

Enhancing Linkages to HIV Primary Care in Jail Settings

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Executive Summary

One-third of the more than two million correctional inmates in the United States on any given day are in jails, but nine million individuals pass through jails in any given year. Inmates remain in jails for much shorter stays than in prisons resulting in a vastly greater turnover in jail populations. These circumstances pose important opportunities and challenges for arranging for HIV testing in jails and linking HIV-infected inmates with services both while they are incarcerated and after release. An important public health opportunity lies in helping more individuals in these high-risk jail populations to learn their HIV status and to be linked to any needed care. Recent demonstration projects funded by the Centers for Disease Control and Prevention (CDC) establish the feasibility of rapid HIV testing in jail settings and its acceptability to inmates and jail administrators.

The Rollins School of Public Health and Abt Associates Inc. serve as the Evaluation and Support Center (ESC) for a new initiative sponsored by the Health Resources and Services Administration (HRSA) to Enhance Linkages to HIV Primary Care in Jail Settings. This initiative, administered by the Special Projects of National Significance (SPNS) Program in HRSA's HIV/AIDS Bureau, will fund up to 10 demonstration projects to implement and evaluate innovative program models that identify HIV-infected individuals in jails and assist them in securing HIV primary care and social support services when transitioning back to the community. Faculty from the Rollins School of Public Health of Emory University and staff from Abt Associates Inc. convened a meeting on October 5-6, 2006, in Bethesda, Maryland, of experts in HIV testing and linkages to HIV care in jails and in the community after release in order to provide consultation to the ESC regarding innovative HIV care and treatment strategies. Meeting participants included:

- jail, public health and Federal administrators who have implemented rapid HIV testing programs;
- policy experts in correctional health care issues;
- jail nursing staff;
- national organizations that serve jail and correctional administrators;
- HIV medical providers; and
- a former inmate.

The Consultancy Meeting provided an opportunity for a wide-ranging and rich discussion of many critical issues related to enhancing linkages to HIV primary care in jail settings and in the community after release. The main topics covered were:

- models of HIV testing and diagnosis;
- models of linkage to HIV care;
- issues related to program and evaluation data; and
- cooperation and ethical issues relevant to implementing and evaluating these models in the demonstration sites.

Key Factors: Models of Testing and Diagnosis

The first step for the SPNS demonstration programs will be to develop and implement improved methods of providing HIV testing and diagnosis in jail settings. The principal issues in this area that the discussion addressed included:

- timing of testing;
- marketing and advertising of services;
- manner in which testing is presented to inmates;
- testing protocols;
- methods of informing those tested of their results;
- confidentiality of results;
- HIV counseling associated with testing; and
- administrative and implementation issues.

Medical examinations that could include HIV testing may be provided at different points in the processing of incoming inmates. In some areas it may occur in pre-booking facilities, in others at the main jail either post-arraignment or at other points. However, the timing of these examinations may affect the feasibility of providing testing services and the proportion of arrestees or inmates who are eligible or likely to be captured in the testing program. Advertising and marketing of HIV testing and the choice of diagnostic services are important in terms of reaching the target population and maximizing inmate participation in and coverage of the program. Careful thought also needs to be given to testing policy and procedures, both from the point of view of the health services provider and the individuals receiving the services: is it a voluntary, “opt-in” system? Is testing targeted? Is it a routine system (where all inmates are tested unless they “opt-out”)?

The protocol for rapid HIV testing can also take various forms. It could be based on a rapid test followed, for individuals with initial positive results, by a standard confirmatory test such as a Western Blot or it could include two different rapid tests (an approach recommended by the World Health Organization, but not routinely used in the United States). The advantage of the double rapid test protocol is that, because confirmed results can be given to inmates in about 45 minutes, the problem of having to find people who test positive later—presumably after many have been released or sent to another facility—is eliminated.

Another important aspect of HIV testing and diagnosis is the question of what message to convey to persons with a positive reaction to the rapid HIV test. There was lively discussion at the meeting on this issue, with some participants arguing that a “preliminary positive” result should be reported to inmates if the rapid test is positive, but other participants insisting that

initially positive individuals should be informed that their results are “unclear” until the result is confirmed by additional testing.

When developing diagnosis and testing models, careful attention should be paid to confidentiality of test results, handling medical information generally, and procedures to comply with Health Insurance Portability and Accountability Act (HIPAA) regulations. Maintaining confidentiality in a correctional setting is particularly challenging.

The CDC has recently released new recommendations on routine testing for HIV according to which, HIV prevention counseling should not be required as part of a diagnostic or screening test, but is still recommended when feasible. The meeting participants affirmed that counseling should be provided to both HIV-negative and HIV-positive individuals whenever possible.

Administrative procedures for implementing model HIV testing and diagnosis programs need to reflect the fact that every correctional setting has its own unique features. Different jails may have unique concerns related to budget, staffing, security, access for outside service providers, waivers of Clinical Laboratory Improvement Amendments (CLIA) requirements and designation of staff authorized to conduct testing and inform patients of diagnoses. Different testing protocols and seroprevalences have implications for the cost of implementing expanded testing programs.

Principal Considerations in Implementing Linkage Services

During the discussion of models for linking HIV-positive jail inmates to HIV care while incarcerated and upon release to the community, important issues for crafting the models became apparent:

- how linkage procedures vary across different jail systems;
- coordination among project partners (e.g., jails, community medical providers);
- mechanisms for linkage;
- scope of services;
- inmate characteristics;
- information sharing; and
- administration and implementation issues.

Overall, as with testing and diagnosis programs, linkage programs need to be tailored to the characteristics of the particular jails including its inmate population. Linkage models vary. Linkage to care may take place within the jail, from jail to prison or, upon release, from jail to the community. Successful strategies for linking HIV-infected inmates to outside services may include:

- face-to-face discharge planning;
- making every effort to obtain accurate information on release dates;
- making appointments for releasees with community-based service providers; and
- meeting releasees at the gate and transporting them to their initial critical service appointments rather than simply offering referrals to providers.

The scope of services demonstration sites might choose to offer also raised issues:

- Should programs focus on just the diagnosis and the initial linkage to post-release care and treatment (i.e., making the linkage and getting people to their *first* appointments?)
- Should programs have the broader goal of making and *maintaining* the linkage to care and treatment for an extended period after release?
- Should programs be ambitious and comprehensive, addressing a wider range of needs such as housing, employment and family stability?
- Should programs provide full-scale case management or just focus on referrals?

The characteristics of the inmates will in part drive the scope of services. For example, in many jails, HIV-positive inmates are also dually and triply diagnosed—that is, they suffer as well from serious substance abuse problems, mental illness or both.

As with testing and diagnosis models, many administrative issues are involved in implementing programs. Appropriate and effective information sharing is critical to successful linkage programs, including:

- having appropriate space for the program in the jail;
- coordinating the new program with existing services;
- authorizing community-based organizations, public health departments and other outside organizations to work in the facility; and
- meeting facility security requirements.

Data Issues

The meeting participants raised two important points regarding evaluation and data:

- (1) Understanding and assessing the capabilities for data collection and data submission of the organizations or consortia that are going to be implementing models in the demonstration sites—that is, their ability to collect and submit data relevant to the evaluation requirements.
- (2) Developing logic models relating the desired outcome measures to the specific interventions being implemented. Developing a logic model helps to ensure that the evaluation is appropriate for the program being evaluated. HRSA has a website to guide grantees in developing logic model—see <http://hab.hrsa.gov/tools/spnsgrantees.htm>.

For the second day's discussion, the Evaluation and Support Center distributed a list of evaluation and data issues to stimulate

discussion. This list (see figure 14 in the full report) included possible:

- aggregate and individual-level data elements for measuring success in testing and diagnosing inmates and linking HIV-positive inmates to care;
- types of data sources, including aggregate and individual -level instruments, data on utilization of services and face-to-face interviews;
- strategies for minimizing the amount of time and effort involved in collecting the data from inmates and staff; and
- strategies for ensuring complete and accurate data submission.

Other important issues raised for discussion—but not resolved—included the following:

- How to calculate the denominator for the proportion of inmates tested in a given period, that is the definition of the pool of inmates eligible to be tested (e.g., all inmates who have a medical examination, all inmates at the facility for certain number of hours or days)?
- Once the denominator is defined, where can those data be obtained (e.g., administrative databases, health service department records)?
- How can newly diagnosed HIV-positive inmates be distinguished from inmates who already know their status but are retested in order to be treated?
- Should recidivism be an outcome measure for determining whether linkage to services in the community was successful?

Participants argued for several other evaluation outcome measurements, including identifying previously undiagnosed HIV-positive persons and getting the releasee to the first appointment in the community. Possible intermediate outcomes suggested included improvements in the inmates' knowledge of HIV's etiology and management.

In addition to discussing evaluation questions, participants raised numerous issues about data collection and related concerns about program implementation. Some participants said that jail staff might resist expanding HIV testing and data reporting because these responsibilities would add to their already heavy workload. Such resistance might result in biased or uneven implementation of testing policies. This failure to follow testing policies could skew data about facility HIV seroprevalence estimates. To reduce staff resistance, redundant paperwork should be avoided at all costs.

Finally, security issues, chaotic intake environments and the timing of health screening may also affect data collection and other aspects of the implementation of an HIV testing and linkage program in a jail.

Facility Cooperation and Ethical Issues Related to Research

Gaining the full cooperation of the correctional facility is obviously critical to initial and ongoing access and the ultimate success of any such research and demonstration project. There are three areas related to gaining cooperation:

- (1) Promotion: the project must be properly promoted, including emphasizing the benefits to facility staff at all levels whose agreement and cooperation will be needed.
- (2) Partnerships: the project will need partners who will be responsible and responsive to the needs and regulations of the facility.
- (3) Funding: there must be adequate funding to pay for any additional services or activities involved in the project. Especially important may be paying for the HIV test kits, along with devoting adequate resources to track and locate participants for follow-up and evaluation.

There are serious ethical issues involved in conducting any research or program evaluation among correctional populations. A 2006 Institute of Medicine report proposed several revisions to the ethical framework for conducting biomedical research to afford prisoners more opportunity to participate in such research. But the report also emphasized the need for research with any populations to adhere to the principles of justice (including risk-benefit analysis), respect for persons, and active participation of all stakeholders in its design and approval.

At least five ethical issues are pertinent to testing, diagnosis and linkage programs:

- ensuring the completely voluntary nature of the testing;
- incorporating sensitivity to the psychological impact of learning one's HIV-positive status;

- including confirmatory testing;
- monitoring adverse events; and
- sharing protected health information in an appropriate manner.

Finally, testing, diagnosis and linkage programs must be sensitive to the multiple forms of discrimination suffered by large numbers of inmates based on race, ethnicity, class, gender, and sexual orientation. Program implementers and community advisory boards representing multiple stakeholders should provide recommendations designed to prevent any discrimination or other unfairness on the part of the program. Within the limitations of available resources, programs should also be attentive to the counseling needs of HIV-negative as well as HIV-positive individuals. It is also important to help HIV-negatives maintain their disease-free condition.

