Background

Annually, 11.4 million people are booked into U.S. jails (Stephan, 2001). An estimated seven percent of jail inmates have current symptoms of serious mental illness (Teplin, 1990; Teplin, Abram, & McClelland, 1996). Of these 800,000 people, approximately three quarters have co-occurring substance use disorders (Abram & Teplin, 1991; Abram, Teplin, & McClelland, 2001).

Women, who represent 11 percent of all jail inmates, have nearly twice the rate of serious mental illness than men (12% vs. 6.4%) (National GAINS Center, 2002). Moreover, many women entering jails present multiple problems relating to parenting, health, and histories of violence, sexual abuse, and trauma. As many as 33 percent of women entering jails have been diagnosed with post-traumatic stress disorder (PTSD) at some point in their lives (Teplin et al., 1996).

Several programs have emerged in recent years to divert individuals with serious mental illness and co-occurring substance use disorders from jail to community-based treatment and support services. In 1992, a national survey of jail diversion programs estimated that only about 52 jails in the U.S. had diversion programs for persons with mental illness (Steadman, Barbera, & Dennis, 1994). Currently, the Federally-funded Substance Abuse Mental Health Services Administration (SAMHSA) Technical Assistance and Policy Analysis Center for Jail Diversion (TAPA) lists 294 operating jail diversion programs nationally (TAPA Center, 2003). These programs include a variety of pre-booking programs, which divert individuals at initial contact with law enforcement officers before formal charges are brought, and post-booking programs, which identify individuals in court or in jail for diversion at some point after arrest and booking.

The recent surge in jail diversion programs has been supported in part by Federal funding. SAMHSA’s Center for Mental Health Services (CMHS) funded 17 jail diversion programs in 2002 and 2003 under its Targeted Capacity Expansion (TCE) Jail Diversion Congressional authorization, in addition to 10 programs in 2001 under its generic TCE authorization. In addition, the Bureau of Justice Assistance funded 23 Mental Health Courts in early 2003 (Bureau of Justice Assistance, 2002).

Broad support for jail diversion programs is also evident in the recommendations of two major recent reports: the Council of State Government’s Criminal Justice/Mental Health Consensus Project report (2002) and the President’s New Freedom Commission on Mental Health report (2003). The Consensus Project report calls on change agents to maximize the “use of alternatives to prosecution through pretrial diversion…” (Policy Statement #9) and “availability and use of dispositional alternatives” (Policy Statement #14) in appropriate cases involving people with mental illness. The President’s Commission recommended “widely adopting adult criminal justice and juvenile justice diversion…strategies to avoid the unnecessary criminalization and extended incarceration of non-violent adult and juvenile offenders with mental illness” (p. 43–44).

Previous Research

There are only seven published empirical outcome studies of jail diversion programs. These small-scale studies had differing methodologies and examined different outcomes. Two of the seven studies examined avoiding arrest as an outcome in police-based, pre-booking diversion programs. Lamb and colleagues (1995) studied how many of 101 consecutive referrals to the Los Angeles SMART emergency outreach teams resulted in the individual being arrested and taken to jail. Of the 101 referrals, 80 were transported to a hospital setting, 69 were held on a 72-hour mental health hold in an inpatient setting, and only 2 were jailed. Similar findings came from a study comparing two police-based programs, the Memphis Crisis Intervention Team (CIT) and the Birmingham Community Service Officers (CSO), and a traditional mobile mental health crisis team in Knoxville (Steadman, Williams Deane, Borum, & Morrissey, 2000). The two police-based programs resulted in substantially fewer people being arrested than the comparable figure found in Chicago for routine police contacts of 16 percent (Sheridan & Teplin, 1981). In Memphis 2 percent of the CIT contacts were arrested and, in Birmingham, 13 percent of the CSO cases.

