# RESEARCH ON THE EFFECTIVENESS OF REENTRY TREATMENTS

# UNC SCHOOL OF GOVERNMENT CRIMINAL JUSTICE INNOVATION LAB

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#### Introduction

More than 600,000 individuals are released from state and federal prisons in the United States each year, and an additional 9 million people pass through local jails (ASPE 2015). The transition period from incarceration to general society, known as reentry, can pose substantial challenges. Barriers are common for justice-involved individuals when attempting to access resources like housing, employment, and transportation. These difficulties are thought to contribute to high rates of recidivism – it is estimated that two-thirds of individuals are rearrested within three years of release from incarceration, and half are reincarcerated within that same time frame (ASPE 2015). Reentry programs seek to support individuals through the reentry process and increase their likelihood of success post-release. Reentry services vary widely, with some programs focused on addressing distinct needs and others offering holistic, wrap-around services. Moreover, the timing and duration of programs can vary. Some begin while the participant is incarcerated and extend after release, while others only operate during the weeks immediately preceding release.

This paper reviews the literature on reentry programming and its effectiveness in addressing recidivism and other post-release outcomes, such as housing and job stability. An initial scan of the empirical research on reentry services identified four main focal points of reentry programming: employment, housing, substance use, and wrap-around services. Relevant research related to these categories is summarized below. A table summarizing individual study findings can be found at the end of each section.

#### I. Employment Services

Access to and stability of employment are thought to be key components of reducing recidivism. Formerly incarcerated individuals often cite having a job as "crucial to their ability to stay crime free" (Duran et al. 2013, 1). As such, it is not surprising that workforce-centered reentry programs exist across the country. These programs vary in size and scope, with some operating as nonprofit organizations and others run through the criminal justice system. This section reviews empirical research regarding the effectiveness of employment-centered reentry programming. Results from the three studies of focus are mixed, with two revealing significant decreases in recidivism and one showing no notable program effects. These results and the limited number of existing studies underscore the need for additional research.

# New York City, New York

Founded in New York City, the nonprofit Center for Employment Opportunities (CEO) is the largest reentry employment provider in the United States. Program evaluation showed that CEO services significantly reduced recidivism for participants two years after program completion. Analyses also suggested that CEO services were most effective for individuals at high risk for recidivism (Bloom et al. 2009).

CEO currently operates in thirty cities nationwide and conducts four-day pre-employment training for recently released individuals. The program then places participants on temporary transitional work teams to provide supplemental maintenance and neighborhood beautification services. Participants work four days a week, are paid at the end of each shift, and receive assistance securing permanent job placements. Program participants typically spend two to four months on transitional work teams. The program provides job retention support throughout participants' first year of full-time employment after completing the CEO program (CEO 2021).

The New York City CEO program was evaluated by MDRC, a nonpartisan education and social policy research organization, as part of the Hard-to-Employ Demonstration and Evaluation Project, from 2001 to 2012 (Bloom et al. 2009, 1). An initial evaluation tracked 977 formerly incarcerated individuals referred to CEO by parole officers. Most study participants were Black or Hispanic males, and most were over the age of thirty. On average, study participants had been arrested eight times and convicted seven times. A majority had been convicted of a violent offense, and three-quarters had drug convictions. The average participant had spent five years in state prison over their lifetime. These individuals were randomly assigned to either the treatment group, which received all of CEO's services, or a control group that received only a condensed 1.5-day pre-employment training, access to CEO's resource room, and staff assistance with job searches upon request. The critical services provided to the treatment group and not the control group were transitional jobs, job coaching, and assistance from CEO job developers. The study notes that participants in both groups were able to seek external services in addition to CEO programming. The evaluation followed both groups' employment and recidivism outcomes using surveys and administrative records (Bloom et al. 2009, 4-5).

The evaluation showed that receiving the full range of CEO services increased employment, but this boost was short-lived and caused by CEO's transitional job offerings. At the end of the first year of evaluation, participants in the control group were as likely to

be employed as those in the treatment group, and both groups earned similar wages (Bloom et al. 2009, 47-50). However, MDRC observed significant differences in recidivism between the control and treatment groups. Participants who received the full CEO programming were less likely to be arrested, convicted of a new crime, or be reincarcerated in jail or prison during the two-year observation period. Further analysis showed that after one year, CEO reduced recidivism only for those who began the program within three months of their release when compared to the control group. After two years, however, CEO reduced recidivism rates for all participants, regardless of the time between release and program start (Bloom et al. 2009, 70-74).

A 2011 follow-up evaluation conducted by The Urban Institute and MDRC expanded on these initial findings by exploring if participants' risk of recidivism factored into the effectiveness of CEO programming. Researchers categorized the original study participants into three groups: low, medium, and high risk of recidivism. To determine risk level, researchers considered individuals' age, gender, and prior arrests. Analysis revealed that CEO services had the greatest impact on recidivism for individuals categorized as high risk. These individuals saw a significant reduction in the probability of rearrest, number of rearrests, and likelihood of reconviction two years after enrolling in CEO. Researchers note there was no significant difference for high-risk individuals in the first year following program entrance. For the medium-risk group, CEO programming significantly decreased the probability of rearrest, reconviction, and reincarceration in the first year. Lastly, there was a marginally significant increase in the probability of rearrest in the second year for the low-risk subgroup. These results may suggest that practitioners should focus this type of programming on those at higher risk of recidivism (Zweig et al. 2011, 963).

#### **Delaware (Statewide)**

In 2006, the U.S. Probation Office, District of Delaware, began implementing a workforce development program with the goal of decreasing recidivism and increasing employment for formerly incarcerated individuals (Visher et al. 2010, 16). Analysis suggests Delaware's program significantly decreased the likelihood of rearrest and, through job referral support, increased employment rates.