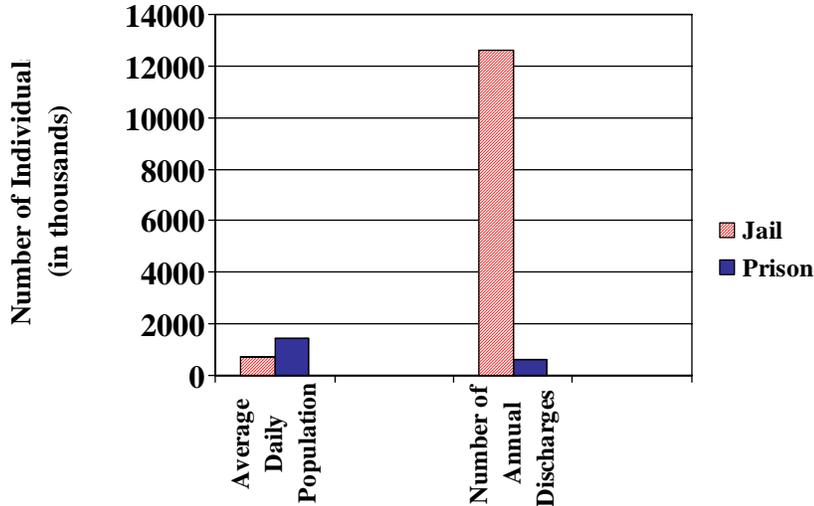
1. Introduction

An overview of the problem of HIV in jail populations, the new opportunities available with rapid testing technology, and the challenges in implementing the latest CDC recommendations for HIV testing will explain the need for new models of enhanced linkages of HIV primary care in jail settings.

1.1. HIV in Jails

Of the 2.2 million people in the United States who are incarcerated on any given day, two-thirds are in prison and one-third are in jails.¹ While jails have average daily populations half that of prisons, their populations are more in flux: the ratio of jail admissions to prison admissions is over 16 to 1 (see figure 1). Inmates progress rapidly through jail facilities. On average, approximately 50 percent of people admitted to jails leave within 48 hours according to data from the U.S. Department of Justice's Bureau of Justice Statistics (BJS)², although the exact turnover rate varies by jurisdiction.

Figure 1
Population Dynamics in Prisons Versus Jails, 2005



Credit: Nicholas Scharff, MD MPH, from whom this representation was borrowed.

Sources: See Harrison and Beck.^{1,3}

Many individuals who pass through jails engage in high-risk behavior prior to arrival. As a result, jails represent a public health opportunity to identify undiagnosed disease, begin treatment and link infected individuals with treatment in the community after release, especially since many jail inmates have not have had access to care prior to incarceration. In fact, because of rapid

inmate turnover, interventions in jail settings, compared to interventions in prisons, may have a larger impact on the health of the local community since, unlike prisons, jails primarily house residents of the surrounding community.

Perhaps the greatest benefit of providing correctional health service in a jail setting is the opportunity for HIV-infected persons to learn their status, because identification of infection is the first step in ensuring HIV-positive persons will be linked with HIV care and support services after release and thereby help prevent the spread of HIV within their social and sexual networks.

Widely available rapid HIV testing methodologies now offer a potentially important opportunity for a great step forward in jail health, because the turnaround time of rapid tests can accommodate the fast pace of jail population flow. The new recommendations for routine testing for HIV recently issued by the Centers for Disease Control and Prevention (CDC) (see figure 2) include correctional health settings as appropriate testing settings.⁴ In jails and prisons, as in the community, when a complete medical exam is performed, HIV testing should be included on a routine basis just like any other test. The challenge lies in determining how to operationalize these recommendations for testing in jails.

Figure 2

Summary of Changes in CDC's 2006 Revised Recommendations For HIV Testing

- HIV screening is recommended for patients in all health care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
 - Persons at high risk for HIV infection should be screened for HIV at least annually.
 - Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
 - Prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening programs in health care settings.
-

Sources: See Branson.⁴

Of the 1.1 million Americans with HIV, only three-fourths (about 875,000) know that they are positive. Moreover, source persons for new infections are over represented in this group that is unaware of their status. Out of 40,000 new infections each year, 25,000 have as a source person for transmission someone who was unaware that they were positive.⁵ Studies have shown that people aware of their diagnosis are less likely to engage in high-risk behavior.⁶ Therefore, it is important that communities find people who are infected and help them become aware of their status. The over twelve million discharges from jails in 2005 represent nine million unique individuals passing through these institutions.³ Even if jail testing identified one percent of this population as HIV-positive, the 90,000 individuals so identified might include a substantial portion of those individuals currently infected but unaware of their status.

1.2. HRSA's New Initiative to Enhance Linkages to HIV Primary Care in Jail Settings

On October 5-6, 2006 experts in providing and evaluating HIV testing and linking inmates to HIV care in jail and in the community after release, met in Bethesda, Maryland. The Consultancy Meeting was convened by faculty and staff at the Rollins School of Public Health of Emory University and Abt Associates Inc. who serve as the Evaluation and Support Center (ESC) for a

new Health Resources and Services Administration (HRSA) Initiative to Enhance Linkages to HIV Primary Care in Jail Settings. Participants at the meeting included:

- jail, public health and Federal administrators who have implemented rapid HIV testing programs;
- policy experts in correctional health care issues;
- jail nursing staff;
- national organizations that serve jail and correctional administrators;
- HIV medical providers; and
- a former inmate.

See appendix 1 for the list of meeting participants and appendix 2 for the meeting agenda.

The goal of the Consultancy Meeting was to assess recent trends and current challenges in identifying and caring for HIV-positive persons incarcerated in jails. Much of the previous work in corrections regarding linking offenders to HIV care after release has focused on prison inmates. In prisons, inmates have prolonged stays. Because turnover is not rapid, case managers have time to develop comprehensive plans. Under those circumstances intensive case management may improve linkage to care after release. However, because the situation is different in jails, health care interventions that work in prison settings may have no significant benefit in a jail setting.⁷

HRSA has charged the Emory-Abt Evaluation and Support Center with performing a five-year cross site evaluation of approximately 10 demonstration sites to identify and describe effective approaches to identifying HIV-infected inmates and detainees and linking them with HIV care that can be replicated on other correctional facilities. At the Consultancy Meeting the empanelled participants discussed how to initiate and evaluate feasible interventions for identifying HIV-positive inmates and linking them with treatment, as well as the ethics involved in implementing and evaluating such interventions. This report summarizes the issues discussed at the meeting. There are myriad HIV testing programs in jail and prison settings.⁸⁻¹⁰ Variables are the timing of test(s), which inmates are targeted, and degree of consent. For voluntary programs, the degree to which testing is promoted and encouraged varies among correctional systems. Whether testing is linked with prevention counseling and education also varies. Figure 3 defines many of the terms and concepts used in this report.

Figure 3
Definitions for HIV Testing in Correctional Facilities

Informed consent: “A process of communication between patient and provider through which an informed patient can choose whether to undergo HIV testing or decline to do so. Elements of informed consent typically include providing oral or written information regarding HIV, the risks and benefits of testing, the implications of HIV test results, how test results will be communicated, and the opportunity to ask questions.”⁴

HIV-prevention counseling: “An interactive process of assessing risk, recognizing specific behaviors that increase the risk for acquiring or transmitting HIV, and developing a plan to take specific steps to reduce risks.”⁴ Counseling may precede or follow testing.

CATEGORIES OF TESTING*

Timing of testing

Intake testing: Testing is conducted at booking or at the first medical encounter.

Testing at conviction: Testing is conducted only after a defendant is found guilty.

Testing at discharge: Testing is conducted close to the time of release (this generally only happen in prison systems where release dates are known).

Triggered tested: Testing is conducted after clinical suspicion of HIV or exposure to blood or other body fluids.

Who is tested

Routine testing: HIV testing is offered and recommended to all inmates.

Targeted testing: HIV testing is offered to subpopulations known or perceived to be at high risk for HIV, typically based on behavioral, clinical or demographic characteristics.

Consent

Mandatory: Inmates have no choice regarding whether they will be tested.

Voluntary: Inmates may request HIV testing or health care staff may recommend testing. Inmates may choose whether or not to test.

Opt-out screening: “Performing HIV screening after notifying the person that 1) the test will be performed and 2) the patient may elect to decline or defer testing. Assent is inferred unless the patient declines testing.”⁴

Opt-in screening: Inmates must request testing.

*These categories are not mutually exclusive.

2. Rapid HIV Testing Technology

The feasibility of conducting routine HIV testing in jails has been increased by the introduction of various rapid testing technologies and protocols.¹¹

2.1. Testing Methodology

Currently, the Food and Drug Administration (FDA) has approved several rapid diagnostic tests, including the Uni-Gold Recombigen (Trinity, figure 4) and the OraQuick Advance (OraSure, figures 5 and 6) tests. These two tests are eligible for waivers so they can be performed outside of traditional laboratory settings.



Figure 4
Uni-Gold Technology

The Uni-Gold test is a rapid, CLIA-waived HIV-1 test. Test kits can be stored at room temperature. After a fingerstick, the inmate's blood is placed in the sample well at the bottom of the device, developer is added and the result is available in about 10 minutes.

Source: CDC.

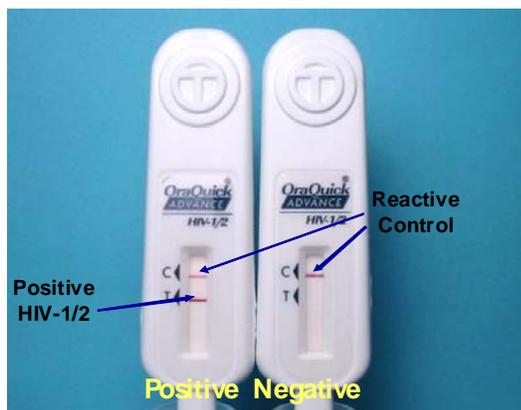


Figure 5
OraQuick Technology

OraQuick is CLIA-waived, rapid HIV test. Test kits can be stored at room temperature. Either whole blood or fluid from an oral mucosa swab can be used. Results are available in about 20 minutes.

Source: CDC.



Figure 6
Collection of Oral Fluids

Demonstration of collecting oral fluid specimens by swabbing gums with test device. Gloves are optional and waste is not bio-hazardous.

Source: CDC.

The Clinical Laboratory Improvement Amendments of 1988 (CLIA) established quality standards for laboratory testing to ensure the accuracy, reliability and timeliness of patient test results.¹² In order to perform tests in a healthcare setting outside of a standard laboratory, such as a medical clinic in a jail, sites can apply for a CLIA waiver.* Other rapid tests are moderately complex and are not eligible for a CLIA waiver. In the recent CDC Jail Demonstration Project, sites employed either the Uni-Gold (using fingersticks) or the OraQuick (using oral mucosal swabs or fingersticks) rapid HIV tests.¹³ Sensitivity (being able to detect the disease when it is present) and specificity (not reporting that the disease is present when it is absent) vary between the whole blood and oral fluid tests (see figure 7). Facilities differ in which test they favor.

