<table>
<thead>
<tr>
<th>Local Service Category:</th>
<th>Early Intervention Services – Incarcerated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Available:</td>
<td>To be determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit Cost</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Budget Requirements or Restrictions (TRG Only):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum 10% of budget for Administrative Cost. No direct medical costs may be billed to this grant.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DSHS Service Category Definition:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of Early Intervention Services (EIS) that include identification of individuals at points of entry and access to services and provision of:</td>
</tr>
<tr>
<td>• HIV Testing and Targeted counseling</td>
</tr>
<tr>
<td>• Referral services</td>
</tr>
<tr>
<td>• Linkage to care</td>
</tr>
<tr>
<td>• Health education and literacy training that enable clients to navigate the HIV system of care</td>
</tr>
</tbody>
</table>

These services must focus on expanding key points of entry and documented tracking of referrals.

Counseling, testing, and referral activities are designed to bring HIV-positive individuals into Outpatient Ambulatory Medical Care. The goal of EIS is to decrease the number of underserved individuals with HIV/AIDS by increasing access to care. EIS also provides the added benefit of educating and motivating clients on the importance and benefits of getting into care. Individuals found to be HIV-negative should be referred to appropriate prevention services.

<table>
<thead>
<tr>
<th>Local Service Category Definition:</th>
</tr>
</thead>
<tbody>
<tr>
<td>This service includes the connection of incarcerated in the Harris County Jail into medical care, the coordination of their medical care while incarcerated, and the transition of their care from Harris County Jail to the community. Services must include: assessment of the client, provision of client education regarding disease and treatment, education and skills building to increase client’s health literacy, establishment of THMP/ADAP post-release eligibility (as applicable), care coordination with medical resources within the jail, care coordination with service providers outside the jail, and discharge planning.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target Population (age, gender, geographic, race, ethnicity, etc.):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services are for all HIV/AIDS infected individuals incarcerated in The Harris County Jail.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Services to be Provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services include but are not limited to CPCDMS registration/update, assessment, provision of client education, coordination of medical care services provided while incarcerated, medication regimen transition, multidisciplinary team review, discharge planning, and referral to community resources.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Unit Definition(s) (TRG Only):</th>
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</thead>
<tbody>
<tr>
<td>One unit of service is defined as 15 minutes of direct client services or coordination of care on behalf of client.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial Eligibility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to incarceration, no income or residency documentation is required.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client Eligibility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-positive incarcerated resident of the Harris County Jail.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agency Requirements (TRG Only):</th>
</tr>
</thead>
<tbody>
<tr>
<td>As applicable, the agency’s facility(ies) shall be appropriately licensed or certified as required by Texas Department of State Health Services, for the provision of HIV Early Intervention Services, including phlebotomy services.</td>
</tr>
</tbody>
</table>
Agency/staff will establish memoranda of understanding (MOUs) with key points of entry into care to facilitate access to care for those who test positive. Agency must execute Memoranda of Understanding with Ryan White funded Outpatient Ambulatory Medical Care providers. The Administrative Agency must be notified in writing if any OAMC providers refuse to execute an MOU.

<table>
<thead>
<tr>
<th>Staff Requirements:</th>
<th>Not Applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Requirements (TRG Only):</td>
<td>Must comply with the Houston EMA/HSDA Standards of Care. The agency must comply with the <strong>DSHS Early Intervention Services Standards of Care</strong>. The agency must have policies and procedures in place that comply with the standards <em>prior</em> to delivery of the service.</td>
</tr>
</tbody>
</table>
## FY 2017 RWPC “How to Best Meet the Need” Decision Process

<table>
<thead>
<tr>
<th>Step in Process: <strong>Council</strong></th>
<th>Date: 06/09/2016</th>
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</thead>
<tbody>
<tr>
<td>Recommendations:</td>
<td>Approved: Y:_____ No:______ Approved With Changes:______</td>
</tr>
<tr>
<td></td>
<td>If approved with changes list changes below:</td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Step in Process: <strong>Steering Committee</strong></th>
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<td></td>
<td>If approved with changes list changes below:</td>
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<th>Step in Process: <strong>Quality Improvement Committee</strong></th>
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<td>Recommendations:</td>
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<td>If approved with changes list changes below:</td>
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<td>1.</td>
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<td>2.</td>
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<tr>
<th>Step in Process: <strong>HTBMTN Workgroup #3</strong></th>
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<td>Financial Eligibility:</td>
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<td>1.</td>
<td></td>
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<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
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The HIV Care Cascade Before, During, and After Incarceration: A Systematic Review and Data Synthesis

We conducted a systematic literature review of the data on HIV testing, engagement in care, and treatment in incarcerated persons, and estimated the care cascade in this group.

We identified 2706 titles in MEDLINE, EBSCO, and Cochrane Library databases for studies indexed to January 13, 2015, and included 92 for analysis. We summarized HIV testing results by type (blinded, opt-out, voluntary); reviewed studies on HIV care engagement, treatment, and virological suppression; and synthesized these results into an HIV care cascade before, during, and after incarceration.

The HIV care cascade following diagnosis increased during incarceration and declined substantially after release, often to levels lower than before incarceration. Incarceration provides an opportunity to address HIV care in hard-to-reach individuals, though new interventions are needed to improve post-release care continuity. (Am J Public Health. 2015;105: e5–e16. doi:10.2105/AJPH.2015.302635)

THE 2010 NATIONAL HIV/AIDS STRATEGY OUTLINES 3 INTERDEPENDENT GOALS: (1) REDUCING HIV INCIDENCE, (2) INCREASING ACCESS TO CARE AND IMPROVING HEALTH OUTCOMES FOR PERSONS LIVING WITH HIV, AND (3) REDUCING HIV-RELATED DISPARITIES AND HEALTH INEQUITIES. To meet these goals, it is essential to measure and improve performance at every stage in the HIV care continuum (also known as the HIV treatment cascade) as supported by a 2013 executive order by President Obama: diagnosis, linkage to care, retention in care, receipt of antiretroviral therapy (ART), and virological suppression. Because 1 in 7 HIV-infected individuals passes through correctional facilities every year, and most inmates come from minority and medically underserved communities, including many people younger than 35 years, jails and prisons are critical settings to address the HIV care continuum and health disparities. Among African American men aged 18 years or older, 1 in 15 is incarcerated, whereas this statistic is 1 in 36 for Hispanic men and 1 in 106 for White men. Incarceration provides a unique opportunity to offer HIV testing, linkage to HIV care, and antiretroviral treatment to individuals who may not be accessing medical services in the community. In addition to including individual outcomes by identifying and treating HIV, interventions in the correctional setting have the potential to affect community health by reducing HIV transmission to others through reduction of an HIV patient’s viral load, known as treatment as prevention.

Although there have been multiple, well-conducted studies of HIV testing, linkage to care, and treatment in incarcerated individuals, there has been less focus on the HIV care continuum as a whole in this group or on how this cascade changes as an individual passes through the correctional system and back to the community. An improved understanding of the course of HIV identification, care, and treatment in this population will allow us to better direct resources to major gaps in the care continuum and to come closer to achieving the goals of the national HIV/AIDS strategy.

Therefore, we sought to perform a systematic literature review to (1) summarize HIV testing, treatment, and linkage to care efforts in the incarcerated and recently released population; (2) determine the estimates in the cascade of care for HIV-infected individuals before, during, and after incarceration; and (3) identify research gaps and targets for future interventions to improve outcomes in the HIV-infected population involved in the criminal justice system.

METHODS

We conducted a literature search with the Ovid MEDLINE database for English-language studies indexed up to January 13, 2015. We used the following medical subject heading (MeSH) terms: “prisoners,” “prisons,” “criminals,” and text words for “incarcerated within 3 words of men, women, male*, female*, patient*, youth, teen*, individual*, person*”; and “exoffender*, exoffender*, releasee*, jail, criminal justice, correctional facility*, prison*, criminal*, inmate*,” combined with MeSH terms “HIV” (term exploded for comprehensive search), “HIV infections” (exploded), “HIV seroprevalence,” and title words for “HIV, AIDS, human immunodeficiency.” With text words and subject headings or keywords from the original search, on January 13, 2015, we also searched Ovid MEDLINE.
InProcess, EBSCO Academic Search Complete, the EBSCO Legal Collection, and 3 Cochrane Library databases: Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effect, and Cochrane Central Register of Controlled Trials. We developed all search strings with the assistance of a qualified librarian.

**Study Selection**

The 2 reviewing authors (P. A. I. and A. E. N.) independently assessed abstracts and titles from all database-generated articles for eligibility on the basis of the following criteria: (1) relevance to HIV and incarceration and (2) specifically addressing outcomes related to HIV testing, linkage to HIV care, retention in HIV care, HIV treatment, and virological suppression in inmates (jail or prison) or recently released individuals. We excluded studies that were not performed in the United States or Canada and limited our evaluation to studies involving adults aged 18 years and older. We excluded additional studies if they had an anonymous author, if they were classified as a non-experimental study (e.g., opinion, review articles, non-peer-reviewed articles, case reports, legal cases), or if the study did not provide original quantitative data.

We reviewed full-text articles for all studies meeting these criteria. For 7 articles, only an abstract was available, which was used only if it contained all the data fields needed for data extraction. Primary authors were contacted for clarification on several articles. After full-text review, we excluded additional studies for a variety of reasons including unclear study design, study outcomes were not the outcomes of interest, the study population represented a selective group and not the general incarcerated population, or a study did not sufficiently differentiate between subgroups (e.g., HIV prevalence results combined for adults and juveniles).

We hand-searched additional studies from the cited references of those studies selected for full review, and identified supplemental references. We elected to include the Bureau of Justice Statistics Bulletin, which is published regularly and includes different time frames without overlapping data.

**Data Extraction**

We generated separate tables for the following categories: HIV testing (Table 1), engagement in HIV care (Table 2), and HIV treatment and virological outcomes (Table 3). We then subdivided the engagement and treatment tables into 3 different sections for studies measuring the outcome before, during, and after incarceration. We extracted the following data from each study for inclusion in all 3 tables: author(s), year of publication, correctional setting, geographical location by state or country, and proportion of individuals achieving the outcome of interest. For all tables, we noted missing data with a dash.

For Table 1, we included number of individuals tested overall, number of positive tests, and number of new positives. We calculated the positivity rate and newly diagnosed positivity rate based on these values. We recorded method of testing (routine or rapid) and grouped studies by how testing was offered (blinded, mandatory, opt-out, opt-in, voluntary). We defined blinded testing in the study methods as using available discarded or excess sera from routine phlebotomy performed on incoming inmates. Blinded testing is anonymized and performed for the purposes of epidemiological study, not for clinical care of inmates. Mandatory testing refers to programs in which all inmates are tested per protocol. In opt-out testing, an inmate is informed that an HIV test will be performed unless he or she declines the test, whereas opt-in testing is when an HIV test is offered routinely and those desiring testing need to actively give permission to be tested. Lastly, voluntary testing refers to testing for HIV that is made available to inmates, not necessarily through a direct offer of testing (may be advertised through posters or signs), and includes testing on patient request. Several studies initially offered voluntary testing and then completed blinded testing on all inmates who declined voluntary testing; these results were combined and included under the blinded category. For studies that allowed inmates known to be HIV-infected to opt out of testing, only new positives were recorded.

The included studies in the engagement-in-care table defined engagement as having at least 1 medical visit during the timeframe indicated. Studies are grouped by year of publication. For the HIV treatment table, we defined treatment as receipt of antiretrovirals during the timeframe listed for each study. Undetectable viral load was defined differently in some studies; the majority defined this as less than 400, less than 50, or less than 20, although one study used less than 500. Therefore, for the purpose of this review, we considered a viral load less than 500 copies per milliliter undetectable.

**Data Synthesis**

To generate the different steps in the HIV treatment cascade for the 3 time periods—before, during, and after incarceration—we included data from all studies relevant to each respective step in the calculations by using weighted means. To estimate the proportion of HIV-infected individuals entering corrections who were known to be HIV-positive at the time of incarceration, we compiled the data from all HIV testing studies that performed blinded testing and reported the number of new diagnoses. The included studies defined an individual as previously undiagnosed with HIV if the inmate’s self-report or medical records indicated a previous negative HIV test or lack of awareness of HIV infection. There was no published literature on blinded testing for HIV during or after incarceration. For the proportion of new HIV diagnoses made during incarceration, we assumed that these diagnoses would be in addition to those already known at entry and, because most facilities only provide testing upon request after entry, would identify relatively few new HIV diagnoses. We extrapolated a 1% increase in known HIV infection based on HIV testing data from inmates tested during incarceration at the Dallas County Jail (written communication, E. Porsa, MD, MPH, CCHP, Parkland Jail Health, July 15, 2014). The proportion of new HIV diagnoses made after release from incarceration were also estimated to be few (<1%) based on 2 studies involving individuals on probation or parole.

For engagement in HIV care, we defined linkage to care upon entry to jail or prison as having received any HIV care before incarceration. For retention in care upon entry to jail or prison we...
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Setting</th>
<th>Location</th>
<th>No. Tested</th>
<th>No. Positive</th>
<th>Newly Diagnosed</th>
<th>Positivity Rate, %</th>
<th>Newly Diagnosed Positivity Rate, %</th>
<th>Type of testing</th>
<th>Method</th>
<th>Gender</th>
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</thead>
<tbody>
<tr>
<td>Altice et al.</td>
<td>1998</td>
<td>Prison</td>
<td>CT</td>
<td>975</td>
<td>59</td>
<td>-</td>
<td>6.1</td>
<td>-</td>
<td>Blinded</td>
<td>Routine</td>
<td>Men</td>
</tr>
<tr>
<td>Altice et al.</td>
<td>2005</td>
<td>Prison</td>
<td>CT</td>
<td>3 315</td>
<td>250</td>
<td>93</td>
<td>7.54</td>
<td>2.81</td>
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<td>Women</td>
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<tr>
<td>Andrus et al.</td>
<td>1989</td>
<td>Prison</td>
<td>OR</td>
<td>977</td>
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<td>-</td>
<td>1.23</td>
<td>-</td>
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<tr>
<td>Begier et al.</td>
<td>2010</td>
<td>Jail</td>
<td>NY</td>
<td>6 411</td>
<td>389</td>
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<td>Calzavara et al.</td>
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<td>Canada</td>
<td>12 048</td>
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<td>Hammett et al</td>
<td>1995</td>
<td>Both</td>
<td>Multiple sites</td>
<td>72 399</td>
<td>2 491</td>
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<tr>
<td>Hoxie et al.</td>
<td>1990</td>
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<td>WI</td>
<td>3 458</td>
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<td>-</td>
<td>0.52</td>
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<td>Prison</td>
<td>WI</td>
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<td>Macalino et al.</td>
<td>2004</td>
<td>Prison</td>
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<td>Singleton et al.</td>
<td>1990</td>
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<td>CA</td>
<td>6 179</td>
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<td>Smith et al.</td>
<td>1991</td>
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<td>Weisfuse et al.</td>
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<td>Wohl et al.</td>
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<td>Wu et al.</td>
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<td>Manuschak et al.</td>
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<td>Rich et al.</td>
<td>1999</td>
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<td>RI</td>
<td>3 146</td>
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<td>Women</td>
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<td>Beckwith et al.</td>
<td>2010</td>
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<td>Men</td>
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<td>Beckwith et al.</td>
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<td>Beckwith et al.</td>
<td>2012</td>
<td>Jail</td>
<td>MD</td>
<td>2 066</td>
<td>42</td>
<td>7</td>
<td>2.03</td>
<td>0.34</td>
<td>Opt-out</td>
<td>Rapid</td>
<td>Both</td>
</tr>
<tr>
<td>CDC</td>
<td>2010</td>
<td>Jail</td>
<td>RI</td>
<td>102 229</td>
<td>1 259</td>
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<td>0.17</td>
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<td>Routine</td>
<td>Both</td>
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<td>WA</td>
<td>4 651</td>
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<td>Routine</td>
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<td>GA</td>
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<td>CT</td>
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<td>Opt-out</td>
<td>Rapid</td>
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<td>Jail</td>
<td>CT</td>
<td>130</td>
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<td>0.77</td>
<td>Opt-out</td>
<td>Rapid</td>
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<td>Jail</td>
<td>GA</td>
<td>17 129</td>
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<td>2012</td>
<td>Both</td>
<td>United States</td>
<td>106 122</td>
<td>1 006</td>
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<tr>
<td>CDC</td>
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<td>Prison</td>
<td>WA</td>
<td>12 174</td>
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<td>Bauserman et al.</td>
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<td>JD or Jail</td>
<td>MD</td>
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<td>Routine</td>
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<td>2007</td>
<td>Jail</td>
<td>RI</td>
<td>95</td>
<td>0</td>
<td>-</td>
<td>0.00</td>
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<td>Rapid</td>
<td>Men</td>
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<tr>
<td>Calzavara et al.</td>
<td>2007</td>
<td>Jail</td>
<td>Canada</td>
<td>1 578</td>
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<td>Jail</td>
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<td>WA</td>
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<td>de Voux et al.</td>
<td>2012</td>
<td>Jail</td>
<td>Multiple sites</td>
<td>210 267</td>
<td>1 312</td>
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<td>Prison</td>
<td>Canada</td>
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<td>Ford et al.</td>
<td>1995</td>
<td>Prison</td>
<td>Canada</td>
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<td>Voluntary</td>
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<td>Women</td>
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<tr>
<td>Gellett et al.</td>
<td>1993</td>
<td>Jail</td>
<td>CA</td>
<td>3 015</td>
<td>82</td>
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<td>2.72</td>
<td>-</td>
<td>Voluntary</td>
<td>Routine</td>
<td>Women</td>
</tr>
</tbody>
</table>