Of the five post-booking programs with published outcome data, three were court-based. All three showed similar or better outcomes for diverted individuals than for persons with mental illness processed through the regular channels. In a randomized study of outcomes of clients assigned to a mental health court versus those assigned to usual mental health services and criminal processing, the mental health court clients demonstrated greater gains in developing independent living skills and reducing drug problems than the “treatment as usual” group during the one-year follow-up period. Both groups reported improvements over time in quality of life and psychological distress, with no differences between the groups (Cosden, Ellens, Schnell, Yamini-Dlouf, & Wolfe, 2003). In a Los Angeles study with a one-year follow-up, judicially monitored individuals with mental illness were significantly more successful than those not monitored by the court, as measured by lower proportions with re-arrest, violence, homelessness, and psychiatric hospitalizations (Lamb, Weinberger, & Reston-Parham, 1996). In a mid-size Midwestern city, diverted individuals had substantially less jail time during a two-month follow-up than non-diverted individuals, with similar proportions of the two groups rearrested (Steadman, Cocozza, & Veysey, 1999).

In a study of jail-based diversion in a mid-size New England city, diverted individuals spent less time in jail over a one-year follow-up period, with an average of 41 days in jail compared to 173 days for non-diverted individuals. The biggest reduction was in class D felons (Hoff, Baronsky, Buchanan, Zonana, & Rosenheck, 1999).

The fifth post-booking program studied was Project Link in Rochester, New York. All program participants in this institution-based program passed through the Monroe County Jail, but the point of contact for the program was the jail, a state prison, or even state mental hospitals. Its research on 41 participants admitted between October 1, 1997 and February 28, 2000 and completing one year, showed a drop in the mean number of jail days in the follow-up year as compared to the prior year from 107.7 per month to 46.4 per month. The mean number of hospital days per month dropped from 115.9 to 7.4. Significant reductions were also noted in average number of arrests per participant. In addition, client functioning improved significantly during the follow-up year (Lamberti, Weisman, Schwarzkopf, Mundondo-Ashton, Price, & Trompeter, 2001).

An eighth set of data comes from an in-house report of a New York City program to divert felony defendants (National GAINS Center, 2002). The Nathaniel Project had 53 participants in its first year. The report compared the participants’ last 12 months pre-diversion with the first 12 months post-diversion in the Nathaniel Project, and noted the number of arrests was reduced from 101 (35 misdemeanors and 66 felonies) to 7 (5 misdemeanors and 2 felonies). The percent housed at intake was 8 percent and at one year was 79 percent. Program retention was 88 percent at 6 months and 80 percent at 2 years.

The Jail Diversion Knowledge Development and Application (KDA)

CMHS and the Center for Substance Abuse Treatment (CSAT) of SAMHSA funded a KDA focusing on jail diversion in 1997. The goal of the SAMHSA KDA programs was to develop new knowledge about ways to improve the prevention and treatment of substance abuse and mental illness and to work with state and local governments as well as providers, families, and consumers to apply that knowledge effectively in everyday practice. The KDA represented an advance over previous studies in that it included several sites with diverse study participants, collected extensive background information on diverted and non-diverted participants, and gathered cost data from some of the sites (Steadman et al, 1999).
SAMHSA funded nine sites, including four pre-booking diversion programs and five post-booking diversion programs. 

The pre-booking programs were located in: 
- Montgomery County, Pennsylvania 
- Memphis, Tennessee 
- Multnomah County, Oregon 
- Wicomico County, Maryland 

Court-based post-booking jail diversion programs in this study included: 
- Connecticut 
- Lane County, Oregon

Jail-based post-booking programs included: 
- Maricopa and Pima Counties, Arizona 
- Oahu, Hawaii 
- New York City, New York

Research Triangle Institute was chosen to coordinate the research initiative, which involved overall responsibility for designing and conducting the multi-site study in collaboration with the study sites. In addition, sites were also able to use a small portion of their funds to implement program enhancements, such as improved management information systems, establishment of jail diversion task forces, training on co-occurring disorders, and universal screening for co-occurring disorders. 

The National GAINS Center for People with Co-Occurring Disorders in Contact with the Justice System was designated as the Technical Assistance Center for the sites and in this capacity conducted site visits to all programs and provided follow-up technical assistance in the form of clinical and cross-trainings, support of community education activities and site visits to model programs, and on-site consultations.