The Delaware program provided various services, and participants were able to attend as often as they deemed necessary. Additionally, participants could receive overlapping services. For example, a participant could complete a job training session and job referral support. The program provided vocational training to 62.5% of participants, 65% received job counseling, 61% received assistance with their job search, and 65% received job referrals.<sup>3</sup> Most participants enrolled in the program via referrals from their probation

<sup>&</sup>lt;sup>1</sup> Researchers identified significant bivariate correlates of recidivism from the available baseline characteristics. They then narrowed this list to those that remained significant (p < 0.05) predictors of recidivism after statistical controls measuring participants' demographics (e.g., age, gender, and race/ethnicity) and time since release (less than 3 months or more) were added to the model (Zweig et al. 2011, 959).

<sup>&</sup>lt;sup>2</sup> Marginally significant here refers to a p-score of 0.121 when p < 0.10.

<sup>&</sup>lt;sup>3</sup> In 2008, the Program implemented Cognitive Behavioral Therapy (CBT) to help participants change their ways of thinking. The scope and effectiveness of the CBT programming were not analyzed in this report.

officers. These participants were considered moderate to high risk for probation failure and/or had faced employment challenges previously.

Program evaluation was based on a sample of 80 participants enrolled in the Delaware program between September 2006 and July 2008. Researchers tracked these individuals for one year. Participants ranged from 22 to 61 years old, with an average age of 34.5. The sample was comprised of a majority of male (84%) and Black (78%) individuals. Evaluation showed that after one year of training, 61% of program participants were employed, and 3.7% were enrolled in school full-time. Two-thirds of those employed were in full-time positions, and their average monthly income was \$1,580.37. Half of the participants' new jobs were in the construction or labor industries; 20% were in retail. Researchers conducted within-sample comparisons to see the effects of the different types of services offered. Those who received job referrals through the program were significantly more likely to be employed after one year than those without referrals (69% compared to 46%). Researchers also observed greater employment levels for those who received vocational training, interview training, resume building, and help with job searches; however, these trends were not statistically significant (Visher et al. 2010, 17).

In order to better analyze the effects of programming on recidivism, researchers contrasted those in the Delaware program to a comparable sample of federal probationers from other districts. This analysis showed the Delaware workforce program significantly decreased the likelihood of rearrest. In this analysis, 15% of those in the Delaware program were rearrested after one year, while 26% of the comparable probationers were arrested within the same time frame (Visher et al. 2010, 20). Overall, study results suggest that those enrolled in the workforce development program were more likely to find and maintain employment and less likely to face rearrest.

# **Southern California**

More than twenty-five community-based reentry organizations use the STRIVE Employment Model, including a well-known vocational program in Southern California that was the subject of this evaluation. Program staff members note that while their services are offered to people regardless of criminal background, the majority of clients have criminal records and substance use challenges. To graduate from the program, participants must complete a 120-hour job readiness course. Classes center on essential skills training, such as interview techniques, professional behavior, and promoting positive attitudes. Staff also offer employment placement and resume writing assistance. Services are free to participants, and those who successfully complete the program have access to continued job placement support for life (Farabee et al. 2014, 312-313). Yet, statistical analysis of participants' outcomes did not produce significant results when compared to a control group, suggesting the program did not impact individuals' likelihood of recidivism or employment (Farabee et al. 2014, 315-317).

However, it is important to note that CBT became a key component of the Workforce Development Program in later years.

<sup>&</sup>lt;sup>4</sup> The program name and exact location were not provided.

For this analysis, researchers sampled 217 individuals who left jail or prison within the last six months and randomly sorted them into either the STRIVE treatment group or a control group. Those in the control group were given a list of community resources and a voucher for a free meal, while those in the treatment group received the STRIVE program offerings. The majority of participants were male, and the most common racial/ethnic identity of participants was Hispanic, followed by White, Non-Hispanic, and Black. Researchers note that there were no statistical differences between groups. Looking at participants' incarceration history, 52% were formerly in a local jail, 41% in California state prisons, and 7% in federal prisons. Data collection consisted of one baseline interview and one twelve-month follow-up interview. Both interviews addressed participants' employment, housing, and criminal activity. Researchers also used arrest records from the California Department of Corrections to verify recidivism.

The outcomes of interest for this study were employment, recidivism, and housing stability. Researchers measured employment status at two reference points: (1) within twelve months of program completion and (2) thirty days prior to the follow-up interview. Recidivism was measured as either being rearrested or reincarcerated within twelve months of program competition. Housing stability was measured as the predominant housing arrangement in the twelve months since program completion (Farabee et al. 2014, 314). Comparisons between treatment and control groups for all variables were not statistically significant, suggesting that STRIVE programming did not impact individuals' employment, housing, or recidivism. Researchers note that these results were both surprising and disappointing. This again emphasizes the need for further exploration of what makes employment-focused reentry programs successful.

# Conclusion

Review of these three studies highlights the mixed results of workforce-focused reentry programs. Two studies revealed significant decreases in recidivism rates, while one observed no significant program effects. The numerous variables that may impact an individual's reintegration into society, such as housing stability, substance use, community support, age, and educational attainment, make it difficult to separate the effects of employment programming specifically. Future research is needed to better understand these individual elements and how they interact with one another in order to ensure the delivery of effective reentry services.

**Table 1: Summary of Employment Reentry Services Studies** 

Study Site	Date	Sample Size	Key Findings
New York City, NY	2009- 2011	977	1. Individuals who received full treatment programming were significantly less likely to be arrested, convicted of a crime, or reincarcerated during the two-year observation period.
Delaware (Statewide)	2010	80	<ol> <li>After one year of training, 61% of program participants were employed and 3.7% were enrolled in school full-time.</li> <li>69% employment rate for participants who received job referrals through the program, significantly higher than the 46% rate for those without referrals.</li> <li>15% of program participants were rearrested after one year, significantly less than the 26% of comparable probationers who were arrested within the same time frame.</li> </ol>
Southern California	2014	217	<ol> <li>Comparisons between treatment and control groups for employment, housing stability, and recidivism were not statistically significant.</li> </ol>

# **II. Housing Services**

The Prison Policy Initiative estimates that formerly incarcerated individuals are ten times more likely to experience homelessness than the general population (Couloute 2018). Researchers link these increased rates of homelessness to the limited housing options available for people with criminal histories.<sup>5</sup> Researchers also point to limited public support for individuals leaving prison without stable housing, as federal laws and local policies frequently bar individuals convicted of certain crimes from accessing subsidized housing (Roman and Travis 2006, 397). A literature review identified one article evaluating housing-centered reentry programming, with additional studies on the connection between housing circumstance and recidivism summarized in the footnotes.<sup>6</sup>

# Washington State (Statewide)

Evaluation of Washington's Reentry Housing Pilot Program revealed significant reductions in convictions for new crimes but no effect on probation revocations. Moreover, analysis showed that homelessness significantly increased the risk of recidivism (Lutze et al. 2014).

