An Analysis of Post-Booking Jail Diversion Programming For Persons with Co-Occurring Disorders

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For persons with co-occurring disorders, interaction with criminal justice systems is a frequent occurrence. As a result, a variety of diversionary programs have been developed nationwide. In this study, a total of 248 individuals with co-occurring disorders of serious mental illness and substance use disorders who had been arrested and booked on misdemeanor charges participated in a post-booking jail diversion program in two urban communities. A quasi-experimental design was used with individuals assigned to diversion or non-diversion status based upon the decision processes of the mental health–criminal justice systems. The effectiveness of the jail diversion program was evaluated from a variety of sources, including structured interviews, behavioral health service utilization patterns, and criminal justice recidivism patterns. Analyses revealed general main effects for time on many of the outcome variables, with few main effects or interaction effects detected on the basis of diversion status (diverted versus non-diverted). Across all measures assessing mental health and substance abuse, study participants displayed improvements over time, irrespective of their diversion status or program location. Participants generally displayed no significant changes in their rates of accessibility to, or frequency of use of, the various mental health, substance abuse, and other services, and few changes for diversion status were detected with regard to service.

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As a result of de-institutionalization, restrictions in the availability of community-based mental health services and a variety of other factors, local law enforcement agencies and criminal justice systems have increasingly found themselves handling individuals with behavioral health issues, including mental illness and addictive disorders. Currently, persons with mental illness account for 7% of all police contacts (Deane, Steadman, Borum, Veysey, & Morrissey, 1999), 16% of all prison inmates, and 7% of our jail population (Steadman, Cocozza, & Veysey, 1999). It is estimated that between 20 and 45% of psychiatric emergency room patients are police referred (Sheridan & Teplin, 1981). Furthermore, in many communities, local jails often represent the largest congregation of persons with psychiatric impairments, as jails become the front-door, first responder to persons with psychiatric impairments, a role most jails are ill prepared to serve. Likewise, persons with substance use disorders, including substance abuse and dependence, represent an ever increasing component of our jail population and point of contact for law enforcement officials. As a result of these trends, many communities have developed alternatives to arrest, prosecution, and incarceration of mentally ill and/or substance abusing defendants, particularly those individuals committing low level misdemeanors and, in some cases, non-violent felonies. Falling under the general rubric of jail diversion programs, these initiatives involve interagency collaboration between mental health, law enforcement, and criminal justice systems to replace the criminalization of individuals with mental illness with community-based crisis stabilization, treatment, and care. Jail diversion programs can be categorized according to when the diversionary activities are implemented as either pre-booking or post-booking. Pre-booking approaches are those that divert the individual prior to arrest, while post-booking approaches divert the individual from prosecution and incarceration after arrest.

By its very nature, the process of providing diversionary alternatives to jail for persons with co-occurring disorders requires extensive collaboration and cooperation. A whole host of agencies and organizations, including local law enforcement, courts, prosecuting and public defender offices, community behavioral health providers, and payor organizations often approach this issue with different orientations, philosophies, and missions. As noted by Steadman et al. (1999a), Steadman, Morris, and Dennis (1995), an effective and comprehensive approach to providing jail diversion alternatives is not possible without a number of critical preliminary activities that set the stage for the trust and cooperation that is necessary to create a successful program. In addition to an informed and enlightened criminal justice system, effective jail diversion programs are predicated on the presence of a comprehensive, responsive, and accountable behavioral health system. Without such a community-based behavioral health system, diversion efforts result in individuals being diverted “from” jail without the infrastructure of programs and
services that allow the individual to be diverted “to” effective community-based treatment. Such poorly organized programs may produce short-term results that may eventually prove harmful to the person and the community.

Complicating the development of jail diversion alternatives is the increasing reliance of state agencies upon managed care contracting systems (Edmunds et al., 1997) to control their publicly funded behavioral health care delivery systems. Driven by the concepts of capitated funding and risk-based contracting, managed care contracting forces service delivery systems to carefully assess their service systems response to high-cost clients, such as individuals with criminal justice involvement. In order to maximize the responsiveness of managed care systems to the needs of individuals with criminal justice involvement, it is essential that state agencies implement appropriate contractual specifications, licensing standards, and practice guidelines that provide meaningful incentives for managed care systems to address the needs of this critical population.