Program Accomplishments

In addition to screening and assessing nearly 2,000 persons with co-occurring mental illness and substance use disorders and diverting 1,000 of these, there were significant system impacts of this initiative. These accomplishments were not only felt in the localities in which the programs were implemented, but also reached other communities interested in adopting jail diversion programs. 

Specific examples include:

- Connecticut used preliminary data from this project to respond to a legislatively mandated report on the costs and effectiveness of diversion. The report influenced passage of legislation funding diversion programs in the areas of the state not previously served and increasing funding for existing programs. 
- The Wicomico County, MD, experiences led the Mental Hygiene Administration (MHA) to develop an intervention to identify and educate women in jail settings about the impact of childhood abuse. The training reached providers and criminal justice staff throughout the state. The eight local detention centers now have trauma specialists funded by the MHA. Also, this program has spawned a new set of initiatives aimed at serving women and their children. 
- Maricopa County (Phoenix), AZ, piloted a felony diversion program, benefiting from the success of the misdemeanor program. Additionally, jail diversion staff have been active participants in the Arizona Council on Offenders with Mental Impairments and have raised awareness and provided technical assistance to numerous communities around the state. A statewide consensus-building process for principles, policies, and strategies for implementation of integrated services for people with co-occurring disorders was completed. In both program locations of Tucson and Phoenix, formalized efforts have been undertaken for the adoption of pre-booking jail diversion programs based on the Memphis CIT model. In addition, a mental health court was developed in Tucson. 
- Building on the experiences of the New York City program, local partners have collaborated on planning additional projects that have been funded, including

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three Community Action grants and two Targeted Capacity Expansion grants. In addition, this project led the New York City Department of Mental Health to require all new projects to include evaluation and the development of program outcome measures to capture program functioning. This project has also contributed to growing awareness of jail diversion and forensic mental health issues on local and state levels.

- **In Hawaii**, as a result of this program, efforts have been made to improve the quality of services to which people are diverted. Forensic Assertive Community Treatment (FACT) teams on Oahu have been established to serve divertees and an intensive case management program has paved the way for the introduction of jail diversion on the Big Island.

- Several systemic changes resulted in **Lane County, OR**, including the adoption of an Oregon Office of Medical Assistance Programs policy that persons covered under this plan cannot be disenrolled from benefits until after they had been in custody in jail for at least 14 days (which serves to preserve individuals’ immediate access to benefits upon release); improved integration of mental health and substance abuse treatment services; and early identification of individuals with co-occurring disorders.

- **In Montgomery County, PA**, this project strengthened the collaboration between the mental health and substance abuse service systems through increasing the number of planning and information meetings among agencies. This collaboration also created new conduits for problem solving between systems, resulting in new state funding to hire a jail social worker to span the boundaries between the jail and the providers.

- **In Multnomah County, OR**, this project brought attention to the need for acute crisis care services and an integrated treatment system. The data collected as a part of this project has also been instrumental in helping the county redesign its mental health system.

- **In Memphis, TN**, increased attention to the treatment needs of persons with co-occurring disorders influenced the creation of treatment options at the jail, including a substance abuse detoxification pre-jail diversion program, post-jail diversion interventions, improved evaluation and treatment components, as well as improved liaison and community aftercare systems. In addition, Memphis’ involvement in the KDA has contributed to the national growth of the CIT program. The Memphis CIT model has been implemented in over 50 cities nationwide and has been accorded numerous awards.

### Client Outcomes

From September 1998 to May 2000, sites identified diverted participants meeting study intake eligibility criteria of a serious mental illness co-occurring with a substance use disorder. Participants also had to be 18 or older, competent to give consent and to understand and respond to questions, and be willing to receive treatment. Comparison (non-diverted) participants for each site meeting eligibility requirements were selected from populations with potentially similar participants.

