
Improving Medical Care for Patients With HIV in New York City Jails

Journal of Correctional Health Care
00(0) 1-5

© The Author(s) 2012

Reprints and permission:

sagepub.com/journalsPermissions.nav

DOI: 10.1177/1078345812445556

<http://jcx.sagepub.com>



**Mohammed Jaffer, PA¹,
Casey Kimura, MPH² and
Homer Venters, MD¹**

AQ2

Abstract

Correctional institutions play an important role in identifying HIV-positive patients and initiating and continuing their care. However, the actual medical care provided to patients with HIV in jail is poorly characterized. The New York City jail system cares for approximately 7,500 HIV-positive persons each year, including approximately 125 who are newly identified during testing in jail. Analysis of patient data reveals that only 17% of newly identified HIV-positive patients were started on therapy, with the most common reasons for not initiating being not meeting clinical guidelines or short stay. Among known HIV-positive patients, rates of medication continuation were high. Keys to success in maintaining a high level of care for HIV-positive patients include real-time evaluation of the population, routine feedback to providers, and case conferencing.

Keywords

HIV, AIDS, jail, correctional health care

Introduction

Correctional institutions have become some of the largest providers of HIV care in the United States (Kavasery et al., 2009; Seal, Eldridge, Zack, & Sosman, 2010). Because of the overlap in risk factors for both HIV and incarceration (including substance abuse and mental illness), public health and correctional health services have long noted the importance of aggressive HIV testing and care in jails and prisons. While HIV testing and discharge planning for the incarcerated patient have received significant attention (Springer et al., 2004; Wang et al., 2008), little has been reported about the actual medical care that newly identified and known HIV-positive patients receive in correctional settings, particularly jail. Many HIV-positive inmates actually receive their HIV diagnosis and

¹ Correctional Health Services, New York City Department of Health and Mental Hygiene, Rikers Island, East Elmhurst, NY, USA

² Hunter College, School of Public Health, New York, NY, USA

Corresponding Author:

Homer Venters, MD, Correctional Health Services, New York City Department of Health and Mental Hygiene, 115 W. Perimeter Rd., Bridge Trailer, Rikers Island, East Elmhurst, NY 11370, USA
Email: hventer1@health.nyc.gov

initiate treatment for the first time during their incarceration, emphasizing the importance of access to treatment in correctional settings (Wakeman & Rich, 2010).

The New York City (NYC) Department of Health and Mental Hygiene's Correctional Health Services (CHS) coordinates the medical, mental health, and dental services for people in the NYC jail system. Each person who is held in the jail system undergoes a comprehensive intake history taking and physical examination before being housed. This process includes a universal offer of HIV testing as well as writing of orders for medications, specialty care, laboratory tests, and diagnostic imaging.

We have reported elsewhere on the development of our universal rapid HIV test offer (Sabharwal et al., 2010). Our current efforts yield an approximately one-third acceptance rate, with about 32,000 tests performed each year and less than 1% positivity. In addition to this small number of newly identified HIV-positive patients, approximately 5% of all incoming patients report being HIV positive. To improve the level of care for both of these patient populations (newly identified and known HIV positive), we have completed a review of medical care provided to all HIV-positive patients. Our findings suggest that most of the impediments to either initiation or continuation of antiretroviral (ARV) medications are nonclinical considerations such as short length of stay.

Newly Identified Patients

In 2009 and 2010, 244 patients were newly identified as being HIV positive in the NYC jail system. These patients resembled the larger jail population in most respects: 74% of the new HIV-positive patients were identified as African American/Black, while 17.5% were identified as Hispanic, 5% as White, 0.5% as Asian, and 3% as other. Women were overrepresented in this sample, with 59 of 244 (24% of all positive tests vs. 10% of all admissions). This number reflects both a higher acceptance rate (approximately 44% among women vs. 33% for the entire population) and a higher positivity rate (close to 3% for women, less than 1% for the entire population). The bulk of these patients were identified during intake screening. Any newly identified HIV-positive patient receives immediate confirmatory testing and other HIV-related laboratory testing, posttest counseling, medical and mental health evaluation, and HIV specialist consultation. In addition, each of these patients is referred to CHS health educators, who provide health education, treatment adherence, and coordination of care for newly diagnosed HIV patients while incarcerated and in transition to the community.