The present evaluation was designed to test a series of four inter-related hypotheses. First, we had hypothesized that individuals with co-occurring disorders are arrested and become involved with the criminal justice system primarily due to low level, non-violent, “nuisance” crimes that are reflective not of criminal intent as much as survival behavior (e.g. illegal trespass, loitering) and the secondary manifestations of dysfunctional and symptomatic behavior (e.g. disturbing the peace, disorderly conduct). Second, we hypothesized that there are key differences in the characteristics of individuals who are diverted and that local mental health and criminal justice systems implicitly operate with an informal or poorly articulated mechanism for screening and identifying appropriate candidates for diversion. Third, we had hypothesized that being diverted from jail would act as a stimulus for enhancing the nature and quantity of behavioral health services provided to individuals. Specifically, we had hypothesized that individuals who were diverted would display a significant increase in their utilization of behavioral health services, particularly during the first 90 days after being arrested and diverted, and that the types of service these individuals received would be distinctly different from the services provided to their non-diverted counterparts. Fourth, we had hypothesized that persons who were diverted from criminal prosecution would display no greater risk of criminal recidivism than their non-diverted counterparts.

**METHOD**

**Participants**

The target population were adult residents of either Phoenix or Tucson, AZ, who were enrolled in the state’s managed behavioral health care system and who had been booked into the county jail for misdemeanor or low level felony offenses. Pre-study screenings were conducted using chart reviews, to verify a diagnosis of either schizophrenia and/or mood disorders. Additionally, as part of the baseline interview, potential subjects were screened using the Michigan Alcoholism Screening Test (MAST) (Zung & Charalampous, 1975) and the Drug Abuse Screening Test (DAST) (Gavin, Ross, & Skinner, 1989). Participants had to score a five or higher on either the MAST or DAST to be enrolled. Interagency agreements
between the local law enforcement agencies and behavioral health agencies provided for information sharing between the booking rosters of the jail and the membership rosters of the behavioral health agencies. Daily “data dumps” from the jail to the behavioral health agencies allowed for identification of individuals booked into jail who were already enrolled in the behavioral health system. Once identified, these individuals would be approached by a designated criminal justice–behavioral health liaison for consideration for diversionary programming and/or participation in the study. Individuals agreeing to participate in the study were then contacted by a research interviewer, provided informed consent, and then participated in a baseline interview.

Program

Within the two targeted communities of Phoenix and Tucson, post-booking diversion programs had been jointly developed between the criminal justice system (law enforcement, county attorney, and public defenders) and the behavioral health provider system. While there were informal, intermittent pre-booking diversion activities that occurred in both communities, there were no formal, written pre-booking agreements in place at the time this study was initiated. In both communities, three post-booking diversion alternatives were available, which consisted of release on conditions, summary probation, and deferred prosecution and are defined in Table 1. Participation in any of the three tiers of diversion was a point of negotiation between the prosecutor’s office, the behavioral health liaison, and the courts. Clients who were not considered a flight risk were usually offered release on conditions.

Design

This study represented one of nine study sites participating in the CMHS-CSAT jointly funded multi-site Jail Diversion Knowledge Development and Application (KDA) program (see Steadman et al., 1999b for a detailed description of the participating programs and study design). Consistent with most SAMHSA multi-site studies, individual study sites shared a common research methodology in terms of inclusion and exclusion criteria and data collection systems, with each site evaluating a unique model of jail diversion alternatives. Of the nine participating sites, four tested various forms of “pre-booking” jail diversion alternatives, and the other five sites implemented “post-booking” jail diversion alternatives. A quasi-experimental, longitudinal panel study design was employed, which consisted of two treatment conditions (jail diversion, no jail diversion) to which participants were assigned non-randomly, with three data collection points (baseline, 3 month, and 12 month follow-ups).