The Reentry Housing Pilot Program (RHPP) began in 2007 to support high-needs individuals transitioning from prison without established housing. RHHP was formed as a collaboration between the Washington State Department of Correction's Community Justice Centers in Clark, King, and Spokane Counties. Each county provided case management plans for individuals, targeted treatment services, accountability strategies, and partnerships with corrections, law enforcement, and treatment providers. The counties secured housing units, created self-sufficiency plans, offered renter's rights courses, and coordinated safety plans to address issues that may arise for landlords, neighbors, or the community related to high-risk behavior (Lutze et al. 2014, 476). To qualify for RHHP, individuals had to be identified as high risk/need, based on a Washington State Department of Corrections (WADOC) screening tool, and be without an established release plan. Additionally, participants needed to have at least twelve months of community supervision to serve, be incarcerated for their initial sentence,

<sup>&</sup>lt;sup>5</sup> Additional researchers cite reports from California, New York, and nationwide studies revealing higher rates of homelessness within populations entering prisons and returning from prison (California Department of Corrections, 1997; Hughes et al. 2001; Riley 2003).

<sup>&</sup>lt;sup>6</sup> Review also found three empirical studies exploring the impacts of housing circumstances and neighborhood characteristics on recidivism. First, Kubrin and Stewart (2006) used 2000 U.S. Census data to examine how neighborhood characteristics influenced recidivism by individuals released from prison in Multnomah County, Oregon, between January 1 and June 30, 2000. They found that individuals who returned to disadvantaged neighborhoods recidivated at higher rates than those who returned to resource-rich communities, even after controlling for individual-level factors. Second, the Minnesota Department of Corrections (MnDOC) studied the impact on recidivism of five categories of post-prison-release housing placements and neighborhood characteristics, including economic disadvantage, racial segregation, proximity to other justice-involved individuals, and urbanization. Results found that housing placements in work-release and treatment centers significantly decreased the likelihood of rearrest. In contrast, housing in emergency shelters increased the chance of rearrest. Neighborhood demographics slightly elevated an individual's risk of rearrest, but concentrated extremes of poverty and affluence did not influence rearrests. Moreover, controlling for individual characteristics and housing placements showed the risk of rearrest did not significantly vary across neighborhoods statewide. (Clark 2015, 14). Third, Jacobs and Gottlieb (2020) sought to understand the relationship between individuals' housing circumstances on probation and rates of recidivism. Analysis revealed that housing insecurity is common and related to a heightened risk of recidivism, more so than other risk factors. The researchers suggest providing housing interventions as a way to decrease recidivism among justice-involved individuals.

which originated from an RHPP pilot county, be free of major infractions for ninety days, have no warrants or detainers, and be eligible for release between January 2008 and July 2009. Program participation was voluntary (Lutze et al. 2014, 478).

To evaluate program outcomes, researchers analyzed data from WADOC, the Washington State Institute for Public Policy's (WSIPP) Criminal History Data Base, and the Washington State Administrative Office of the Courts (AOC). Researchers compared the 208 RHHP participants to an equal number of control subjects with similar characteristics. Results revealed that RHHP participants had significantly reduced rates of new convictions (22% vs. 36%) and readmissions to prison (37% vs. 56%) compared to the control group. RHHP did not significantly impact probation revocations (Lutze et al. 2014, 483). RHHP participants remained out of incarceration significantly longer than the control group, averaging 133 days until a new conviction, 76 days until a probation revocation, and 255 days until readmission (Lutze et al. 2014, 481). Individuals in both the RHHP group and control group experienced bouts of homelessness, which significantly increased the likelihood of recidivism. From these findings, Lutze and colleagues called for subsidized housing for high-risk offenders as a central part of reentry programming.

#### Conclusion

Researchers have long identified securing housing as a key challenge during the reentry period. Although one study summarized here found that providing housing to high-risk individuals significantly reduced rearrest rates, additional research is needed to test this result and better understand the impact of different housing options for individuals reentering society.

**Table 2: Summary of Housing Reentry Services Studies** 

Study Site	Date	Sample Size	Key Findings
Washington State (Statewide)	2014	416	<ol> <li>Participants had significantly reduced rates of new convictions (22% vs. 36%), and readmissions to prison (37% vs. 56%) compared to the control group.</li> <li>No significant impact on probation revocations.</li> </ol>

#### **III. Substance Use Services**

It is estimated that 58% of individuals incarcerated in state prisons and 63% of those in jails meet the medical criteria for drug dependence or abuse. This compares to just 5% of the general adult population (Bronson et al. 2017, 1). Upon release, individuals with substance use histories face an increased risk of relapse and recidivism. Nearly two-thirds (65%) of individuals incarcerated for drug offenses are rearrested within three years of release from state prison, and 81% are rearrested within ten years of release (Antenangeli & Durose 2021, 5).

The literature demonstrates that reentry programs focused on substance use treatment can reduce crime, rates of rearrest, substance use, and healthcare costs (Field 1985; Field 1989; Belenko et al. 2005; Olson & Lurigio 2014, 601). However, substance use-oriented reentry programming varies widely in terms of approach and quality, and interventions are not always built on empirical evidence (Belenko, Hiller, Hamilton 2013; Moore et al. 2020). Cognitive behavioral therapy, psychoeducation or twelve-step, medication-assisted treatment, and therapeutic communities are the most common treatment methods. Additionally, programs typically use case managers to connect individuals with external agencies for support (Moore et al. 2020, 96-97).