Figure 7
FDA-approved Rapid HIV Tests Specimen Requirements

Test	Whole Blood (fingerstick)	Oral Fluid (oral mucosal swab)	Serum/ Plasma (venopuncture)	Complexity
Uni-Gold Recombigen	100% sensitive 99.7% specific		100% sensitive 99.8% specific	CLIA-waived
OraQuick Advance	99.6% sensitive 100% specific	99.3% sensitive 99.8% specific	99.6% sensitive 99.9% specific	CLIA-waived
Reveal G-2			99.8% sensitive 99.1% specific	Moderate
Multispot			100% sensitive 99.9% specific	Moderate

Source: See Greenwald.¹⁴

All of these rapid tests can be considered definitive for individuals who test negative. As a result, the test administrator can tell persons tested that they do not have HIV unless they have engaged in high-risk behavior in the three-to-six month period prior to the test. This period is called the window period for seroconversion. It is the period when a person can be infected with the virus but has not yet produced antibodies to it, so does not yet test positive.

*More information on CLIA waivers can be found at:
<http://www.cdc.gov/hiv/topics/testing/resources/factsheets/roltCLIA.htm> (see endnote 12.)

A positive rapid test requires a confirmatory test,¹⁴ but conveying the confirmatory test results to jail inmates if they are released before the results become available can pose logistical challenges unless there are close linkages between the jail and community health resources. Some rapid test sites, such as New York City jails, have been able to turn around Western Blot confirmatory tests within three days, so they can inform most inmates of their confirmed results before release. Another rapid HIV testing protocol that has been shown to provide results of comparable sensitivity and specificity to those given by the standard double ELISA with Western Blot confirmation involves the OraQuick screening test using oral fluid samples. With OraQuick, positive individuals are given a second rapid test, such as UniGold, using fingerstick blood samples. Each test produces results in about 20 minutes so that individuals can be given confirmed HIV results within 45 minutes excluding time for counseling.¹⁵

2.2. Challenges Involved with Testing in Jails Versus Prisons

In 2004, 23,000 people with HIV were known to be in prisons.⁹ Almost all prisons provide some level of HIV testing: some have policies for mandatory or routine testing for all incoming inmates or certain risk groups, others have more passive policies according to which inmates are offered or can request testing.⁹ Without periodic retesting, correctional facilities cannot measure the number of new cases of HIV transmission after admission.¹⁶ As long as there is no systematic testing of all inmates, no one knows how many more inmates above the 23,000 known cases are actually HIV-infected.

Jails often offer HIV testing, but less commonly and less systematically than in prisons, and none have mandatory testing policies for all inmates at intake. As a result, the precise number of HIV-positive individuals passing through jails is unknown. A Bureau of Justice Statistics survey in 2002, before widespread availability of rapid testing, reported that only 21.6 percent of jail inmates had received an HIV test after admission.¹⁷

The CDC does not endorse mandatory testing, but advocates, instead, that testing should be voluntary. All recipients of routine testing need to understand that they are going to be tested for HIV unless they refuse. General consent for medical care should be considered sufficient to encompass consent for HIV testing. However, the new CDC recommendations assert that programs should not require that counseling be provided when testing is a part of a screening program or conducted for diagnostic purposes, especially if the inability to provide prevention counseling would discourage health providers from offering testing.⁴ Staff at every health care facility need to know their state and local laws regarding HIV testing before implementing the new CDC recommendations.^{18,19}

Rapid testing increases the probability that more HIV-positive inmates will receive their results. At the same time, however, there will be some inmates who are HIV-negative yet receive preliminary false positive test results. Some of these individuals will be released before receiving the positive or negative confirmatory test results. Because Consultancy Meeting participants who had implemented rapid testing programs in jails had substantially different experiences with the procedures, they disagreed about how to explain the meaning of a positive rapid test result to inmates, especially since one jail had used batches of test kits with higher than expected false positivity rates. (CDC investigation of these occasional problems is ongoing.²⁰)

The question of what to tell an inmate after a rapid test result is positive has vexed some jail health administrators, especially those with experiences with false negative results. The recommended CDC protocol is to tell the test recipient, “You are preliminarily positive,” and explain that a confirmatory test is necessary.²¹ However, meeting participants disagreed about the best approach. (See the box “Jail Experts Disagree About What to Tell Inmates Who Test Positive”.)

Jail Experts Disagree About What to Tell Inmates Who Test Positive

Some participants at the Consultancy Meeting felt that the “preliminarily positive” message could be confusing and potentially cause unnecessary emotional suffering in the already stressful jail environment. Others defended the language because, for a test with high sensitivity, in the vast majority of cases the confirmed result will be positive and if the inmates are released before receiving the definitive results they should be left with the understanding that they are probably infected so they will seek care in the community. These participants argued that the primary goal was to identify inmates with HIV and link them to care immediately. They argued that, to be safe, it is necessary to err on the side of telling people they are potentially positive because the most pressing need is to link inmates who are probably infected with case management and HIV treatment.

Some jails were able to refer every inmate who tested positive to mental health services within the jail in order to address the emotional stress of receiving indeterminate results. Notwithstanding this opportunity to access mental health services, according to the participants, most inmates took the results calmly. Participants reported that in their experiences, receipt of positive results was not associated with an increased likelihood of suicide or requirements for suicide watch at the jail.

2.3. Experience to Date with HIV Testing in Jails: Demonstration Projects

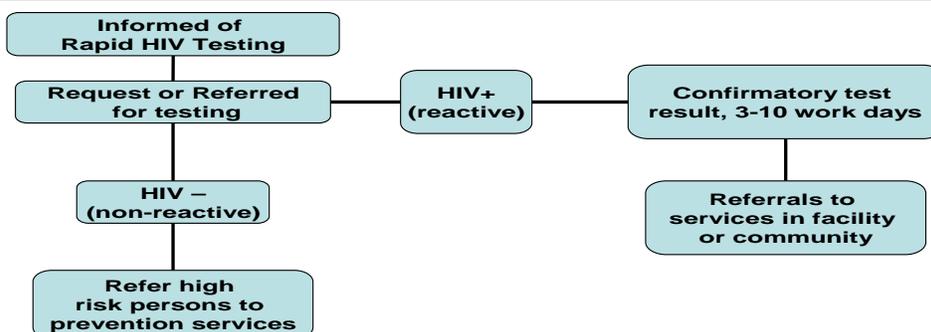
CDC has funded a few rapid testing projects in jails and their associated State and local health departments: in Illinois²² and more recently, a four site Jail Demonstration Project in Florida, Louisiana, New York and Wisconsin (see figure 8).¹³ The CDC Jail Demonstration Project protocol is shown in figure 9. Publication of the full results from these the four demonstration sites is pending, but preliminary reports indicate the feasibility and acceptability to inmates and jail staff of the rapid testing protocols. Of the over 30,000 tests that were conducted in this project, 1.1 percent were positive, 70 percent of whom were previously unknown cases of HIV (see figure 8).¹³ Using rapid HIV testing in a Wisconsin jail increased the testing with inmates with HIV risk factors by 20 percent and increased the number of inmates known to be infected by 52 percent,²³ an increase similar to that found in community settings that have incorporated rapid testing.²⁴

Figure 8
CDC Jail Demonstration Project: Voluntary Testing by Referral (January 2004-March 2006)
[Preliminary Data]

State	Jails	Bookings per Year
Florida	5 jails operated by the Broward County Sheriff's Office	~100,000
Louisiana	Orleans Parish Prison and Baton Rouge	~100,000
New York	18 jails statewide (excluding New York City)	~76,000
Wisconsin	Milwaukee House of Corrections, Rock County Jail	~26,500

Total Tested	#	%
Number of tests	30,723	--
Reactive rapid-tests	346	1.1%
Newly identified persons with HIV	240	0.7%

Figure 9
CDC Jail Demonstration Project: Rapid HIV Testing Flow Diagram



2.4. Consultancy Meeting Participants' Perspectives on Approaches to HIV Testing in Jails

The meeting participants identified the following advantages and disadvantages of a variety of approaches to implementing HIV testing in jails:

- (1) To provide testing as a routine part of the medical evaluation; however, many inmates leave jail after an assessment by nurses and before the full medical physical.
- (2) To target persons at highest risk, but not all inmates are forthcoming about risky behavior at intake.
- (3) To have testing available on request during medical visits or as a stand-alone program.

The number of inmates who chose to be tested for HIV depends to some extent on how testing is marketed and encouraged. Whether one or a combination of approaches is appropriate in any given jail will be affected by local conditions such as the number of admissions, the median and mean length of stay and the HIV prevalence in the jurisdiction. All of the CDC Jail Demonstration Projects were stand-alone programs; some offered testing at entry while others offered testing only to those who were detained for a number of days.

2.5. Lessons Learned from the CDC Jail Demonstration Project

The CDC Jail Demonstration Project experience provided information about the importance of certain aspects of the implementation of rapid HIV testing in jails.

- Administering rapid HIV tests in jails was feasible as long as the project worked with custody services and secured and maintained the support of the correctional administration.
- Developing formal agreements (e.g., written memorandum of understanding) among the jail, the healthcare provider (often a private entity) and the health department was important.
- Issues of compliance, program reporting and sustainability needed to be addressed at the outset.
- Understanding and working with the facilities' schedules was critical.
- Testing space needed to be conducive to ensuring confidentiality.
- Inmates accepted the presentation of results of either "preliminary positive" or "negative." Eighteen persons (4 percent) with preliminary positive test results did not have confirmation.
- Linking inmates with probable HIV infection to services before release was important.

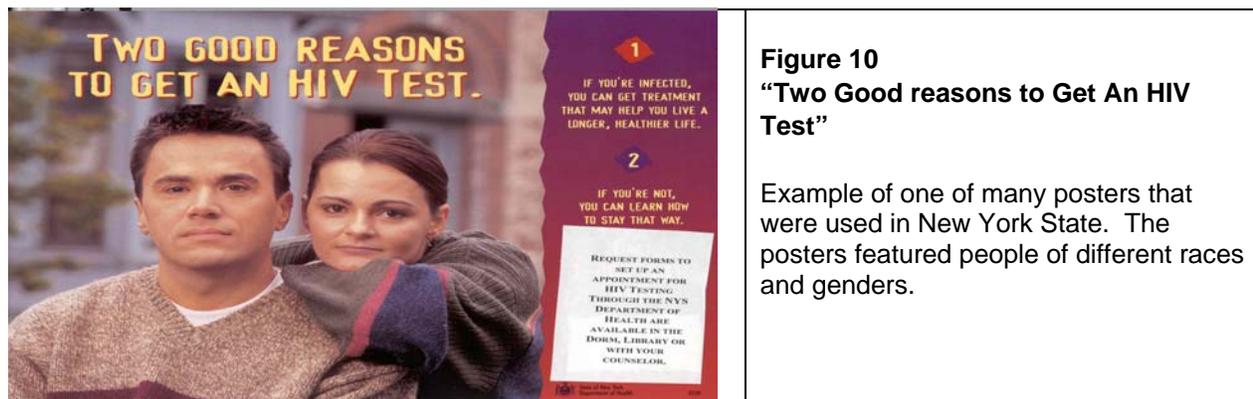


Figure 10
“Two Good reasons to Get An HIV Test”

Example of one of many posters that were used in New York State. The posters featured people of different races and genders.

