

**Access to Publicly-Funded Substance Abuse Services  
Among Ex-Offenders with HIV**

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## **Abstract**

**Objectives.** The Transitional Intervention Project (TIP) provides intensive case management services to support reintegration of incarcerated individuals living with HIV into the community. This research sought to ascertain whether participation in TIP improves access to publicly-funded substance abuse treatment services provided by the Massachusetts Bureau of Substance Abuse Services (BSAS).

**Methods.** This research matched TIP programmatic data on 884 clients with 1,265 cases, and BSAS substance abuse treatment data on services to TIP clients during the same period of time.

**Results.** The neediest clients had already accessed BSAS services before enrolling in TIP, but high need for substance abuse treatment was not a significant predictor of BSAS services. Clients with multiple TIP cases, longer cases, and more intense cases, were more likely to access BSAS services after their first TIP case. Those who accessed BSAS after TIP had more BSAS admissions.

**Conclusions.** Transitional case management is effective in helping inmates living with HIV who have multiple needs to obtain access substance abuse treatment in the community.

## Background

Massachusetts currently holds more than 20,000 inmates. Almost all (97%) of these people will eventually be released to the community.<sup>3</sup> The estimated prevalence of HIV in 2001, at 3.0% (2.8% of male prisoners and 5.7% of female prisoners), was 50% higher than the national average, and the prevalence of confirmed AIDS, at 1.2%, was more than twice the national average. Moreover, 59% of men and 68% of women entering the Massachusetts prison system reported past injection or inhalation of drugs.<sup>7</sup> Twenty-seven percent of male inmates and 44% of female inmates are infected with hepatitis C.<sup>8</sup>

The population of inmates returning to the community, then, brings significant substance abuse needs that, if unmet, undermine the quality of life for both the individual and the community. At the same time, this population has few resources on which to draw and faces additional obstacles to its success. These obstacles range from social norms and prejudices against ex-offenders to institutional policies and practices. For example, inmates with “dual diagnoses”, having both mental illness and a substance abuse disorder, often cannot obtain the comprehensive treatment they need because many organizations do not allow individuals to participate in substance abuse treatment programs if they are taking psychotropic medications.<sup>10</sup>

The high rates of substance abuse are some of the reasons for the evolution of case management that specializes in the transition from incarceration to the community for persons living with HIV. By helping inmates access needed services, transitional case management holds promise for both reducing recidivism and improving the health of the individual and of the community.

### The TIP Project

This article reports an observational evaluation of the Transitional Intervention Project (TIP), a statewide public-private partnership that provides intensive case management services to support the successful reintegration of incarcerated individuals living with HIV back into the community. TIP is administered by the HIV/AIDS Bureau (HAB) of the Massachusetts Department of Public Health (MDPH). During the time period reported here, it was funded as part of the national Corrections Demonstration Project by the HAB, the U.S. Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA).

The HAB hired *Capacities*, a private research firm, to conduct an evaluation of TIP. More details about the program have been published elsewhere.<sup>19,20</sup>

One premise is that successful client reintegration into the community will decrease substance abuse relapse. Decreasing relapse, in turn, is expected to create a safer and healthier community.

This research sought to answer the following question: Did participation in TIP improve access to other services, specifically, publicly-funded substance abuse treatment services?

## Method

### Sample and Data Collection Procedures

This study used programmatic data collected by TIP case managers, and programmatic data from the Bureau of Substance Abuse Services. Programmatic data from MDPH included three levels of data: client level, case level, and event level. Clients who were re-incarcerated would begin a new case. For each case, at intake, TIP case managers recorded standard demographic information about the client, such as age, ethnicity, gender, race and marital status.

For each case, at intake, TIP case managers also recorded case information, which included the date the case was opened, case status, release date, date case was closed and the TIP service provider. A case was considered closed if a closing date was entered or the status was listed as completed, transferred, or “on hold,” (meaning the case was inactive, but the case manager anticipated possible future services). For closed cases, if no closing date was entered, it was deemed to be the date of the last service event. Case duration was computed by subtracting the intake date from the closing date.

As the case progressed, case managers also recorded utilization (“event”) data by case for each service and monitoring activity. The broadest category of service event was case management, which included activities involving advocacy, building trust, counseling, escorting/transporting, follow-up, service planning, and generic case management. Other service events were setting up appointments and procurement of services (e.g., medical treatment, mental health treatment, substance abuse treatment, medications, and non-medical assistance). We counted the total number of events for each case. In addition, some service events requested the amount

of time spent on the event, which allowed us to calculate the total number of hours spent on those events for each case.

We constructed dichotomous need variables in five areas – medical, mental health, substance abuse, housing and transportation – by counting affirmative responses to the relevant items from the case intake, the detailed needs assessment, and subsequent needs assessment events (details published elsewhere [ref]).

