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Successful Linkage of Medical Care and Community Services for HIV-Positive Offenders Being Released From Prison

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ABSTRACT *Human immunodeficiency virus (HIV) infection is more prevalent among the incarcerated than the general population. For many offenders, incarceration is the only time that they may access primary care. Project Bridge is a federally funded demonstration project that provides intensive case management for HIV-positive ex-offenders being released from the Rhode Island state prison to the community. The program is based on collaboration between colocated medical and social work staff. The primary goal of the program is to increase continuity of medical care through social stabilization; it follows a harm reduction philosophy in addressing substance use. Program participants are provided with assistance in accessing a variety of medical and social services. The treatment plan may include the following: mental illness triage and referral, substance abuse assessment and treatment, appointments for HIV and other medical conditions, and referral for assistance to community programs that address basic survival needs. In the first 3 years of this program, 97 offenders were enrolled. Injection drug use was reported by 80% of those enrolled. There were 90% followed for 18 months, 7% moved out of state or died, and 3% were lost to follow-up. Reincarceration happened to 48% at least once. Of those expressing a need, 75% were linked with specialty medical care in the community, and 100% received HIV-related medical services. Of those expressing a need for substance abuse treatment, 67% were successful in keeping appointments for substance abuse treatment within the community. Project Bridge has demonstrated that it is possible to maintain HIV-positive ex-offenders in medical care through the provision of ongoing case management services following prison release. Ex-offenders will access HIV-related health care after release when given adequate support.*

KEYWORDS *AIDS, Case Management, HIV, Incarceration, Injection Drug Use, Prison, Prisoners.*

INTRODUCTION

A disproportionately high burden of infectious disease in general, and human immunodeficiency virus (HIV) in particular, resides within correctional institutions.[1–6]

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For many HIV-positive substance abusers, incarceration may be the first opportunity to diagnose HIV infection and to have their health needs addressed comprehensively at a time when they are sober. Interventions that can address the complex needs of this population promise to benefit not only the inmates, but also the broader public health.[7–10] In 1997, it was estimated that there were between 151,000 and 197,000 HIV-infected individuals incarcerated.[11] The majority of inmates return to the community, in which they may have great difficulty accessing appropriate medical care.[7–9] On release into the community, these individuals can benefit from a range of services, including continuity of health care, stable housing, drug treatment, assistance accessing eligibility for benefits, as well as job training and other supportive services. The challenge of linking and maintaining ex-offenders with appropriate community resources as they make the transition from a highly structured environment into the community is considerable.

Since October 1996, the Miriam Hospital in Providence, Rhode Island, a Brown University affiliate, has been funded through a Ryan White CARE (Comprehensive AIDS Resources Emergency) Act Special Project of National Significance research grant to develop a model for overcoming barriers to medical continuity of care for ex-offenders. The program, Project Bridge, provides intensive case management for HIV-positive sentenced prisoners being released from the state prison to the community. The primary goal of the program is to increase continuity of medical care through social stabilization. HIV-positive ex-offenders are provided services by a social work team for 18 months postrelease from prison.

The foundation of Project Bridge is collaboration between doctors and social workers within the same clinic. This colocation of staff greatly enhances communication and mutual regard. In addition, the program builds on the existence of HIV specialty care within the prison by Miriam Hospital providers. This supports continuity of medical care for the ex-offenders in the community by the ability to sustain the patient/provider relationship. The intensive case management program is comprised of two teams consisting of a professional-level social worker and an outreach worker. This article describes the initial results of the program.

METHODS

Setting

Rhode Island has a single state correctional facility that houses approximately 3,000 male inmates and 200 female inmates at a given time. There are approximately 15,000 incarcerations per year. The facility functions as both a jail for inmates awaiting trial and a prison for sentenced inmates. Since 1989, the state has had a law mandating HIV testing of sentenced inmates. There is currently a system of routine HIV testing, and over 90% of all inmates are routinely tested on incarceration. The state prison is the single largest HIV testing site in the state. Approximately one third of the HIV-positive tests identified in the state have been identified there.