Based on their experiences with jails, Consultancy Meeting participants agreed that “social marketing” can help to increase the number of inmates who choose to be tested. Participants agreed that educational materials should be written at a 6th grade reading level and that every attempt should be made to convey information in writing as well verbally or through other media (e.g., video) for inmates who are illiterate or cannot read English (see Figures 10 and 11). Some jails admit persons directly off the streets; others only receive intakes only after arraignment. Concern was raised about asking for consent for testing form a person at intake who was inebriated or had recently been using illicit drugs. The group was united in stating that requesting consent from an impaired person was not ethical. Consent cannot be obtained from those lacking the mental capacity to consent.¹⁹

2.6. Results of the CDC Jail Demonstration Projects

Inmates who tested positive in the CDC Jail Demonstration Projects were different from the total group that tested:

- Older individuals, non-Hispanic Blacks and females were over-represented among those inmates who tested positive.
- The age range for all persons tested was 18-86, with a median age of 32 years; of those inmates who tested positive, the median age was 37 years.
- Non-Hispanic Blacks represented 57 percent of those tested, but 75 percent of those inmates who tested positive.

Another finding was that not all inmates who tested positive were forthcoming about their risk factors. Testing only those who disclose high-risk behavior may have missed nearly half of those newly HIV diagnosed. For some risk behaviors, the prevalence of the risk was similar in both the HIV-positive and HIV-negative inmates. For example, the proportion reporting injection drug use was 15 percent in the group testing positive and 13 percent in all inmates tested.

In these projects, jails avoided burdening their medical staff with additional duties by partnering with outside agencies to set up rapid testing as a stand-alone service in the facility. Challenges inherent with this approach included the difficulty of some community-based organization (CBO) staff had entering facilities, especially if a member of the organization had previously been incarcerated. As a result, one CBO staff member reported, “It was just easier for the [jail] medical staff to do the testing.” Also, communicating information between the jail medical staff and the CBOs was at times strained. Some CBOs might leave the facility with results in hand, never integrating test results into the medical chart. Other CBOs could not obtain relevant data from the medical charts. A Florida system solved this

problem by asking inmates at testing to provide dual consent so both the state health department, which was performing the tests, and the jail health provider could receive HIV-specific information.

2.7. The Cost of Implementing Rapid HIV Testing Programs

Because most inmates who tested positive in the CDC Jail Demonstration Projects did not start treatment while in jail, additional medication costs associated with the testing program were negligible. However, the rapid HIV test kits cost \$8 each for demonstration sites. The cost of identifying positives varied greatly due to the variability in seropositivity among inmates who volunteered for testing. Sites with a higher percentage of positive rapid tests had lower costs per positive test, and also had lower costs for each newly identified HIV infection. In Florida, the average cost incurred by the program for new positive test result was \$2,968 in labor and materials. The cost of mental health counseling was not included in this figure.

According to a recent cost effectiveness study,²⁵ 7 percent of individuals with HIV transmit their infection within two years if no counseling or testing is performed. The transmission rate drops by 1.8 percent to approximately 5.2 percent if these individuals are found and counseled. Further decreases in transmission occur when uninfected partners reduce their risk behavior in relationships with other individuals besides the infected partner. Assuming an average lifetime cost care for HIV of more than \$180,000 per person, for the 240 new HIV-positive inmates found by the CDC Jail Demonstration Project, these figures indicate counseling and testing could have reduced the number of HIV transmissions from 17 to 13. Four new cases could have been averted and over \$700,000 could have been saved.

Conducting cost-benefit analyses of jail health interventions is complicated by the fact that, while there are savings to society as a whole, there may not be direct savings to the jail. State and local health departments are the participants that may stand to benefit the most if jails institute measures to identify or prevent HIV. It may be the case that if prevention programs are not implemented, more inmates in future jail cohorts will be infected which could ultimately lead to higher costs to the jail. However, whether the jail systems themselves will realize a net savings from HIV prevention is difficult to estimate. As a result, it may be challenging to convince jail administrators that “spending now will save you money later.”

Figure 11
Example of a New York City poster targeted to individuals with low reading levels



Case Study: Implementing HIV Rapid Testing at Rikers Island, New York City

Jail Size (FY2005): Average daily population: 13,576. Detainees: 70%, sentenced: 30%.

Admissions (FY2005): Over 102,772 (representing 60-65,000 unique individuals).

Length of stay (LOS): 2-3 days: 25%; one week: 50%; mean detainee LOS: 48 days.

Race/Ethnicity: African American: 58%, Caucasian: 7%; Hispanic/race not identified: 34%; other: 2%

Intake procedure: Within 24 hours of admission: intake history and physical exam; TB test; syphilis test; pregnancy test and PAP smear (women); gonorrhea and chlamydia (young men and women); and routine rapid HIV tests (since 3/2004).

Impetus to implement rapid HIV testing:

Conventional HIV testing had been available at Rikers for years, but in New York City (NYC) approximately 25,000 residents have HIV and are not aware of their status. It is reasonable to assume that some of those individuals pass through the jail system. A 1999 blinded seroprevalence survey from all routine blood specimen showed 8 percent of men and 18 percent of women were HIV-positive. Through the voluntary conventional testing program, results were not available for 5-7 days, well after most detainees were released. This lag in getting test results may have contributed to the high percentage of persons declining HIV testing. A rapid test program made sense in these circumstances.

Implementation: Correctional health practitioners sought to “routinize” testing and offer it to 100 percent of inmates at intake regardless of their risk behaviors. They wanted to incorporate testing into the daily workflow of nursing and medical staff. The offer for testing could be repeated anytime during incarceration, especially if an STD, active TB or pregnancy were diagnosed. With support from the commissioner of health, practitioners solicited comments in face-to-face meetings with the contracted healthcare provider (Prison Health Services) and the NYC Department of Corrections regarding the feasibility of implementing rapid HIV testing. The NY State Department of Health and Mental Hygiene inspected the setting in order to grant a CLIA waiver.¹² The CDC donated test kits.

Prior to the implementation of rapid testing, 20 HIV counselors conducted all HIV testing in the NYC jail system. In order to accommodate more testing, training was offered to nurses to perform HIV counseling and testing.

The Department of Health tested social marketing messages with outreach education workers who were sent into the orientation sessions and the housing areas to explain the rapid test and its administration to inmates. Brochures, videos and posters were available. Figure 11 is an example of a poster with a low reading level that was used in an NYC-wide campaign and at Rikers designed so that everyone

would recognize its symbols (minus sign/plus sign/question mark) wherever they went. The test was initiated as an opt-in test, routinely offered to all individuals at intake. Discussions are underway to move to an opt-out model.

Outcomes: Rikers Island implemented the completely voluntary program in March 2004. In 2003, the year before implementation, a total of 6,500 tests were performed over the entire year; triple that number were completed in 2005 when 26,000 tests were administered. Inmate acceptance of rapid testing was high even in a jail setting. However, while the testing rate increased, the positivity rate neither rose nor fell but remained at less than 2 percent. By testing a larger pool, more people received a positive test result, but HIV-positives inmates did not represent a higher proportion of all inmates tested.

An evaluation showed that, contrary to the program’s design, the test was not being universally offered. Providers persisted in assessing risk before offering the test. When intake was very busy or staffing was short, dropping HIV testing was one of the first shortcuts made. In addition, the facility’s reliance on per diem workers made uniform training of all staff challenging. The city finally hired extra personnel who could legally administer the tests and give the results. As a result, outcome data do not reflect universal offering of the test.

The intake area is a busy place where private and prolonged conversations are difficult and interruptions frequent. Inmates did understand the test was highly accurate and found the fact that it required just a finger stick rather than venopuncture appealing. Within 24-48 hours of receipt of a positive test, case managers met with the inmate to explain the test results and how to access services (medical, drug rehabilitation, etc.) in the community. Even so, inmates expressed concern before testing that they might not be able to cope if their test result were positive. Inmates also needed more reassurance about confidentiality of results, because they feared a positive test result would be shared with the court system or might prolong their incarceration. There are staff dedicated to linking any new HIV-positive detainees to healthcare providers post-release. Preliminary results show that approximately 50 percent of inmates who tested were linked with providers post release. The difficulty is in jails receiving feedback from community healthcare providers about who actually accessed care and kept their appointments after release.

Current recommendations regarding testing frequency:

Regardless of risk behaviors, all individuals incarcerated in NYC jails should be HIV tested every three months.

2.8. Additional Issues Identified with Rapid HIV Testing in Jails

The Consultancy Meeting participants discussed their experiences with rapid HIV testing in jails and raised several issues:

- Administrators of a jail with an opt-out voluntary HIV testing policy ordered inmates who opted-out of HIV testing into lock down. Once the medical director heard about the action, he promptly clarified that all inmates were free to refuse the test. This anecdote illustrates the importance of good communication with the jail administration.
- The implementation of electronic medical records could help smooth the flow of information, especially making data gathered during a previous incarceration available on a subsequent incarceration. Storing information electronically may also facilitate the evaluation of programs.
- Some Consultancy Meeting participants were concerned that if inmates who had engaged in high-risk behavior, but who tested HIV-negative, did not receive counseling with their results, they might use the negative test result as a license to engage in even more high-risk activity, thinking they are immune from infection. Without counseling, one meeting participant commented, “We may be creating more problems than we are solving.” (Experience with a 1999-2004 Corrections Demonstration Project—see section 3 for more information on this project—in California showed that counseling inmates who test HIV-negative required more skill than counseling infected inmates.)
- Several meeting participants were concerned that there are few current studies on the efficacy of counseling. The studies conducted years ago on the efficacy of counseling and testing as a prevention intervention did not examine the effect of testing in individuals who have been as extensively tested as some inmates passing through jails have been during the 25th year of the AIDS epidemic. The concern of the participants expressed in the absence of research was, “[Counseling] comes and it goes very fast. Is there evidence that counseling at that moment makes a difference? That individuals who get counseling are different a year later? Does counseling now, after the tenth test, have the same preventive effect as counseling at the first test?”
- Many meeting participants expressed concern about whether correctional facilities can add yet one more intervention to their intake process. Large, overcrowded jails may have already severely constrained resources. Small jails may not have enough medical and mental health expertise to offer support services. However, one participant made an analogy between introducing rapid HIV testing and introducing DNA testing, which many jurisdictions have made mandatory for all sentenced inmates. One jurisdiction in New Jersey creatively split the burden of performing DNA testing between the courthouse, for offenders sentenced at court, and the jail or for offenders entering jail for a probation violation. Responsibility for HIV testing could likewise be shared because, according to one meeting participant, “This isn’t a jail problem, this isn’t an inmate problem; this is a *community* problem.” Seeing the issue as a community wide responsibility will require educating members of the American Jail Association and the American Correctional Association about the importance of identifying HIV-positive inmates who do not know their status, perhaps at their semi-annual conferences. Partnering with probation services may help a CBO locate program participants after release to give them the confirmatory test results or to provide linkages to care. Jails differ in terms of the percentage of releasees are released on probation.
- Finding more previously undiagnosed HIV-positive persons may strain community resources or the resources of contracted health care providers within jails, but fear of “system overload” should not be used as an excuse not to find people who are unaware of their infection. One meeting participant called this reason for shying away from

aggressive case finding “ridiculous,” especially since individuals who are unaware that they are infected have been shown to be responsible for over half of the continued HIV transmission.⁵ With more clients, however, Ryan White CARE Act* resources may have to be allocated even more judiciously. Localities may need to evaluate programs to determine whether an inmate who is referred to community services from a jail actually shows up and what services the organization actually performed using Ryan White funds. One of the participants commented that, “That feedback hardly ever comes back to the jail, so we really don’t have a way to know how effective our referral method is.”