Continued
TABLE 1—Continued

Gordon et al.64 2013 Pro/Par Multiple sitesa 364 - 2 - 0.55 Voluntary Rapid Both
Hankins et al.65 1994 Pro/Par multiple sitesb 394 27 6.85 - Voluntary Rapid Women
Harawa et al.66 2009 Jail CA 1 322 - 23 - 1.74 Voluntary Routine Both
Kassina et al.67 2001 Prison MD 7 159 405 236 5.66 3.30 Voluntary Routine Both
Kendrick et al.68 2004 Jail IL 988 - 9 - 0.91 Voluntary Rapid Women
Klein et al.69 2002 Prison NY 9 468 95 - 1.00 - Voluntary Routine Both
Liddicoat et al.70 2006 Prison MA 734 - 2 - 0.27 Voluntary Routine Both
Lyons et al.71 2006 Jail IL 110 0 - 0.00 - Voluntary Routine Both
Magowan et al.72 2009 Jail Multiple sited 33 211 409 269 1.23 0.81 Voluntary Rapid Both
McCusker et al.73 2006 Pro/Par Prison MA 1 408 144 - 10.23 - Voluntary Routine Both
Oser et al.74 2006 Pro/Par Prison KY 800 0 0.00 - Voluntary Rapid Both
Poulin et al.75 2007 Prison Canada 1 607 54 11 3.36 0.68 Voluntary Rapid Both
Rosen et al.76 2009 Pro/Par Prison NC 21 419 718 115 3.35 0.54 Voluntary Routine Both
Sabín et al.77 2001 Both Multiple sitesf 494 029 16 797 8 855 3.40 1.79 Voluntary Routine Both
Tartaro and Levy78 2013 Jail NJ 956 3 1 0.31 0.10 Voluntary Rapid Both

Note. CDC = Centers for Disease Control and Prevention; JD = juvenile detention; Pro/Par = probation or parole; SAFPs = substance abuse felony punishment units. Dash indicates missing data.
aAR, CO, GA, HI, IL, LA, MA, NC, NJ, NY, OR, SC, TN, TX, VA, WA, Canada.
bAL, CO, GA, IA, ID, MI, MO, ND, NE, NH, WI, MI, RI, UT, WV.
cAL, AR, CO, IA, ID, MI, MO, ND, NE, NH, WI, OK, RI, UT, WV.
dAL, AR, CO, GA, IA, ID, MI, MO, MS, ND, NE, OH, OK, RI, SC, UT, NY.
eAL, AR, CO, GA, IA, ID, IN, MI, MN, MS, ND, NE, NH, WI, OH, OK, RI, SC, TX, UT, WA, WI.
fCT, GA, IL, MA, NY, OH, PA, SC, RI.
gMD, RI.
hFL, LA, NY, WI.
i4S project areas in United States.
j45 study sites.

used national data from the general population living with HIV in the United States.7 For linkage to and retention into care during incarceration, we compiled reports from the Dallas County Jail (written communication, E. Porsa, MD, MPH, CCHP, Parkland Jail Health, July 15, 2014) and 2 published studies.70,71 For the postrelease population, we defined linkage to care as a medical visit within 6 months after release from incarceration, which included both newly diagnosed and known HIV-infected individuals.67-70,73-78 We considered retention in care to be 2 medical visits over 6 months, an outcome reported in 1 multicenter study.68

To estimate the proportion of HIV-infected individuals receiving ART upon entry to jail or prison, we compiled data from multiple studies that assessed treatment before incarceration.68,69,79 For the proportion receiving ART while incarcerated, we included all studies reporting HIV treatment during incarceration or at the time of release.68,69,70,73,75,77,78,83,84,86,88,92,93,95 For estimates of released inmates on ART, we summarized data from studies with follow-up within a 6-month period.72,76,81,95,96 Finally, we estimated the proportion of HIV-infected individuals with an undetectable viral load (<500 copies/mL) upon entry,58,69,80,98 during,66,75,77,80,86,87,91-94,98 and after release from incarceration.99,100

RESULTS

The electronic search process for article selection is summarized in Figure 1. The search identified 2706 titles, of which we excluded 2406 for not meeting criteria on the basis of review of the title and abstract. We retrieved the remaining 300 full-text articles for review. Of these, we excluded 201 on the basis of our eligibility criteria and we excluded an additional 19 because of reporting results from selective study populations not representative of the entire incarcerated population, the same study population was examined by different articles reporting on related outcomes of interest, or the HIV treatment timeframe was unclear or insufficient for the outcome measure. For inclusion in the final review, we identified an additional 5 titles from hand-searching references along with 2 conference proceedings, 4 Bureau of Justice Statistics HIV testing bulletins, and a report from the local county jail (written communication, E. Porsa, MD, MPH, CCHP, Parkland Jail Health, July 15, 2014).17,28-30,40,78,81,89-100

Study Characteristics

Overall, we included 92 unique studies for review, of which 10 were included in more than 1 HIV care cascade category.66-69,72,73,75,76,78,89-100 Eleven studies reported HIV outcome data obtained from multiple geographic sites.4,47-49,59,64,67,84,72,82,86-99 Fifty-five percent of the studies reviewed were surveillance studies of HIV testing upon entry into the correctional setting. Twenty-one were retrospective cohort studies of HIV-infected inmates.66,69,75,78,83,84,86,88,92,101 or releases.69,71,73,75,78 Three studies used a longitudinal design, assessing HIV outcomes in this population at multiple time points.67,72,76 Other study designs included descriptive studies,74,85,87,89 multisite prospective demonstration projects,68,81,82,99
nonrandomized trials,32,38,39,91 and randomized trials.51,77,94,95

Of the 50 studies, and 1 conference proceeding40 that addressed HIV testing, 21 were in the jail setting, 24 in the prison setting, 4 in combined settings, and 2 at probation or parole offices. The Bureau of Justice Statistics HIV testing bulletins predominately reported results from the prison setting.17,28---30The majority of testing was implemented upon entry to a correctional facility; however, a few compared testing at different time points during incarceration.57- - -59We identified 13 studies addressing engagement in HIV care. Lastly, we reviewed 31 studies and 1 conference proceeding100 on HIV treatment and virological suppression in prisoners.

**HIV Testing, Engagement in Care, and Treatment**

We summarized HIV testing by testing type (Table 1). Eighteen studies, and 4 summary reports indicated testing of inmates in a blinded or mandatory fashion upon entry into the correctional facilities. All but 2 were performed in a prison setting. In general, incarcerated women had higher rates of HIV than incarcerated men, though most studies reported combined results for men and women. The average HIV positivity rate among blinded and mandatory studies combined was 1.39% (range = 0.52%—18.75%), and average newly diagnosed positivity rate (only reported in 3 studies) was 0.66% (range = 0.09%—2.81%).

The majority of opt-out testing was implemented in jails with rapid testing methods. The proportion of positive tests averaged 1.05% (range = 0.58%—2.03%), and all studies reported the proportion newly diagnosed, averaging 0.43% (range = 0%—0.77%).

Opt-in HIV screening was reported by only 2 studies; 1 compared its results to the later adoption of an opt-out screening program,36 and the other integrated an HCV-screening initiative into an existing HIV-screening program.42 Twenty-four studies conducted voluntary HIV screening. When we combined the opt-in and voluntary testing efforts, the average HIV-positivity rate was 2.55% (range = 0%—10.23%) and the newly diagnosed positivity rate was 1.32% (range = 0.10%—3.30%).

Engagement in HIV care was summarized in 15 different studies, which ranged from observational descriptive studies to randomized controlled interventions (Table 2). At the time of incarceration, an average of 72% (42%—78%) of inmates who were HIV-positive were reported to have visited an HIV care provider before entering jail or prison. There were 2 studies that specifically reported on engagement in care during incarceration.70,71 Twelve studies followed up with inmates after release from incarceration and had varying

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**TABLE 2—Summary of Engagement Into HIV Care Before, During, and After Release From Incarceration: Systematic Review and Data Synthesis**

Indexed up to January 13, 2015, United States and Canada

<table>
<thead>
<tr>
<th>Author Year</th>
<th>Setting</th>
<th>Location</th>
<th>Intervention</th>
<th>No. Positive</th>
<th>Proportion Engaged Into Care, %</th>
<th>Timeframe Relative to Incarceration</th>
</tr>
</thead>
</table>
| Upon entry or before incarceration
| White et al.66 2001 | Jail | CA | NA | 77 | 32 | 42 | Any time before |
| Harzke et al.57 2006 | Prison | Southwestern United States | NA | 51 | 31 | 61 | 1 y before |
| Althoff et al.68 2013 | Jail | Multiple sites | NA | 867 | 641 | 74 | 30 d before |
| Khawcharoenporn et al.69 2013 | Jail | IL | NA | 172 | 134 | 78 | Any time before |
| During incarceration
| Farley et al.70 2000 | Prison | RI | Yes | 172 | 110 | 64 | During |
| Zaller et al.71 2008 | Prison | RI | Yes | 59 | 54 | 92 | During |
| After incarceration
| Warren et al.72 1994 | Jail | NY | No | 40 | 15 | 38 | ≤ 95 d after |
| Farley et al.70 2000 | Prison | RI | Yes | 41 | 34 | 83 | 6 mo after |
| Rich et al.73 2001 | Prison | RI | Yes | 67 | 64 | 95 | 12 mo after |
| Harzke et al.57 2006 | Prison | Southwestern United States | No | 30 | 18 | 60 | 21 d after |
| Fontana and Beckerman74 2007 | Jail | FL | No | 105 | 77 | 73 | 12 mo after |
| Zaller et al.71 2008 | Prison | RI | Yes | 59 | 56 | 96 | 12 mo after |
| Baillargeon et al.75 2010 | Prison | TX | No | 1750 | 490 | 28 | ≤ 90 d after |
| Westergaard et al.76 2011 | Both | MD | No | 182 | 109 | 60 | 6 mo after |
| Wohl et al.77 2011 | Prison | NC | Both | 104 | 82 | 79 | 24 wk after |
| Althoff et al.68 2013 | Jail | Multiple sites | Yes | 867 | 572 | 66 | 6 mo after |
| Khawcharoenporn et al.69 2013 | Jail | IL | No | 95 | 66 | 69 | 6 mo after |
| Beckwith et al.78 2014 | Jail | RI | No | 64 | 37 | 58 | 6 mo after |

Note. NA = not applicable.

4CT, GA, IL, MA, NY, OH, PA, SC, RI.
timeframes for engagement in HIV care, ranging from 21 days to a year. Engagement in care, defined as a single medical visit after release, was lower in observational studies, 28% by 3 months, 58% to 59% by 6 months, and 73% by 12 months compared with studies that conducted directed interviews or employed an intervention, 38% to 60% at 3 months, 66% to 85% at 6 months, and 95% to 96% at 12 months.

**TABLE 3—Summary of HIV Treatment Before, During, and After Release From Incarceration: Systematic Review and Data Synthesis Indexed up to January 13, 2015, United States and Canada**

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Setting</th>
<th>Location</th>
<th>Intervention</th>
<th>No. HIV Positive</th>
<th>Proportion on Treatment, %</th>
<th>Undetectable VL, %</th>
<th>Treatment Timeframe Relative to Incarceration</th>
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<td></td>
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<td></td>
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<td>Clements-Nolle et al.</td>
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<td>Springer et al.</td>
<td>2004</td>
<td>Prison</td>
<td>CT</td>
<td>NA</td>
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<td>IL</td>
<td>NA</td>
<td>172</td>
<td>125</td>
<td>73</td>
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<tr>
<td>Meyer et al.</td>
<td>2014</td>
<td>Both</td>
<td>CT</td>
<td>NA</td>
<td>882</td>
<td>-</td>
<td>-</td>
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<td>During incarceration</td>
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<td>Arriola et al.</td>
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<td>Beckwith et al.</td>
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<td>9</td>
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<td>Menezes et al.</td>
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<td>No</td>
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<td>1445</td>
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<td>Mostashari et al.</td>
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<td>Jail</td>
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<td>No</td>
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<td>Bingham et al.</td>
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<td>Federal BOP</td>
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<td>No</td>
<td>1445</td>
<td>858</td>
<td>59</td>
<td>46</td>
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<td>Wohl et al.</td>
<td>2003</td>
<td>Prison</td>
<td>NC</td>
<td>No</td>
<td>31</td>
<td>-</td>
<td>45</td>
<td>-</td>
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<tr>
<td>Pai et al.</td>
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<td>Jail</td>
<td>CA</td>
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<td>Altice et al.</td>
<td>2001</td>
<td>Prison</td>
<td>CT</td>
<td>No</td>
<td>205</td>
<td>164</td>
<td>80</td>
<td>-</td>
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<tr>
<td>Griffin et al.</td>
<td>1996</td>
<td>Jail</td>
<td>TX</td>
<td>No</td>
<td>225</td>
<td>78</td>
<td>35</td>
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<tr>
<td>Kirkland et al.</td>
<td>2002</td>
<td>Prison</td>
<td>United States</td>
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<td>-</td>
<td>68</td>
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<tr>
<td>Springer et al.</td>
<td>2004</td>
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<td>CT</td>
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<td>1866</td>
<td>-</td>
<td>59</td>
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<tr>
<td>Stephenson et al.</td>
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<td>-</td>
<td>80</td>
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<tr>
<td>Springer et al.</td>
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<td>CT</td>
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<td>63</td>
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<td>Wohl et al.</td>
<td>2011</td>
<td>Prison</td>
<td>NC</td>
<td>Both</td>
<td>89</td>
<td>62</td>
<td>70</td>
<td>58</td>
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<tr>
<td>Harzke et al.</td>
<td>2006</td>
<td>Prison</td>
<td>Southwestern United States</td>
<td>No</td>
<td>30</td>
<td>14</td>
<td>47</td>
<td>-</td>
</tr>
<tr>
<td>Meyer et al.</td>
<td>2014</td>
<td>Both</td>
<td>CT</td>
<td>No</td>
<td>-</td>
<td>882</td>
<td>-</td>
<td>70</td>
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<tr>
<td>Reznick et al.</td>
<td>2013</td>
<td>Both</td>
<td>CA</td>
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<td>151</td>
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Note. BOP = Bureau of Prisons; NA = not applicable; VL = viral load. Dash indicates missing data.