A quasi-experimental non-equivalent comparison group design was adopted due to difficulties involved in conducting true experiments with random assignment of participants to jail and non-jail statuses. Research staff interviewed participants at baseline, 3 months and 12 months using an interview protocol developed by the Steering Committee. The protocol contained the following major sections:

- Demographics and living arrangements
- Mental health and treatment history
- Substance abuse and treatment history
- Health problems
- Social support
- Employment and finances
- Criminal justice involvement and violence
The sites conducted:
- baseline interviews with 1,966 participants (including 971 diverted participants and 995 non-diverted participants);
- 3-month follow-up interviews with 1,497 participants (including 741 diverted participants and 756 non-diverted participants); and,
- 12-month interviews with 1,353 participants (with 697 diverted participants and 656 non-diverted participants).
The overall study retention rates were 76 percent for the 3-month interview and 69 percent for the 12-month interview.

Major Findings

The following data are drawn from 1,185 12-month interviews among participants in six sites that had reliable and sufficiently large datasets. All data are self-report.

Diverted and non-diverted participants were significantly different on many characteristics at baseline. In particular, diverted participants were more likely to be female; have a primary diagnosis of schizophrenia or a mood disorder with psychotic features; receive Supplemental Security Income or SSDI; have higher Colorado Symptom Inventory scores indicating better mental health; and report higher life satisfaction. The diverted group also was less likely to live with a spouse or partner; have substance use problems; and have been arrested and spent time in jail. At the same time, the two groups were similar on measures of physical health, age, race/ethnicity, education level, previous employment, previous treatment, victimization, and violent acts.

However, it should be noted that there were some differences between pre-booking and post-booking sites for some of these variables. In particular, it has been noted that post-booking diverted participants as a group appear to be more functionally impaired than the pre-booking diverted group, suggesting that pre-booking and post-booking diversion programs tend to target different populations (Lattimore, Broner, Sherman, Frisman, & Shafer, 2003).

Table 1 presents a comparison of 12-month outcomes for diverted and non-diverted participants overall and within pre-booking sites and post-booking sites.

<table>
<thead>
<tr>
<th></th>
<th>Pre-Booking Diverted</th>
<th>Post-Booking Diverted</th>
<th>Total Diverted</th>
<th>Pre-Booking Not Diverted</th>
<th>Post-Booking Not Diverted</th>
<th>Total Not Diverted</th>
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<tr>
<td>Number of arrests since intake</td>
<td>.71</td>
<td>1.40</td>
<td>1.03</td>
<td>1.23</td>
<td>1.15</td>
<td>1.20</td>
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<tr>
<td>Community days **</td>
<td>315.9</td>
<td>288.5</td>
<td>303.3</td>
<td>257.3</td>
<td>222.1</td>
<td>245.2</td>
</tr>
<tr>
<td>ER use *</td>
<td>31.6 %</td>
<td>30.9 %</td>
<td>31.3 %</td>
<td>25.7 %</td>
<td>20.5 %</td>
<td>23.9 %</td>
</tr>
<tr>
<td>Hospitalization**</td>
<td>35.6 %</td>
<td>27.1 %</td>
<td>31.7 %</td>
<td>20.6 %</td>
<td>15.1 %</td>
<td>18.7 %</td>
</tr>
<tr>
<td>Any medication *</td>
<td>81.6 %</td>
<td>81.8 %</td>
<td>81.7 %</td>
<td>72.7 %</td>
<td>75.5 %</td>
<td>73.7 %</td>
</tr>
<tr>
<td>Any counseling *</td>
<td>57.5 %</td>
<td>68.4 %</td>
<td>62.6 %</td>
<td>55.3 %</td>
<td>59.7 %</td>
<td>56.8 %</td>
</tr>
<tr>
<td>Any residential *</td>
<td>8.7 %</td>
<td>16.2 %</td>
<td>12.2 %</td>
<td>16.4 %</td>
<td>17.0 %</td>
<td>16.6 %</td>
</tr>
<tr>
<td>Change in CSI</td>
<td>8.88</td>
<td>7.42</td>
<td>8.21</td>
<td>7.09</td>
<td>7.39</td>
<td>7.19</td>
</tr>
</tbody>
</table>

*p<.05, **p<.001 for overall difference between “Diverted” and “Non-Diverted”
Time in the Community

Diverted participants spent more time in the community than the non-diverted group in the first year after their target contact/arrest.