Among the 244 newly identified HIV-positive patients from 2009 and 2010, only one had an undetectable viral load, while 70 had viral loads under 5,000 copies/ml, 119 had viral loads between 5,000 and 100,000 copies/ml, and 37 had viral loads in excess of 100,000 copies/ml (18 missing data). The CD4 levels of these patients were higher than we would have expected, with 101 patients having a CD4 level above 500 cells per ml (see Figure 1). Of these newly identified HIV-positive patients, 17% were initiated on ARVs while 83% were not. The two most common reasons documented for not starting ARVs were short stay (49%) and high CD4 level (30%).

Known Patients

Compared to the number of newly identified HIV-positive patients, the NYC jail system admits a large number of patients each year who self-report or are known to have HIV. This patient cohort is approximately 5% of the overall census (close to 5% for men, 8% for women); with 500 to 750 patients in the system on a daily basis and approximately 7,500 admitted each year. The intake process in jails is a chaotic one that creates special challenges for HIV-positive patients. In NYC, a person who is arrested may spend 24 hours in a police holding pen before being held over (not being given/not able to afford bail). At the point of being held over, an arrestee is transferred to the custody of the NYC Department of Corrections, which will take up to 24 hours to transfer the person to a jail,

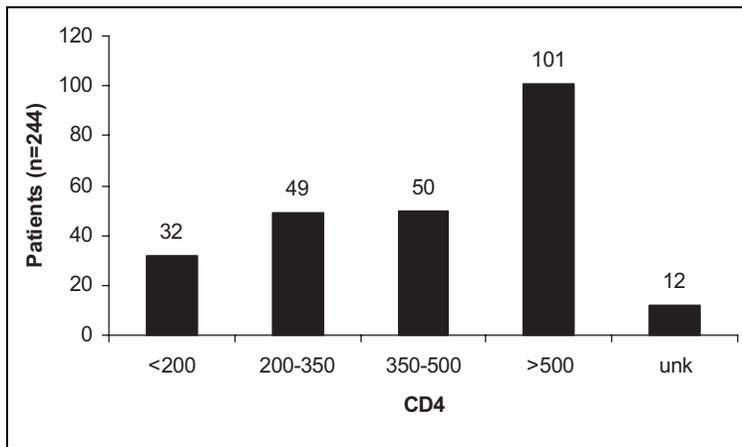


Figure 1. CD4 levels of newly identified HIV-positive patients.

conduct its own security assessment, and deliver the inmate-patient to medical staff for the intake history and physical. Thus, medical staff conduct their intake work with patients who have often been awake for 48+ hours, are extremely fearful and agitated about their surroundings, and who may have missed multiple rounds of medications.

Two central challenges regarding a known HIV-positive patient during intake are to identify persons with AIDS (or who are acutely ill and need quick follow-up) and to prevent interruption of ongoing treatment. The goal of CHS is to continue all ARV medications directly during the intake process, even when medications have been interrupted for 30 days or less. While continuation of ARVs is straightforward when patients recall all of their information, clinicians are often confronted with patients who recall part of their regimen or who report an interruption of treatment. To mitigate these challenges, all clinicians have access to ARV pill charts and are periodically retrained on their use in HIV case conferences as well at systemwide grand rounds. In addition, each of the 11 jails is covered by an HIV specialist physician who provides feedback to jail medical staff regarding the importance of continuing medication. Finally, in the instance where vital information is missing, CHS has a cadre of HIV health educators who intake clinicians can call upon to rapidly seek collateral information from community providers.

In tandem with the review of care for newly identified HIV-positive patients, we have reviewed the practices of our clinicians in continuing ARVs for HIV-positive patients. This review is based on a daily report generated from our medical record that captures any HIV diagnosis entered in the problem list and crossmatches each day for new admissions. This list is then reviewed for the presence or absence of ARV prescriptions and each patient's record is reviewed for appropriateness of ARV regimen or reason for not having ARVs prescribed. This daily review of our HIV-positive patients began in December 2010 and also captures whether or not pneumococcal vaccine has been offered. The first 3 months of this review (593 patients) are reflected in this analysis of known HIV-positive patients.