Project Bridge Intervention

All sentenced (not awaiting trial) HIV-positive inmates are eligible for enrollment in Project Bridge. The health services division within the prison identifies potential clients. Either a physician or a nurse informs an HIV-positive inmate about the

program and asks if he or she would like to be referred to it. All inmates are offered and encouraged to enroll in Project Bridge within 30 to 90 days prior to prison release. Inmates may miss an opportunity for enrollment by not participating in medical care or through a failure of the staff to learn of the approaching release date. Because of scheduling difficulties that are endemic to correctional facilities, 30 days is the minimum amount of time needed to enroll a client and design a comprehensive prerelease plan.

A master's level social worker (MSW) case manager meets with the inmate to describe the services of the program. Clients are then offered voluntary enrollment in the program, with informed consent required for participation in evaluation activities. A psychosocial history is taken, and an assessment of the client's needs is conducted to formulate a comprehensive discharge plan. The Miriam Hospital's Institutional Review Board, with a prisoner representative as a member, approved this program.

As the release date approaches, the caseworker introduces the potential client to the second team member, an outreach worker, who assists the client in obtaining concrete services. The team provides supportive services for the client for a period of 18 months. The initial community contact occurs during the first week of release, weekly for the first 3 months, and then at least bimonthly for the remaining 15 months of enrollment. The ex-offenders are provided with assistance in accessing a variety of medical and social service needs. The plan may include the following: mental illness triage and referral, substance abuse assessment and treatment, appointments for HIV and other medical conditions, and referral for assistance with housing, nutrition, entitlements, and community programs that address basic survival needs. Periodically, case conferences are held with medical providers, agency representatives, and the client to assess progress and refine the ongoing treatment plan. Clients are provided transportation by taxi or are given bus tokens for medical and social service appointments. The case manger accompanies the client to medical appointments to enhance patient/provider communication and remove barriers to care, such as access to related resources. The outreach worker accompanies the client to appointments for basic needs and locates the client if appointments are missed. This division of labor is a hallmark of the program. Teaming professionals with nonprofessionals provides complementary skills that enhance client engagement. At the completion of the 18-month enrollment period, clients make the transition to less-intensive community case management programs.

Cost Estimates

Cost estimates of providing services for clients with mental health diagnoses were estimated using hours of direct contact with staff, indirect contacts done on behalf of clients (collateral encounters), staff travel (time and mileage), and clinical supervision.

Data Collection

Information was gathered using both chart review and self-report questionnaires with written informed consent. *Trauma* was defined as having a history of childhood physical abuse or childhood sexual abuse; witnessing domestic violence/child abuse; being a victim of domestic violence, physical assault, or sexual victimization; being a combat veteran; and having multiple losses (deaths or abandonment) and multiple events (two or more of types of trauma).

RESULTS

The program began enrollment in January 1997, and as of June 2000, there were 97 participants enrolled. The demographics and baseline characteristics are depicted in Table 1.

At release, 69% were homeless or "doubled-upped" with a friend or relative. If we consider an intact family as an indicator of increased stability, although 61% of the population are parents, less than 10% have custody of their children, and 67% have never been married. There were 12% in a committed relationship (married or domestic partner) at baseline. At baseline, 37% reported a history of employment (having ever drawn wages). Spanish was the primary language of 5%.

Table 2 shows the clients' self-reported risk behaviors and medical information at enrollment. Heroin and cocaine were the most common drugs of choice, although most reported polysubstance abuse. Many reported injection drug use and

TABLE 1. Demographics at enrollment of HIV-infected ex-offenders (N = 97) enrolled in Project Bridge, Rhode Island, 1997–2000

	% (n)
Gender	
Male	71 (69)
Female	29 (28)
Race	
Black	51 (49)
White	35 (34)
Hispanic	13 (13)
Native American	1 (1)
Mean age (standard deviation) at release	39.0 years (6.5 years)
Urban residence	87 (84)
Primary language English	95 (92)
Education	
Median education (range)	11 years (3–15 years)
Vocational training	23 (22)
Employment	
Currently employed	6 (6)
History of ever being employed over entire life	37 (36)
Housing status	
Live with friends or relatives	55 (53)
Rent	18 (17)
Live in a treatment center	13 (13)
Live in a shelter	7 (7)
Homeless	5 (5)
Other	2 (2)
Marital status	
Single	68 (66)
Divorced or widowed	21 (20)
Married	7 (7)
Domestic partner	4 (4)
Children	
Custody	9 (9)
Median number of children (range)	1 (0–10)

TABLE 2. Self-reported risk behavior and medical information on HIV-infected ex-offenders (N = 97) in Project Bridge, Rhode Island, 1997–2000