Instrumentation

Data on study participants were collected from two primary sources including structured interviews conducted at three points in time and record abstractions.
Structured interviews were conducted with each study participant at three points in time: baseline (within 2 weeks of their arrest and entry into the diversion program), 3 months following their baseline, and 12 months following their baseline interview. The interviews typically required a total of 2 hours to administer and covered a variety of information, including mental health status and symptoms, drug use patterns, criminal behavior, work and living situation, and income patterns. The research interviewers had received rigorous training with ongoing monitoring and supervision provided along with periodic reliability checks. The interview results were recorded in a prepared booklet that was then reviewed for completeness and accuracy before data entry. Study participants were provided a stipend, either in the form of a gift certificate or cash, for their completion of each interview, with the value of the stipend increasing with each subsequent interview. The participant interviews represented the primary data source for this study, but were supplemented with three administrative and clinical record abstractions. First, information was abstracted from the participant’s booking sheet regarding arrest charges and disposition. Second, clinical information regarding the mental health diagnoses and service utilization patterns were abstracted from the administrative data files maintained by the behavioral health systems in which these individuals were enrolled. Finally, data
queries were conducted in the Arizona State’s Public Safety Criminal Justice Information System to assess arrest patterns during the 12 months immediately preceding and following each participant’s entry into the jail diversion program.

RESULTS

Participant Recruitment Patterns

A total of 418 individuals were approached for study participation. Two hundred and eighty-eight (68.9%) agreed to participate in the study and provided informed consent. t-tests revealed no significant differences between those consenting and those refusing to participate in the study based on gender, age, ethnicity, diagnosis, or arrest charge. Of those consenting to participate in the study, 248 (59.3%) completed the baseline instrument and were found eligible to continue in the study based on MAST and DAST scores. A total of 36 individuals (8.6%) were found to be ineligible for the study. The reasons for exclusion include the following: MAST/DAST scores ($n = 17$), mental health diagnosis ($n = 15$), and criminal charges/other reasons ($n = 4$). An additional four individuals (0.9%) refused to complete the baseline interview and/or participate in the study, after providing informed consent. There were no significant differences between those eligible and those not eligible for the study in gender, age, ethnicity, diagnosis, or arrest charge. Of the 248 eligible study participants who completed baseline assessments, 154 (62.1%) received diversion while 94 (37.9%) received no diversion. Of those individuals who were diverted, the form of diversion varied as 86 individuals were released on conditions, 48 received deferred prosecution, and five participants received summary probation. No differences were noted between those individuals consenting to participate, found to be eligible, or completing baseline assessments based upon either location (Tucson versus Phoenix) or study condition (diverted versus non-diverted). Of the 248 eligible study participants who completed a baseline interview, 3 month follow-up interviews were conducted with 226 participants and 12 month interviews were conducted with a total of 202 participants, generating follow-up rates of 92.2 and 83.5%, respectively. Additionally, for 190 participants (78.5%) complete records of Baseline, 3 month and 12 month interviews were collected.

Participant Baseline Characteristics

In general, study participants were male (63%), Caucasian (57.7%), living with others (45.2%), and unemployed (85.5%) at the time of the arrest. With regard to cultural diversity, slightly more than one-fifth of the participants identified themselves as Hispanic (20.2%), with 16.1% identifying themselves as African-American, and 12.9% identifying themselves as Native American. On average, study participants reported 11.8 years of formal education, with 64.5% reporting either a high school diploma, or a GED. Twenty percent of the participants reported

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1These numbers add up to more than 100% because some respondents identified themselves as belonging to more than one racial or ethnic group.
being married, with 31.9% reporting living with a partner or spouse at the time of the baseline interview. Nearly two-thirds (63.9%) reported episodes of homelessness in the past 12 months. While three-quarters of the participants reported having had a regular job in the past and 68.1% reported having had a full-time job, only 25% reported working in the past 30 days. Significant differences were detected at baseline on the relative rates of diversion between the study participants in Tucson and Phoenix. In Tucson, 72.6% of all program participants were diverted compared with 51.6% in Phoenix (p = 0.001). Physical health and mental health assessments were conducted through the SF12 (Ware, Kosinski, & Keller, 1996) and the Colorado Symptom Inventory (CSI) (Shern, Lee, & Coen, 1996). At the time of baseline interviews, no significant differences were noted in either the physical or mental health of the study participants, on the basis of diversion status. Participants in general displayed good to fair physical health, within one standard deviation of the mean for the SF12 physical health scale, and slightly more than one standard deviation below the mean for the SF12 mental health scale.