A literature review found thirty articles relating to this topic. Ten are described in detail below: one study evaluating the effectiveness of jail-based services and nine on services delivered in the prison setting and/or after release from prison. The remaining studies serve as supplementary citations, with eight summarized in the footnotes. The ten studies discussed in the text below were selected based on high citation rates and their exploration of different aspects and locations of substance use treatment. One study showed positive impacts of jail-based treatment. Several studies show that in-prison treatment is effective and that in-prison treatment combined with aftercare yields even greater benefits. Research suggests individuals are more likely to successfully engage in aftercare when referred by a case manager and when able to self-identify as needing treatment. Evaluation of treatment programs indicates that individuals' perception of program quality, self-esteem, risk of recidivism, and emotion factor into treatment outcomes.

#### **Delaware County, Ohio**

Miller, Miller, and Barnes (2016) evaluated male offenders and their families for two years to better understand the effects of the Community Reinforcement and Family Training model as a jail-based treatment option. Results suggested that, compared to individuals who did not receive services, program participants were significantly less likely to be rearrested within one year of release and more likely to comply with child support orders following release.

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<sup>&</sup>lt;sup>7</sup> Medical criteria here refer to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria for drug dependence or abuse.

<sup>&</sup>lt;sup>8</sup> Drug offenses include possession, trafficking, and other unspecified drug offenses.

<sup>&</sup>lt;sup>9</sup> An evaluative review of 38 studies revealed wide variation in practices. Of these studies, 34 unique interventions were identified and reviewed. Researchers identified 21 interventions as directly providing substance use treatment. The main treatment methods were cognitive behavioral therapy (n = 6), motivational interviewing (n = 2), medication-assisted treatment (n = 2), therapeutic community (n = 2), psychoeducation or 12-step (n = 5), and four did not specify their practices. The remaining 13 programs used case managers to connect individuals with external agencies for support; details on external programming were not provided.

Community Reinforcement and Family Training (CRAFT) helps individuals see the benefits of drug-free living by identifying non-substance-related enjoyable activities and implementing positive reinforcement to reward participants when they engage in such activities. CRAFT also involves family, friends, and other concerned loved ones in the treatment process to encourage and assist those undergoing treatment (Miller, Miller, Barnes 2016, 57). The Delaware County CRAFT program used inpatient cognitive-behavioral therapy in individual and group sessions during incarceration, as well as family-assisted therapy during the reentry period. In-jail programming lasted for ninety days, and offenders received, on average, 270 hours of treatment. Participants lived in a specialized housing unit separate from the rest of the jail population. Following successful completion of this initial treatment, participants transitioned to group and family counseling sessions for sixty days post-release. <sup>10</sup>

Researchers combined qualitative and quantitative methods to evaluate program benefits and outcomes between program participants (34 total) and control subjects (32 total). Half of all individuals (program participants and control subjects) reoffended within the two-year follow-up period. However, those in the control group were significantly more likely to reoffend (75%) compared with the treatment group (27.27%) (Miller, Miller, Barnes 2016, 65). The researchers also analyzed the effect of treatment on different types of recidivism: probation revocations and new charges. Treatment did not appear to impact probation revocations. However, the treatment group had 86% lower odds of receiving a new charge as compared to the control group. Additionally, for individuals who did reoffend, those in the treatment group had a longer time until recidivism than those in the control. Findings from this study suggest that short-term interventions occurring at the jail level can reduce recidivism. <sup>12</sup>

#### Kyle, Texas

A 1999 study by Hiller, Knight, and Simpson explored the effects of a residential aftercare program on recidivism following prison-based treatment for drug-involved offenders. This study showed that in-prison treatment, followed by residential aftercare, was effective at reducing recidivism rates. These findings highlight the value of a continuum of care approach to supporting incarcerated individuals with substance use challenges.

In-Prison Therapeutic Communities (ITCs) operate within correctional institutions and house treatment clients separately from the general prison population. Researchers expanded on existing evaluations to explore the impacts of aftercare treatment in greater depth (Hiller, Knight, Simpson 1999, 834).<sup>13</sup> Data were collected from 293 parolees who received treatment

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 $<sup>^{10}</sup>$  Program length varied depending on individuals' needs. The average aftercare treatment length for participants was 60 days.

<sup>&</sup>lt;sup>11</sup> One offender in the control group remained incarcerated at the time of analysis. Data from this individual were included in the sample but removed from all analyses of post-incarceration outcomes.

<sup>&</sup>lt;sup>12</sup> Study findings also showed that more individuals in the treatment group (57.14%) reported paying their child support as compared with control group members (0%); this difference was statistically significant.

<sup>&</sup>lt;sup>13</sup> Initial analysis by Knight, Simpson, Chatham, and Camacho (1997) explored the effects of New Vision ITC and aftercare programming at the same center in Kyle, Texas, six months after participants' release from prison. Those who completed programming saw significant reductions in their rate of rearrest and self-reported substance use than those who did not complete programming. Moreover, those who completed aftercare programming had significantly

at the nine-month New Vision ITC in Kyle, Texas. Additionally, data were collected on 203 parolees who were eligible for, but did not receive treatment, to use as a matched comparison group. For those enrolled in ITC programming, state law mandated three months of residential community-based aftercare at a Transitional Therapeutic Community (TTC) immediately following release from ITC; however, many individuals dropped out of this subsequent treatment program. As such, researchers divided the treatment group into two subgroups for analysis: ITC only (n = 123) and ITC/TTC (n = 170). All subjects were male; 45% were Black individuals, and 33% were White individuals; most subjects were 26 to 35 years old. Over one-third had been incarcerated on drug-related charges; two-thirds had been previously incarcerated (Hiller, Knight, Simpson 1999 836).

Researchers collected background demographics on all subjects. They also used self-administered questionnaires to evaluate the treatment group's satisfaction with their ITC programming. Those who completed TTC also completed in-person interviews on program satisfaction six months following completion of aftercare treatment. At the time of record collection, participants had been out of prison for at least thirteen months and up to twenty-three months.