	% (n)
Drugs ever used	
Heroin/speedball	65 (63)
Alcohol (alcoholic)	48 (47)
Cocaine	42 (41)
Crack	41 (40)
Marijuana	27 (26)
Amphetamines/crystal meth	5 (5)
Inhalants	0 (0)
Drug of choice at enrollment	
Heroin	42 (41)
Cocaine	22 (21)
Speedball	11 (11)
Crack	10 (10)
Polysubstance	8 (8)
Alcohol	3 (3)
Marijuana	3 (3)
Other risk factors	
Gay/bisexual	12 (12)
Needle sharing (ever)	54 (52)
Exchange sex for drugs/money	23 (22)
Injection drug use	80 (78)
Condom use at last encounter	62 (60)
History of STDs	35 (34)
Medical insurance status	
No insurance	65 (63)
Medicaid	34 (33)
Private insurance	1 (1)
Self-reported mental illness diagnosis, total reported mental illness	49 (48)
Depression	48 (23)
Anxiety (other than PTSD)	25 (12)
PTSD	17 (8)
Schizophrenia	10 (5)
Taking combination therapy	59 (57)

PTSD, posttraumatic stress disorder; STD, sexually transmitted disease.

ongoing sexual contact without protection. Mental health disorders were reported by 45% of participants at baseline. Past physical and/or psychological trauma was reported by 86% of participants at baseline.

Table 3 describes program completion and attrition. At baseline, the average number of prior incarcerations was 4. There were 50 reincarcerations during enrollment. Of those, 30 were arrested on new charges, for a resentenced rate of 31% (see Table 3). There were 86% (58/67) who remained enrolled for the entire 18 months. Of those enrolled, 95% kept their first medical appointment. Follow-up was successfully maintained for 98% for 12 months. There have been 2 clients lost to follow-up. Within 6 months of program completion, by chart review, 82% continued to receive medical care. Data were missing for 1 client who was not followed for medical care at our clinic.

TABLE 3. Reincarceration and program completion of HIV-positive ex-offenders in Project Bridge, Rhode Island, 1997–2000

	Overall, % (n)	Male, % (n)	Female, % (n)
Postenrollment reincarceration			
Once	33 (32)*	36 (25)*	25 (7)*
Two or more times	19 (18)*	17 (12)*	21 (6)*
New Charges	31 (30)*	29 (20)*	29 (8)*
Currently actively enrolled in program	31 (30)*	33 (23)*	25 (7)*
Program completion/termination, enrolled for 18 months	69 (67)*	68 (47)*	71 (20)*
Completed program	86 (58)†	85 (40)†	90 (18)†
Moved away	5 (3)†	4 (2)†	5 (1)†
Sentenced greater than 18 months	5 (2)†	4 (2)†	
Lost to follow-up	3 (2)†	2 (1)†	5 (1)†
Deported	1 (1)†	2 (1)†	
Died	1 (1)†	2 (1)†	
Number finished	100 (67)†	100 (47)†	100 (20)†

*Percentage of total participants (n = 98), total male participants (n = 69), or total female participants (n = 28), as appropriate.

†Percentages of those who completed/terminated program.

Table 4 provides details for the types of referrals requested by the clients and the percentage of those who kept the referrals that were made. The overall kept appointment rate for referrals was 73%. While all of the enrollees (100%) had a significant history of substance use/abuse at baseline, 43 (44%) clients requested referral to treatment. Of those requesting treatment referrals, 29 (67%) kept the

TABLE 4. Referrals made for HIV-infected ex-offenders in Project Bridge, Rhode Island, 1997–2000

Referrals	Expressed need and received referrals, % (n)	Kept referral appointment (of those needing one), % (n)
HIV Specialty care	100 (97)	100 (97/97)
Housing	95 (92)	76 (70/92)
Drug treatment	44 (43)	67 (29/43)
HIV/AIDS medications: AIDS Drug Assistance Program	32 (31)	100 (31/31)
Mental health treatment	95 (92)	48 (44/92)
Employment	94 (91)	37 (34/91)
Shelter	18 (17)	76 (13/17)
Food	37 (36)	75 (27/36)
Pharmaceuticals (other than for HIV/AIDS)	28 (27)	96 (26/27)
Dental treatment	28 (27)	59 (16/27)
SSI	26 (25)	84 (21/25)
Medical specialists (other than for HIV/AIDS)	33 (32)	75 (24/32)
Medicaid	32 (31)	81 (25/31)
Other social services	71 (69)	88 (61/69)

appointments that were made for this service. Two clients remained substance free through out the entire 18 months of the program. The average program cost for services to those with a mental health diagnosis was approximately $8,000 per participant versus approximately $5,000 per participant for those without a mental illness. During the course of enrollment, 98% of all participants requested and received a referral for mental health treatment. Of those who were referred, 49% kept the appointment.