*CT, CA, IL, MA, NY, OH, PA, SC, RI.*
summarized in Table 3. Approximately 54% (41%–73%) of HIV-positive patients were receiving ART before incarceration. On average, 65% (9%–91%) received ART during incarceration and 37% (27%–63%) received ART after release. Rates of virological suppression varied at entry to a correctional facility, 27% (1%–35%), then on average up to 51% (25%–80%) during incarceration, and 26% at 6 months postrelease (based on a multicenter demonstration project). Several studies assessed adherence to ART, defined as missing no more than 1 dose per week or taking at least 80% of prescribed medications. We assessed adherence only in those prescribed ART and it was measured by directly observed therapy, through electronic monitoring caps, by pill counts, or by self-reported adherence questionnaire. Before incarceration, adherence was estimated at 34% (33%–48%); during incarceration, adherence was 58% (30%–94%); and after release, adherence was 40% (39%–49%).

**Cascade**

Figure 2 depicts the HIV care cascade before, during, and after release from jail or prison, to levels that were equal to or lower than before incarceration. The largest declines were in postincarceration engagement in care, with a drop from 76% to 36% for linkage to care and from 76% to 30% for retention in care. Receipt of ART dropped from 51% to 29% after release, and virological suppression dropped from 40% to 21% after release.

Specific gaps identified in the literature, where only limited or no data were available, include testing after release from corrections (and the potential for

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**FIGURE 1—Flow diagram of study selection in a systematic review and data synthesis indexed up to January 13, 2015, of the HIV care cascade before, during, and after incarceration: United States and Canada.**
Upon entry to jail/prison
After release
During incarceration
leased individuals re
in incarcerated and recently re-
strated that the HIV care cascade
the literature, we have demon-
rates the importance of of-
are not aware of their diagnosis,
try to jail and prison, many in-
population. Speci-
virological suppression in this

during incarceration, and vi-
rates of linkage to and retention in
recently released population),
for stronger re-entry and linkage-
highlighting the important public
considerably during incarceration,
these steps in the cascade increase
leading to high mortality early in the
though they were much reduced
over previous, which may be re-
related to high mortality early in the
epidemiology of injection drug
use, prevention efforts, and the
introduction of ART. The blinded
results provide the best estimate of
HIV prevalence in these set-
tings, though this is not a practical
approach to offering HIV testing. Eight of the published voluntary
testing studies also found high
positivity rates greater than 3%46,48,54,60,62-64,76; however, it
is unknown how many infections
were missed among those who did
not volunteer for testing. In gen-
eral, the results among voluntary
tests vary widely in part because
of variability in how this testing is
offered and accepted across sites.
Opt-out testing found comparatively
lower rates of positive re-
results, though results were re-
high-prevalence areas such as
Wisconsin or Washington state,18,36
had low rates of newly diagnosed
individuals, whereas in other set-
many more previously undiagnosed
individuals were identified. This may
reflect the previous success of
longstanding testing efforts in
correctional systems, which have
already identified a large propor-
tion of HIV in those involved in
the criminal justice system com-
pared with new testing efforts in
places, such as jails and high-
prevalence areas in the southern
United States, where there has
historically been less HIV test-
approaches to offering HIV testing.

Note. ART = antiretroviral therapy; VL = viral load.
References 4, 14, 69-71, and 76.
References 4, 67, 75, 77-79, 82, 83, 86, 89, and 90.
References 4 and 77.
References 4, 17, 28-30, 38, 40, 67, 72, 75, 77, 80, 83, 87, 90, 99, and 100.

FIGURE 2—HIV care cascade—before, during, and after release from incarceration: systematic review and
data synthesis indexed up to January 13, 2015, United States and Canada.
systems and 35% of jails provide opt-out HIV testing. Although routine HIV testing in the correctional setting may be cost-effective from a societal perspective, the cost of treatment of HIV-positive inmates is expensive, and could deter correctional facilities from providing testing. Future partnerships between state departments of corrections and departments of health are needed to expand testing in jails and prisons to reduce the estimated 22% of HIV-infected individuals entering corrections who are unaware of their HIV infection (Figure 2).

For incoming inmates, overall rates of linkage to care were 6 percentage points lower than the general population, (Figure 2; 56% vs 62%). This underscores the role of institutional factors in improving rates of engagement (and re-engagement) in care for this population. During incarceration, the majority of HIV-infected inmates has access to HIV care and ART and surpasses the general population in this step of the cascade. However, after release from incarceration, rates of linkage to care and retention in care drop dramatically resulting in a decline in treatment and virological suppression rates. Multiple factors have been identified that contribute to linkage to HIV care after release from jail or prison. Facilitators of linkage include HIV education during incarceration, discharge planning, transportation, and stable housing and barriers include drug use, mental illness, stigma, lack of social support, and unemployment. Accordingly, successful interventions have addressed many of these issues, including opiate replacement therapy, enhanced case management, patient navigation, or combinations thereof. However, results of some interventions have been mixed and a randomized controlled trial of intensive case management versus standard care did not show a significant difference in rates of linkage to care, though overall rates of linkage to HIV care in this study were quite high.

Nonetheless, nationwide, there is room for improvement in linkage to HIV care after release from incarceration. Fewer than 20% of prisons and jails provide discharge planning services for inmates transitioning to the community, with making an appointment with a community health care provider, assisting with enrollment in an entitlement program, and providing a copy of the medical record and a supply of HIV medication. Under the Affordable Care Act, states that are expanding Medicaid will have new opportunities to link individuals to community health care after release from jail.

With regard to virological suppression, among individuals known to be HIV-infected, nearly 50% had received treatment before incarceration, though only 27% of them had an undetectable viral load upon entry to jail or prison. However, the majority of inmates do achieve virological suppression during incarceration (52% of total, 65% of those on ART), and suppression rates are higher with longer duration of incarceration. Compared with the general population, and with the proportion of those on therapy with undetectable viral load as a proxy for adherence, inmates’ average adherence during incarceration, 58% (30%–94%), is not as high as adherence among the general population (78%–87%), suggesting a need for education and adherence counseling. This may be especially true in the reincarcerated population, who have lower rates of virological suppression overall consistent with a dose–response effect of incarceration on nonadherence. Lastly, we found that the largest gap in the literature on HIV in the criminal justice system is clinical outcomes among released inmates, with only 2 published studies reporting HIV viral loads after release. Of these, the EnhanceLink study, a multicenter demonstration project, found that 26% had an undetectable viral load 6 months after release by using a missing equals failure analysis. Further study is needed in this area, and a series of ongoing projects on “seek, test, treat, and retain” may provide additional data and insight to this outcome. With the increase in sexual and drug use risk behavior after release from incarceration, increasing virological suppression in these individuals has direct implications for secondary HIV prevention.

Along the continuum in the incarcerated and recently released, racial disparities persist. For example, Blacks were less likely to have an HIV provider 30 days before jail entry and more likely to have advanced HIV disease. In addition, Hispanics and Blacks were less likely to fill an initial prescription for ART within 10 and 30 days after release, compared with non-Hispanic Whites. To reduce such health disparities, additional efforts need to be directed at incarcerated individuals and those returning to the community, including specific interventions tailored to minority patients.

**Limitations**

There are several limitations inherent to our systematic review. Using what is available in the published literature likely biases toward jails and prisons that have extra efforts aimed at identifying HIV, engaging HIV patients in care, and providing treatment. In addition, our systematic review is limited by varied definitions of each care cascade step by different studies. We included observational studies as well as those that implemented interventions to present all of the available published data. Therefore, our cascade may overestimate some of these outcomes because of publication bias, indicating that the disparities in outcomes between this population and the general HIV-infected population may be even greater than our estimates.

The heterogeneity of studies made it challenging to summarize some of the outcomes; however, this was accounted for whenever possible. For example, for testing studies that excluded known HIV-infected individuals, we reported these as new infections only. For engagement in care studies in which missing data (e.g., individuals who do not follow-up after release) was not considered failure, we used the original study definitions of failure. This system-
Division of Infectious Diseases, University of Texas Southwestern Medical Center, Dallas. Helen Mayo is with Health Sciences Digital Library and Learning Center, University of Texas Southwestern Medical Center.

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This article was accepted February 12, 2015.

Contributors
A. E. Nijhawan and P. A. Iroh originated the idea for the article, reviewed all titles and selected articles for inclusion, completed data extraction, and compiled the data. H. Mayo assisted in executing the search for articles. All authors contributed to the article.

Acknowledgments
Research reported in this publication was supported by the National Center for Advancing Translational Sciences of the National Institutes of Health under award K23TR001103 (A. N.) and by 5R01DA030778 (principal investigator, A. N.).

Note. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Human Participant Protection
Institutional review board approval was not needed, as our research did not involve human participant interactions or identifiable private information.

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82. Arriola KR, Braithwaite RL, Health e16 | Systematic Review | Peer Reviewed |


Innovative Assessment of Childhood Trauma and Its Link to HIV and Substance Abuse in Post-Incarcerated Women

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Women who are incarcerated often report unresolved early life traumas, which research has linked to subsequent HIV and substance abuse risks. This article presents an arts-based counseling technique used with women re-entering society after incarceration. Women were assessed for childhood trauma (i.e. sexual, emotional, and/or physical abuse) in relation to age of onset and frequency of events using an interactive pictorial assessment technique, Healing Me Timeline activity. The technique allowed women to use color-coded graphs in identifying points along a timeline during which traumatic events occurred and to process insights to foster healthy coping strategies. The timeline activity was an innovative and gender-appropriate method for uncovering the nature and extent of women’s trauma and counseling needs. Facilitators used the counseling tool to assist women in processing personal insights and to make referrals to mental health counseling, medical services, and substance use programs.

KEYWORDS assessment, childhood abuse, creativity in counseling, HIV, incarceration, substance abuse, women
The rate of women entering prison has steadily increased in recent years. It is estimated that in 2012, of the 1.57 million people incarcerated in the United States, 108,866 were women (Carson & Golinelli, 2013), and the current rate of increase in women inmates outpaces that of their male counterparts. The number of women sentenced to state and federal prison increased 4% from 2001 to 2008 compared to a 2% increase in male inmates (Sabol, West, & Cooper, 2009). This rapid increase highlights the need for resources and interventions, particularly Human Immunodeficiency Virus (HIV) prevention, targeting this female population.

Women who are incarcerated often report life experiences that place them at risk of contracting HIV (Farel et al., 2013). This population is more likely to have experienced childhood trauma, particularly sexual abuse (Christopher, Lutz-Zois, & Reinhardt, 2007; Peltan & Cellucci, 2011; Swogger, Conner, Walsh, & Maisto, 2011) and physical abuse (Moloney & Moller, 2009; Plotzker, Metzger, & Holmes, 2007). Those traumatic experiences can ultimately lead, in some cases, to post-traumatic stress disorder (PTSD; Lewis, 2005). Studies document that women who experience childhood sexual abuse (CSA) are likely to display symptoms of PTSD, depression, substance abuse, or substance dependency disorders (Gibb, Chelminsk, & Zimmerman, 2007; Harner & Riley, 2013; Sikkema et al., 2007; Women’s Prison Association, 2009) and low levels of self-esteem (Klein, Elifson, & Sterk, 2007; Leonard, Iverson, & Follette, 2008).

Researchers who identified a link between CSA and adult risk for sexually transmitted infections have suggested that women re-entering communities after release from prison are particularly vulnerable and may be at especially high risk for HIV if they have a history of CSA or other forms of abuse (Klein et al., 2007; Plotzker et al., 2007; Sikkema, Hansen, Meade, Kochman, & Fox, 2009). Wyatt et al. (2004) found that women who have a history of CSA have a sevenfold increase in high-risk sexual and reproductive behavior related to HIV. These risky behaviors include the following: early onset of sexual activity (Wyatt, Carmona, Loeb, & Williams, 2005), inconsistent condom use (Farel et al., 2013), and multiple partners (Mosack et al., 2010). A history of violence also makes women considerably vulnerable to unprotected sex (Klein et al., 2007; Masters et al., 2014; Mosack et al., 2010). Additionally, in HIV-negative incarcerated women, a past history of physical violence has been associated with HIV-related sexual risk (Ravi, Blankenship, & Altice, 2007).

Substance use often serves as a coping mechanism for women who have experienced CSA (Asberg & Renk, 2012; Masters et al., 2014; Salter & Brechenridge, 2014). Not surprisingly, studies show that women in substance use programs tend to have histories of CSA (Salter & Brechenridge, 2014). Substance use impairs judgment and negotiation skills, increases the likelihood of trading sex for money or having multiple partners, and decreases the chance of using condoms (El-Bassel, Gilbert, Rajah, Foleno, & Frye, 2000).
Thus, in order to reduce HIV risk among women, counseling and intervention programs must assess women for both CSA and substance abuse (El-Bassel, Caldeira, Ruglass, & Gilbert, 2009; Sikkema et al., 2007; Wyatt et al., 2004).

This consideration is especially relevant to recently released female inmates, many of whom have not had opportunities to receive mental health counseling for childhood abuse, whether physical, emotional, or sexual (Segrave & Carlton, 2010). Due to the relation between incarceration, childhood abuse, and sexual risk-taking, practitioners are in an ideal situation to discover the extent and nature of childhood traumas for reentry women and, when possible, to address trauma when women enroll in intervention programs. The assessment of childhood abuse and women’s level of healing from the abuse is needed to reduce trauma-related symptoms and foster healthy coping strategies.

**RATIONALE**

Uncovering and addressing the childhood traumatic abuse experiences of women recently released from prison opens an avenue for meeting the unique needs of this population. However, providing counseling for this population has its challenges, as many survivors of CSA have never expressed their authentic voice surrounding this stigmatized topic. Many survivors of CSA reframe from reporting the abuse at the time of the occurrence, and continue their silence later in life (Herskowitz, Horowitz, & Lamb, 2005). Given the prevalence of CSA among incarcerated women (Lalor & McElvaney, 2010; Pereda, Guilera, Forns, & Gómez-Benito, 2009) and under-reporting of CSA (Finkelhor, 2009), creative strategies are needed to assess CSA when working with this population.

Incorporation of childhood abuse assessment has been strongly endorsed as a strategy to increase the long-term effectiveness of intervention programs which aim to yield long-term risk reduction behavior (El-Bassel et al., 2009; Sikkema et al., 2007; Wyatt et al., 2004), especially among African American and Latina women who are overrepresented among female inmates (Sabol et al., 2009) and women living with HIV (Center for Disease Control and Prevention [CDC], 2013). An intervention designed by Wyatt et al. (2004) was one of the first HIV prevention programs to address the effects of CSA on African American and Latina women. Their findings suggest that an interpersonal communication skills-building intervention produced significant changes in reducing self-reported HIV risk behaviors among African American and Latina women who were HIV-positive and had a history of childhood sexual abuse. Similarly, Sikkema et al. (2007) found that a trauma-based intervention delivered in a group setting that addressed CSA and HIV-related risk was efficacious in reducing trauma related symptoms.
and produced healthy coping strategies associated with CSA. These findings point to the need to adjust interventions and counseling settings to address women’s needs for authentic communication about past trauma and the need for healing as necessary components to healthy coping for this especially vulnerable population.

Creative arts can serve as a counseling technique to help clients heal from the abuse and provide a safe-haven for creative expression and reflection (Amir & Lev-Wiesel, 2007). Victims of CSA often have never processed the abuse in a safe setting with the goal of gaining insight into the trauma’s effects on their past and current behaviors (Sigurdardottir, Halldorsdottir, & Bender, 2014). Therefore, the use of creative strategies can stimulate the start of healing and help clients move from contemplation to preparation for action of change (Matto, Corcoran, & Fassler, 2003). This article reports on the Healing Me Timeline activity, a counseling tool to assess childhood trauma, and create an atmosphere of interpersonal communications for women recently released from prison.

