the Indian Health Service patient registry to data housed in either the California Health and Human Services Agency (CHHSA), California Department of Public Health, Office of Vital Statistics to determine mortality rates from alcohol and drugs, or the Office of Statewide Health Planning and Development (OSHPD) to examine patient discharge data for hospitalizations associated with alcohol and drugs. Racial misclassification numbers and proportions will be calculated, along with rates of mortality and the specific health conditions or events per 100,000 AIAN in the population with 95% confidence intervals. Rate ratios comparing rates of cases for AIAN to rates of incident or prevalent cases in the whole state database population will be calculated. A report of findings will be developed by the fellow and disseminated through presentations and consultations at Indian health programs, state health departments, universities, local health departments, hospitals, and American Indian communities.

Additional projects may be included depending on the interest of the fellow, the needs of CTEC, and CSTE requirements.

Preparedness Role

The fellow may participate in the CRIHB Emergency Preparedness workgroup, which is a partnership between CTEC and the Family and Community Health departments, both housed at CRIHB, to build partnerships and provide technical assistance in emergency preparedness to member tribal health programs; for example CTEC provided technical support to tribal health programs during the H1N1 outbreak in 2009 and 2010. This may involve the fellow completing the ICS training 100, 200, 650 and 700 courses or attending exercises, drills, and tabletops hosted by CTEC member tribal health programs or Tribes. The fellow will assist as appropriate in emergent problems.

Assignment Location:	Sacramento, California
Primary Mentor:	Kristal Chichlowska, PhD, MPH Director California Tribal Epidemiology Center
Secondary Mentor:	Thomas Kim, MD, MPH Medical Epidemiologist California Tribal Epidemiology Center