**Behavioral Health Indicators**

Regarding mental health and substance abuse profiles, 53% of the study participants were identified as having an Axis I diagnosis that was consistent with a mood disorder; 47% were diagnosed with schizophrenia or a related disorder. More than two-thirds (71%) had ever attempted suicide, with 19% reporting at least one attempt in the preceding 12 months. Participants reported an average age of onset of mental health problems as 17, with a much earlier age of alcohol and drug use at 12.9 and 15.7 years, respectively.

**Substance Use Indicators**

Fifty-eight percent of the study participants reported using alcohol in the previous calendar month, with those who drank reporting an average use of 10.2 days during the month preceding the baseline interview. In comparison, 59% of the study participants reported use of illegal drugs in the month preceding the baseline interview, with an average of 13.4 days of self-reported drug use during the month preceding the baseline assessment. At baseline, 39.5% of the project participants reported use of both alcohol and drugs in the previous month, with significantly more of the diverted participants reporting poly-substance use (45.5 versus 29.8%, p = 0.01). With regard to drug choice, marijuana and cocaine were the most commonly cited substances, at 35.9 and 32.3% of the study participants, respectively. Stimulants, opiates, and sedatives were cited by 6.5, 5.6, and 3.6% of the participants respectively. Finally, 1.2% of the study participants reported use of inhalants in the calendar month preceding the baseline interview.

**Service Utilization Patterns**

Nearly all (91.9%) of the study participants reported use of prescribed medications for a mental illness, 82.7% reported seeing a case manager, and 74.2% reported
seeing a psychiatrist in the 90 days prior to the baseline interview. Obviously, the individuals participating in this study site were individuals already engaged in the public behavioral health system. Furthermore, participants displayed differential rates of service utilization for mental health versus substance abuse services, with more participants reporting use of mental health services compared with substance abuse services. Furthermore, medication utilization predominated the mental health services reported, with individual/group therapy use reported by slightly less than one-half of the study participants. With regard to substance abuse service patterns, self-help groups were the most frequently reported service by 31.5% of the participants, followed by individual and group therapy, at slightly less than one-quarter (22%). Other commonly reported services included medical/physical health services (39.5%), housing (29.8%) benefit and entitlement counseling (26.6%), seeing a probation/parole officer (17.7%), and legal aid (17.3%). Only one significant difference was noted between study participants’ utilization patterns, as diverted participants more frequently reported using an emergency room for mental health problems (27.3%) compared with their non-diverted counterparts (14.9%) \((p \leq 0.012)\). This pattern of elevated ER services for mental health remained present at both the 3 month and 12 month follow-ups.