DISCUSSION

Project Bridge has documented that it is possible to enable the transition of HIV-positive ex-offenders to the community by providing linkage to a wide array of services and to medical care. This was accomplished through an intensive intervention that uses both a professional-level social work case manager and an outreach worker.

Relapse into substance abuse and reincarceration does occur. There is a common misconception that substance abuse recovery is a necessary precursor to medical program adherence. Our experience demonstrates that this is not necessarily the case. The program uses a harm reduction philosophy in its approach to substance abuse. Of the 58 clients who have completed the program since its inception, only 2 reliably remained drug free throughout their entire 18-month enrollment period. Addiction is the greatest barrier to continuity of care and social stabilization that most ex-offenders face. It affects health care, medication adherence, housing opportunities, social relationships, and employment; in short, it permeates every aspect of an individual's life. Despite this, through an intensive community-based program, it is still possible to maintain clients in a variety of services. To link ex-offenders with services on release, it is important to reassure participants that substance abuse recovery is not a condition of program participation. Programs need to reinforce the importance of substance abuse treatment plans, but not abandon individuals if they continue substance abuse. A harm reduction philosophy emphasizes the importance of keeping individuals as healthy as possible.

The high percentage of clients who reported at baseline having a history of mental health disorders is a common finding among people who are HIV positive. Prior research in this area has tended to examine primarily mood disorders, substance abuse disorders, and anxiety disorders without reporting specifically on trauma experiences.[12–15] Of our participants, 86% reported experiencing one or more traumatic events. Table 4 shows that 95% of clients were referred to mental health treatment during the course of their enrollment in Project Bridge. Since this is higher than the number reporting mental health disorders at baseline, referral rates and utilization are likely a reflection of the sensitivity of professional social workers in recognizing symptoms and encouraging and facilitating treatment. The cost estimates shown for program participants contrast those with major mental illness versus those without.

Adequate housing is a substantial problem in this population, with 82% of participants living in a place other than their own at release. We found men were far more likely than women to have a family member or former partner who supplied shelter for them at the time of prison release. While low-income housing is generally scarce across the United States, it is significantly more difficult to obtain for ex-offenders. Federal regulations allow federally funded housing programs to deny access to persons recently released from prison. In our area, ex-offenders may

have to wait up to 5 years to become eligible for low-income housing. The Project Bridge social workers assist clients to appeal denials of service in housing and in many other realms.

In light of continued or intermittent substance abuse, it is not surprising that reincarcerations do occur. While illegal activity may decrease with involvement in substance abuse treatment, recovery itself is a long-term process. As the goal of Project Bridge is the continuation of medical care for ex-offenders, reducing illegal activity is beyond the scope of the program. However, for individuals coming out of prison, incarceration is part of the fabric of life, which does not always mean that they have committed a new offense. Ex-offenders are frequently arrested for nonpayment of fines, for an old warrant, or because of past involvement in illegal behavior; they are frequently incarcerated briefly due to suspicion of illegal activity. While 50 of the 97 enrollees returned to prison one or more times during program enrollment, only 31 were sentenced on new charges. We achieve our goal by continuing to offer both supportive social and medical services during reincarceration.

Incarcerated individuals, both within the prison and on release, may demonstrate difficulty developing even low levels of trust in service providers. Experience has taught them that community providers are often reluctant to serve them. The most effective way to develop sufficient trust to establish a working relationship is to provide consistency. Many participants in Project Bridge report that they only began to trust their case manager after repeated visits demonstrated reliability. The consistency was underscored by persistence in locating clients who failed to keep appointments and to maintain contact. This persistence and the resulting perception of the dependability of the team by the client is reflected in the fact that only 3% of participants were lost to follow-up. The ability to develop a trusting relationship is enhanced by community care providers (social workers and outreach workers) entering the incarceration setting to make personal contact with the inmate prior to release. This requires cooperation on the part of community agencies, as well as correctional officials, to allow service providers to make the first contact within the incarceration setting. Contact within the prison has also proved to be effective for medical health care providers, for example, nurses and physicians, who wish to follow up patients in the community after release. While discharge planning is a necessary component, it is not sufficient to retain ex-offenders in care past their initial postrelease appointments.