ASSUMPTIONS

The following assumptions provide the foundation for the strategy proposed in this article:

1. Victims of CSA often need support in expressing and processing childhood traumas due to silencing and feelings of victimization (Sigurdardottir et al., 2014).
2. Victims of CSA have likely never linked their CSA to subsequent traumatic events later in life (i.e. sexual assault, risk-taking, or delinquency; Kim, Tajima, Herrenkohl, Huang, & Herrenkohl, 2009).
3. Treatment providers should employ creative assessment strategies when treating victims with histories of CSA (Eaton, Doherty, & Widrick, 2007).

OBJECTIVES

Creative counseling tools in interventions or counseling sessions help women with histories of CSA understand their past and current behaviors in relation to their childhood abuse and also recognize the influence of abuse on their incarceration. Objectives of strategies discussed here include the following:

- Uncovering and addressing incarcerated women’s childhood abuse (emotional, physical and/or sexual);
• Facilitating self-recognition of the association between childhood abuse and subsequent risk-taking associated with HIV exposure, substance abuse, and/or incarceration;
• Providing group support for incarcerated women with histories of CSA;
• Encouraging healing by providing a safe space for honest expression of thoughts and emotions; and
• Promoting women’s self-determination to help accomplish a transition from victim to survivor status.

PROCESS

Women who were recently released from prison attended a six-week HIV prevention program within the first six months following release from prison or jail. The gender-responsive prevention education and risk reduction program employs a psycho-educational group intervention format tailored specifically for this population. The intervention is designed to develop self-worth, sense of control, life management skills, motivation, coping mechanism, and general health promotion behavior, including HIV and sexually transmitted infection (STI) risk-reduction practices. Using a color-coded Healing Me Timeline activity to gauge age of onset and frequency of victimization, the program facilitators were able to assess the women for childhood abuse, including CSA and physical, emotional, and verbal abuse. In the middle of the program trajectory, after establishing sufficient trust and cohesion among group members, each woman was given a blank sheet of colored paper and colored pencils and asked to identify events along a timeline. To introduce the activity, the group facilitator prepared the participants for the sensitive nature of the topic, the importance of the exercise, and the option to pass or not share with the group as the activity progressed.

The facilitator guided participants through each step of the activity with specific instructions on the development of the color-coded timeline. Women were asked to take out their colored piece of paper and their box of writing tools. First, women were instructed to use a black marker to draw a line across the middle of the page, signifying age one on the far left hand side to current age on the right. Facilitators modeled the timeline on a blackboard visible to all participants. Participants continued the exercise by answering the first question, “How old were you when you first knew you had a vagina?” Participants were instructed to use one color pencil to make a dot on the line, starting from the left, marking their age. They then drew an inch-long line above the dot and wrote the word, “vagina,” or whatever word each participant used to refer to her vagina at that age. Using the same color pencil, they were subsequently asked to indicate whether the term used to refer to their vagina that was used by themselves or others. Women were given ample time to remember terms and users. They were also encouraged
to consider the influence of those terms on their knowledge and understanding of gender, puberty, and sexuality. Next, the women were asked to take out a different color pencil and answer, “How old were you when you began your period?” and “What feelings came up for you?” The same instructions continued throughout the exercise in regards to the following questions:

- What age were you when you encountered any form of abuse (verbal, physical, emotional, sexual)?
- How old were you when you experienced your first sexual encounter? Was this experience with your consent or a violation?
- How old were you when you first had an alcoholic drink or used drugs? What was the outcome?
- How old were you when you first went to jail/prison or had an experience with the law? What was the outcome?
- If you have been diagnosed with an STD, how old were you when you were first told that you had an STD? How did you feel when you found out?
- If you are HIV positive, how old were you when you were first diagnosed with HIV?

Throughout the process, sufficient time was allowed for women to experience and express realizations of causality between early life trauma and subsequent thoughts or behaviors.

On completion of the timelines, the facilitator asked for volunteers to share in greater detail some of their experiences, insights, and hopes for the future. For some women, the *Healing Me Timeline* activity functioned as their first opportunity to investigate and understand the implications of their past traumas. Figure 1 shows one recently incarcerated woman’s early life experience of multiple traumas and subsequent substance abuse and HIV exposure.

In this case, Mary (pseudonym), a 38-year old participant, experienced early childhood trauma in multiple domains—physical (being beaten) and verbal (being told she was ugly and stupid) when she was 7 and 8 years old. A year later, Mary was sexually abused by her uncle, and although she initially indicated the sexual encounter at 13 was consensual, she stated there were “blurred lines” because that sexual encounter was with an extended family member. In completing the timeline activity, Mary was able to express how she felt as a young girl and how those feelings led to her coping through alcohol and marijuana use by age 14, which were gateway drugs to subsequent crack use. At age 19, Mary learned of her HIV-seropositive status, which led to increased drug use and victimization by men within the drug scene, including being forced to commit burglaries, and eventually was arrested that same year for assault and robbery. In processing the accounts,
Mary expressed, “I didn’t know, I just thought I was just born to be used.” Now, recently released from prison at 38, Mary’s exposure to the timeline activity provided her an opportunity to process the past and move forward with increased clarity.

Following the counseling process, facilitators gave each participant individual attention concerning her emotional stability (the extent to which she felt stable and supported) and her need or desire to be referred to mental health, substance abuse, or domestic violence services. Strategically placed in the middle of the six-week program, the timeline activity informed latter sessions focused on self-empowerment as women transitioned into communities.

ADAPTATION OF THE PROCESS

The Healing Me Timeline activity can be used in individual counseling or group settings with women who have not experienced incarceration but who lack similar strategies for understanding associations between childhood trauma and high-risk behaviors like substance abuse or HIV exposure. In general, participants who have experienced trauma can be guided in using this counseling tool to help them make connections between past trauma and current behavior. Most importantly, this activity helps participants develop emotional self-awareness, a skill often unavailable to individuals living with
unresolved childhood trauma. Additionally, the mingling of visual compo-
nents and verbal expression make this tool useful in adolescent populations. 
Since the tool can include colorful images instead of words, authors also 
recommend it for participants with limited literacy.

**REQUIREMENTS AND LIMITATION**

The *Healing Me Timeline* activity requires a facilitator or counselor with 
experience in group therapy and with expertise in fostering a sense of 
group trust and cohesion, which help the group reach its goals of healing 
and transformation. However, given the sensitivity regarding topics dis-
gressed, participants should be encouraged to share their experiences with 
the understanding that participation is optional. Because sufficient time must 
be allowed for reflection and response, activity pacing is extremely impor-
tant. Repetition of words used during the session is also significant so that 
participants can consider the contextual and personal significance of indi-
vidual terms and make connections among life events with which certain 
words are associated. Since participants will employ different vocabularies, 
providing a list of alternative and related terms is necessary.

This activity cultivates a secure environment for reflection on past 
trauma and interaction with others who have similar experiences. For both 
group and individual settings, creative arts can help participants explore 
trauma and overcome difficulty expressing feelings and emotions. In prepa-
rion for the activity, resources should always be available for participants 
with substance abuse problems or with needs for mental health referrals. 
Little additional preparation is necessary outside of colored paper, colored 
writing utensils (crayons, markers, or pencils), and a large room so that par-
ticipants can spread out and have access to privacy, as needed, to complete 
the timeline.

**CONCLUSION**

The literature has documented that available reentry programs across the 
country fail to meet the needs of post-incarceration women, lack integrated 
services, and fall short of meeting the needs stemming from women’s com-
plex histories (Scroggins & Malley, 2010). In individual or group counseling, 
innovative assessment tools improve therapy for women with past trauma. 
Creative expression provides women with safe outlets for self-reflection and 
the articulation of thoughts and emotions silenced by a traumatic past (Amir 
& Lev-Wiesel, 2007). The *Healing Me Timeline* enables self-expression free of 
the social stigma attached to childhood abuse. In addition, the timeline activ-
ity establishes productive relationships between participant and counselor or
among group members and facilitators. Most importantly, it facilitates recovery from the psychosocial consequences of childhood abuse. This assessment tool holds promise in addressing CSA and can be utilized by multiple disciplines working with marginalized groups, and those who are reluctant to articulate their experiences using more traditional methods.

**ACKNOWLEDGEMENT**

The authors would like to thank participants of Get Started Girl, an HIV and substance abuse intervention for post-incarcerated women, and funding by the Office of Women's Health, U.S. Department of Health and Human Services.

**REFERENCES**


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A report by the National Minority AIDS Council and Housing Works, with support from the Ford Foundation.

February 2013
Prepared by Ginny Shubert for the National Minority AIDS Council and Housing Works.
OVERVIEW

Over the past three decades in the United States, overlapping epidemics of mass incarceration and HIV/AIDS have become disproportionately concentrated among economically disadvantaged persons of color. As a result, a substantial proportion of people living with HIV in the U.S. have spent time in prison or jail, including many with co-occurring substance use and mental health disorders that complicate care and contribute to social marginalization. Each year, some 150,000 Americans living with HIV/AIDS are released from a correctional facility. Some are able to return to live with family – but studies show that as many as half of HIV-positive inmates leave prison or jail with no place to call home and no income to meet basic subsistence needs.

Formerly incarcerated persons with HIV/AIDS face unique barriers to housing that contribute to social instability long after return to the community. The resources currently available to support housing stability fall short of real need for all low-income American households living with HIV. The added stigma of criminal justice involvement further blocks access to work and to the private housing market, and punitive public policies restrict the eligibility of formerly incarcerated persons for public housing, income supports and other safety net programs. Stable, appropriate housing is consistently found to be the greatest unmet need of persons with HIV/AIDS reentering the community from prison and jail, and a history of incarceration has been found to double the risk of subsequent homelessness among low-income persons living with HIV/AIDS.

Recent incarceration and a lack of stable housing are both identified regularly in the research literature as potent risk factors for poor HIV health outcomes and ongoing HIV transmission. Homelessness and housing instability are consistently linked to greater HIV vulnerability, inadequate health care, poor HIV health status and early death. For persons with HIV leaving prison and jail, the period following release is often characterized by limited access to medical care, interruption of antiretroviral therapy, poor virological and immunological outcomes, and behaviors that can transmit HIV infection. These poor individual HIV health outcomes contribute to high community viral load that perpetuates ongoing HIV transmission.

While experts agree that housing instability is a major challenge to successful management of HIV among persons involved with the criminal justice system, increasing evidence points to housing status as an independent predictor of HIV treatment effectiveness and risk behaviors that can be addressed through cost-effective interventions.

Research findings show that housing assistance for homeless and unstably housed people with HIV improves physical and mental health, reduces HIV transmission, and sharply cuts the use of avoidable emergency and inpatient health care – generating savings in averted health care spending that offset the cost of the housing services. These findings suggest that targeted housing supports have the potential to significantly improve HIV health and criminal justice outcomes among formerly incarcerated persons living with HIV/AIDS, particularly during the vulnerable period immediately following release from prison and jail, but also long-term.

The evidence indicates that action to remove post-incarceration barriers to housing and to increase the availability of housing assistance for low-income persons with HIV/AIDS would improve outcomes for individuals involved with the correctional system, lower community viral load, and reduce
the burden of illness in disparately impacted communities of color.

This issue brief synthesizes existing research findings on housing status, incarceration and HIV health; examines the available evidence from housing-based HIV interventions; and offers evidence-based recommendations for action to increase housing stability and improve post-release outcomes for persons living with HIV/AIDS in the U.S. and for their communities.

OVERLAPPING RISKS: INCARCERATION, HIV/AIDS AND HOUSING INSTABILITY

Criminal justice involvement, HIV infection and housing instability are strongly linked risk factors that disproportionally impact minority and low-income Americans and have a cumulative and compounding effect on HIV vulnerability and health outcomes for affected individuals, their families and their communities.

**Mass incarceration in the U.S. disproportionately involves people of color**

The United States has experienced unprecedented growth in incarceration over the past three decades – an increase attributed primarily to greater reliance on the criminal justice system to deal with a range of social issues including drug use and mental illness. (HRW, 2003). The number of adults under the supervision of Federal, state and local correctional authorities rose from 1.8 million in 1980 to 7.1 million at the end of 2010 (1 out of every 33 U.S. adults) – including 1.5 million persons in prison, 4.9 million on probation or parole, and 749,000 in local jails. (Glaze, 2011). With the largest prison and jail population of any country in the world, the U.S. now accounts for just 5% of the world’s population but 25% of all incarcerated persons. (Pew, 2011).

Since almost all incarcerated persons return to the community, the number of persons discharged each year from prison and jail has also increased dramatically. In 2010, over 708,000 persons were released from federal and state prisons (Glaze, 2011) and 11.8 million persons cycled through local jails. (Minton, 2012).

The burden of this mass incarceration falls disproportionately on male members of racial and ethnic minorities. Black non-Hispanic males are incarcerated at a rate more than six times that of White males and 2.6 times that of Hispanic males. (Glaze, 2011; Hartney & Vuong, 2009). This disparity cannot be accounted for solely by differences in criminal conduct, but rather reflects disproportionate law enforcement and sentencing practices that adversely affect Black Americans. For example, while Blacks constitute only 13% of the U.S. population and Blacks and Whites engage in drug offenses at the same rates, Blacks constitute 33.6% of drug arrests, 44% of persons convicted of drug felonies in state court, and 37% of people sent to state prison on drug charges. (HRW, 2012). At the same time, while 93% of state and federal prison inmates are male, incarceration is growing at a faster pace among women. (Pew, 2011). Between 1995 and 2007, there was a 68% increase in the number of female incarcerations, compared to a 43% increase in male incarcerations. (West & Sabol, 2009).

**The ongoing U.S. HIV epidemic is also concentrated among members of minorities**

More than 30 years into the AIDS epidemic, HIV prevention and treatment efforts in the U.S. are stalled, with no decline in new infections in recent years. Nearly half of all HIV-positive persons are outside of regular care, and only an estimated 28% of all HIV-positive persons are receiving antiretroviral therapy that results in viral suppression. (Cohen, et al., 2011; see also
Gardner, et al. 2011). One factor contributing to poor HIV health outcomes is continued HIV stigma and discrimination, including laws that criminalize behaviors by people living with HIV (such as spitting, biting and consensual sex) based on HIV status. Such laws are unsupported by the current scientific understanding of HIV transmission routes, expose HIV-positive persons to criminal justice involvement, and undermine public health efforts to promote HIV screening and treatment. (ONAP, 2010).

The ongoing U.S. HIV epidemic is also increasingly concentrated among marginalized and underserved people of color, especially Black Americans. Racial, ethnic and sexual minorities represent the majority of new AIDS diagnoses, new HIV infections, people living with HIV/AIDS, and AIDS deaths. (Prejean, et al. 2011). Although Blacks represent only 13% of the U.S. population, in 2010 Blacks accounted for 46% of new HIV infections, 44% of people living with HIV disease, and almost half of new AIDS diagnoses. (CDC, 2012; Prejean, et al., 2011). The HIV infection rate among Black women is 15 times the rate of infection among White women, and between 2006 and 2009, young Black men who have sex with men (MSM) experienced by far the greatest increase (48%) in the incidence of new HIV infections. (Prejean, et al., 2011). Latinos likewise bear a heavy burden of the epidemic. Despite making up only 16% of the U.S. population, Latinos accounted for approximately 20% of new HIV infections in 2010. (CDC, 2012).

Disparities in HIV and incarceration overlap for individuals and communities of color

As a result of the intersection of HIV and mass incarceration among marginalized populations, a significant proportion of all people living with HIV infection in the U.S. have become incarcerated. Each year some 155,000 HIV-positive persons – 14% (1 in 7) of all people living with HIV in the U.S. – are released from U.S. prisons and jails. Among HIV-infected Black men, an estimated 22% - 28% pass through a correctional facility each year. (Spaulding, et al., 2009).