Figure 12 provides a summary of issues jails should consider before implementing rapid testing.

Figure 12
Summary Variables to Consider in Establishing HIV Testing Programs

Jail-related	
Size	Average daily population, number of annual admissions
Length of stay	Mean and median length of stay; also, the number of unique inmates with incarceration lengths of 1 day, 2 days, 14 days, 30 days
Population type	Pre- or post-arraignment; sentenced; ratio among them
Health care provider type	Jail, private contractor, department of public health, other
Transferring of data to prison	Method of transfer of inmate medical information from jail to prison for sentenced inmates
Program-related	
Conducting and paying for HIV tests	Jail health services, private vendor, Department of Public Health, CBO
HIV testing target	Opt-in or opt-out; for entire population or high-risk sub groups
Marketing strategy	How detainees learn about the program
Delivering results	What tester says to inmate if the test is positive (e.g., “Preliminarily positive”)
Confirmatory test	Western Blot, second rapid test
Seropositivity rate	Rate associated with a given program

* The Ryan White Comprehensive AIDS Resources Emergency (CARE) Act is Federal legislation enacted in 1990 that addresses the unmet health needs of persons living with HIV disease by funding primary health care and support services. The CARE Act was named after Ryan White, an Indiana teenager whose struggle with HIV/AIDS and against AIDS-related discrimination helped educate the nation. The CARE Act is one of several sources of HIV/AIDS care.

3. Linking Jail Inmates to HIV Care

Once jail inmates have been identified as HIV-infected either through testing or self-report, the next step is to link them to medical care in jail, the community or both. Because short periods of incarceration often limit the reach of jail-based HIV care, HIV-infected inmates should be assessed quickly regarding their need for post-release services. Once the responsible staff knows whether the inmates have a regular health care provider or insurance, and where the individual expects to live once released, they can arrange an appointment with, or referral to, an appropriate health care provider. Such linkage services can be provided by staff from the jail health department, community health agencies or community-based organizations (CBOs). However, the uncertain length of stay for many jail inmates can make it difficult to complete discharge planning or develop a treatment plan.

While medical care is often an HIV provider's top priority, it is often not the top priority of HIV-infected inmates at release, whose other, more pressing, concerns may affect their ability or willingness to engage in HIV care (e.g., a person with no place to live may not be able to adhere to a complex medication regimen).

3.1. The CDC/HRSA Corrections Demonstration Project (CDP)

As discussed in Section 2, a major national project that addressed HIV testing and continuity of care for HIV-infected inmates in various correctional settings was the five-year CDC/HRSA Corrections Demonstration Project (CDP). The project took into account the fact that correctional facilities serve large numbers of people with medical, mental health and substance abuse conditions, many of whom have not accessed care in the community and for whom the period of incarceration can therefore serve as an entry point for care. In 1999, CDC and HRSA funded the CDP to expand and improve services for inmates and recent releasees with or at risk for HIV in states with a high prevalence of the disease. The scope of the CDP was wide and included a broad range of diseases (e.g., HIV, STDs), correctional settings (e.g., jail, prisons, juvenile facilities) and intervention models (e.g., screening, prevention, case management).

The CDP attempted to establish linkages between existing networks of correctional and community health services to ensure continuity of HIV care during and after incarceration, while addressing other inmate health and social service needs as necessary. At the program level, the projects sought to link people to services within the correctional facility and in the community through a combination of programs that focused on case management and referrals to community services. Secondary goals were for communities to gain a better understanding of what the health issues were for this population and to use jails as sentinel sites for surveillance of infectious disease in the community. An evaluation component was included to measure how well the projects reached and served their target populations.

CDC and HRSA funded departments of public health (DPHs) in California, Florida, Georgia, Massachusetts, New Jersey and New York, and the city of Chicago. The funded DPHs partnered with correctional facilities (i.e., jails, prisons, juvenile facilities) and generally contracted with one or more CBOs to provide HIV services inside the institutions and in the community. Each grantee received approximately \$1 million per year. As with the new HRSA initiative, the Rollins School of Public Health of Emory University and Abt Associates Inc. served as that project's Evaluation and Program Support Center (EPSC).

As illustrated below, the CDP provided a rich demonstration of how to design, implement, administer and evaluate multi-site demonstration projects:

- The CDP involved 30 jails, 48 prisons, over 100 juvenile facilities and 26 community corrections programs.
- The project served, in some capacity, approximately 123,000 unique individuals.
- CDP screened 41,000 inmates for one or more sexually transmitted disease, including HIV.
- Of 14,500 inmates tested for HIV across the sites, 3.5 percent tested positive.
- About 7,000 inmates received intensive case management services and over half of these individuals were jail inmates.

3.2. Lessons Learned about Project Management and Design from the Corrections Demonstration Project

Several leaders of the CDP from CDC and HRSA participated in the Consultancy Meeting and discussed critical program design and implementation issues, especially related to linking HIV-infected inmates to care and services in jail and after release.

3.2.1. Collaboration in Project Management

One meeting participant who was closely involved in the establishment of the CDP described HIV services in correctional facilities as “a four-legged stool”, because corrections, community providers, public health and—most importantly— inmates must collaborate for programs to work. For CDP grantees, relationships between the first three legs of the stool (corrections, community providers and public health) were often new collaborations. While it did not occur consistently at all sites, seeking participating from inmates in program design, while more difficult and at times controversial, can give a project valuable insight into the types of services that are truly needed inside and outside the facility. A few strategies for building partnerships are described in the box “Models of Collaboration and Program Design from the Corrections Demonstration Project”.

Models of Collaboration and Program Design

Consultancy Meeting participants described a variety of program elements from the Corrections Demonstration Project (CDP) and other jail-based programs. A few of these are summarized below. (This is not meant to represent a complete description of all the programs implemented under the Corrections Demonstration Project or by meeting participants.)

Corrections Demonstration Project Program Elements:

New York State: New York State's CDP program built on the State Department of Health's long standing Criminal Justice Initiative (a collaboration between the department of health, the department of corrections and a consortium of CBOs to provide HIV services in state prisons). CDP funding allowed more facilities to be served and expanded the HIV screening and prevention services offered.

Florida: The Florida Department of Corrections and local jails had a system of referral in place for HIV-infected inmates being released from reception centers before the CDP. The Department of Corrections and sheriff offices took the lead on the CDP and enhanced services.

San Francisco: The San Francisco Department of Public Health is the primary care provider in the jail system and at public community HIV clinics. DPH has maintained strong relationships with community providers and arranged to bring community providers into the jails to see inmates before they are released. However, while many CBOs have expressed interest in coming into the jails to serve this population, DPH has learned to be careful to identify which CBOs will actually be consistent about showing up at the jail as promised, because, as one DPH staff member said, "there are many CBOs that mean well, but it just gets really easy [not to show up]—it's such a hassle to go through all those gates—so we spend a lot of time identifying who can work with us in the community."

The most successful project management structure was one where one of the collaborating partners took the lead in program implementation. Within the lead organization, a single individual needed to be in charge of coordinating all project activities and keeping them on track. Good communication was critical to ensuring that all participating agencies were true partners.

3.2.2. Program Design

All seven grantees implanted continuity of care programs in at least one jail to link HIV-positive inmates to medical care and other services in the community after release. The basic model they used included the following elements:

- (1) One or more CBOs worked in the jail and in the community to link HIV-infected inmates to services.
- (2) Case managers either split their time between the jail and the community, or one set of case managers worked in the jail and another set worked in the community.
- (3) The case manager met with HIV-positive inmates at the jail at least one time before release to assess post-release needs (e.g., HIV treatment and medications; other medical, mental health and substance abuse treatment needs; cash and medical benefits; housing). The case manager would determine whether the inmate had any existing relationships with providers in the community or if new connections were necessary.
- (4) The case manager would develop a discharge plan that prioritizes the particular services that the inmate needs and make appointments (ideally) or referrals (minimally) with providers in the community. If there was not time to make pre-release appointments for services, they at least made an appointment for post-release case management.

- (5) In programs where there were two case managers, one in the jail and one in the community, the community case manager came to the jail to meet the inmate.
- (6) When possible, the case manager met the inmate at the jail gate at the time of release and escorted them to their first appointments or housing.
- (7) The community case manager worked with the released inmate in the community to follow up on the discharge plan or make additional linkages to community services.

While it can be a challenge for CBO staff to gain access to the jail and to the inmate, in-jail meetings are a critical component of the program, as they help to establish a relationship between the case manager and the inmate. In-jail meetings serve as a time to develop the discharge plan as described above, but also show the inmate that the case manager cares enough to make the effort to come and see them.

Innovative Program Elements From the Corrections Demonstration Project

Each grantee designed its program to reflect local conditions and existing relationships between corrections, the community agencies and the public health system:

- One grantee developed a transitional housing program to house HIV-infected jail releasees for up to three months after release and provided intensive support services (with additional funding from other sources).
- Another grantee partnered with shelters and transitional housing programs to ensure access to beds.
- One grantee collaborated with a major health center to establish a weekly clinic staffed by a few HIV providers from the jail and a case manager. Inmates were told to go to the clinic after they were released in order to pick up medications and be linked to community HIV care provider. CDP case managers came to the clinic as well to meet with their clients.
- Many of the grantees that served large jails put together consortia of CBOs to serve inmates released to different neighborhoods (or, in one statewide program, different regions of the state).
- Each grantee put together teams of different combinations of social workers, case managers and peers (e.g., former inmates, people living with HIV, people in recovery from drug and alcohol addiction) to provide services.

CDP grantees found, not surprisingly, that HIV was not necessarily the most pressing issue in the lives of many of the releasees served, despite it being the source of funding for the projects. For many of these individuals, HIV was just an entry point into the healthcare system. The issues that were of importance to the releasees, and generally had to be addressed before they were willing or able to think about HIV treatment and management, were housing, family reunification, employment, substance use and mental health treatment. Rather than defining program participants by their diseases, the programs had to be holistic and address the range of issues that the releasee was dealing with, as identified and prioritized by them. Through this process grantees learned about the myriad policies unrelated to HIV or other health issues that affect the transition into the community (e.g., prohibitions against ex-offenders working in certain professions or obtaining public housing or public cash and medical benefits).

3.3. General Issues Related to Linking HIV-positive Inmates To Care

The meeting participants discussed the topic of linking inmates to HIV care after release beyond the experience of the Corrections Demonstration Project.

3.3.1. Providing Information to Inmates at Release

Making referrals to community services and arranging for HIV medications to be ready at release often involved last-minute arrangements. Release dates are especially difficult to predict for jail inmates, who can be released from jail or from court without advance notice. It can be a balancing act to have the final discharge plan in place and documented for the inmate and the most recent medical information and medications in their hands at the time of release.

Meeting participants discussed a variety of strategies for resolving this problem. Some systems give inmates papers with their medical information, generic or specific referrals to care or places to go for test results if they were abruptly released. There are three drawbacks to this approach: (1) A paper-based system is not a good strategy when inmates are not always allowed to keep papers with them. (2) Having information about HIV (even if it is generic) in their possession could inadvertently disclose the inmate's HIV status to jail staff or other inmates. (3) Inmates may not want to carry the papers around and may just throw them away.