**Criminal History and Patterns**

Criminality was assessed along a variety of dimensions, including index offense, history of arrests and incarceration, and exposure to violence. These data were drawn from three primary sources, including self-reported information as part of the cross-site interview protocol, review of the arresting or booking sheet, and review of data from the Arizona Computerized Criminal History System, maintained by the Arizona Department of Public Safety. With regard to index offense (that is the charge or charges of the arrest incident that brought the participant to the attention of the study), four charge classifications predominated: procedural violations (31.5%), public disorder offenses (24.6%), minor violations (24.2%), and non-sex assault offenses (25.4%). All other charge classifications, including drug crimes and property crimes, were noted for less than 10% of the participants. Diverted participants were found to more frequently report non-sex assault offenses among their arrest charges, along with other person crimes. Additionally, procedural violations were more frequently observed among the Tucson study population (41.9%) than in Phoenix (21.0%); this difference was statistically significant \((p < 0.001)\). Table 2 provides a summary of the self-reported lifetime arrest history, past 12 months arrest history, and most serious crime arrest profiles for the study participants, separated on the basis of diversion status. These findings suggest that diverted participants were significantly more likely to have a history of violent crime offenses and significantly less likely to have a history of procedural violation offenses, as compared with their non-diverted counterparts. Diverted participants were also more likely to report arrests in the previous 12 months for violent crimes and less likely to report procedural violations. When queried to identify the most serious crime for which they had ever been arrested, participants displayed similar response patterns, with non-sex assault offenses (35.9%), other lesser crimes (20.6%), drug crimes (17.7%), and property crimes (17.7%) reflecting the more commonly cited charge categories.
Repeated measures analysis of variance (ANOVA) and chi-square analyses were used to detect preliminary differences in key outcomes, as evidenced in the interview assessments conducted with study participants at baseline, 3 month, and 12 month post-baseline interviews. Tests for main effects and interaction effects were conducted for diversion status and time of interview. Comparative analysis between the baseline and subsequent follow-up interviews revealed general main effects for time on many of the outcome variables, with few main effects or interaction effects detected on the basis of diversion status (diverted versus non-diverted). Furthermore, statistically significant main effects for time that were observed at the 3 month follow-up were generally sustained at the 12 month follow-up as well. Table 3 summarizes only the main effects observed at the 12 month interview on the basis of diversion status.

As these data reveal, non-diverted study participants reported less frequent use of emergency room services for substance abuse or mental health issues in the 90 days prior to the 12 month interview, along with more frequent use of psychiatrists’ visits and other physical health services, as compared with their diverted counterparts. No other statistically significant differences were detected between the diverted and non-diverted study participants at the 12 month interview point.

### Table 2. Criminal history profiles of program participants

<table>
<thead>
<tr>
<th>Offense</th>
<th>Diverted study participants</th>
<th>Non-diverted study participants</th>
<th>Diverted study participants</th>
<th>Non-diverted study participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent crimes</td>
<td>66.2%</td>
<td>48.9%</td>
<td>39%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Drug crimes</td>
<td>37.7%</td>
<td>52.1%</td>
<td>14.9%</td>
<td>17%</td>
</tr>
<tr>
<td>Other crimes against people</td>
<td>17.5%</td>
<td>17%</td>
<td>10.4%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Property crimes</td>
<td>33.1%</td>
<td>39.4%</td>
<td>9.7%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Procedural violations</td>
<td>55.2%</td>
<td>75.5%</td>
<td>36.4%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Lesser crimes</td>
<td>81.8%</td>
<td>87.2%</td>
<td>57.1%</td>
<td>57.4%</td>
</tr>
<tr>
<td>Other offenses</td>
<td>2.6%</td>
<td>5.3%</td>
<td>1.9%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

### Table 3. Outcome measures with statistically significant differences between samples

<table>
<thead>
<tr>
<th>Measure</th>
<th>Diverted</th>
<th>Non-diverted</th>
<th>p ≤</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado Symptom Index Anxiety–Depression Subscale</td>
<td>9.11 (SD = 3.60)</td>
<td>10.24 (SD = 3.20)</td>
<td>0.025</td>
</tr>
<tr>
<td>Use of ER for mental health or substance abuse since baseline interview</td>
<td>28 (22.6%)</td>
<td>6 (7.7%)</td>
<td>0.006</td>
</tr>
<tr>
<td>Use of ER for mental health or substance abuse 6–9 months before interview</td>
<td>15 (12.1%)</td>
<td>2 (2.6%)</td>
<td>0.017</td>
</tr>
<tr>
<td>No. of times physical health service past 90 days (among those who received those services)</td>
<td>3.21 (SD = 3.54)</td>
<td>5.62 (SD = 7.01)</td>
<td>0.046</td>
</tr>
<tr>
<td>Arrested for lesser crimes past 3 months</td>
<td>10 (8.1%)</td>
<td>16 (20.5%)</td>
<td>0.011</td>
</tr>
</tbody>
</table>
Consistently, across all measures assessing mental health and substance abuse, study participants displayed improvements over time, irrespective of their diversion status. With regard to CSI scores, study participants displayed statistically significant reductions in their overall CSI scores, along with the two CSI subscale scores of Psychoticism and Anxiety–Depression. Similarly, reductions in alcohol and drug use were also observed, with the number of participants reporting alcohol use and drug use in the previous calendar month down from 58.5 and 58.9% respectively at baseline to 40.6 and 34.7%, respectively, at the 12 month interview.