Correctional populations in the U.S. have disproportionately high rates of HIV/AIDS and other infectious disease, including viral hepatitis and tuberculosis. (Hammett, 2006). At the end of 2010, state and federal prison authorities reported that 1.4% of male inmates and 1.9% of female inmates were known to have been diagnosed with HIV/AIDS – rates that are 3 to 5 times higher than in the general U.S. population. HIV prevalence in state prisons varies significantly by region, with Florida, Louisiana, Maryland and New York reporting the highest rates of HIV among state inmates. In New York State, 5.2% of male prison inmates and 11.7% of female inmates had an HIV diagnosis at the end of 2010. (Maruschak, 2012).

Persons detained in local jails bear a similar burden of HIV disease as prison inmates, although studies show that a significant percentage of HIV-positive persons who pass through jails remain undiagnosed. (de Vou, et al., 2012; Spaulding, et al., 2009). A 2006 blinded serosurvey of persons entering New York City jails revealed an overall HIV prevalence of 8.7% (6.5% of males and 14% of females). Over a quarter (28%) of HIV infections identified through the serosurvey were undiagnosed at jail entry, and only a small percentage (11.5%) of these persons with previously undiagnosed HIV infection were newly diagnosed through routine jail testing during the survey period. (Begier, et al., 2010).

The higher HIV prevalence among women in correctional settings is attributed to the fact that many women are incarcerated for drug-related and sex work crimes – including sex exchange to meet housing and other survival needs – that put them at risk for acquiring HIV and other sexually transmitted diseases. Indeed, incarcerated women...
experience worse overall health outcomes than male prisoners, including disproportionately high rates of hepatitis C (HCV) infection, gonorrhea, syphilis, Chlamydia infection and cervical cancer. (See, e.g.: Kim, et al., 2011; Springer, et al., 2010).

Many persons with HIV/AIDS involved with the correctional system have co-occurring mental health and alcohol/drug dependence issues that complicate HIV care and contribute to social marginalization. (See Scheyett, et al., 2010). Rates of behavioral health problems are extremely high among incarcerated persons – a result of U.S. dependence upon corrections as a response to mental illness and drug use. Yet relatively few inmates receive behavioral health care while incarcerated. At midyear 2005, more than half of all prison and jail inmates in the U.S. had a mental health problem, yet only about one in three state prisoners with mental health problems, one in four federal prisoners and one in six jail inmates had received mental health treatment since admission. (James & Glaze, 2006). One-half to two-thirds of all inmates in jails and prisons meet standard diagnostic criteria for alcohol/drug dependence or abuse, yet only 7% to 17% of these persons receive substance use treatment while incarcerated, so that most who are released back into the community have not received needed services. (NIDA, 2009).

Incarceration is linked to lack of stable housing among people living with HIV/AIDS

Record levels of poverty and homelessness in the U.S. also disparately impact people of color. Blacks and Hispanics have poverty rates that greatly exceed the average – 27.4% of Blacks and 26.6% of Hispanics were living in poverty in 2010, compared to 9.9% of non-Hispanic Whites. (DeNavas-Walt, 2011). Homelessness is at historic highs, due primarily to a shortage of affordable housing. Nationwide, for every 100 extremely low-income households there are only 32 units of existing affordable housing. (HUD, 2011b). Approximately 1.2 million people across the nation spent at least one night in an emergency shelter or homeless housing facility during 2010. Black Americans, single men between the ages of 31 and 50, and people with disabilities were all at disproportionate risk of homelessness, compared to their representation in either the U.S. or the poverty population. This is likely a result of poor employment prospects and insufficient income supports to afford housing. (HUD, 2011a).

Access to safe, affordable housing has been one of the chief concerns of Americans living with HIV/AIDS since the beginning of the epidemic. Loss of income, poor health, interruption of intimate relationships, and pre-existing social disadvantage combine to make it difficult or impossible for many persons living with HIV to secure or maintain housing. (Aidala & Sumartojo, 2007). The U.S. Department of Housing and Urban Development (HUD) Office of HIV/AIDS Housing recently reported that 145,366 U.S. households living with HIV (over 12% of all persons living with HIV in the U.S.) have a current unmet housing need. (OHAH, 2012a). Among persons triply diagnosed with HIV, substance use, and mental health issues, a large multistate study found that 43% currently lack stable housing. (Conover, et al. 2009).

A history of incarceration and lack of stable housing are overlapping vulnerabilities for people living with HIV/AIDS. A 2010 Alabama survey of consumers of HIV services found that 47% were unstably housed (including 27% who were homeless), and 50% had a history of incarceration. (Alabama Department of Public Health, 2012). Findings from two representative samples of New Yorkers living with HIV/AIDS likewise revealed high rates of lifetime incarceration (43% to 48%), homelessness or housing instability (54% to 70%) and felony convictions (over 30%), as well as recent incarceration experience (12% to 13%). (Aidala, et al., 2007; Shubert, et al., 2004). A history of incarceration, mental health hospitalization, and substance use issues each, independently, almost doubled the risk of homelessness among a large group of people with HIV. (Shubert, et al., 2004).
Rates of homelessness are high both before and after incarceration

Housing instability has been described as both a cause and an effect of incarceration. Homelessness is thought to increase the risk for imprisonment through shared risk factors such as untreated mental illness and through increased likelihood of arrest. (Metraux, et al., 2008). Studies show that 10% to 20% of all prison and jail inmates are homeless in the period immediately before incarceration. (Greenberg & Rosenheck, 2008; Metraux & Culhane, 2004). Imprisonment can also precipitate homelessness by disrupting family and community contacts and by decreasing income and housing prospects. (Kushel, et al., 2005). Homeless and marginally housed Americans have lifetime incarceration rates as high as 50%. (U.S. Reentry Council, 2011).

For persons with HIV who become incarcerated, studies show that rates of homelessness are extremely high in the time periods both immediately before and after incarceration. A recent multisite study of HIV-positive men entering jail found that 43% of those newly-diagnosed with HIV infection and 44% of those previously diagnosed were homeless at the time that they entered jail. (de Voux, et al., 2012). A study of people with HIV/AIDS being discharged from prison to Connecticut communities found that 25.9% were homeless and an additional 54.4% were “near homeless” upon release. (Saber-Tehrani, 2012).

Housing instability also increases the risk of return to prison

The evidence also shows that persons who become homeless following release from prison are substantially more likely than those with stable housing to be incarcerated again. (Metraux, et al., 2008). Over 11% of all persons who left New York State prisons to return to New York City entered a homeless shelter within two years of release, and a third of the released prisoners who ended up in shelters had returned to prison by the end of the two-year study period. (Metraux & Culhane, 2004). Self-sufficiency after release is key to reentry success for all former prisoners, and those who secure their own housing and those employed for longer times after release are far less likely to return to prison. (Huebner & Berg, 2011; Yahner & Visher, 2008).

A primary measure used to gauge re-entry success is the “recidivism rate” – the proportion of persons returned to custody within a specific time period. The overall rate of recidivism to prison in the U.S. is extremely high, with a recent large-scale study documenting a 62% re-incarceration rate over an eight-year study period. (Huebner & Berg, 2011). Existing studies indicate a lower than average rate of recidivism to prison among persons who have an HIV/AIDS diagnosis upon release – 20% to 27% over three years – however former prisoners with HIV who are Black, who have a major psychiatric disorder and who are released on parole are at significantly increased risk of re-incarceration. (Baillargeon, et al., 2010-b; Springer, et al., 2004).

Mass incarceration undermines the social stability and health of communities

The record movement of individuals in and out of the U.S. correctional system not only affects the lives of incarcerated individuals but also profoundly threatens their families and communities. Most released prisoners return to low-income communities of color in urban centers, and many of these persons cycle back and forth between these communities and correctional settings. (Lynch & Sabol, 2001). Incarceration reduces lifetime employment earnings and long-term
economic mobility and these losses are collectively amplified for minority communities, often already at a disadvantage in terms of broader financial wellbeing. (Pew, 2010). At the end of 2010, one in 12 working-age Black men was in prison or jail, and one in every nine Black children (11.4%) had an incarcerated parent. (Pew, 2011). Incarceration rates are highest for young Black men who are poorly educated and living in poverty – a recent analysis showed that 7.3% of all Black males ages 20 to 34 were incarcerated with a sentence of more than one year, and that more young Black men without a high school diploma or GED were behind bars (37%) than employed (26%). (Pew, 2010).

High rates of incarceration and related economic and social marginalization fuel the increasing burden of HIV and other chronic diseases in these low-income communities of color. (See Adimora & Schoenbach, 2005). Recent research found that poverty – not race – is the most significant predictor of HIV infection among residents of the U.S. urban neighborhoods most heavily impacted by HIV/AIDS, and that homelessness, unemployment and other social determinants further increase HIV risk for community members. (Denning, et al., 2011). As described in the section below, the social instability experienced by many formerly incarcerated persons living with HIV/AIDS, including housing instability, results in disconnection from HIV care and high rates of behaviors that can transmit HIV. In neighborhoods where a significant number of persons living with HIV are involved with the correctional system, poor post-release HIV health outcomes contribute to high community viral load that perpetuates ongoing HIV transmission, further exacerbating HIV health inequities. (See: Blankenship & Smoyer, 2012; Freudenberg, 2011; Freudenberg, 2001).

HOUSING STATUS, INCARCERATION AND HIV HEALTH OUTCOMES

It has been observed that the “criminal justice setting provides vast opportunities for early diagnosis, prevention and treatment of HIV.” (Meyer, et al., 2011). Highly active antiretroviral therapy (HAART) has transformed HIV into a manageable chronic condition for many, and effective HAART decreases viral load to an undetectable level that significantly reduces transmission of the virus. (Cohen, et al., 2011). More than ever, prisons and jails can provide a critical “public health opportunity to test for HIV, viral hepatitis, and other sexually transmitted infections, provide treatment such as highly active antiretroviral therapy, and link infected persons to longitudinal comprehensive HIV care upon their release for such co-morbidities as addiction and mental illness.” (Beckwith, et al. 2010).

Indeed, because access to HIV care is legally protected in correctional settings but not in the community, prison and jails can be the most consistent sites of HIV care for marginalized populations. (Meyer, et al., 2011). Unfortunately, however, any HIV health gains achieved as a result of HIV treatment during incarceration are often lost upon return to the community because of social and economic determinants affecting adherence, including housing instability. For persons with HIV, release from incarceration is strongly associated with interruption of HIV health care, decreased access to antiretroviral therapy, poor virological and immunological outcomes, and high rates of engagement in behaviors that can transmit HIV infection. (Meyer, et al., 2011; Rich, et al., 2011; Beckwith, et al. 2010).

Housing instability and poor HIV health are common following release from prison

Although prison and jail inmates still face barriers to effective HIV treatment (see AMFAR, 2008), many prisoners infected with HIV are diagnosed, initiate HAART and adhere to treatment regimens while
incarcerated, and HIV treatment in prison settings, when offered, has been demonstrated to be highly successful. (Meyer, et al., 2011). After release from prison, however, many persons with HIV fall out of care. One study examined health care utilization by all inmates (2,115) who were receiving HIV antiretroviral treatment at the time of release from Texas prisons over a four-year period. Only 28% made an appointment with an HIV clinic in the 90 days following release, only 5% of those eligible for free medications through the Ryan-White funded AIDS Drug Assistance Program (ADAP) filled their prescriptions within the 10-day window to obtain a free supply, and only 30% had filled a prescription for antiretroviral medication 60 days after release. (Baillargeon, et al., 2010-a; Baillargeon, et al., 2009). Not surprisingly, the group of these persons who were re-incarcerated within three years (27%) showed a significant decrease in mean CD4 count and increase in viral load upon return to prison. (Baillargeon, et al., 2010-b).

The period immediately after release from prison is a highly vulnerable time for all persons, characterized by high rates of recidivism, homelessness, relapse to drug use, and premature death. (Lim, et al., 2012; Visher & Travis, 2011; Binswanger, et al., 2007). For persons with HIV, housing instability following release is a potent factor contributing to poor HIV health care access, utilization and outcomes. Compared to stably housed peers, persons living with HIV who lack stable housing are more likely to delay HIV care, have poorer access to regular care, are less likely to receive and adhere to optimal antiretroviral therapy, and have lower CD4 counts and higher viral loads. (Wolitski, et al., 2007; Aidala, et al., 2007; Kidder, et al., 2007b). Significantly, housing status has been found to be a more significant predictor of HIV health care utilization and outcomes than demographics, drug use, mental health or other individual characteristics more commonly associated with treatment effectiveness. (Kidder, et al., 2007b).

Non-adherence to HIV therapy, loss of viral suppression and declines in CD4 cell counts are commonplace following discharge from prison. (Stephenson, et al., 2005; Springer, et al., 2004). Among North Carolina men who successfully used HAART while in prison, those who were released and re-incarcerated during a two-year period had significantly worse HIV health status upon return to prison than a matched group who had remained continuously incarcerated. (Stephenson, et al., 2005). A large Connecticut study found that 59% of all prisoners who received HAART during incarceration had an undetectable viral load by discharge, but the rate of return to prison was high (27%) and was associated with poor HIV outcomes. (Springer, et al., 2004). Incarceration events have been found to have a “dose effect” upon HIV health outcomes following return to the community, with a strong relationship noted between the number of incarcerations and being unable to adhere to HIV treatment. (Milloy, et al. 2011).

**Jail stays are also linked to homelessness and inadequate HIV care**

While this paper is focused primarily on the challenges faced by men and women living with HIV who are re-entering the community from state and federal prisons, it is also important to mention the thousands of persons with HIV who pass through local jails each year. Many of the same issues and approaches are relevant, but there are differences in the jail setting and population that present unique barriers to stability and HIV treatment.

Each year in the U.S. there are an estimated 12 million admissions to local jails. (Minton, 2012). Many persons repeatedly cycle though jails, shelters
and other institutional settings as a result of lack of employment or income, housing instability, drug and alcohol dependence, mental illness and chronic health issues including HIV/AIDS. (Metraux & Culhane, 2010; Solomon, et al., 2008). The steep increase since the late 1980’s in the number of people incarcerated in jails, high rates of HIV infection, and the concentration of both HIV and incarceration among already disadvantaged low-income, Black, and Latino populations, have led some to describe urban jail systems as the “epicenter of the epicenter” of the HIV epidemic in the United States. (Freudenberg, 2011).

Jail stays provide a critical opportunity to diagnose and treat HIV infection among high-risk, transient populations with limited access to medical services. However, since most jail stays are less than one month and many are just a few hours or days, there is little opportunity for discharge planning or to address social or health issues. (Solomon, et al., 2008). Most people with HIV/AIDS incarcerated in jails return to the community with co-occurring problems related to housing and substance use, and the overall instability in their lives hampers their ability to attend to HIV-related health care needs. (Fontana & Beckerman, 2007). One study examined outcomes of antiretroviral therapy (ART) in a cohort of HIV-positive persons going in and out of a county jail over a nine-year period. Even intermittent antiretroviral therapy conferred some medical benefit, but a large majority of the inmates (76%) interrupted ART after being released from jail and only a small number (15%) managed to stay on medications over time. (Pai, et al., 2009).

Housing instability before and after a jail stay is strongly linked with poor HIV health outcomes. A multisite study of 743 HIV-infected jail detainees prescribed or eligible for ART found that persons who were homeless in the week before incarceration were significantly less likely than those who were housed to be engaged in healthcare using any measure – .less likely to have an HIV provider, to be taking ART, and to be adherent to prescribed ART. (Chen, et al., 2011). Among 177 HIV-infected inmates who were released and then re-incarcerated in the San Francisco jail system in a 12-month period, more than half were homeless in the month preceding re-incarceration, 59% of those with a history of antiretroviral use were not taking HAART, and HAART discontinuation was independently associated with homelessness. (Clements-Nolle, et al., 2008).

The evidence shows that improved discharge planning and post-release housing supports are an urgent public health priority not just for persons with HIV/AIDS who are re-entering the community from prison but also for persons living with HIV at the point of discharge from jail. The Urban Institute’s Elected Official’s Toolkit for Jail Reentry provides information and resources for local elected officials interested in launching a jail reentry initiative. (Urban Institute, 2010).