Some jails addressed the risk of having "HIV literature" end up as "HIV litter" by putting referral papers and medication in the inmate's property to be picked up at the time of release. This approach is even more effective when a flag can be placed in the offender tracking software to alert correctional officers that property must be picked up before the person leaves.

In response to requests from community HIV providers in San Francisco, the DPH (which provides the medical in the jail) has begun to contact community HIV providers when inmates are arrested and when they are released. In addition, the jails and community DPH providers share an electronic medical record system. The jail providers can view the community record and the community providers can view at least some of the jail medical record (e.g., most recent lab values) at designated computer terminals at the DPH clinics. DPH has an extensive consent process that covers these activities.

3.3.2. Providing Medical Information to Inmates When They Transfer to Prison

Not all jail inmates are released to the community; some transfer to prison and need to initiate or continue HIV care there. Providing or facilitating continuity of HIV care for jail inmates who move on to prison requires coordination between local jails and state prisons, entities that are not necessarily used to working together on sharing medical information. While it is not currently standard procedure for them to share detailed information on the results of medical examinations and laboratory tests, it would seem to be in the interest of every department of corrections to develop systems to do this, if for no other reason than it would reduce the costs to the prisons of retesting every ill inmate. Of course, providing an accurate medical history and current treatment plan would also facilitate continuity of care.

While "transfer sheets" are sometimes used to relay information from one facility to the next, the forms are not standardized across correctional systems. Participants at the Consultancy Meeting disparaged transfer sheets as containing poor quality, non-standard, overly basic information.

One participant gave a description of a likely scenario about how the transfer sheets are compiled: “Well, it’s usually done the night before: the nurse has got a list of these 40 people [who] are going to be transferred in the morning, and they quickly summarize the record.” There was no consensus on whether jails with an electronic medical record are better able to generate a useful transfer sheet.

3.4. Program Design Issues For HRSA’s New Initiative

The question was raised at the meeting as to whether, like the Corrections Demonstration Project, the competition for the new demonstration site grants should be limited in some way to jails and communities with a high prevalence of HIV. Areas with low prevalence will neither be able to identify a large number of new HIV-positive inmates nor link a large number of them to care. On the other hand, if the majority of jails in the country are small with relatively low HIV prevalence, there may be wisdom in developing models that will work in those settings. While there are over 3,300 jails in the US and that the vast majority of those are small jails that hold fewer than one hundred inmates, the HIV prevalence rates in those jails are largely unknown.

One strategy to overcome low HIV rates may be to cluster jails or develop a consortium of jails that apply for a grant together because, collectively, they have a larger number of HIV cases. Regional jails (e.g., in Virginia) have already been established to serve geographically dispersed populations and, in the health arena, there are consortiums of health centers (e.g., in Northern Illinois and in Southwestern South Carolina) that pool data to examine health outcomes for certain diseases (e.g., diabetes).

Another challenge related to discharge planning is that many jails house inmates from other states or from Federal correctional facilities and it will be very difficult logistically to arrange discharge planning for any of these inmates who will be moving away from the local community to other states as soon as they have been released from jail. It is also more difficult to convince jail administrators or local health providers of the importance of doing discharge planning for these inmates since their health needs will not affect the local community after release.

When planning programs that involve public health, effective linkages need to be based on clarifying the role of the local department of public health (DPH). Roles will vary depending on whether the DPH provides primary care. In situations where the DPH is not a health service provider, a community health center or AIDS service provider may be more appropriate to play the role of coordinating the inmate’s discharge planning.

Lessons Learned From Using a Control Group to Evaluate a Jail-based Case Management Program

A recently published paper by Needels⁶, not discussed at the meeting, examined the efficacy of case management for women and adolescents at high risk for contracting HIV after release from jail. The evaluation compared an intervention group receiving case management and a control group receiving usual care. HIV risk behavior and recidivism were not significantly different between the two groups although more releasees in the case management group compared to releasees in the control group entered drug rehabilitation after release. The experimental design of the evaluation provided strong evidence that jail program planners need to use caution when adopting programs that have been successful in prisons.

One participant closely involved in the CDP and other continuity of care initiatives for HIV-positive inmates provided a summary of the types of questions that jails should consider when developing new services. These include epidemiological and demographic statistics of the community and the jail (summarized in figure 13).

Figure 13 Background Characteristics That May Influence Program Design

- The prevalence of HIV in the community to be served
- The prevalence of HIV in the jail (if known)
- The average daily population of the jail
- The number of unique individuals who pass through the jail annually (if known)
- The mean and median length of stay
- The number of inmates released in one, two and seven days.

It is crucial to understand what the scope any new project will be (e.g., services to be provided, number of inmates to be served, organizations that will be involved) and to communicate that accurately to all partners, especially the jail and inmates. This means that program administrators need to be aware of what services are already offered at the jail and what services are available (and not available) to releasees in the community in addition to what services will be provided by the new program in the jail (especially given time constraints) and in the community. It is also crucial not to over-promise what services can be delivered. For inmates this can foster disappointment and create or worsen a general distrust of service providers while for jail staff, over promising can generate or exacerbate wariness about allowing community providers into the facility. Some of the issues to consider as projects are being planned and implemented to help avoid these dangers are enumerated in the Checklist For Project Development below.

Checklist for Project Development

What is the big picture?

- Answer the questions: Why are you doing this? What are the program goals, target population and desired outcomes? What value will a new HIV testing and linkage services add to existing jail and community services?

Who is already advocating for HIV infected inmates and ex-offenders?

- Identify which individuals or institutions in the community already work with jails and prisons.
- Identify the “champions” of jail HIV testing and continuity of care for releasees who will support what you’re doing.
- Determine what relationships between corrections, public health practitioners and community providers already exist and if there are any formal agreements among them.
- Determine if any community providers are already working in the jail or if Ryan White transitional services are being provided.

What is already being done for HIV-infected inmates and releasees?

- Understand what services are already being provided, don’t do something again that is already being done (e.g., disease screening).
- Determine if jail health or security staff or community providers are already offering any discharge planning.
- Identify what, if any, benefits your program will have for the jailer or sheriff: what’s in it for them to let you in? Why would they want to do this?
- Determine what data elements are routinely collected by the jail and public health department on services provided (e.g., number of inmates tested for HIV).

How is the jail organized?

- Determine if it is feasible to implement your program in the jail.
- Determine the structure of jail health services: are jail health services provided by the jail, the public health department or a private vendor?
- If a private vendor: what does the contract say about HIV screening, treatment and services? What kind of continuous quality improvement is built into the contract? Who monitors it? Can the services offered be changed and, if so, how? Who pays if there is a change?
- Go to the jail and do a inmate-flow analysis: walk through the health services unit and any other relevant space, learn where services are delivered, who provides them and how inmates are moved around.
- Assess whether the space amenable to the program: the facilities are very important, and there are always extreme space constraints in jails. Plan where and how services will be delivered, especially given confidentiality concerns about both testing and linkage programs.
- Determine the role of jail security staff in the project and involve them in the planning.
- Determine what types of inmate are housed in the jail.

What existing community and criminal justice resources and structures can you tap into to strengthen your program?

- Understand what’s already available and not available in the community for this population.
- Determine if drug courts, family courts and probation services exist, and if so, what they are doing and how they can be involved.
- Learn whether any local laws and policies limit releasees’ access to employment, housing and cash/medical benefits.
- Understand what safety net services exist and how people access them.

4. Data Elements and Data Security

As explained in Section 1, HRSA has funded Emory University and Abt Associates to serve as an Evaluation and Support Center (ESC) for the agency's upcoming initiative on Enhancing Linkages to HIV Primary Care in Jail Settings. Each site will develop an evaluation plan for its individual project, referring to a logic model that describes the original project design. (For information on logic models, see <http://hab.hrsa.gov/tools/spnsgrantees.htm>.) The ESC has been charged with implementing a multi-layered evaluation that includes (1) gathering aggregate data on certain project activities, (2) implementing a multi-site individual-level evaluation and (3) conducting other in-depth evaluation activities at a subset of sites. Data collection to evaluate HIV testing and linkage will involve assembling aggregate data on the testing portion of the program and collecting aggregate and individual-level data on inmates who test positive. A summary of data elements that might be collected is provided in figure 14, these data elements are not required by the grantees and many, while providing invaluable insight into project operations, may be difficult to obtain.

Figure 14

Aggregate and Individual-level Data Elements, Data Sources and Data Collection Strategies to Be Considered in the Program and Evaluation Design

1. What data are needed to measure the success of linking inmates to care in jails and in the community?

Site-level

- Total number of jail admissions and of unique jail admissions (different inmates) in a given period

Aggregate

HIV Testing

- Total number of inmates tested inside the jail
- Total number of positive tests (rapid and traditional)
- Total number of inmates accepting confirmatory testing (for rapid test results)
- Total number of positive inmates (based on confirmatory test results)
- Total number of newly diagnosed inmates (based on confirmatory testing)

Linkage to Care

- Total number of positive inmates linked or referred to services inside the jail
- Total number of positive inmates enrolled in the program inside the jail
- Total number of inmates served inside the jail (whatever linkage program the grantees implement)
- Total number of inmates released during study period
- Total number of inmates served in the community

Individual-level

- Demographic characteristics, incarceration history, HIV diagnosis, medications and provider history
 - Health care benefits received prior to incarceration
 - Comorbid conditions (e.g., substance abuse, mental health diagnoses, STDs, other chronic illnesses)
 - Sexual risk behaviors prior to incarceration and after release
 - Types of services received in jail and the community
 - Plan for linking inmate to post-release health care (e.g., appointments, referrals)
 - Plan for linking inmate to medications and other benefits after release
 - Clinical indicators of HIV progression (in jail and the community)
 - Filling of prescription (in jail, upon release and in the community)
 - Housing status, employment status, social support, concerns about disclosure after release
-

Figure 14

Aggregate and Individual-level Data Elements, Data Sources and Data Collection Strategies to Be Considered in the Program and Evaluation Design

2. What data sources are needed?

- Aggregate and inmate-level instruments completed by program staff (both in the jail and the community)
- Baseline and follow-up face-to-face structured interviews
- Follow-up data collection intervals

3. What data collection strategies minimize burden and help ensure complete, accurate data submission?

- Consider and reduce burden to both inmates and providers
- Train providers to collect the data (develop a training curriculum, have update trainings, use train-the-trainer models)
- Make instruments similar in content and format to forms currently in use (as simple as possible)
- Compile list of frequently encountered problems with the completion of forms
- Establish open communication directly with the providers
- Secure buy-in and participation from all project partners
- Establish consequences for the evaluators of incomplete data submission
- Ensure full access to medical records for program staff
- Consider whether to provide monetary incentives for participants
- Create a “culture of compliance” with evaluation protocols with support from funders

This list was developed by the ESC prior to the Consultancy Meeting and revised after discussion by the participants. It is neither a *required* nor an *exclusive* list of data elements and data collection strategies for RFA applicants, and many of these elements and strategies may be difficult to obtain or arrange.

4.1. Challenges to Collecting the Aggregate Data

Aggregate data is information collected on all individuals involved in an intervention. The data are not linked to any specific person or used to track that person’s actions, but are used to describe the whole group; for example, demographic data are used to describe the age, gender and race of a group. There are four potentially significant challenges sites may experience in trying to collect the aggregate data on HIV testing.