Rates of rearrest for new offenses during the 13 to 23-month evaluation period were highest (42%) for control subjects, followed by ITC-only subjects (35%), and lowest (30%) for ITC/TTC subjects. Of those rearrested, 80% faced charges during their first year of release and 34% during the first six months of release. Drug offenses accounted for 21% of rearrests. Those with prior incarceration records were twice as likely as those without such records to face rearrest during the evaluation period. No other demographic factors were significantly related to rearrest rates (Hiller, Knight, Simpson 1999, 838).

Researchers also explored potential influencing factors on rearrest rates between the ITC-only and ITC/TTC treatment groups. Results showed individuals in both groups to be very similar in backgrounds and ratings of ITC programming. Those in the ITC-only group were significantly less satisfied with their TTC programming than those in the ITC/TTC group; this is not surprising, given those in the ITC-only group chose to leave the aftercare program.

This study showed that completion of aftercare resulted in decreased recidivism as compared to individuals who received only in-prison treatment. Practitioners may look to ensure the quality and satisfaction of program participants to aid in their completion of aftercare treatment (Hiller, Knight, Simpson 1999, 840).

#### San Diego, California

This 1999 study, conducted by Wexler, Melnick, Lowe, and Peters, explored the three-year effects of an in-prison therapeutic community (TC) and accompanying aftercare treatments. Results showed the lowest rates of recidivism for individuals who completed both in-prison

lower rates of rearrest and substance use than those who quit aftercare and those in the non-treatment comparison group.

<sup>&</sup>lt;sup>14</sup> While all subjects, both treatment and control, were deemed eligible for ITC treatment, those in the treatment subject group reported higher drug usage than those in the control group (Hiller, Knight, Simpson 1999, 836).

and aftercare treatments. Moreover, Wexler et al. (1999b) found a positive relationship between the time spent in treatment and time until return to incarceration for those who recidivated. For those who completed only in-prison treatment, reductions in recidivism were seen only at twelve and twenty-four months, not extending to thirty-six months.

The Amity program was implemented at the R.J. Donovan medium-security Correctional Facility in San Diego, California. The program was divided into three parts. The first phase (2-3 months) consisted of orientation, clinical assessment of individuals' needs, planning, and setting of treatment goals. The second phase (5-6 months) consisted of counseling and group sessions centered on self-discipline, self-worth, respect of authority, and acceptance of guidance. In the third phase, reentry (1-3 months), participants focused on planning and decision-making skills and worked with counselors in preparation for their release. After completion of the in-prison program, participants were offered space in the community-based treatment program (aftercare) for one year. This aftercare program housed residents and continued the same type of programming as the in-prison component. It also provided services to spouses and children of its residents (Wexler et al. 1999b, 323-324).

The Amity program recruited volunteers from the general prison population. From there, individuals were randomly selected as program space became available. Those not selected were added to the non-treatment comparison group. This study looked at those on parole for three years or more following initial release from prison (treatment group n = 289; comparison group n = 189). Researchers divided the treatment group into three categories: those who dropped out of in-prison treatment (n = 73); those who completed only in-prison treatment (n = 154); and those who completed both in-prison and aftercare treatment (n = 62). n = 151

Initial analysis revealed no significant differences in participant characteristics between those in the treatment and control groups. Due to the voluntary nature of treatment, researchers compared participants' characteristics between the three treatment subgroups. Those who completed aftercare were significantly older, more likely to identify as White, more likely to report a history of intravenous drug use, and had a greater readiness for treatment than those who did not complete aftercare (Wexler et al. 1999b, 326). Analysis of reincarceration rates showed that 27% of those who completed aftercare returned to custody compared to 82% of those who dropped out of in-prison treatment and 79% of those who only completed in-prison treatment without follow-up aftercare (Wexler et al. 1999b, 333). Additionally, results showed that for those who completed aftercare, more time spent in treatment had a positive relationship with the number of days to reincarceration for individuals who faced rearrest when examining the 36-month follow-up period.

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<sup>&</sup>lt;sup>15</sup> Hiller, Knight, and Simpson (1999) explored factors impacting TC dropout rates for individuals on felony probation. Results showed early dropout was related to cocaine dependence, history of psychiatric treatment, unemployed status before adjudication to treatment, and to higher levels of depression, anxiety, and hostility. Dropout rates were higher for probationers with deviant peer networks and lower ratings of self-efficacy. Scoring high on a criminality risk index was the strongest predictor of early dropout.

<sup>&</sup>lt;sup>16</sup> Participants who completed in-prison treatment but did not complete aftercare either chose not to enroll in aftercare or withdrew from aftercare prior to completion.

<sup>&</sup>lt;sup>17</sup> Readiness was defined as participants' perceived need for treatment and evaluated through baseline psychological evaluations.

Researchers compared the results of this study to their previous analysis of the Amity program, which only evaluated outcomes at 12- and 24-months post-release. The previous study produced positive relationships between the number of days spent in treatment, with or without aftercare, and reincarceration; however, these were not maintained at the 36-month mark.<sup>18</sup> The sustained three-year effects of aftercare treatment underscore the importance of this final treatment step. Researchers called for further analysis to better understand how in-prison treatment and aftercare affect recidivism rates.

#### **Delaware (Statewide)**

This study, conducted by Inciardi, Martin, and Butzin in 2004, explored the five-year impacts of Delaware's residential therapeutic community (TC) programming. Results showed treatment participants, with and without completing aftercare, were significantly more likely to remain drug and arrest-free than those in a no-treatment comparison group.