Incarceration and housing instability heighten the risk of HIV infection
Both homelessness and a history of incarceration are strongly associated with high HIV prevalence and increased risk of ongoing HIV transmissions. The rate of HIV infection was 11% in a large sample (1,426) of homeless and marginally housed adults interviewed in San Francisco, and persons who reported a history of incarceration (25% of the sample) were significantly more likely than those who had not been imprisoned to be HIV infected (14.9% versus 10.1%), and to report psychiatric hospitalizations, drug use, and multiple sexual partners. (Kushel, 2005).

People coping with homelessness and housing instability face enormous day-to-day challenges

A report by the National Minority AIDS Council and Housing Works, with support from the Ford Foundation.
that affect their ability to limit exposure to HIV or to reduce behaviors that can transmit HIV to others. Homelessness and unstable housing are strongly associated with increased rates of unsafe sex and drug use behaviors, after controlling for other factors that influence HIV risk such as demographics, substance use, mental health issues and access to services. (Kidder, et al., 2008; Wolitski, et al., 2007; Aidala, et al., 2005). Compared to stably housed persons with HIV with the same individual and service use characteristics, persons with HIV who lack stable housing are two to three times more likely to engage in sex exchange, to have unprotected sex with an unknown status partner, to use drugs and to inject drugs. (Kidder, et al., 2008). Rates of new HIV diagnoses among homeless persons have been found to be as much as 16 times the rate in the general population. (Kerker, et al., 2005; Robertson, et al., 2004). Housing instability magnifies HIV risk among already-vulnerable populations, including street-involved youth, transgendered persons, injection drug users and men who have sex with men (Marshall, et al., 2009; Wilson, et al., 2009; Kipke, et al., 2007), and is a barrier to proven risk reduction strategies such as needle exchange and counseling. (Des Jarlais, et al., 2007; Elifson, et al., 2007). Even in communities of concentrated poverty and high HIV seroprevalence, the rate of new HIV infections is almost twice as high (1.8 times) for persons with a recent experience of homelessness, compared to those with stable housing. (Denning, et al., 2011).

A history of incarceration likewise amplifies the risk of acquiring or transmitting HIV infection. The evidence suggests that while some HIV transmission may occur in prison, the greatest risk for individuals and their communities occurs during the periods just before and just following incarceration. (Gough et al., 2010; Epperson, et al., 2010). Due to difficulty in accessing services to meet basic needs, including housing, many persons recently released from prison or jail use drugs or engage in sex for drugs, money, or transportation early in the community reentry process. (Luther, et al., 2011). Incarceration may also contribute to viral transmission by disrupting stable partnerships and promoting high-risk partnerships. (Khan, et al., 2011). Recent findings from the HIV Prevention Trials Network (HPTN) 061 multi-site longitudinal study of Black men who have sex with men (BMSM) in the U.S. show a high prevalence (60%) of prior incarceration among BMSM, suggesting that incarceration may be one factor that contributes to high HIV infection rates among BMSM. (Brewer, et al., 2012).

Unmet housing needs undermine reentry initiatives to improve HIV health
Communities have employed a range of HIV-specific case management and discharge planning services to target persons leaving prison and jail and connect them to HIV care. Targeted federal initiatives include the HIV/AIDS Health Improvement for Re-entering Ex-Offenders (HIRE) program, a demonstration project established in 2009 by the Office of Minority Health (OMH) in the U.S. Department of Health and Human Services. The program funds provider networks in five U.S. communities that work collaboratively to improve connections between the reentry population and community-based, minority-serving organizations that provide HIV/AIDS-related services and transition assistance.

Most reentry programs have not been rigorously evaluated, however, and those that have been examined show only limited success connecting discharged persons to HIV care. (Freudenberg, 2011; Meyer, et al., 2011; Springer, et al., 2011). Even case management programs that have successfully linked released prisoners to medical services have failed to confer stability in HIV treatment outcomes over time. (Wohl, et al., 2011). Reentry case management interventions examined to date have not demonstrated reductions in either recidivism or long-term health benefit, “leaving only a limited evidence base to guide policy and resource allocation.” (Freudenberg, 2011). Housing instability appears to be a major factor contributing to this lack of success. Qualitative findings from a large HIV reentry initiative revealed that stable housing and access to mental health
services were the primary unmet needs of the returning prisoners served by the program. (Nunn, et al., 2010). Project Bridge, a federally funded demonstration project, provides intensive case management for HIV-positive persons returning to the community from prison. During the first three years of the Project Bridge program, re-incarceration happened at least once for 48% of participants. (Rich, et al. 2001). An evaluation of the program showed that participants had high rates of substance use issues (97%) and mental health issues (34% on medication) and that 86% reported living in unstable housing at baseline. Housing was identified as greatest unmet need of participants, and the most difficult to address – only half of project clients achieved stable housing during an 18-month study period, primarily though the federal Housing for People with HIV/AIDS (HOPWA) program. (Zaller, et al. 2008).

HOUSING INTERVENTIONS TO IMPROVE HIV HEALTH FOLLOWING REENTRY

Incarceration, housing instability, poor HIV health and increased risk of transmission are strongly associated in the period immediately following release from prison or jail and remain linked long after reentry. Among a large cohort of homeless and unstably housed persons living with HIV in three urban centers, 68% reported a history of incarceration, 32% had spent more than one year incarcerated, and a history of incarceration was significantly associated with detectible viral load. (Courtenay-Quirk, et al., 2008).

Housing status is increasingly identified as a “strategic” point of intervention to address HIV/AIDS and the overlapping vulnerabilities associated with both HIV infection and incarceration, including race and gender, extreme poverty, mental illness, chronic drug use and histories of exposure to trauma and violence. (Aidala & Sumartojo, 2007). A pilot study of HIV-positive men and women leaving prison found that living in the same place as before incarceration and rating housing “comfortable” or “very comfortable” were significant predictors of engagement with post-release primary care. (Harzke, et al. 2006).

Housing assistance is HIV health care and prevention

A now-substantial body of research evidence supports housing assistance as an evidence-based HIV health care intervention for homeless or unstably housed persons living with HIV/AIDS. Systematic review of the research literature reveals a significant positive association between increased housing stability and better health-related outcomes in all studies examining housing status with outcomes of medication adherence, utilization of health and social services, HIV health status and HIV risk behaviors. (Milloy, et al., 2012; Aidala, et al., 2012; Leaver, et al., 2007).

Housing status is one of the strongest predictors of accessing HIV primary care, maintaining continuous care, receiving care that meets clinical practice standards, and entry into HIV care among those outside or marginal to the health care system. (Aidala, et al., 2007; Kidder, et al., 2007b). Over time, receipt of housing assistance is independently linked to improved HIV health care outcomes after controlling for other factors associated with treatment effectiveness, including demographics, drug use, health and mental health status, and receipt of other services. (Aidala, et al., 2007, see also Knowlton, et al., 2006). A randomized controlled trial found that homeless persons with HIV who received a housing placement upon hospital discharge were twice as likely to achieve an undetectable viral load as a matched comparison group that continued to rely on the “usual care” available to homeless persons in the community. (Buchanan, et al., 2009).

Stable housing provides a baseline to address not only HIV, but also the mental health and substance use issues that often accompany and complicate HIV infection. A large scale study of housing and health among persons living with HIV in three cities found that improved housing status led to dramatic
reductions in avoidable emergency and acute care, and that receipt of a federal housing voucher was associated with significant improvements in access to mental health services, depression, perceived stress and overall mental health status. (Wolitski, et al., 2010).

Improved housing status is also a proven HIV prevention strategy. A large, multi-state study found that homeless/unstably housed persons whose housing status improved over time reduced their risk behaviors by half, while persons whose housing worsened over time engaged in increased risky behaviors. (Aidala, et al., 2005). Women who received federal housing assistance were half as likely to engage in sexual risk behaviors as a matched group of very-low-income women who were homeless. (Wenzel, et al., 2007). Perhaps most importantly, housing assistance improves access and adherence to antiretroviral medications, which can lower viral load to an undetectable level, reducing the risk of transmission to a sexual or drug-using partner by as much as 96%. (NIAID, 2011).

In fact, there is evidence that housing status is perhaps the most important factor in determining an HIV-positive person’s access to health care, their health outcomes, and how long they will live. The San Francisco Department of Public Health found that over a five-year period entry into supportive housing was independently associated with an 80% reduction in mortality among persons who were homeless at the time of AIDS diagnosis. (Schwarcz, et al., 2009). Two recent studies by Riley, et al., empirically ranked factors that affect the health status of HIV-infected homeless and unstably housed women and men. Unmet subsistence needs (i.e., food, hygiene, shelter) had the strongest effect on overall physical and mental health – more significant even than antiretroviral treatment. (Riley, et al., 2011; Riley, et al., 2012). The authors observed, “Impoverished persons will not fully benefit from progress in HIV medicine until these barriers are overcome, a situation that is likely to continue fueling the US HIV epidemic.” (Riley, et al., 2012).

Housing-based HIV interventions improve health and reduce public spending
Recent findings from large scale intervention studies not only link housing assistance to improved health outcomes for homeless and unstably housed persons living with HIV, but also show that public dollars spent on housing produce net savings for communities.

The Housing and Health (H&H) Study was conducted by the Centers for Disease Control and Prevention (CDC) and the HUD Housing Opportunities for People with AIDS (HOPWA) program to assess the impact of immediate access to a HOPWA housing voucher on physical health, mental health and HIV risk behaviors among people living with HIV/AIDS who were homeless, unstably housed or doubled-up with another household. (Kidder, et al., 2007a). At the end of the 18-month study period, 82% of study participants who received a HOPWA voucher were stably housed and improved housing status resulted in substantially better health outcomes, including a 35% reduction in people reporting one or more emergency room visit, a 57% reduction in the number of hospitalizations, and significantly improved mental health status. (Wolitski, et al., 2010). H&H analyses included a comparison of health outcomes of study participants who continued to experience homelessness during the follow-up period with outcomes for participants who had no time homeless during the study. After controlling for socio-demographic variables, substance use, and physical and mental health status, those who experienced homelessness were 2.5 times more likely to use an emergency room, 2.8 more likely to have a detectible viral load, reported significantly higher levels of perceived stress, and were more likely to report unprotected sex with a negative/unknown status partner. (Wolitski, et al., 2009).

H&H researchers also considered the cost implications of HIV-specific housing, using statistically significant housing-related health outcomes to calculate the “cost-utility” of H&H housing assistance as a health care intervention.
Cost-utility, expressed as the cost per quality-adjusted life year saved (QALY), is the measure used by health economists and policy makers to compare the “value-for-money” of health care interventions. The cost-utility of the H&H intervention was calculated as a function of the cost of the services provided, HIV transmissions averted, medical costs saved, and quality-adjusted life years saved. Findings show that housing is a cost-effective HIV health care intervention, with a cost per quality-adjusted life year (QALY) in the same range as widely accepted health care interventions such as kidney dialysis and screening mammography, and far below (about one-fifth) the cost per QALY of HIV pre-exposure prophylaxis (PrEP). (Holtgrave, et al., 2012).

The Chicago Housing for Health Partnership (CHHP) is an integrated system of housing and supports for individuals with chronic medical illnesses who are homeless upon discharge from hospitalization. An 18-month random control trial compared health outcomes and public costs for over 400 chronically ill homeless persons discharged from hospital stays: half randomly assigned to supportive housing placement and half discharged to “usual care” in the community. (Sadowski, et al., 2009). Among one third of study participants living with HIV/AIDS, those who received a supportive housing placement were twice as likely as those assigned to usual care to have an undetectable viral load at 12 months. (Buchanan, et al., 2009). Cost analyses compared the total annual cost of publicly funded medical/health, legal, housing (including the supportive housing intervention), and social services used per homeless adult in the intervention and usual care groups. Compared to members of the usual care group, the intervention group generated an average annual public cost savings of $9,809 for each chronically homeless person living with HIV/AIDS and $6,620 for non-chronically homeless PLWHA. Stated another way – for every 100 chronically homeless PLWHA housed with case management services, there was a net savings of almost $1 million annually in avoidable publicly funded health and crisis care costs. (Basu, et al., 2012).

The H&H and CHHP studies add to the growing evidence base on the potential of housing interventions to end homelessness and reduce public systems involvement and costs among persons with chronic health conditions, serious mental illness and substance use problems. (Culhane & Byrne, 2010; Flaming, et al., 2009; Larimer, et al., 2009; Culhane, et al., 2002). Among the initiatives are attempts to address homelessness among people released from incarceration and redirect public resources from unproductive crisis care and correctional systems costs to more appropriate and cost-effective uses. (Roman, et al., 2009; Metraux, et al., 2008).

Outcomes of HIV-specific reentry housing interventions are promising. While there are no published results from housing interventions specifically targeted to serve formerly incarcerated persons living with HIV/AIDS, available information from housing-based programs is encouraging. For example, the City of Dallas’ Project Reconnect Housing program has successfully employed HOPWA and Dallas Housing Authority resources to fund non-profit organizations to address reentry challenges for people with HIV/AIDS through permanent tenant-based rental assistance coupled with intensive case management to ensure that persons placed into housing are connected to HIV care and maintain housing. (HUD, 2012).

A HOPWA-funded New York City program assists formerly incarcerated individuals with HIV-related illness to secure permanent housing in the private market using locally funded rental assistance. The program places homeless participants in immediate transitional housing, provides assistance with permanent housing placement (helping participants to locate affordable units, apply for the rental...
subsidy, and pay security deposits and brokers’ fees), and links participants to health care and supportive services. Program results show high rates of housing stability and that only 8% of program participants were re-incarcerated in prison or jail during a one-year period. (Quattrochi & Arzola, 2010).

A 20-unit transitional residence in New York City is funded through Ryan White to serve women living with HIV/AIDS who are homeless upon exit from prison or jail. Same-day placement in a studio apartment is combined with case management, access to HIV health care and other community-based supports. The program employs a low-threshold approach that does not require sobriety as condition of either obtaining or maintaining housing. Initial results indicate significant impact on improved viral load and CD4 counts six months from program entry, increased enrollment in behavioral health care and a reduction in self-reported substance use. Program participants have also been substantially more successful securing permanent housing than members of a comparison group of recently released women receiving case management only. Findings indicate that immediate housing placement may be an effective strategy to address the myriad challenges women face upon reentry, including histories of sexual and physical violence, and that when housed, mandatory abstinence from substance use may not be required for persons living with HIV/AIDS to be adherent to antiretroviral medication. (Ali, et al. 2011).

RECOMMENDATIONS FOR IMPROVING HOUSING AND HEALTH OUTCOMES FOR FORMERLY INCARCERATED PERSONS WITH HIV/AIDS

Any recommendations to improve outcomes following release from prison or jail must be placed within the larger context of the individual, community and societal harm caused by our nation’s culture of mass incarceration. We can never adequately address the overlap of homelessness, incarceration and HIV vulnerability until our nation reforms its criminal justice systems and takes a “broader view of public safety that is not produced by punishment alone.” (Western & Pettit, 2010). The devastating social, political, and economic implications of mass incarceration have been largely invisible to the public, but even the popular press has begun to acknowledge that the “scale and the brutality of our prisons are the moral scandal of American life.” (Gopnik, 2012).

Efforts are underway to better understand and address mass incarceration, weighing concerns about crime control, rehabilitation, and more fundamental issues of social justice. Better approaches to public safety will require attention to systems responsible for education, employment, social protection, physical and behavioral health care, as well as more effective responses to problem drug and alcohol use and curtailing unnecessary custodial sentences. There is also growing recognition that our criminal justice system - like other government systems - must be evidence-based, meet clear performance measures and withstand the scrutiny of fiscal, cost-benefit and racial impact analyses. One interesting multidisciplinary task force examining these issues was a group of scholars convened by the American Academy in 2008. (See Deadalus, 2010).