These results show that 76% of known HIV-positive patients are prescribed ARVs (see Table 1) within 14 days. When the cohort of known HIV-positive patients who were not prescribed ARVs is reviewed, we find that the two most common reasons are short stay (38%, i.e., a question from intake about ARV prescribing is not resolved before a follow-up visit) and being treatment naïve (17%). Although the share of women not prescribed ARVs is greater, these cases had a very high rate of valid reasons (95% for women, as compared to 88% for all), with the majority of these cases involving patients who were treatment naïve or who refused ARVs. This review gives us the ability to

Table 1. Continuation of ARV for Known HIV-Positive Patients (December 8, 10–March 8, 11)

	All (Males and Females)	Females
Total known at intake	593	132
ARV continued at intake	400 (67%)	79 (60%)
ARV restarted within 2 weeks for those not continued at intake	54 (28%)	7 (13%)
Total continued at intake and restarted within 2 weeks	454 (76%)	86 (65%)

monitor the prescribing practices for all HIV-positive patients on a daily basis and intervene quickly when required. In addition, we have assessed vaccinations and PCP prophylaxis. The percentage of patients in this cohort who had received a pneumococcal vaccine was very low, with approximately 25% recorded as not offered, 15% as given (by us or within 5 years elsewhere), and 60% as refused. A long-standing process captures all CD4 results and automatically refers a daily list of patients requiring and those receiving prophylaxis. More than 95% of persons requiring PCP or MAC prophylaxis (based on CD4 results) receive these medications.

AQ3

Discussion

A central tension exists in jails between the opportunity to provide much needed health care and the chaos and agitation of the setting. For patients with HIV, jail can be a particularly difficult setting to navigate; access to testing, medical care, and medication must be weighed against stigma, violence, and competing activities that either mitigate the adversity of jail or contribute toward release (i.e., family visits, commissary, and court). In our review of clinical care for newly identified and known HIV-positive patients, we have found the following. First, although the number of newly identified HIV-positive patients is small, each requires a great deal of resources that is best standardized with a clear protocol. Second, the large number of known HIV-positive patients entering our system require close case monitoring to ensure that those who need ARVs have them prescribed. Third, the most common reasons for ARVs not to be prescribed is short stay for newly identified patients and either being treatment naïve or having a more than 30-day ARV interruption for known patients. Because our system includes vigorous discharge planning for HIV-positive patients, the great amount of data generated for our patients is likely to inform care in the community.

We have devoted significant resources to the clinical care of patients with HIV. One key challenge is to routinize this care. For example, the multiple reports that we generate (i.e., all low CD4 lab results, intake HIV diagnoses, new HIV rapid positive results) will ideally be integrated into the electronic health record that we are in the mid of adopting so that we can assess individual and population information in a single setting. Also, we plan to increasingly focus on HIV primary care. The extremely low pneumococcal vaccination rate among our known HIV-positive patients signals a need to expand our clinical attention beyond ARV and laboratory testing.

Declaration of Conflicting Interests

The authors disclosed no conflicts of interest with respect to the authorship and/or publication of this article. For information about *JCHC*'s disclosure policy, please see the Self-Study Exam.

Funding

AQ4

The authors received no financial support for the research, authorship, and/or publication of this article.

References

Kavasery, R., Maru, D. S., Cornman-Hornonoff, J., Sylla, L. N., Smith, D., & Altice, F. L. (2009). Routine opt-out HIV testing strategies in a female jail setting: A prospective controlled trial. *PLoS ONE*, *4*, 1–8.

- Sabharwal, C. J., Muse, K. H., Alper, H., Begier, E., McNeill, M., Galeta, G., . . . Parvez, F. (2010). Jail-based providers' perceptions of challenges to routine HIV testing in New York City jails. *Journal of Correctional Health Care, 16*, 310–321.
- Seal, D. W., Eldridge, G. D., Zack, B., & Sosman, J. (2010). HIV testing and treatment with correctional populations: People, not prisoners. *Journal of Health Care for the Poor and Underserved, 21*, 977–985.
- Springer, S. A., Pesanti, E., Hodges, J., Macura, T., Doros, G., & Altice, F. L. (2004). Effectiveness of antiretroviral therapy among HIV-infected prisoners: Reincarceration and the lack of sustained benefit after release to the community. *Clinical Infectious Diseases, 38*, 1754–1760.
- Wakeman, S. E., & Rich, J. D. (2010). HIV treatment in U.S. prisons. *HIV Therapy, 4*, 505–510.
- Wang, E. A., White, M. C., Jamison, R., Goldenson, J., Estes, M., & Tulskey, J. P. (2008). Discharge planning and continuity of health care: Findings from the San Francisco county jail. *American Journal of Public Health, 98*, 2182–2184.