4.1.1. Staff Attitudes

Staff may resist implementing HIV testing according to a protocol. One Consultancy Meeting participant described how expanding HIV testing and adding the rapid test at one jail meant that staff had to do additional work, both in the actual screening and keeping up to date about counseling issues. The participant summed up the dilemma, “[E]very new public health initiative that you want to add creates work. So something has to give.” As a result, if the jail or entity conducting the testing does not plan for the increased work then “When they are short of staff, HIV testing is the first thing to go.” An observational study at this site revealed that gradually over time HIV rapid testing was performed less often. The decrease could have been due in part to use of temporary staff, who may not have received the same level of training as regular staff. Even after training many clinicians said they were not comfortable giving a positive result and 89 percent did not feel confident giving a negative result. However, at most early rapid HIV testing

demonstrations, clinicians and counselors came to “really like” rapid testing as familiarity with the procedure grew.

Staff may allow their presumptions about who should be tested to affect who is offered testing. Further investigation of the jail where HIV testing was supposed to be offered routinely showed that “the test was not being universally offered, contrary to what we thought,” or what was planned because the clinicians “had their own perceptions about who was at high risk and who wasn’t and who they needed to test.”

Redundant paperwork can present a challenge in program evaluation, where reports and forms are required by the entity conducting the testing as well as by the evaluation (and in some cases by local, state or federal health authorities as well, as is the case with reportable diseases like HIV). Duplicative forms should be avoided at all costs. The Corrections Demonstration Project (described in detail in section 3) evaluation required that multiple forms be completed by case managers and a lesson learned was that that continuous quality improvement measures are needed, with oversight of specific work (e.g., data entry) as well as the consistency of the work (e.g., clinicians not screening everyone).

4.1.2. Environment

The chaotic environment in a jail’s intake area may impede the inmate’s willingness to provide certain information (e.g., sexual and drug use behavior). At one very large jail, staff interruptions compromised confidentiality. As one administrator said, “Patients want to make sure that no one else can hear their conversation or what is going on.” Security requirements can also complicate the testing process. In stand-alone testing programs operated by outside providers, it takes time for non-jail personnel to pass through security. In some studies, CBO staff did not pass background checks. Such logistical challenges may justify having jail staff perform the testing.

4.1.3. Who Gets Tested

Consultancy Meeting participants gave many examples of the “worried well” agreeing to HIV testing more often than inmates who might be more likely to test positive. An expanded routine (opt-in) testing at one jail increased the number of inmates who got tested for HIV, but did not change the percentage of tests that came back positive. In the new HRSA initiative it is likely that differences in testing policies among the sites will affect the number of inmates who decide to get tested (in all but mandatory testing programs) and the percentage of inmates who test positive; willingness to be tested could be correlated with willingness to seek health care after release. In the evaluation, testing policies will have to be factored into the analysis of the quantitative data and in the selection of sites to be studied qualitatively.

4.1.4. Timing

Jails conduct the initial medical exam at varying lengths of time after intake, and, furthermore, arrestees are brought to jail at varying lengths of time after their arrest. Consultancy Meeting participants discussed a variety of policies. In one jurisdiction, arraignees are held in a superior court pre-jail facility and receive some services before entering the jail; in another, intoxicated arrestees are sent to a hospital or detoxification unit and are not booked until they are sober. Some jails have a waiting period before offering HIV testing to increase the likelihood that inmates have become sober, while other jails conduct health assessments of each inmate within the first three hours of arrival at the facility. The fact that sites are likely to have different policies regarding when inmates are provided HIV testing will have to be factored into the

evaluation. Another concern related to timing is that an inmate's length of stay can reflect the reason for being arrested, ability to post bail or other factors that could be correlated with likelihood of seeking health care in the community.

4.2. Data Collection

As noted above, the sites are likely to collect two types of data: aggregate data on all people tested and individual-level data for inmates who test positive for HIV and receive linkages through the initiative. Individual-level data are collected in order to track the characteristics and behaviors of each program participant as well as the services they are offered and receive through the program.

4.2.1. Aggregate Data

In a proportion, the numerator is the number on the top of the division symbol (“/”) and the denominator is the number of the bottom. The numerator can refer to the number of persons with a given characteristic; the denominator refers to the total number of individuals in the pool from which the numerator is drawn. It is not always a simple proposition to determine what the appropriate denominator is for HIV testing in jails and it can be quite difficult to obtain the figures from jail records once it has been determined. Many individuals enter and leave jail quickly, and their brief presence may not be recorded on all jail databases or paper and pencil logs. Determining how many admissions represent unique individuals can also be challenging because some inmates may return several times for multiple offenses and therefore be tested and offered linkage services multiple times over the course of the evaluation. Regardless of the tracking system used, the aggregate numbers will typically not reflect which individuals entering the jail have been there one or more times before. The number of new admissions seen by health services, even for a quick health screen in the booking or reception area, may represent a substantially smaller subset of the entire population of inmates who entered the jail.

Counting the number of inmates tested, the number testing positive and the number testing positive for the first time introduces additional challenges. For jails with paper systems for tracking laboratory activities, each medical record must be reviewed individually unless a separate log is kept that contains all this information in one place. Some inmates will already know that they are infected when they are admitted to the jail and this may make them more, or less, likely to agree to be tested. As a result, unless testing of inmates at admission is random or universal, the percentage calculated for the number of inmates who test positive (seropositivity rate) will not be an accurate representation of the number of inmates who in fact are infected. However HIV tests are tracked, determining who was tested more than once could represent yet another challenge (e.g., either the worried well inmate who gets tested each time they are arrested or the HIV-positive inmate on treatment who needs a documented test result to receive medications).

4.2.2. Individual-level Data

It will be necessary to clearly define the objectives of the HRSA initiative before it will be possible to draft the study's evaluation questions. Two aspects of program design that will affect the structure of the evaluation were discussed at the meeting, (1) the intensity of the linkages intervention and (2) how recidivism should be addressed by the interventions.

Intensity of Linkages

One critical distinction that was discussed at the Consultancy Meeting (but not settled) was whether the initiative's focus should be that the releasee makes an *initial linkage* to HIV care in the community or whether programs should attempt to ensure that the releasee makes a *sustained linkage* to care (of course, a sustained link is preferred for all program participants, but the question is how to focus resources and design the programs). If making a sustained linkage becomes the focus, the programs would be more complex. In addition, the evaluation would require data on which linkages were made prior to release as well as a potentially wide range of data on post-release service utilization (e.g., mental health care, substance abuse services, benefits and housing, as well as long-term outcomes such as CD4 counts). One participant pointed out that "First and foremost is early detection, informing people of what they don't know, and getting them into care... Let's take baby steps." Indeed, the Corrections Demonstration Project data show that attending the first HIV appointment after release is important to accessing a range of services. The basic evaluation question that might apply in this instance is, "Which linkage strategies and programmatic approaches most successfully result in initial access to services within the jail or community?"

Recidivism

Another dimension of the initiative and the evaluation that was discussed at the Consultancy Meeting was whether reducing recidivism should be an objective of the initiative. To answer this question, program participants would have to be followed for a fairly long time, and the study would require sophisticated data collection tools. At a minimum, each program participant would need to be identified and linked to a unique study ID number that could be replicated at the jail during the first and subsequent incarcerations, at other regional jails where they might be re-incarcerated and in the community where HIV care and other services are received. Some geographic regions may be able to support such complex data collection systems. Another potential problem with including recidivism as an outcome measure is that it might require that community staff have access to criminal justice data.

Regardless of the effect of the initiative on recidivism, repeat offenders will have an effect on data collection because an individual could—indeed, is likely to—be arrested multiple times during the evaluation period. This issue here is not related to whether any of the arrests lead to convictions, but just to multiple entries into the jail and exposures to the program that create the danger of double counting inmates in the evaluation. As a result, the Consultancy Meeting participants recommended that the evaluation examine: (1) The frequency of reincarcerations to determine whether the frequency decreases over time and (2) releasees' reports of HIV care utilization in the community to determine whether there is a critical number of contacts with the jail-based intervention before releasees seek services in the community. (This analysis would need to be adjusted for the releasees' age because older people are known to be more likely than younger people to seek out health care.)

4.3. Other Data Collection Issues

The box below identifies some of the other data collection concerns Consultancy Meeting members raised. It should be noted that the discussion raised many questions rather than achieving unanimity.

Summary of the Discussion of Other Issues Related to Data Collection

- The evaluation should use electronic data capture methods that will enable each data submitter—jail staff, community partner or local evaluator—to select a participant’s ID before adding data. This will minimize errors related to writing an ID number on a form. Although HRSA supports web-based data collection, the obstacles involved in this approach may be insurmountable.
- The Corrections Demonstration Project showed that having case managers collect and submit program data can be very challenging due to staff turnover, inconsistent training and the perception that data submission is not their role.
- “Lost to follow-up”—that is, participants who drop out of the program or the study—is a significant challenge to any longitudinal study, but interventions targeting a population with high rates of joblessness, mental health needs and conditions that contribute to chaos in the participants’ lives face even greater challenges. Many meeting participants agreed that incentives such as meal tickets to fast food restaurants or transportation vouchers combined with coupons “seem to have worked” for similar populations, but these incentives can be expensive. Indeed, if implemented, incentives can make a study’s evaluation component more expensive than the intervention itself.
- This is a four-year project. Even given the expectation that sites will be able to implement the project quickly and the requirement that grant applicants must already have cooperative agreements in place, four years may not be long enough to allow for enough follow-up time for the majority of program participants, especially if recidivism is an outcome measure.
- There was some discussion about measuring intermediate outcomes, such as changes in the inmates’ knowledge of HIV’s etiology, but it was pointed out that many intermediate outcomes could show improvement due to community interventions other than participation in the HRSA funded jail-based intervention.

5. How Ethically to Meet the Needs of a Diverse Jail Population

As the previous sections have explained, implementing an innovative HIV testing and linkage program in a jail setting is not without its challenges. Cooperation with the custody services of the correctional facility is the first step to success. In order to be accepted and successful, the project must be properly promoted, including emphasizing the benefits to jail staff at all levels whose support is needed. Having project partners—at public health department, community agencies and at the institution—who will be responsible for as well as responsive to the needs and regulations of the facility—will be critical to the program’s success. Finally, there needs to be adequate funding to pay for any additional services or activities involved in the project, such as mental health counseling for inmates who test positive for HIV.

The program will need to address three major ethical challenges.

- The first challenge involves paying special attention to the ethical implications of serving a highly vulnerable population. Because inmates are literally a captive audience, they are more susceptible to medical abuse than are non-institutionalized individuals. This requires that special considerations be given to ensuring that basic ethical principles are adhered to. The program needs to at least begin to address the first challenge *before* seeking the cooperation of the facility and its staff, and the cooperation of partners and their staff, and only *after* there are assurances that there will be enough money to support the needed project activities. Of course, the program’s initial plans for serving this population ethically, which should be in writing, may change during the course of recruiting the jail and service organizations, because these partners may have their own, perhaps more stringent, views and rules in this area.
- The second major ethical challenge involves paying special attention to ensuring that testing and linkage are conducted in a manner that reflects the characteristics and needs of this population. Programs need to meet this challenge in collaboration with jail and partner staff.
- The third challenge lies in conducting a demonstration project that seeks to gather generalizable knowledge about best practices. Such an endeavor meets the definition of research set by Federal regulation.