For persons with HIV leaving prison or jail, a recent review of the literature on incarceration and HIV health outcomes identified four major challenges to successful management of HIV: “relapse to substance use, homelessness, mental illness, and loss of medical and social benefits.” (Meyer, et al. 2011; see also, Springer, et al., 2011). As the authors explain, each of these challenges constitutes a competing priority upon release that demands immediate attention and diverts time, energy, and valuable resources away from engagement in care and adherence to HAART.
Preexisting poverty, lack of education and employment opportunities, disruption of social supports, and high rates of untreated substance use and mental health problems have already been mentioned here as formidable obstacles for many people reentering the community from prison and jail. Those living with HIV/AIDS must also contend with the combined stigma of incarceration and an HIV diagnosis.

Outlined below are resource limitations, policies and practices that restrict access to post-release housing and services for persons with HIV/AIDS, along with recommendations for change proposed by researchers, service providers and advocates.

**Recommendation 1: Make appropriate, affordable housing available to all low-income people living with HIV/AIDS**

As already mentioned, many persons living HIV/AIDS in the U.S. find it difficult or impossible to secure and maintain a stable, appropriate place to live. Housing is consistently cited as the greatest unmet need of people with HIV across the country. (NAHC, 2011). While stigma, co-occurring behavioral health issues and other factors contribute to housing instability for low-income households living with HIV, affordability is by far the most significant barrier. The most recent HUD data show that 41% (7.1 million) of very low income renter households have “worst case housing needs” defined as severe rent burden, inadequate housing, or both, and that the number of households with worst case needs has almost doubled over the last decade. (HUD, 2011b). Even persons disabled by HIV who receive Social Security or Veterans benefits are shut out of the housing market, since there is not a single county in the US where a person who relies on federal disability benefits can afford even an efficiency apartment. (NLIHC, 2012).

Low-income people with HIV/AIDS leaving prison or jail and those with a history of incarceration face additional obstacles to stable housing. (Roman & Travis, 2004). The stigma of criminal justice involvement further blocks access to the private housing market, as many landlords conduct background checks of criminal history, income, employment, credit history, and rental history – all of which present very real challenges for individuals with a history of justice involvement. (Solomon, et al., 2008). As explained below, punitive post-incarceration policies also restrict eligibility for public housing and homeless housing assistance.

Successful strategies to improve housing and health outcomes for formerly incarcerated people living with HIV/AIDS will require additional resources, policy changes and new housing approaches.

**Recommendation 1-a: Scale up targeted HIV/AIDS housing resources to meet real need**

Efforts to make appropriate, affordable housing available to all low-income households living with HIV in the U.S., including supportive housing for those who need it, must start with increased funding for targeted HIV housing assistance. Current HIV housing resources are highly effective but can meet only a fraction of actual need.

The U.S. Department of Housing and Urban Development (HUD) Housing Opportunities for People With AIDS (HOPWA) program is the only designated federal housing program for households living with HIV/AIDS. The HOPWA program funds local communities and projects to provide emergency, transitional and permanent housing assistance and related support services for low-income persons with HIV. Most HOPWA funds are distributed as non-competitive allocations to localities or regions that demonstrate significant HIV/AIDS prevalence. Local administrative agencies have a great deal of discretion in how this formula HOPWA funding is used, and some localities have made housing for formerly incarcerated persons a priority. HOPWA Special Projects of National Significance (SPNS) program grants are awarded directly by HUD to non-profits that can demonstrate innovation in terms of program concept or population served. HOPWA SPNS funds
have been used in Baltimore, Dallas, New York and other cities to develop or expand supportive housing opportunities for formerly incarcerated persons living with HIV/AIDS. (OHAH, 2012b).

The HOPWA program achieves high rates of housing stability, reporting in 2011 that 95% of households receiving permanent housing assistance remained stably housed, 96% of households receiving short-term rent, mortgage, and utility assistance were stable or had reduced risk of homelessness, and 79% of those receiving other short-term or transitional support were stable or had reduced risk of homelessness. (OHAH, 2012a & 2012b). Recent research found HOPWA housing vouchers to be a cost-effective health intervention to improve HIV outcomes and reduce ongoing transmission among homeless and unstably housing people living with HIV. (Holtgrave, et al., 2012; Holtgrave, et al., 2007). Since program services are available to individuals at the point of release from incarceration, HOPWA funding has been particularly useful in the creation and operation of reentry housing programs. However, the HOPWA program is currently funded to serve less than 30% of households living with HIV that have a housing need, and among the many HOPWA housing programs in the U.S. only a handful target persons leaving prison and jail.

Ryan White CARE Act Title I Funds have also been used effectively in some communities to provide emergency and transitional housing for formerly incarcerated persons living with HIV/AIDS. Ryan White Title I funds are allocated by the federal government to local planning councils, who determine priority uses of the funds. As one example, New York City’s local planning council supports transitional housing programs that target persons recently released from incarceration. (Public Health Solutions, 2012). However, since housing is classified under the Act as a supportive rather than a health service, communities may use only a fraction of Ryan White dollars to fund housing interventions. Now that substantial research findings demonstrate the role of housing assistance as an evidence-based HIV health care intervention for homeless and unstably housed persons living with HIV/AIDS, it is time for a shift in paradigm – to view housing as a core component of HIV health care rather than an ancillary service.

Finally, despite the fact that housing assistance is a proven evidence-based prevention strategy, we are not aware of any U.S. housing programs funded explicitly as primary HIV prevention for vulnerable persons. For street involved adolescents, young urban men of color, transgender persons and other extremely vulnerable persons, the evidence shows that criminal justice involvement and homelessness are overlapping risks that are strongly associated with acquiring HIV infection, exposure to violence and other negative outcomes. (Ramaswamy & Freudenberg, 2012; Wilson, et al., 2009). It is time to fund housing assistance as a primary HIV prevention strategy for HIV-negative persons at highest risk who are homeless and become engaged with the criminal justice system.

The National HIV/AIDS Strategy (NHAS) highlights the importance of HIV-related housing services as a key part of a comprehensive HIV service delivery package, states that federal agencies should consider additional efforts to support housing assistance to enable people living with HIV to obtain and adhere to HIV treatment, and sets specific goals and metrics for measuring progress on improved housing status for persons with HIV. (ONAP, 2010). Unfortunately, to date no new federal HIV housing resources have been made available to meet these NHAS housing goals.

To bring federal HIV housing resources to scale to meet the real housing needs of all income-eligible persons living with HIV, including formerly incarcerated persons:

• Increase HOPWA allocations to address the disparity between available resources and real housing needs, and scale up successful HOPWA-funded models of post-release housing for persons with HIV/AIDS.
• Introduce HUD-sponsored legislation, as directed by the NHAS, to update the distribution of HOPWA formula funds to align with current HIV incidence rather than cumulative AIDS morbidity, and to include factors that take into account local poverty rates and housing costs.

• Preserve and expand the role of Ryan White funded housing supports for homeless persons with HIV/AIDS, including persons leaving prison and jail, as part of the 2013 reauthorization of the Ryan White CARE Act.

• Fund housing as a primary prevention strategy for persons whose homelessness upon release from incarceration places them at highest risk for HIV infection, violence and other negative outcomes, such as street youth, young urban men of color and transgender people.

**Recommendation 1-b. Allow formerly incarcerated persons appropriate access to a full range of federal housing programs and homeless assistance**

Even with increased funding, targeted HIV housing resources cannot meet the needs of all formerly incarcerated persons with HIV/AIDS. Expanding housing options post-incarceration will also require policy changes to remove barriers to “mainstream” federal programs that provide subsidized low-income housing and homeless housing assistance.

In many communities, persons leaving prison or jail face significant barriers or total exclusion from federally funded public housing and voucher programs administered by local Public Housing Authorities (PHAs) – subsidized housing that is the federal government’s major program for assisting very low-income families, the elderly, and the disabled to afford decent, safe, and sanitary housing. (LAC, 2009).

While it is widely believed that persons convicted of a crime are barred from living in public housing, in fact PHAs have great discretion in determining their admissions and occupancy policies for federally subsidized housing and voucher assistance. Federal law allows PHAs to exclude persons with criminal convictions altogether or subject them to restrictive admissions policies, but PHAs are required to ban only persons convicted of methamphetamine production on the premises of federally assisted housing and those subject to lifetime registration as a sex offender. PHAs are authorized to make individual determinations in every other case. For example, applicants who have been evicted from federally assisted housing as a result of drug-related criminal activity within the last three years are ineligible for public housing and voucher programs unless the PHA determines that the evicted household member has successfully completed rehabilitation, or the circumstances leading to the eviction no longer exist (e.g., the offending household member has died or is imprisoned). (U.S. Reentry Council, 2012; LAC, 2009).

Although most persons convicted of a crime continue to satisfy federal eligibility requirements for subsidized housing, restrictive PHA tenant screening policies and procedures are a significant obstacle. Only a few PHAs completely bar formerly incarcerated persons, but many PHAs initially deny applications for housing based on criminal backgrounds for all households, relying on appeal procedures to allow for a case-by-case review of circumstances, including evidence of rehabilitation. Most harmfully, these policies can prevent persons living with HIV/AIDS from returning to federally subsidized housing to live with family after release from prison or jail. In June 2011, the Secretary of HUD sent a letter to PHA executive directors, describing the laws and policies regarding screening

There is evidence that housing status is perhaps the most important factor in determining an HIV-positive person’s access to health care, their health outcomes, and how long they will live.
potential tenants based on criminal activity and encouraging PHAs to modify policies to enable more formerly incarcerated persons to reunite with family members who live in public housing or receive voucher assistance – noting that in order to give persons a “second chance” we must help them “gain access to one of the most fundamental building blocks of a stable life – a place to live.” (HUD, 2011c). The Secretary sent a similar letter in 2012 to private rental property owners of HUD-assisted properties. (HUD, 2012). Some PHAs have begun lowering barriers faced by tenants and applicants convicted of a crime, including innovative programs that link housing to necessary support services. (Wilkins & Burt, 2012). However, most communities continue to employ policies and practices that effectively bar formerly incarcerated persons, including persons with HIV/AIDS, from mainstream federally subsidized housing.

HUD regulations explicitly exclude homeless persons reentering the community from prison or long jail stays from entering mainstream federal homeless assistance programs upon release from incarceration. The McKinney-Vento Homeless Assistance Program (reauthorized and updated in 2009 by the Homeless Emergency Assistance and Rapid Transition to Housing (HEARTH) Act) funds the primary programs providing supportive housing for homeless persons, including the Supportive Housing Program, the Shelter Plus Care Program and the SRO Program. These programs are a vital resource for persons living with HIV/AIDS who require housing linked to support services. The HUD definition of homelessness that is used to determine eligibility for these programs specifically excludes persons leaving a prison or jail stay that lasts 90 days or more.

To make all federal housing and homeless assistance available to meet the housing needs of formerly incarcerated persons, including people with HIV/AIDS:

- Change local Public Housing Authority policies and decision-making processes to lower barriers to federally subsidized housing for persons with a criminal conviction – most importantly to enable people leaving prison or jail to reunite with family members who live in public housing or receive federal voucher assistance.

- Expand eligibility for McKinney-Vento Homeless Housing Programs authorized by the HEARTH Act to include persons who are homeless at the point of discharge from a criminal detention facility.

**Recommendation 1-c: Incorporate housing as a critical element of new HIV health care systems**

Evidence that housing assistance is a cost-effective HIV health care intervention necessitates new investments in housing as a core component of HIV health care delivery models.

HIV treatment advances and treatment as prevention strategies present exciting opportunities to improve individual and population level HIV outcomes. Housing insecurity, however, is a powerful impediment to HIV treatment effectiveness. As HIV prevention and care systems evolve in the U.S., it is critical to ensure that housing strategies are viewed and funded as an essential component of health care delivery.

Implementation of the Affordable Care Act (ACA) in the U.S. presents a unique and particularly important opportunity to expand supportive housing for people with HIV. One of the ACA’s most important provisions is the option for states to significantly expand Medicaid eligibility for low-income Americans, including those with HIV/AIDS, without requiring a disability designation. ACA provisions also offer the potential to couple stable affordable housing with Medicaid-funded supports for persons with HIV and other chronic health challenges, connecting them to a network of comprehensive primary and behavioral health services that can help improve health, increase survival rates, foster mental health, reduce harmful alcohol and drug use, and generate health care savings through reduced dependence on expensive
emergency and acute care. (CHCS, 2012). In the case of HIV/AIDS, stable housing also produces substantial cost savings by lowering rates of ongoing HIV transmissions, since each averted HIV infection saves an estimated $400,000 in lifetime health care costs alone. (Schackman, et al., 2006).

To realize the full potential of the Affordable Care Act for homeless and unstably housed people with HIV/AIDS, including formerly incarcerated persons living with HIV, each state should:

- Fully implement the Affordable Care Act and exercise the option to widely expand Medicaid coverage.
- Promote models of care for persons with HIV/AIDS and other chronic illnesses that incorporate housing supports as a core health service.
- Track health care savings realized through improved housing status and re-invest those savings in housing supports for chronically ill persons.

**Recommendation 1-d: Promote “low-threshold” housing policies and models for persons with complex needs**

Meeting real housing need among formerly incarcerated people with HIV will require housing approaches that lower barriers posed by behavioral health issues and restrictive eligibility criteria.

HIV-positive persons with a history of incarceration and active drug use face the additional barrier of combined “stigma against drug users, people with HIV infection and those involved in the criminal justice system.” (Freudenberg, 2011). Public Housing Authorities may deny federal housing assistance to current drug users and those who abuse alcohol (although they may also consider mitigating circumstances such as access to support services in determining a final course of action). (LAC, 2009). Even within HIV and homeless service systems, many non-profit housing providers exclude persons with active drug and mental health issues and/or histories of incarceration – either as a matter of policy or through tenant selection. Staff members of social support organizations report that housing is one of the most difficult services to obtain for HIV-positive clients transitioning from corrections, in large part due to housing program restrictions associated with previous incarceration and substance use – and that some clients choose re-incarceration because of the lack of services following release. (Robillard, et al., 2011).

Low-threshold “housing first” models prioritize housing placement and do not require either abstinence from drugs or alcohol or behavioral health treatment compliance as a condition of becoming or staying housed. Increasing evidence indicates that housing first approaches improve quality of life, achieve stability and HIV health outcomes that are comparable to more traditional abstinence-based housing models, and are far less expensive than the cost of habitual shelter stays and emergency medical services that are often the alternative for chronically ill homeless people. (Hawk & Davis, 2012; Tsai, et al., 2010; Wolitski, et al., 2010; Larimer, et al., 2009; Sadowski, et al., 2009; Caton, et al., 2008; Martinez & Burt, 2006). Seventy-two percent (72%) of those admitted to a low-threshold housing program for persons with active substance use and mental health disorders achieved housing success (retention in stable housing for 2 years or more), and program participants with a history of incarceration were as stable in housing as persons with no criminal record. (Malone, 2009).

Formerly incarcerated persons with HIV infection may also be excluded from existing housing resources based on restrictive admission criteria that require advanced HIV disease, a source of income to contribute towards rent, or proof of legal immigration status. Each community must work to minimize barriers to housing and to identify and allocate available resources to meet the varied and complex circumstances of all homeless and unstably housed persons with HIV.
To meet the housing needs of all persons with HIV/AIDS, it is necessary to adopt a public health approach to housing delivery that will:

- Lift housing exclusions based solely on active drug use or mental health issues.

- Incentivize the development of low-threshold, harm reduction housing interventions that enable persons with active drug use and mental health issues to establish stability, improve HIV health outcomes, and reduce HIV risk behaviors.

- Ensure the availability of housing resources and placement assistance to overcome barriers to housing access and stability that are related to behavioral health, HIV disease stage, lack of income, immigration status or other unique circumstances.

**Recommendation 2: Remove post-incarceration barriers to subsistence income and health insurance**

Lack of employment, income and public assistance contribute to housing instability and poor health outcomes for formerly incarcerated people with HIV and their families. Many persons leave prison or jail with no source of ongoing income and no medical insurance to cover HIV treatment and behavioral health services in the community.

