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Expanding Test and Treat in Correctional Populations: A Key Opportunity to Reduce Racial Disparities in HIV Infection

TO THE EDITOR—Charlebois et al [1] highlight the potential population impact of expanding highly active antiretroviral therapy to all human immunodeficiency virus (HIV)-infected individuals in San Francisco, California. In their commentary and response, De-Gruttola and Schooley [2] underscore the importance of developing research designs that explore the impacts of "test and treat" interventions at the community level and call for advancing the "test and treat" agenda beyond mathematical models to real-world application. To apply test-and-treat models in community settings, the public health community must develop innovative strategies to identify, link to care, and retain persons from difficult-to-reach populations. This goal will be particularly important for reducing racial disparities in HIV infection in the United States.

Correctional populations are at higher risk for HIV infection; $\sim 14\%$ of people living with HIV infection in the United States pass through the correctional system each year [3]. African Americans are also incarcerated at 6 times the rate of whites [4]; face 7 times the rate of HIV infection; constitute 45% of new HIV infections nationwide [5]; and are nearly twice as likely to lack health insurance [6]. Incarceration represents a prime opportunity to test and treat high-risk populations, particularly African Americans, uninsured populations, and others who may otherwise have limited access to health services. Although many correctional institutions have made important progress in identifying new cases of HIV infection, maintaining virologic suppression after reentry into the community remains a challenge [7].

Scaling successful programs that support linkage to care and maintenance of virologic suppression for prisoners upon reentry requires development of metrics to assess linkage to care in the community. The availability of centralized client-level data for key safety net programs such as Ryan White care offers an important opportunity to inform the development of innovative programs to address these populations.

We are undertaking a research study that assesses the impact of linking inmates to treatment and care services in several correctional systems across the United States. This project will use the encrypted Unique Client Identifier developed by the Health Resources and Services Administration to link corrections release data to Ryan White client-level data provided by Ryan White grantees collaborating on this study. By comparing dates of release with the first dates of service, we will be able to determine the time to linkage for persons cared for in Ryan White care programs. Rvan White data sets, which include clinical data such as CD4 cell count and viral load values, will facilitate further characterization of the adequacy of linkage to care and its impact on health outcomes in the community. To further explore performance across sites, we will conduct in-depth qualitative studies that examine local institutional conditions, policy climates, and inmates' clinical and social experiences with HIV testing and linkage to care upon release.

This applied test-and-treat model will be the first of its kind, allowing the review of programs to support retention in

care and maintenance of viral load suppression for persons in high-risk correctional populations across the nation. This exercise will highlight important trends for how a variety of large correctional institutions and communities perform in linking inmates to treatment and care services upon release, and may also provide some important lessons learned about the institutional conditions and policy climates that give rise to favorable HIV/AIDS population-level health outcomes. Notably, nearly 50% of Ryan White program clients are African American; understanding clinical trends beyond correctional walls and how to enhance linkage to care services for recently released inmates participating in Ryan White programs will also provide important lessons for achieving President Obama's goals of reducing racial disparities in HIV infection.

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