Service Utilization Patterns

Participants’ reported patterns of service utilization may be characterized as follows. First, participants generally displayed no significant changes in their rates of accessibility to, or frequency of use of, the various mental health, substance abuse, and other services that were previously described at the 3 month and 12 month follow-up interviews, relative to reported baseline rates. Second, few main effects for diversion status were detected with regard to service utilization, as diverted participants more frequently reported use of emergency rooms for mental health issues at baseline and 12 month follow-ups. Furthermore, significantly more diverted participants reported use of emergency services other than the emergency room for mental health and for substance abuse problems at the 3 month follow-ups, although insignificant differences were detected at either baseline or 12 months. Third, non-diverted participants reported receipt of medical health services more frequently than non-diverted participants at the 12 month follow-up. Fourth, case management, psychiatric medications, and seeing a psychiatrist continued to be the three more frequently identified mental health/substance abuse services, cited by more than 80% of the participants at the 3 month and 12 month follow-ups.

Violence and criminality patterns

Data collected at the 3 and 12 month follow-up interviews suggest that, while a number of indicators of criminality and violence were reduced over time, these reductions were statistically insignificant with no main effects for diversionary status or time identified at either the 3 month or 12 month follow-up. For example, nearly 10% of the study participants reported having been arrested in the 30 days immediately prior to the 12 month follow-up interview, compared with a 3 month rate of 15.5%. At the 12 month follow-up, 47% of all participants reported having been arrested at least once since their baseline interview. In general, rates of reported violence, both perpetrated and received by the project participants, decreased over time, although no statistically significant effects were observed for time or diversion status.

Arrest data was obtained from the Arizona Computerized Criminal History System maintained by the Arizona Department of Public Safety on 149 study participants through August 2000. In an analysis of this data using MANOVA with three dependent variables (12 months pre- and post-baseline, 90 days pre- and
post-baseline, and 30 days pre- and post-baseline) and two independent variables (city and diversion condition) statistically significant differences were noted. Significant interaction effects between time and city were observed as the average number of arrests 90 days pre-baseline was significantly higher in Phoenix (1.66) compared with Tucson (1.16), while the average numbers of arrests 90 days post-baseline were almost identical (0.51 for Phoenix; 0.50 for Tucson; $F = 7.159$; $df = 1,145$; $p = 0.008$). Additionally, as depicted in Figure 1, significant time-by-city-by-diversion condition interactions were observed ($F = 4.277$, $df = 1,145$; $p = 0.040$), as the number of arrests 12 months pre-baseline was highest for Phoenix non-diverted subjects, while the number of arrests 12 months post-baseline was lowest for Tucson diverted subjects.