In the mid-1990s, Delaware prisons began operating KEY/CREST, a multiphase TC treatment program. At the time of this study, phase one lasted for twelve months and focused on residential counseling and recovery. The second 26-week phase was a transitional TC work release program in which individuals spent their days working for pay outside the residential community and returned to the prison during non-working hours. This phase focused on increasing participant responsibility and preparing them for reentry into general society. Researchers expected those who received treatment through the transitional work release program and follow-up aftercare would have significantly lower rates of drug use and recidivism, both short and long term. <sup>19,20</sup>

Analysis revealed treatment participation was the strongest predictor of an individual's abstinence from drug use at forty-two- and sixty-months post-release. Treatment participation was also a significant predictor of recidivism at forty-two months, reducing the odds of rearrest by 70% when compared to the control group. At the sixty-month mark, program participation reduced the odds of rearrest by a similar amount (Inciardi, Matin, Butzin 2004, 98-100). Researchers divided the treatment group into three subgroups: dropouts, graduates without aftercare, and graduates who completed aftercare. Those who completed treatment with or without aftercare had significantly greater probabilities of remaining both arrest-free and drugfree at 42 and 60 months than did those without treatment. Even treatment dropouts were significantly more likely to be drug-free than those in the no-treatment comparison group. However, individuals who completed treatment were significantly more likely to have positive outcomes, and those who completed treatment and attended aftercare were the least likely to

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<sup>&</sup>lt;sup>18</sup> Wexler, De Leon, Kressel, and Peters (1999) explored 12- and 24-month follow-up period for those who completed treatment at the Amity program. Results revealed reductions in reincarceration rates of more than 40% at 12 months and more than 50% at 24 months post-release for those who completed prison TC plus aftercare when compared to a non-treatment control group.

<sup>&</sup>lt;sup>19</sup>A 1997 study by Inciardi, Martin, Butzin, Hooper, and Harrison examined the 18-month follow-up data from Delaware's CREST/KEY program and found significant effects for those who received any transitional treatment in work release, even if they did not complete treatment.

<sup>&</sup>lt;sup>20</sup> A follow-up 1999 analysis by Martin, Butzin, Saum, and Inciardi looked at 42-month follow-up data from Delaware's CREST/KEY program. Results found that significant reductions in relapse and recidivism occur for those who complete the transitional treatment and those who undertake aftercare.

have a new arrest or drug use. Analysis predicted that half of those who completed treatment and attended aftercare would be expected to have a new arrest, compared to more than 75% of the group without treatment (Inciardi, Matin, Butzin 2004, 100-102). Researchers note that at the sixty-month follow-up, 58% of those who completed in-prison treatment had been rearrested, and 79% had relapsed to drug use. Among the treatment graduates who also had aftercare, 52% had been rearrested, and 71% had relapsed within this follow-up period. For those in the no-treatment group, 77% had been rearrested, and 95% had relapsed at the sixty-month follow-up (Inciardi, Matin, Butzin 2004, 101).

This research supports the effectiveness of prison-based TC treatment and aftercare. The researchers called for further analysis of the unique aspects of TC treatment and the effects of treatment phases on recidivism.

#### Sheridan, Illinois

Similar to the studies above, this evaluation of formerly incarcerated individuals from the Sheridan Correctional Center (SCC) in Sheridan, Illinois, demonstrated how pairing aftercare with in-prison substance use treatment results in a more substantial decrease in recidivism. This study showed that these decreases remained long after release from prison.

SCC is a correctional facility dedicated to providing substance use treatment. Its interventions are based on the therapeutic community (TC) model, designed to encourage engagement and personal reflection through group activities. TCs provide a holistic approach focused on the person, not just their past criminal behavior and substance use. Participants spend time in group meetings, classes, and counseling sessions. At the time of evaluation, SCC housed 950 individuals, divided into TC groups of 20 to 25. Upon release from SCC, all participants were required to complete community-based aftercare treatments; however, only half did. Failure to complete aftercare was attributed to an individual's decision not to attend or a lack of access to aftercare. For example, individuals returning to rural communities were less likely to enroll in aftercare due to a lack of available programming (Olson & Lurigio 2014, 606-615).

Researchers compared the post-release outcomes of the first 1,501 SCC program graduates to those of a control group of 2,858 individuals released from Illinois prisons with similar backgrounds. Both groups consisted of individuals released from prison between July 2004 and June 2007. The average age of study subjects was thirty-three years old at time of release; 69% of subjects were non-White individuals, and 52% were from the Chicago/Cook County region. After controlling for correlates of recidivism like education, age, and race, analyses revealed those in the treatment group were 14% less likely to return to prison than those in the control group during the 6.9-year follow-up period (Olson & Lurigio 2014, 609-611).<sup>21</sup>

For further analysis, researchers divided the SCC treatment group into two subgroups: those who completed aftercare and those who failed to complete aftercare. Analysis revealed substantial impacts of aftercare programming. Those who completed both SCC in-prison treatment and aftercare treatment were 46% less likely to be reincarcerated in state prison than

<sup>&</sup>lt;sup>21</sup> The treatment group here includes both individuals who completed aftercare and those who failed to complete aftercare.

those in the control group. In contrast, those who failed to complete the aftercare treatment were more likely to return to prison than the control group (Olson & Lurigio 2014, 612). These results suggest that aftercare treatment is critical for sustaining substance use recovery started in prison.

# Texas (Statewide)

A 1996 study by Broome and colleagues explored the substance use treatment process and how it influenced recidivism.<sup>22</sup> Findings of this study connected rates of recidivism to individuals' ratings of self-esteem and counselor competence during treatment (Broome et al. 1996, 489-490).

Broome et al. (1996) sampled 279 individuals on probation who graduated from a four-month residential drug treatment program in Texas between December 1992 and December 1993.<sup>23</sup> Treatment took place while under supervisory probation, not while in custody. Two-thirds of the sample were male, 53% were White individuals, and 38% were Black individuals. Participants completed monthly client evaluations rating their psychological, social, and motivational states, and perceptions of their counselors. Researchers used these evaluations to determine individuals' levels of self-esteem, perception of counselor competence, and level of peer support from other individuals on probation. Researchers evaluated rearrest rates for the sampled individuals who had been out of the drug treatment facility for sixteen to twenty-eight months.

The study showed that 36% of those sampled were rearrested within the follow-up period. Nearly half (47%) of rearrests occurred in the first six months; 76% occurred within the first year. Almost all (91%) of those who were arrest-free in the first year remained so in the second year of evaluation. The study also showed that while ratings of high self-esteem and high counselor competence significantly reduced incidents of recidivism, peer support had no impact on recidivism. Risk ratios indicated that high ratings of self-esteem were associated with a 64% decrease in rearrest, and high rating of counselor competence were associated with a 39% reduction in rearrests (Broome et al. 1996, 490). These findings suggest that treatment processes impact recidivism rates. Practitioners may consider incorporating practices to bolster individuals' self-esteem, the competence of counselors, and the quality of programming.