In addition to MDPH data, data were obtained from the Bureau of Substance Abuse Services (BSAS) (the public funder of substance abuse treatment services of last resort in Massachusetts) pursuant to an inter-agency limited data set agreement. BSAS-funded services include, among others, long- and short-term residential substance abuse treatment, short-term detoxification services, and partial hospitalization substance abuse treatment services. These services are available irrespective of ability to pay and are often the only substance abuse services available to persons with HIV or living in poverty. Using a standardized form, BSAS providers collect client-level data describing demographic characteristics, substance and needle use history, and other service needs at the time of intake into any BSAS-funded service. For this evaluation data were obtained for clients whose identification number matched a client identification number from the MDPH database and whose service admissions were between January 1, 1999 and March 30, 2004. Clients were categorized as having received BSAS services (1) entirely before their first TIP case was opened, (2) at any time after their first TIP case was opened, or (3) not at all.

## **Analysis**

To determine whether participation in TIP was associated with the ability to access publicly funded substance abuse services, we used chi-square analysis to compare the percent of clients receiving services from the Bureau of Substance Abuse Services, according to their level of overall need, and their level of need for substance abuse services, as assessed by TIP (Table 3).

## **Results**

Programmatic data were collected for 884 TIP clients whose characteristics are summarized in Table 1. The vast majority are well below 250% of the federal poverty line and without private health insurance and, thus, would qualify for services from providers of last resort. There

were 1,265 cases involving these 884 clients, of which 1,083 were closed (a case closed when a client who had been released was re-incarcerated; if the client wanted services again, a new case was opened). Case characteristics are set forth in Table 2. Nearly all (96%) of the clients had a history of substance abuse.

When we examined services provided by the Bureau of Substance Abuse Services (BSAS) (Table 5), we found that many more female than male clients accessed service from BSAS, especially following enrollment in TIP. Clients with high overall needs at intake were particularly likely to have accessed BSAS already, before enrolling in TIP. Clients assessed with mental health needs and transportation needs were more likely to access BSAS either before or after TIP. This was also true of clients with housing and medical/HIV needs, although the latter had more dramatic impact on BSAS service before TIP enrollment. High need for substance abuse treatment assessed at intake was not a significant predictor of BSAS services.

The strongest association was with the number of TIP cases. Clients with more than one TIP case were far more likely to access BSAS services after their first TIP case. All three measures of characteristics of closed TIP cases were significant predictors of receiving BSAS services after TIP enrollment: duration of the case, number of selected case-related events, and hours spent on those events. These clients' cases lasted longer, included more events, and required more hours of work. Clients accessing BSAS after TIP had more BSAS admissions than those accessing BSAS before TIP enrollment.

## **Discussion**

### **Limitations**

Programmatic data were collected for quality assurance, e.g., to see if clients were “slipping through the cracks,” rather than for evaluation. Therefore, a number of rigorous research protocols (e.g., mandatory skip patterns, instruction manuals and codebooks) were not built into the system, and inferences drawn from missing answers would be questionable.

BSAS data do not include individuals who received mental health treatment for their substance abuse in place of formal substance abuse treatment, or who received substance abuse treatment through a privately funded source or after March 30, 2004. Furthermore, the data were matched with Case Trakker data using a number of proxy indicators for identifiers, and is likely

to under-count the overlap of data sets. Therefore, inferences represent estimates of directionality of outcomes, rather than precise outcomes. Also, without a control group, we could not compare how TIP clients and non-TIP clients accessed BSAS services.

## **Conclusions**

It is surprising that substance abuse needs were so poor a predictor of subsequent services from the Bureau of Substance Abuse Services. This could reflect the fact that such a large percentage of the clients had a history of substance abuse (96%) that the factor of substance abuse needs loses any usefulness in discriminating who currently gets services. Conceivably, BSAS services could be utilized as a means of providing housing, as some staff suggested; however, that suggestion ignores the finding that BSAS clients had higher needs in many other areas as well: medical, mental health, and transportation. Simply stated, the findings indicate that high-need clients utilize BSAS. This view is supported by the strong association with the number of TIP cases. However, that association also reflects the fact that multiple cases predominate among clients who enrolled earlier in the 5-year time span, allowing them more time during which to both access BSAS and return to TIP. BSAS utilization could be simply a proxy for poverty or for general life stressors. The association of accessing BSAS with multiple cases suggests that repeated exposure to TIP increases the likelihood of access. Staff have noted that clients are often more amenable substance abuse treatment after having tried unsuccessfully to get along in the community without it. Another possibility is that the association indicates simply that clients with more needs, who access BSAS, tend to be re-arrested.

The findings also indicate that clients served by BSAS after enrolling in TIP are recipients of a great deal more effort by TIP staff. Our data do not allow a causal inference, but it is plausible that much effort is devoted to getting the services for the client. During the study period, BSAS funds were cut drastically; the cuts compromised the Bureau's ability to maintain federal requirements and it almost lost eligibility for matching funds from the Substance Abuse and Mental Health Services Administration. Some TIP staff and staff "behind the wall" have also noted that much effort is often applied to getting the client to accept and utilize substance abuse services. Also, we don't know, but it is possible that similar efforts by staff elsewhere went into getting other clients into BSAS services before TIP.

In summary, incarcerated persons living with HIV, when they are released, have a high level of need for substance abuse treatment, which is compounded with needs for medical care, mental health treatment, housing and transportation.