- The diverted group reported 303 days in the community compared to 245 days among the non-diverted group. Time in the community reflects the number of days not spent incarcerated or in psychiatric hospitals or residential treatment.

- The approximate two-month difference in the number of community days between diverted and non-diverted participants was observed in both the pre-booking and post-booking groups, though the average numbers of community days for diverted and non-diverted participants from pre-booking sites (316 days and 257 days, respectively) was significantly higher than for those from post-booking sites (289 days and 222 days, respectively).

Mental Health Symptoms

Both diverted and non-diverted groups improved mental health symptoms over time, though one group did not improve significantly more than the other.

- Diverted participants improved Colorado Symptom Index scores from baseline to 12 months by an average 8.21 points, compared to a 7.19 point improvement by non-diverted participants. This difference is not statistically significant.

Cost Data

Adopting a taxpayers’ perspective, RTI assessed the costs and effectiveness of jail diversion for four sites: Lane County, Oregon; Memphis, Tennessee; New York, New York; and Tucson, Arizona (Cowell, Stewart, & Ng, 2002a, 2002b, 2002c, 2002d). Researchers collected cost and utilization data for criminal justice processing and treatment services for mental health and substance use disorder to answer two questions:

1. How different are the costs of the jail diversion program for the average participant from the costs of the traditional criminal justice system?

The results were mixed:

- **Lane County, OR**—no significant overall cost difference between being diverted and not being diverted (Cowell et al., 2002a)
Jail diversion does not increase public safety risk. Despite more days in the community, diverted participants had comparable re-arrest rates in the 12-month follow-up period.

Jail diversion programs link diverees to community-based services; however, it is not clear from the data whether individuals receive the type, amount, and mix of services, including evidence-based practices, they need to improve outcomes, such as mental health symptoms.

In general, jail diversion results in lower criminal justice costs and greater treatment costs, as diverted participants receive more treatment than those not diverted. This additional treatment cost is often higher than the criminal justice savings in the short-run.

Taken together with the findings from previous studies on jail diversion, these findings provide evidence that jail diversion results in positive outcomes for individuals, systems, and communities.

Future research should focus on exactly what treatment, including evidence-based practices, diverted individuals receive, and what impact these services have on outcomes.

Summary and Conclusions

The KDA study expands our knowledge of the effectiveness of jail diversion. Data from the KDA suggest the following:

- Jail diversion ‘works’ in terms of reducing time spent in jail, as evidenced by diverted participants spending an average of two months more in the community.

- Tucson, AZ—no significant overall cost difference between being diverted and not being diverted (Cowell et al., 2002d)

- New York, NY—diversion resulted in a net cost savings ($6,260 = average additional savings), due to the high jail costs for the non-diverted group (Cowell et al., 2002c)

- Memphis, TN—the cost of diversion was significantly higher ($5,855 = average additional cost), because the diverted group tended to incur far higher inpatient treatment costs following diversion, which outweighed the higher criminal justice costs for the non-diverted group (Cowell et al., 2002b)

In general, the diverted group incurred higher community-based treatment costs, and the non-diverted group incurred higher jail costs.

2. What effect does the jail diversion program have on each of a broad range of outcomes (self-reported measures of criminal behavior, quality of life, substance use and mental health status)?

Few statistically significant differences were observed. In each of the sites, diversion was associated with differences in one of the outcomes:

- Lane County, OR—diversion reduced the probability of drug use by 80 percent at no greater net cost (Cowell et al., 2002a)

- Tucson, AZ—diversion raised the Colorado Symptom Inventory scores 4.5 points at a cost of $190 per one point of improvement (a non-statistically significant difference) (Cowell et al., 2002d)

- New York, NY—diversion reduced the odds of non-violent victimization by nearly 70 percent (Cowell et al., 2002c)

- Memphis, TN—diversion raised the Colorado Symptom Inventory scores by 2.4 points at three months at a cost of $1,236 per one point of improvement (Cowell et al., 2002b)
Resources