#### Mansfield, Texas

In a similar study, Broome and colleagues (1997) modeled the impacts of client characteristics, therapeutic relationships, and rearrest rates among individuals on probation in mandatory drug use programming. Results revealed a positive association between therapeutic relationships and recognition of drug-related problems. Higher ratings of peer support and counselor competence, referred to as therapeutic relationships, were related to lower rearrest rates, while higher levels of peer deviance were related to higher rearrest rates.

<sup>&</sup>lt;sup>22</sup> A 2007 literature review by Pelissier, Jones, and Cadigan called into question the certainty of aftercare effectiveness as researchers had not identified the most impactful types and characteristics of aftercare treatment. Additionally, they noted the need to better address self-selection biases, individual behavior, and the effects of justice system policies.

<sup>&</sup>lt;sup>23</sup> Municipal and/or county information not provided.

Researchers analyzed data from 250 individuals on probation who had been remanded to and graduated from a four-month residential substance use treatment in Mansfield, Texas, between November 1992 and December 1993. Over two-thirds of participants analyzed were male; 50% were White individuals, and the median age was twenty-nine years old. When entering treatment, counselors interviewed individuals to evaluate their sociodemographic background, family history, peer relations, criminal history, health, substance use history, and AIDS risk. At the end of each month of treatment, individuals completed self-administered ratings of their psychological, social, and motivational states, perceptions of counselors, and the treatment program (Broome et al. 1997, 390-391). From these evaluations, researchers analyzed the following factors:

- Drug-related problems: defined as an individual's self-reported drug problems, self-reported alcohol problems, and counselor ratings of an individual's drug problems.
- Peer deviance: defined as friends who get into fights, use or deal drugs, commit crimes, are in gangs, or have been in prison. They also evaluated levels of peer social conformity and negative influences.
- Family dysfunction: defined as family members blaming the individual on probation for things, loud arguments, and disagreements compared to helping family, getting along with family, and communicating with family.
- Therapeutic relationships: defined by individuals' ratings of counselor competence and peer support while in treatment.

Researchers tracked rearrest rates through examination of state records. Statistical modeling showed peer deviance and therapeutic relationships were predictive of rearrest. Higher levels of peer deviance were connected to higher levels of rearrest, whereas higher levels of therapeutic relationships were connected to lower levels of rearrest. Higher perceptions of drug-related problems related to higher levels of therapeutic relationships but had no relationship with rates of rearrest. Peer deviance and family dysfunction did not have statistical correlations with therapeutic relationships, meaning pre-treatment relationships did not impact individuals' therapeutic relationships. Lastly, despite researchers' expectations, therapeutic relationships did not appear to mediate the connection between rearrest, drugrelated problems, peer deviance, and family dysfunction. While perceptions of drug-related problems were associated with therapeutic relationships, they were not associated with rearrest. Conversely, peer deviance was associated with rearrest but not therapeutic relationships. Family dysfunction was not associated with either rearrest or therapeutic relationships. From these results, researchers suggested that practitioners and researchers work to understand individuals' unique experiences pre-treatment and during-treatment in order to better predict and prepare for post-treatment outcomes (Broome et al. 1997, 392-396).

#### **Connecticut (Statewide)**

This study of individuals incarcerated in Connecticut prisons showed that individuals who attended higher tier substance use treatment while in prison had lower rates of rearrest than those who completed a lower tier treatment or received no substance use treatment. Additionally, the state correctional system saw benefits, measured in terms of the cost of

avoided reincarcerations, ranging from 1.8 to 5.7 times the cost of implementing the programs (Daley et al. 2004, 82).

Researchers used data from the State of Connecticut Department of Corrections and the State of Connecticut Department of Mental Health and Addiction Services (DMHAS) to measure the cost-effectiveness of four tiers of substance use treatment in Connecticut prisons:

- Tier one consisted of a one-week session of drug/alcohol education, made up of six group sessions or four group sessions followed by two fellowship meetings.<sup>24</sup>
- Tier two consisted of thirty outpatient group sessions three days a week for ten weeks.
- Tier three involved an intensive day treatment program, consisting of four sessions a week for four months or a total of sixty-four sessions.
- Tier four was a full-time daily residential treatment program for six months in a separate housing unit.

Individuals were placed in a tier of care based on a needs assessment conducted by the state Department of Corrections. Participation at all levels was voluntary (Daley et al. 2004, 72).<sup>25</sup>

The sample consisted of 831 individuals released from Connecticut prisons between 1996 and 1997. Researchers compared rearrest rates for those who participated in the tiered programming (286 people) with those of similar backgrounds who did not participate in tiered programming (585 people). Forty-three percent of those in the sample were Black individuals; individuals in the sample ranged from 25 to 35 years in age, and most had not completed high school; 60% were currently serving sentences greater than one year (Daley et al. 2004, 77-78).

At one-year post-release, 41.3% of the entire sample (treatment and non-treatment group) had been rearrested. However, individuals who participated in any treatment tier were significantly less likely to be rearrested than those without treatment. Rearrest rate was measured at 6-, 12-, 18-, and 24-months post-release. At six months, 17.8% of the treatment group had been rearrested compared to 28.8% of the comparison group. At 24 months, 57.7% of the treatment group had been rearrested compared to 64.9% of the comparison group. Researchers then looked at the impact of the different tiers of treatment one year after release. Results showed tier one and two programming had no significant effects compared to the control group after one year. However, both tier three and four programming showed significant decreases in recidivism compared to the control group.

Cost-benefit analysis revealed that all tiers produced benefits that exceeded programming costs. Researchers estimate that Connecticut taxpayers received a return on investment six times greater than the cost of implementing tier two programs, three times greater than the cost of tier three programs, and twice as great as the cost of operating tier four programs (Daley et al. 2004, 79-82). Results from this study suggest that higher tier in-prison substance use treatment, on its own, may reduce rates of rearrest and be cost-effective.