5.1. Ethical Considerations Involved in Conducting Research in Jail Settings

At the request of the Department of Health and Human Services’ Office of Human Research Protections (OHRP), the independent Institute of Medicine (IOM) recently issued a report seeking to rework the ethical framework for conducting research in jails and prisons.²⁶ Although the department has not yet changed its research regulations, the report provides a useful synopsis of the challenges inherent in conducting with correctional populations. The IOM report outlines an ethical framework based on the four principles summarized below. The first three principles come from 1979 Belmont Report issued by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research;²⁷ the IOM added the fourth, the principal of collaborative responsibility.

1. **Justice:** This principle recognizes the need for the target population to share the benefits as well as the burden of participating in research. Dating back to at least the mid-1940s there is clear documentation that inmates in the United States have been used as a convenient population to study that has borne the risks of medical research but has not enjoyed its benefits.²⁸

2. **Respect for Persons:** This principle recognizes the need for informed consent, voluntary participation, sampling without bias and protection of data from harmful use. Researchers often pay the greatest attention to issues of informed consent and voluntary participation in their interpretation of this principle.
3. **Beneficence:** This principal involves not only respecting the decisions of research subjects and protecting them from harm, but also by making efforts to secure their well-being. From the 1979 Belmont Report, “Two general rules have been formulated as complementary expressions of beneficent actions in this sense: do no harm, and maximize possible benefits and minimize possible harms.”
4. **Collaborative Responsibility:** This principle is a derivative of the principle of justice and stipulates that all aspects of research should include the active participation of relevant stakeholders (including inmates, correctional officers, medical staff, administrators and—in the case of the current project—community members as well). With the collaboration of the stakeholders, studies should be designed that is appropriate to the concerns, needs, capacities and resources of the research setting.

Particularly when applying the principle of justice, an evaluation of the risk/benefit ratio to inmates becomes of central importance. In assessing whether to conduct research in a jail setting, the following questions need to be examined: (1) Will the study carry risk to the inmate? (2) Will the study benefit the inmate? (3) Will there be a significant societal benefit? (4) Must the study be conducted in a jail? It is the responsibility of both the researcher and the Institutional Review Board (IRB) that is responsible for reviewing the research protocol to carefully consider each of these questions. In keeping with the principle of collective responsibility it is also necessary for IRBs reviewing research involving inmates to include a prisoner advocate (who may be a former inmate or someone else who understands and is sympathetic to the needs of inmates) reviewing the research protocol.

5.2. Ethical Issues Relevant to Testing and Linkage

Five central issues need to be considered in advance when developing HIV testing and linkage programs in jail settings:

- (1) How will testing be performed in a voluntary manner, in light of the new CDC recommendations that suggest incorporating testing into routine medical services?
- (2) How will testing be performed in a manner that is sensitive to the psychological impact of an inmate’s learning for the first time his or her HIV status?
- (3) How will confirmatory testing be delivered within a brief time period, given the slightly higher false-positive testing rate of rapid testing?
- (4) How will adverse events be monitored?
- (5) How will protected health information be shared in a manner that facilitates linkages but does not violate the Health Insurance Portability and Accountability Act (HIPAA)?

5.2.1. How will testing be performed in a voluntary manner, in light of the new CDC recommendations that suggest incorporating testing into routine medical services?

In September 2006, the CDC issued recommendations that suggest incorporating HIV testing into routine medical services. These recommendations specifically target correctional populations (among other populations highly affected by HIV).⁴ However, the authoritarian manner in which health care tends to be delivered in jail settings creates important challenges to maintaining the voluntary nature of HIV testing under the new recommendations. Sites implementing programs under the new HRSA initiative should

consider how to maintain voluntary HIV testing in the context of the manner in which general medical care is delivered within the jail setting.

5.2.2. How will testing be performed in a manner that is sensitive to the psychological impact of an inmate's learning for the first time his or her HIV status?

Using traditional testing procedures, individuals who agreed to be tested for HIV had to wait 10-14 days before receiving their results. This period could be used to consider the implications of a positive test result, but could also be filled with anxiety and dread about that result; in the jail setting it is also quite likely that the individual would be released in that period before finding out conclusively whether or not they were infected with HIV. Although the hallmark of rapid testing is that results can be communicated very quickly, the potential disadvantage is that inmates' existing coping mechanisms may have already been taxed by the experience of having just been arrested and detained and by not having adequate support systems available. As a result, sites should consider how and when to incorporate post-test counseling and what mental health services to make available to inmates who agree to be tested.

5.2.3. How will confirmatory testing be delivered within a brief time period, given the slightly higher false-positive testing rate of rapid testing?

Rapid testing methodologies tend to yield a slightly higher false-positive rate than traditional testing methods. At the same time, rapid testing is encouraged because inmates are in and out of jail facilities so quickly. This creates a challenge to finding a way to deliver confirmatory test results to individuals who test positive in jail but are released before they the confirmatory test result comes back. Sites may want to consider strategies that allow for confirmatory testing to occur within the facility for tested inmates who will still be incarcerated when the confirmatory test results become available and in the community for tested inmates who will be released very quickly. Sites might also use a double rapid testing protocol that allows for providing fairly conclusive results in about 45 minutes.

5.2.4. How will adverse events be monitored?

There are a variety of adverse events that could occur in the context of rapid HIV testing and linkage in jails including inmates acting out, becoming belligerent or developing acute depression because of the lack of available coping mechanisms and support systems to handle such traumatic news after having only recently having been arrested. Other adverse events may serve to compromise confidentiality. Inmates have a right to have their HIV status held in the strictest confidence such that only necessary health care providers have access to the information. However, the process of providing HIV-positive results (during which correctional officers may have to be present due to the need for security) may result in confidentiality being compromised. Recording an inmate's HIV status in medical records that could be inappropriately shared with correctional administrators may also compromise confidentiality. Subtle ways that confidentiality could be compromised include correctional officers' use of protective gloves with some inmates and not others during searches and treating people differently in medication lines. Sites also need to create mechanisms that facilitate the process of monitoring adverse events related to testing and linkage while maintaining inmate confidentiality.

5.2.5. How will protected health information be shared in a manner that facilitates linkages but does not violate the Health Insurance Portability and Accountability Act (HIPAA)?

Sharing protected health information (specific health data defined by the HIPAA legislation) with community-based service providers may be necessary in order to facilitate the process of linking HIV-positive inmates with services after release. However, sharing this information in a manner that does not violate HIPAA regulations is important. Sites must have a clear understanding of the HIPAA regulations that apply to correctional settings.

5.3. Sensitivity to the Characteristics and Needs of an Inmate Population

Data indicate that correctional populations tend to have less education and lower incomes and to have had, prior to incarceration, underutilization of health services (in part due to being uninsured or underinsured) as compared with non-incarcerated populations. Many inmates also face language barriers because they are not proficient in English. People of color are overrepresented in jails. While the majority of inmates are male, the number of female inmates is increasing.¹ Furthermore, the health status of individuals admitted to jail is poor, and inmates report having been exposed to violence and abuse more often and more severely than do people who have never been incarcerated.¹⁷

Recognizing that the jail population is highly disadvantaged, testing and linkage programs need to be delivered in a manner that is sensitive to the complex interplay among multiple forms of hardship (e.g., based on race or ethnicity, class, gender, sexual orientation and ill health). Services must also be delivered in a manner that respects that HIV testing may not be a top priority for someone who may be facing legal challenges. Even once released, issues of housing, employment, family reunification and transportation, not to mention avoiding relapse, may be higher priorities than seeking health care. In keeping with the principle of collaborative responsibility, there needs to be an opportunity for the inmates receiving services through the new initiative to participate in discussions related to the delivery of services to ensure that this sensitivity is displayed in the context of both HIV testing and linkage. (See the box “Selected Approaches to Ensuring Sensitivity in Doing Research With Jail Inmates”.)

Selected Approaches to Ensuring Sensitivity in Doing Research With Jail Inmates

Focus on the humanity of the people who are being served.

Testing and linkage programs should recognize that inmates are human beings first. Those designing interventions must consider how they themselves would want to be treated or how they would want family members to be treated in a correctional facility. Programs that are comprehensive will consider difficulties with housing, employment, availability of mental health services and personal safety that inmates may face while incarcerated and after release. Screening and connecting inmates to services in a manner that respects their humanity ought to be the first goal of any project.

Seek participation from the community in developing and implementing programs.

The jail is part of the community. They are not two separate entities. Programs should be developed in a manner that reflects this interconnection between the jail and the community. For example, jail-based programs—particularly those that support linkages to the community—should involve advisory group that understands the fluid connections between jails and the community. Such community advisory boards (CABs) may include members of existing advisory entities (e.g., Ryan White Planning Council) or may be formed especially for the new program. The CAB should serve as a liaison between the program's three principal constituencies (correctional administrators, health departments and the community) and facilitate the sustainability of the projects. It is critical that the CAB includes representation from different stakeholders (e.g., individuals who are HIV-positive and persons who are HIV-negative), provides information from the community to the jail and from the jail to the community and is involved early in the process of developing the program in order to ensure that the voices of all stakeholders are heard.

Consider how HIV-negative individuals will be affected by services.

Even with HIV seroprevalence rates as high as 5 percent, the vast majority of individuals (roughly 95 percent) will test negative for HIV. Sites must grapple with the issue of what type of services they will offer to these individuals so they remain disease-free. Some form of brief individual-level counseling could be made available to everyone who is tested for HIV while they are awaiting test results; alternatively, inmates who are tested might be told that "no news" means a negative test result (thereby potentially conveying misinformation to someone who is released before a positive result can be communicated). Given limited resources, sites will have to decide what level of effort their programs can devote to meeting their obligations to HIV-negative individuals.

5.4. Concluding Thoughts

The program announcement to which the ESC responded (HRSA-06-125 Evaluation and Support Center for an Initiative on Enhancing Linkages to HIV Primary Care in Jail Settings) observed that: “Jail... is often the first opportunity for health screening, and HIV testing is a key link in gaining access to the continuum of HIV prevention and treatment services.” However HIV researchers have pointed out that:

...unresolved issues about HIV testing policies in jail revolve around the often-chaotic nature of the setting, the various states of intoxication and withdrawal of the inmates, availability of staff, the provision of confidential settings for testing and the likelihood of being able to provide confirmatory testing for preliminary positives.²⁹

The Consultancy Meeting underscored the need for jails to identify the HIV-positive inmates passing through their facilities. Failure to provide a positive HIV test result to someone who is infected represents a missed public health opportunity. Diagnosis is the first step for linkage but not the only step. The necessary components of effective linkage programs for HIV-positive inmates leaving jails still must be determined. Robust evaluations help make this determination by providing evidence for what types of linkage programs works and what do not. While programs need to carry out evaluations in an ethical fashion, to continue operating programs without evidence of their efficacy may also be unethical.

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Appendix 1: Consultancy Meeting Participants

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Sixth Discussion

Moderator: Gardner

How do we ensure that testing, linkage, and reporting are conducted in a manner that reflects the characteristics and needs of the population?

Do sites need Community Advisory Boards?

Session D – Final Concerns

Seventh Discussion

Moderator: Kennedy

How to define and collect denominator data?

Eighth Discussion

Moderator: Norton

Data elements and security of data