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**Table 1. Description of TIP Clients and Study Participants (n = 884)**

Variable	%	(n)
Sociodemographic Characteristics		
Gender		
Male	76	(674)
Female	24	(210)
Transgender	0	(0)
Ethnicity/Race		
African American	23	(203)
Hispanic	29	(257)
White	38	(339)
Cape Verdean/Portuguese	4	(37)
Native American	1	(9)
Other or unknown	5	(39)
Age ( <i>n</i> =882) <sup>b</sup>	(mean = 38.7, sd = 7.4)	
17-29	10	(87)
30-39	46	(406)
40-49	37	(323)
50-79	7	(66)
Married or Committed Relationship <sup>b</sup> ( <i>n</i> =451)		
No	76	(342)
Yes	24	(109)
Health history <sup>b</sup>		
Hepatitis C ( <i>n</i> =480)	58	(278)
Developmental Disability ( <i>n</i> =415)	11	(45)
Mental Illness ( <i>n</i> =435)	48	(209)
Substance Abuse ( <i>n</i> =423)	96	(404)
Number of Cases		
One	68	(602)
Two	23	(200)
Three-Five	9	(82)

<sup>a</sup> Actually, 26, but one participant did not provide demographic data.

<sup>b</sup> As of case intake. For clients with multiple cases, the first case intake was used.

**Table 2. Description of TIP Cases (cases = 1,038 closed cases)**

<b>Variable</b>	<b>Mean</b>	<b>(sd)</b>
Duration (months)	8.4	(7.0)
Before release ( <i>421 w release date known</i> )	47%	
After release     “	53%	
Number of selected case-related events <sup>a</sup>	16.3	(23.0)
Before release ( <i>421 w release date known</i> )	45%	
After release     “	55%	
Hours spent on those case-related events <sup>a</sup>	13.0	(18.8)
Before release ( <i>421 w release date known</i> )	43%	
After release     “	57%	

**Table 3. Association of Client and Case Characteristics with Receipt of Service from Bureau of Substance Abuse Services (clients = 859) <sup>a, b</sup>**

	No BSAS Services		BSAS Services Only Prior to 1 <sup>st</sup> TIP Case		Any BSAS Services Subsequent to TIP			
	%	(n)	%	(n)	%	(n)	$\chi^2$	p( $\chi^2$ )
<b>Overall</b>	67	(577)	11	(93)	22	(189)		
<b>Sociodemographic Characteristics</b>								
<b>Gender</b>								
Female	50	(104)	13	(28)	37	(77)	41.8	<.0001
Male	73	(473)	10	(65)	17	(112)		
<b>Age</b>	m 38.9	(sd 7.3)	m 39.1	(sd 8.4)	m 37.7	(sd 7.2)	2.1	.12
<b>Ethnicity</b>								
African American	63	(126)	16	(31)	21	(42)	18.0	.06
Hispanic	67	(164)	10	(25)	23	(55)		
White	70	(232)	9	(29)	22	(72)		
Other/Unknown	66	(55)	10	(8)	24	(20)		
<b>Needs Assessed</b>								
Overall	64	(397)	14	(86)	22	(134)	22.3	<.0001
<i>Substance Abuse</i>	65	(347)	14	(86)	22	(117)	4.8	.09
<i>Medical /HIV</i>	59	(242)	18	(72)	23	(94)	40.9	<.0001
<i>Mental Health</i>	63	(273)	13	(56)	24	(106)	8.0	.02
<i>Housing</i>	62	(260)	15	(65)	23	(95)	19.9	<.0001
<i>Transportation</i>	60	(224)	16	(60)	24	(91)	23.5	<.0001
<b>More than one TIP case</b>	55	(154)	7	(19)	39	(109)	64.2	<.0001
<b>TIP Case Characteristics</b> <small>b, c</small>	<b>mean</b>	<b>(sd)</b>	<b>mean</b>	<b>(sd)</b>	<b>mean</b>	<b>(sd)</b>	<b>F</b>	<b>p(F)</b>
Duration (months)	8.3	(6.9)	6.8	(5.3)	10.1	(8.9)	5.7	.004
Number of case-related events	14.1	(18.4)	13.0	(17.6)	22.4	(29.5)	11.6	<.0001
Hours spent on those events	10.6	(16.2)	12.0	(16.5)	19.8	(25.7)	16.0	<.0001
<b>BSAS Information</b>								
Number of BSAS events	--	--	5.3	(5.3)	9.9	(11.2)	t=4.5	<.0001
			<b>%</b>	<b>(n)</b>	<b>%</b>	<b>(n)</b>	<b><math>\chi^2</math></b>	<b>p(<math>\chi^2</math>)</b>
Needle use (at any case)	--	--	72	(67)	85	(160)	6.3	.01
Homeless (at any case)			50	(47)	63	(119)	4.0	.05

<sup>a</sup> Limited to cases started before 3-30-04 because service data from BSAS available only through 3-30-04.

<sup>b</sup> For 282 clients with multiple cases, only the first case was used.

<sup>c</sup> Closed cases only, n = 739.