

Infectious Disease

Assignment Description

The fellow will be assigned to the HIV Epidemiology and Field Services Program of the Bureau of HIV/AIDS Prevention and Control. The Bureau of HIV/AIDS Prevention and Control is one of the seven Bureaus of the Division of Disease Control.

The main assignment will involve assisting in, developing and taking the lead on data analyses for the Medical Monitoring Project (MMP). The MMP study is an ongoing, national multi-year study of people living with HIV/AIDS (PLWHA) who are receiving medical care for HIV. MMP is funded by and conducted in collaboration with the Centers for Disease Control and Prevention (CDC). The study design is cross-sectional with annual multi-stage probability samples of patients receiving care within a defined period (January through April of each project year). At this time, MMP has collected data on samples of patients receiving care in 2005, 2007, 2008, and 2009. The MMP uses data from structured interviews and medical record abstractions to estimate the prevalence of clinical outcomes, describe HIV-related and other health behaviors, determine accessibility and use of health and support services, assess the prevalence and frequency of HIV-related risk and preventive behaviors, and examine variations by geographic area, patient characteristics and other correlates.

Day-to- Day Activities

The CSTE fellow will assist in and conduct analyses and dissemination of MMP data. The analyses will include descriptive analyses of outcomes in each outcome domain and by demographic and other relevant variables, comparisons of these outcomes across sample years, and inferential analyses of specific research questions. The inferential analyses will involve developing and testing explanatory models using multivariate statistical techniques. Analyses will be conducted using SAS and other analytic software. In addition to assisting in ongoing analyses, the CSTE fellow will develop analysis concepts and take the lead in implementing analyses. Dissemination activities will include responding to data requests from the HIV Epidemiology and Field Services Program and other Programs in the Bureau of HIV Prevention and Control, and from elsewhere in the Department of Health and external sources.

In addition to working on journal quality articles, the CSTE fellow will develop and produce slide presentations, reports, and fact sheets, and will participate in oral and poster presentations of data analyses. In the context of working on analyses of MMP data, the CSTE research fellow will interact with and collaborate with other MMP analysts and staff on sample selection and participant recruitment, data collection and management, and process analyses for evaluating questionnaire items and sample accrual goals and characteristics. As part of the MMP research team, the CSTE fellow will interact with MMP and other Program staff and participate in project meetings focusing on data analysis and other project activities.

Potential Projects

In MMP there are a number of possible analyses to conduct, such as:

- Stage of disease at diagnosis and the factors associated with concurrent diagnosis of HIV and AIDS
- The prevalence and correlates of detectable viral loads and low CD4 counts

- Factors associated with adherence to antiretroviral treatment
- Race-ethnic disparities in clinical outcomes
- Exposure to prevention and risk behaviors
- Access to and utilization of mental health and drug and alcohol treatment use
- Drug use and health status
- Sexual risk behaviors among heterosexuals, men-who-have-sex-with-men, and drug users

Preparedness Role

We fully anticipate being able to engage the CSTE Fellow in the agency's emergency preparedness activities to the extent that they are interested and/or required to do so. Our current CSTE Fellow has been able to attend emergency preparedness meetings in which tabletop exercises are conducted. She has been able to participate in a foodborne outbreak response, which provided her with many experiences relevant to emergency preparedness. She has also been able to work with the leadership of one of the agency's emergency preparedness sections to conceive of her own tabletop exercise for presentation to the wider group.

Assignment Location: New York, New York

Primary Mentor: Alan Neaigus, PhD
Director of HIV Research
New York City Department of Health and Mental Hygiene

Secondary Mentor: Colin Shepard, MD
Director, HIV Epidemiology and Field Services Program
New York City Department of Health and Mental Hygiene