The initial period following prison release is critically important in determining whether a person relapses into substance abuse and high-risk behaviors and becomes lost to follow-up. For many individuals, the first 24 hours present significant challenges to maintaining their discharge plan. For example, if a woman cannot obtain a safe place to live, she may quickly return to an abusive relationship that revolves around substance abuse. Men are more likely to have a girlfriend or female relative who will provide them with shelter; however, they may return to the same set of circumstances they left when they were incarcerated. To provide transitional services for ex-offenders, it is important to make contact within the first week following release. To achieve that end, Project Bridge is a community-based program. Client contact occurs in the client's home, neighborhood hangouts, commercial establishments, shelters, or wherever the client is comfortable. The program is housed in an office located in the neighborhood in which the majority of clients reside. It is also a site for HIV counseling, testing, and referral, as well as HIV prevention activities; therefore, it is not identified by the public as an acquired immunodefi-

ciency syndrome (AIDS) service center. Homeless clients use the office as their mailing address.

Project Bridge relies on a philosophy that medical care can only be addressed within the context of comprehensive care, which includes ongoing referrals for substance abuse treatment, social support, and mental health referral. Clients who wish to achieve recovery identify a substance abuse treatment plan of choice before release (i.e., methadone maintenance, 12-step program, or residential treatment). Locating support for basic needs is a necessity, whether through the provision of housing, entitlement programs, clothing banks, or food stamps. The psychological health of the individual must be part of the care plan; a history of emotional, physical, or sexual abuse is very common among persons who are HIV positive. In our program, 86% (83) reported histories of trauma. There were 45% (44) who reported a mental health disorder. Depression (41%) was the most common, followed by anxiety disorders (36%) and chronic mental illness (10%). These disorders need to be diagnosed and treated in conjunction with HIV care.

Our experience has emphasized the importance of community-based organizations in providing concrete services for HIV-positive ex-offenders. Many of these agencies may be AIDS service organizations, but other “less-traditional” agencies can also be helpful, for example, faith-based inner-city communities. In our area, the Salvation Army is the most frequent provider of temporary housing for men coming out of prison. Likewise, a faith-based agency has provided a peer (who is HIV positive) to facilitate a support group inside the prison for HIV-positive men. They also provide concrete services and financial assistance after prison release. Their services within the prison are available at no cost to the correctional setting and afford the opportunity to provide for continuity within the community to which the individual will return.

While Project Bridge has flourished within the limited geographic area of Rhode Island, the size of a region should not be seen as an insurmountable obstacle. States with greater geographic area may find that dividing the state into regional groupings to arrange discharge planning and community follow-up can accomplish similar goals. Grouping can be done by ZIP codes to which the ex-offenders are released or through establishment of catchement areas similar to those used by mental health services. When funding and staffing appear to be insurmountable barriers, the establishment of simple discharge planning by prison social services or health services staff would provide some benefit to ex-offenders. Project Bridge has also profited from the use of community-based HIV medical specialists who provide care within the prison and can provide medical care for the same individuals after release. The continuity of care has been perceived as very beneficial by patients. This same linkage to medical care can be provided by paraprofessionals, such as nurses or nurse practitioners. Funding sources to establish similar programs may be sought from local Ryan White CARE Act Title I and II programs.

In summary, by coordinating discharge planning between the correctional setting and community providers, ex-offenders can be mainstreamed back into the community without interruption in their health care. Assistance to obtain essential services such as substance abuse treatment, housing, and financial support promotes the overall goal of remaining in medical care. The discharge plan identifies the resources that the ex-offender needs to access following prison release. The provision of intensive case management supports the ex-offender in maintaining those connections while stabilization occurs. A harm reduction approach to active

substance use demonstrates respect for the client and an understanding of the nature of addiction. The fact that Project Bridge has maintained 90% of participants in follow-up for 18 months demonstrates that, given a viable choice, even the most disadvantaged members of society desire to remain healthy. Ex-offenders care about their HIV status and will remain actively involved in health care when given adequate support.

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