There are numerous barriers, both formal and informal, for ex-inmates who seek work. Lack of education and work experience limit employment opportunities, formerly incarcerated people can be prohibited by state law from working in certain industries or obtaining occupational licenses, and applicants are often required to reveal criminal justice histories early in the job application process, limiting chances. (LAC, 2009). Providing education, job training opportunities and work supports to incarcerated persons, both before and immediately after their release from prison or jail, has been shown to help individuals secure employment and break the cycle of recidivism. (Pew, 2010). However, job-training opportunities in prison are limited, and some states such as Alabama and South Carolina segregate HIV-positive inmates, thereby excluding them from available education and job-training programs. (HRW, 2010).

Persons who rely on Social Security disability or Veterans benefits often experience a reduction or gap in benefits upon release from prison or jail. Supplemental Security Income (SSI) and Social Security Disability Insurance Disability (SSDI) benefits are suspended when a person is held in prison or jail for more than one month, and if the stay lasts more than 12 consecutive months SSI benefits are terminated and the disabled individual must begin the application process over again. Veterans benefits may be reduced or terminated for persons convicted of a crime. Proper pre-release planning and procedures, when offered, can enable persons whose SSI, SSDI or Veterans benefits are suspended or reduced to have benefits reinstated and checks restarted upon release. A change in federal law will be required to allow for suspension rather than termination of SSI benefits during prison or jail stays longer than one year. (See Burt & Wilkins, 2012).

Formerly incarcerated persons may also face barriers to public assistance to support themselves and their dependent children. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (which instituted the Temporary Assistance for Needy Families (TANF) Act) stipulates that anyone with a drug conviction can be barred for life from obtaining food stamps and TANF benefits, unless a state modifies or eliminates this prohibition. As of 2009, 24 states did end TANF and Food Stamp benefits permanently for persons with drug convictions and another 17 states imposed requirements before TANF benefits can be restored, such as successful completion of a drug or alcohol treatment program. Although TANF-funded housing subsidies are currently subject to federal lifetime benefit limits, both the TANF and Food Stamp programs are critical sources of assistance for extremely low-income families. Action is needed at federal and state levels to eliminate restrictions on...
income supports and benefit programs for persons convicted of drug-related crimes. (LAC, 2009).

Finally, many persons with HIV who are eligible for the Medicaid program leave prison or jail without the active health coverage necessary for continuous care and uninterrupted treatment. The Medicaid law prohibits federal payment for services furnished to anyone in jail or prison, but does not require that incarcerated individuals lose their Medicaid eligibility. Nevertheless, most states terminate rather than suspend Medicaid benefits upon incarceration, and reestablishing eligibility following release can take weeks. Federal regulations that govern the impact of incarceration on Medicaid coverage are complex and intertwined with SSI and other federal benefit programs. However, the regulations provide states with the flexibility to ensure that almost all eligible low-income persons are enrolled in Medicaid upon release from prison or jail. Unfortunately, many states simply fail to take advantage of available strategies to facilitate access to Medicaid coverage and services in the community. (See Bazelon Center, 2009).

To improve the ability of formerly incarcerated people with HIV/AIDS to meet basic subsistence and health needs for themselves and their families:

• Reduce barriers to employment opportunities by removing questions about convictions from initial job applications, shielding non-violent convictions from public view past a certain time, incentivizing businesses to hire and train those with criminal records, and expanding pre- and post-release educational and job-training programs to assist individuals with criminal records.

• Change federal law to allow for suspension rather than termination of Social Security and Veterans disability benefits during incarceration, and ensure that all correctional institutions have agreements in place with the Social Security Administration to facilitate reinstatement of suspended benefits upon release.

• Eliminate restrictions on income supports, food stamps and other benefit programs for those convicted of drug-related crimes and encourage states to remove barriers to education, job training programs and employment programs based on criminal justice involvement.

• Suspend rather than terminate Medicaid for inmates during incarceration and provide prescreening of inmates prior to release so that Medicaid coverage for each eligible person is active upon discharge.

Recommendation 3: Improve pre-release discharge planning for inmates with HIV/AIDS to meet housing and other essential needs

Discharge planning, transitional services, and continuity of care programs are essential for the vast majority of inmates who are released and return home, and may be particularly important for inmates living with HIV/AIDS to ensure uninterrupted HIV treatment and reduce the risk of ongoing HIV transmission upon return to the community. Even something as basic as identification can require planning prior to release. For example, many persons leaving prison do not have a current driver’s license or a social security card, and/or lack copies of birth certificates or other official documents necessary to obtain state-issued identification required for job applications, to establish eligibility for public benefits, or to rent an apartment.

Despite increased focus on reentry and innovative demonstration projects, discharge planning and other transitional supports remain unavailable to many inmates facing release from prison, and few institutions offer assistance to secure stable housing prior to release (e.g., counseling, search assistance, referrals to local housing providers, applications for rent vouchers, renter education, etc.). (Metraux, et al., 2008). Adequate planning for discharge from jail is even more limited, given the volume of persons cycling though local jails each year and the short length of many jail stays. (Solomon, et al., 2008).
To improve post-release outcomes for each person living with HIV/AIDS who is leaving prison or a substantial jail term, provide comprehensive discharge planning services prior to release that will:

- Connect individuals to Medicaid, disability benefits, food stamps, and other public benefits that will be activated immediately upon release.

- Schedule appointments with community health and social service providers, including a post-release appointment with an HIV care provider in the community and referrals to behavioral health care programs as needed.

- Provide an adequate supply of medications to ensure continuous treatment of HIV-infection and other physical and behavioral health issues until community-based health care is in place.

- Identify available employment options and/or collaborate with community service providers to connect individuals to case management, job training and other supports.

- Provide comprehensive housing assistance (e.g., counseling, search assistance, referrals to local housing providers, applications for rent vouchers, renter education, etc.) that secures a placement in stable, affordable and appropriate housing on the day of release.

**Recommendation 4: Evaluate the effectiveness of housing-based interventions for formerly incarcerated people with HIV/AIDS**

Despite the substantial co-occurrence and harmful impact of housing instability and incarceration among HIV-positive persons, there is limited research specifically examining the overlap of these vulnerabilities on health or criminal justice outcomes, or evaluating the impact of housing-based interventions that target formerly incarcerated people with HIV.

A better understanding will first require regular collection and analysis of data on housing status. All federally-funded providers or health care and services for persons living with HIV should be required to regularly monitor housing status along with health care engagement, viral load and other HIV health indicators in a patient-centered non-coercive manner. The CDC should collect and analyze data on housing status as a routine part of HIV surveillance. Finally, data sharing and collaboration among federal agencies, including the CDC, HUD, and the U.S. Department of Health and Human Services (HHS), would facilitate analysis of the role of housing as HIV prevention and health care intervention to inform the U.S. HIV response. In July 2012 HHS took a significant step towards these goals by including housing status as one of seven common core indicators adopted by the HHS Secretary for monitoring HHS-funded HIV prevention, treatment, and care services. (HHS, 2012). Housing status is also identified as a core indicator of HIV care in a recent Institute of Medicine (IOM) report commissioned by the White House Office of National AIDS Policy (ONAP) to develop tools for assessing progress the U.S. HIV response. (IOM, 2012).

Experts also call for empirical research focused specifically on the needs of HIV-infected prisoners and those released from prison, including intervention research that incorporates evidence-based solutions into the criminal justice setting. (Meyer, et al., 2011; Rich, et al. 2011)). Evidence-based responses to improve post-incarceration outcomes will require targeted research to examine housing status as an independent determinant of HIV treatment effectiveness and risk behaviors, access to behavioral health care, recidivism to prison or jail, and the public cost implications of housing interventions for people living with HIV/AIDS, their families and their communities.

To better understand the impact of housing status on post-incarceration HIV health outcomes, and to inform the development of evidence-based HIV prevention and care interventions for individuals...
involved with the criminal justice system and their communities:

• Require all federally-funded providers who deliver health care and services for persons living with HIV to regularly monitor housing status, engagement with HIV health care, viral load and other HIV health indicators in a patient-centered non-coercive manner.

• Gather information on housing status as a core indicator of HIV health as part of routine data collection by HHS, the CDC, HUD and other federal agencies involved in HIV prevention and care.

• Promote interagency data sharing and analysis to determine real housing need among people with HIV in the U.S., to evaluate the impact of housing status on HIV treatment effectiveness and prevention strategies, and to monitor and inform the U.S. HIV response.

• Conduct empirical research focused specifically on the needs of persons with HIV/AIDS involved with the criminal justice system, including intervention research to test the effectiveness and public cost implications of models of housing support that serve formerly incarcerated people with HIV.

OPPORTUNITIES FOR PROGRESS: THE FEDERAL POLICY LANDSCAPE

The current federal policy landscape provides important opportunities for action to improve housing and health outcomes for formerly incarcerated persons living with HIV/AIDS, their families and their communities.

Over the past decade there has been a mounting reaction to the corrosive effects of mass incarceration on individuals and communities – due in large part to the enormous public expense required to maintain the U.S. correctional system and address the worsening health of incarcerated populations. One focus has been the development of reintegration initiatives for returning prisoners designed to reduce high rates of recidivism to prison and jail by stabilizing and improving the lives of justice-involved individuals, families and communities.

Ambitious new federal initiatives to expand health insurance, renew and coordinate the U.S. response to HIV/AIDS, and address homelessness likewise create unique and important opportunities to improve the social stability and health outcomes of low-income people living with HIV in the U.S., including formerly incarcerated persons, and to reduce the disparate burden of HIV disease borne by individuals and communities of color.

Outlined below are several of these federal initiatives.

The Second Chance Act
In 2008 the federal Second Chance Act (Public Law 110-199) was signed into law as the first legislation designed to address the needs of people reentering communities from incarceration. Administered by the U.S. Justice Department, Second Chance Act programs are intended to help state and local agencies implement programs and strategies to reduce recidivism and ensure the safe and successful reentry of adults and juveniles released from correctional facilities. The legislation established the National Reentry Resource Center as a project of the Council of State Governments Justice Center (CSG), and authorizes federal grants to government agencies and nonprofit organizations to provide employment assistance, substance abuse treatment, housing, family programming, mentoring, victims’ support, and other services that can help reduce recidivism. Congress appropriates federal grant funding for these reentry efforts and program initiatives are underway at the Departments of Justice, Veterans Affairs, Health and Human Services, and Labor. (U.S. Reentry Council, 2011). The National Reentry Resource Center also provides useful guides to reentry planning, including available housing options. (National Reentry Resource Center, 2011; CSG, 2010).
The Federal Reentry Council
In January 2011 the Justice Department convened the Federal Reentry Council, which brings together 20 federal agencies to remove federal barriers to successful reentry. Reentry Council agencies are charged with taking concrete steps to reduce recidivism and lower the direct and collateral costs of incarceration through action to “improve public health, child welfare, employment, education, housing and other key reintegration outcomes.” (U.S. Reentry Council, 2011).

The National HIV/AIDS Strategy
The first U.S. National HIV/AIDS Strategy (NHAS), released in 2010, sets ambitious goals for reducing HIV incidence, lowering the HIV transmission rate, increasing linkage to care for persons living with HIV/AIDS, reducing health disparities, and improving service coordination. The NHAS highlights the importance of HIV-related housing services as a key part of a comprehensive HIV service delivery package, specifically states that federal agencies should consider additional efforts to support housing assistance and other services that enable people living with HIV to obtain and adhere to HIV treatment, and sets goals and metrics for measuring progress on improved housing status for persons with HIV. NHAS provisions direct HUD to reconsider the allocation formula for HOPWA grant funding to better align the program with current need, and to date HUD’s NHAS implementation activities have been focused primarily on this goal. Unfortunately, no new federal HIV housing resources have been made available as yet to meet the housing goals of the NHAS.

Opening Doors: The Federal Strategic Plan to Prevent and End Homelessness
Opening Doors, the 2010 Federal Strategic Plan to Prevent and End Homelessness also recognizes housing as an evidence-based HIV prevention and health care intervention for homeless/unstably housed persons. The plan notes that HIV housing assistance coupled with health care has been shown to decrease overall public expense and make better use of limited public resources, which is relevant to achieving objective Nine of the plan, to “[a]dvance health and housing stability for people experiencing homelessness who have frequent contact with hospitals and criminal justice.” As yet, however, federal homeless assistance programs are unavailable to persons who are homeless upon exit from prison, including persons with HIV/AIDS, and no specific initiative or funding targets persons with HIV experiencing homelessness and criminal justice involvement. (Interagency Council on Homelessness, 2012).

The Affordable Care Act
The Affordable Care Act (ACA) introduced health care reform in the U.S. with three basic principles – to increase access to care; increase the quality of care; and lower health care costs. One of the ACA’s most important provisions is expansion of Medicaid eligibility to all individuals under the age of 65 with incomes below 133% of the federal poverty level. The recent Supreme Court’s ruling on the ACA made the expansion of Medicaid eligibility an option states could accept or decline. The optional expansion presents states with a significant opportunity to secure federal funding for health care for low-income Americans, including almost all homeless persons and all low-income persons with HIV/AIDS. As noted above, ACA provisions also offer the potential to couple stable affordable housing with Medicaid-funded supports for persons with HIV and other chronic health challenges. Each state will make a number of critical policy decisions regarding the Medicaid expansion over the next several months and years. These decisions will have a profound impact on health systems and the people who use them, including people living with HIV/AIDS. (See Bazelon Center, 2012).

Ryan White Care Act Reauthorization
Looking ahead, the reauthorization of the Ryan White CARE Act will provide another important opportunity to address homelessness and poor health outcomes following incarceration. Ryan White Title I Funds have been an important, if limited, federal source of funds used effectively to provide emergency and transitional housing
as a supportive service for formerly incarcerated persons living with HIV/AIDS. Given the substantial evidence base linking housing status and HIV prevention and treatment effectiveness, it is time to view housing supports as a core component of HIV health care rather than an ancillary service. As the 2013 reauthorization of the Ryan White CARE Act is considered, it is important to preserve and expand the role of Ryan White funded housing supports for homeless persons with HIV/AIDS who are leaving prison and jail.

CONCLUSION

Dr. Robert Fullilove has observed that “homelessness, housing conditions, incarceration and the concentration of poverty in communities of color are more than just ‘complicating factors’ for people being treated for HIV/AIDS. They are the forces that produce marginalized communities and marginalized people.” (Fullilove, 2006).

Experts agree that progress in HIV prevention and care will require action to address structural factors such as incarceration and homelessness that impede effective treatment, and that housing supports are a proven and cost-effective structural HIV health intervention. (Auerbach, 2009; Gupta, et al., 2008; Purcell & McCree, 2009). As stated in a CDC report on HIV-related health inequities, “new approaches are needed to reduce the impact of poverty, unequal access to health care, incarceration, lack of education, stigma, homophobia, sexism, racism, and other factors that result in disproportionate health impact.” (CDC, 2010).

The need to achieve better health outcomes for HIV-infected persons involved with the correctional system is an urgent individual and public health priority. Alternative approaches to criminal justice and incarceration would likely result in profound public health benefits. The focus of this paper is on the more proximate issue of housing status for persons reentering the community from prison and jail – a factor that is shown to be amenable to intervention with a significant impact on HIV health outcomes. Housing assistance is an evidence-based HIV prevention and care strategy to mitigate the disadvantage associated with HIV/AIDS and criminal justice involvement, and by doing so to reduce the impact of poverty, unemployment, intergenerational deprivation, mental illness, harmful substance use and other infectious diseases such as TB.

We call on the HIV/AIDS, housing, public health and criminal justice sectors to alleviate the overlapping burden of HIV infection and incarceration on individuals and communities by taking immediate steps to improve housing status among former prisoners living with HIV/AIDS and their families. Though much is likely to be eliminated or deferred during these difficult budget times, the failure to fund and bring to scale these proven and critically-needed housing resources will end up costing much more than it saves.
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