**DISCUSSION**

This report summarizes the results of a longitudinal study of 248 individuals with co-occurring disorders of substance use and serious mental illness who had been arrested for misdemeanor offenses by local law enforcement officials in two urban communities of Arizona. These results provide critical information in a number of key areas regarding programmatic information including key process and outcome variables of post-booking jail diversion programs. The baseline characteristics of these participants reflect a chronic and acute population of individuals with co-occurring disorders, with the overwhelming majority of the program participants reporting abuse of alcohol, drugs, or both, having been homeless in the past 12 months, and reporting previous attempts at suicide. All of these participants were enrolled in their community’s behavioral health service delivery system, with most reporting having seen their case managers or psychiatrists within the 90 days prior to their arrest. Individuals who were diverted tended to do so more regularly in one
community (Tucson) than another (Phoenix). Furthermore, diverted individuals tended to report poly-substance use and to also have had a history of violent criminal charges. As a result of diversion, only a handful of main effects or changes in participant status were observed 12 months after their index offense. Irrespective of status (being diverted or not), participants were observed to be more stable, in terms of mental health, substance use, physical health, criminality, and housing, 12 months after their arrest than during the 12 months prior to their arrest. For all study participants, the index offense represented a crisis in their lives, from which most participants recovered a modicum of stability and wellness. Nonetheless, for individuals who were diverted, a number of statistically significant findings were observed. These individuals tended to make more frequent utilization of emergency rooms for both mental health or substance use, but also less frequent access of physical health/primary care services, as compared with their non-diverted counterparts. Additionally, individuals who were diverted displayed lower scores of depression and anxiety as compared with their non-diverted counterparts. Most significantly, those individuals who were diverted showed no significant differences in their overall re-arrest rates, which were lower for both groups at 12 months, and statistically significantly lower rates of re-arrest for lower level misdemeanor crimes, as compared with their non-diverted counterparts.

Prior to attending to the results and implications of this study, it is important to highlight the numerous methodological limitations of this study. First and foremost, the inability to randomly assign study participants to diversionary status limits the internal validity of our findings. Randomization was disallowed by the funding agency and would have been extremely difficult to carry out within the structure of the program. The baseline differences noted between our diverted and non-diverted study participants suggest additional analyses should incorporate some forms of adjustment, using multivariate analyses or propensity scoring. A second limitation is the fact that the study relied extensively upon self-report measures. This is particularly problematic in regards to participants’ self-reports of substance use patterns, where previous research has suggested consistent patterns of under-reporting, particularly for individuals under criminal justice supervision. Future research would be enhanced by the use of more rigorous cross validation measures, such as urinalysis or other physiological assessments of substance use patterns. Finally, a paucity of information was collected to assess the programmatic elements of the diversionary programs which participants were provided. While a general conceptual understanding of the diversionary programs was developed, the lack of any objective process monitoring or fidelity assessments leaves open to suspicion any interpretation of the specific programmatic characteristics of these programs, particularly in light of the significantly different rates of diversion that were observed between the two participating communities. In spite of these limitations, these results provide compelling findings and provocative implications for the growing practice of behavioral health diversion programs, specialty courts, and future research in these areas of practice.

First and foremost, new knowledge is gained regarding the characteristics of individuals with co-occurring disorders involved with the criminal justice system. These characteristics and their relationship to successful diversion outcomes with regard to reduced criminality, improved behavioral health status, and independence provide implications for the design and delivery of effective diversion treatment.
programs. We had hypothesized that the types of offense that diverted study participants would be charged with would be non-dangerous offenses; in fact, 26.6% of the study participants’ index offenses were classified as non-sex assault offenses. However, closer inspection of the operational definition of this cross-site study classification and a review of the actual booking sheets suggest an underlying pattern of interpersonal conflict and dysfunction. Jail diversion programs may do well to offer formal social skills training programs (cf. Lieberman, DeRisi, & Mueser, 1989) or other approaches to enhance the social competence and functioning of program participants.

Second, new knowledge has been gained regarding the relative outcomes of post-booking jail diversion programs. Based upon the results of this study, qualified, but empirically defensible, conclusions can be drawn about the impact of post-booking jail diversion programs for persons with co-occurring disorders with regard to public safety, client functioning, and costs. The results of this study suggest that post-booking jail diversion offers a safe and reasonable alternative to prosecution and incarceration. Individuals who were diverted displayed no greater risk of further arrests and criminal behavior than those individuals who were not diverted. Results were inconclusive with regard to the relative effects of diversion upon subsequent criminal activity as both groups of study participants displayed similar reductions in subsequent arrests and bookings. Furthermore, all study participants displayed significant improvements over time in most measures of mental health, social support, and quality of life. As such, a reasonable conclusion to be drawn from these results is that diversion places individuals at no additional risk of future criminal behavior or involvement with the criminal justice system. Conversely, it is reasonable to conclude from these preliminary findings that diverting individuals with co-occurring disorders poses no substantial increase in safety risks to the community.

Third, new knowledge is gained with regard to the relative strength of post-booking jail diversion programs with implications for program design and monitoring. The lack of any main treatment effects with regard to diversion status is a challenging and disappointing finding. We had hypothesized that individuals who were diverted would experience increased behavioral health service utilization, especially at the 3 month follow-up, and as a result of these enhanced services would display significant improvements in terms of mental health and substance use indicators, criminality, and other indicators of psychosocial stability (e.g. housing, employment, etc.). In fact, these results yielded few significant differences between the study samples in terms of self-reported access to care and “dosage” of services. Furthermore, no increase over time in access to care or service utilization was observed for either group, relative to baseline, suggesting weak or poorly defined treatment protocols or service guidelines for diversion services. Although both communities had prescribed treatment guidelines for serving those individuals who were diverted, these guidelines did not appear to impact the frequency or composition of services provided to study participants. Subsequent analyses are planned to study the service utilization data more closely. Based upon the data analyzed to date, it is reasonable to conclude that diversion from criminal justice prosecution and possible incarceration did not affect the composition, dosage, or access to treatment and rehabilitation services among the study participants. This finding provides implications for the ongoing debate of whether diversion represents
a diversion from criminal justice prosecution or a diversion to treatment. For these study participants, diversion was characterized as the former, that is, diversion from criminal justice prosecution. This finding should be tempered by the fact that diverted participants displayed no significant increased risk of subsequent criminal behavior over than their non-diverted counterparts. Future research is needed to identify and explicate critical treatment ingredients and their implementation within community-based behavioral health settings.

It is worth commenting on the structure of the behavioral health service delivery systems within which these jail diversion programs operated and the effects that such organization had upon service delivery. The state of Arizona has had one of the longer and more stable experiences in providing integrated treatment services within a managed care environment. At both the state level and at the regional level, all behavioral health services, including prevention, substance abuse treatment, children’s mental health, general mental health services, and services to persons with serious mental illness are administratively integrated through a single payor system. Furthermore, over the course of the past 10 years, interagency attention to the issues of criminal justice involved persons with mental impairments has been a statewide priority, as reflected by the Arizona Council of Offenders with Mental Impairments (ACOMI), comprised of representation of treatment, law enforcement, and criminal justice constituents throughout the state.

Within each of the local communities in which the jail diversion programs operated, there are key elements that affected the course and scope of the diversion efforts. The Tucson community was characterized by a series of four de-centralized, comprehensive behavioral health care networks that are at risk and capitation funded by a managed behavioral health organization. In this system of care, case management and care coordination was provided at the network level, along with all treatment and rehabilitation services. In contrast, the managed behavioral health care corporation in Phoenix provided centralized case management services, with services purchased by area providers on a purchase of service system. These different organizational structures provide important implications for the placement and function of what Steadman has described as “boundary spanners.” Within the Phoenix community, these boundary spanners were able to communicate and collaborate directly with case managers within their agency’s chain of command. One feature of this enhanced integration was an agency-wide email system that provides for automatic notification to case managers of clients who have been arrested and identified through the joint jail/RBHA data system (Raider & Arthur, 1999). In contrast, within the Tucson community, jail diversion boundary spanner staff were employed by the behavioral health managed care organization, while case managers were employees of one of the four at-risk provider networks. In this latter configuration, both formal and informal inter-agency alliances and key points of contact had to be established to ensure efficient coordination and collaboration between the boundary spanners and the case managers and treatment teams.

In summary, the results of this evaluation provide tentative support to the conclusion that post-booking jail diversion programs offer a safe and viable alternative to the prosecution and incarceration of individuals with co-occurring disorders who have been charged with committing low level offenses. The results presented in this report, while intriguing, are limited by a number of methodological
considerations. Most notably, the nonequivalence of groups, due to the inability to randomly assign individuals to treatment conditions, is of particular concern and should be addressed in future studies.

REFERENCES