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<sup>&</sup>lt;sup>24</sup> Tier one treatment is not mandatory but is strongly encouraged for individuals placed in higher tiers as an additional treatment.

<sup>&</sup>lt;sup>25</sup> Twelve percent of individuals in Connecticut prisons enter these treatment programs.

#### Pennsylvania (Statewide)

A 2013 study by Welsh and Zajac explored the hypothesis that participation in a prison-based therapeutic community (TC) without supervised community aftercare would decrease recidivism but not drug relapse. Results showed that TC programming reduced reincarceration in the absence of aftercare but did not impact rates of rearrest or relapse. Welsh and Zajac sampled individuals admitted to the Pennsylvania Department of Corrections drug and alcohol treatment program across five prison sites; 36% were TC participants (555 people), and 64% were comparison control subjects (998 people). Rosubjects received supervised aftercare treatment. Their average age was 34.5 years old, and most were to be released within three months of sampling. The sample was 53% Black individuals, 37% White individuals, 9% Hispanic individuals, and 1% individuals of other ethnicities or races. Researchers looked at three outcome measures: reincarceration, rearrest, and relapse. At the time of data collection, most participants had been released for four years or more (Welsh & Zajac 2013, 254-256).

Study results showed that those in the TC group had significantly lower reincarceration rates than their peers in the comparison group. Specifically, TC treatment significantly reduced the probability of reincarceration (59% v. 50%) after four years, even after adjusting for all control variables, such as drug dependency, age, and criminal history. TC participation did not significantly reduce rearrest rates and drug relapse (Welsh & Zajac 2013, 260-263). These findings suggest TC treatment is effective at reducing reincarceration even in the absence of aftercare treatment.

# Chester, Pennsylvania

Therapeutic communities (TCs) have grown into the most common evidence-based substance use treatment model used in prisons. At the time of this study, few evaluative studies of TCs had been conducted, and researchers sought to compare the effectiveness of TCs at reducing recidivism to that of other methods.<sup>29</sup> Results from a randomized-control study did not show TC treatment to be more effective than less intensive outpatient treatment. These findings highlight the need for further inquiry into individuals' responsiveness to treatment and the relationships between individual characteristics and treatment methods (Welsh, W.N., Zajac, G., & Bucklen 2014).

Welsh, Zajac, and Bucklen (2014) partnered with the Pennsylvania Department of Corrections to compare the effectiveness of TCs and outpatient treatment at reducing reincarceration, as

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<sup>&</sup>lt;sup>26</sup> Exact locations of sites were not provided.

<sup>&</sup>lt;sup>27</sup> Descriptive analysis showed the comparison group to be younger than the TC group (average age 34 vs. 36 years). Additionally, there was significant variance in their time remaining to minimum release dates; more individuals in the comparison group had served past their minimum release date, indicating they had previously been denied parole at least once. TC participants had more serious current offense histories and had a slightly higher need for treatment at admission, as indicated by drug screening instruments. However, a majority of individuals in the comparison group also met or surpassed the minimum eligibility criteria for TC placement.

<sup>28</sup> Results also showed those with more time remaining until their minimum release date had a lower reincarceration rate. Those who remained in the community for longer periods of time had lower rates of reincarceration, and individuals employed full-time or part-time had a lower rate of reincarceration.

<sup>&</sup>lt;sup>29</sup> A meta-analytic review of 66 studies by Mitchell, Wilson, and MacKenzie (2007) evaluated the effectiveness of different types of substance use treatments. Results strongly supported the effectiveness of TC programming.

well as the interactions between an individual's risk level and certain psychological attributes. They were particularly interested in a trait called negative affect, which is used to describe individuals who are more likely to perceive events as inherently negative, blame others for these negative feelings, and to respond to such events in an intense or aggressive manner. The researchers quantified negative affect using scales that measured depression and hostility.

Researchers sampled individuals at the Chester State Correctional Institute. Participants were randomly assigned to either the TC (286 people) or outpatient (318 people) treatment group. Outpatient treatment is much less intensive than a therapeutic community. Individuals in outpatient services do not live in separate housing units, and their treatment is typically integrated into daily activities, such as education and recreation. Additionally, outpatient treatment costs less and has better cost-effectiveness ratios (Belenko et al. 2005).

Upon treatment completion and release from prison, both groups were required to complete a six-month aftercare program offered by a private treatment provider. The average age of participants was 32.5 years old, and most had two years until their minimum release date. Participants were 64% Black individuals, 21% White individuals, 14% Hispanic individuals, and less than 1% individuals of other ethnicities or races. During prison intake, participants answered the question, "which drugs caused you the most serious problems during the 12 months prior to incarceration?" at the following frequencies: alcohol (23%), marijuana (21%), cocaine or crack (20%), opiates (11%), and tranquilizers or sedatives (5%). The average score on the intake questionnaire indicated a relatively high need for drug treatment. Of those who began treatment, 87% successfully completed it (Welsh, W.N., Zajac, G., & Bucklen 2014, 160-163).

Researchers examined reincarceration rates for the TC and outpatient groups, considering their risk for recidivism and their psychological state and affect during the final month of treatment (Welsh, W.N., Zajac, G., & Bucklen 2014, 162). Forty-one percent of all individuals sampled were reincarcerated during the three-year follow-up period. Results did not show a significant difference in recidivism rates between those in the TC or outpatient treatment groups. Analysis of risk and affect did produce significant results. Specifically, the interactions between program type and negative affect and program type and risk score were significant. Those high in negative affect (hostility and depression) saw better results in outpatient treatment than TC. Similarly, those identified as high risk saw better results in outpatient treatment (Welsh, W.N., Zajac, G., & Bucklen 2014, 167). These findings suggest that treatment communities may be less effective than outpatient treatment for certain populations.

#### **Conclusions**

Researchers have identified the positive benefits of substance use treatment on recidivism for individuals reentering society following incarceration. The studies reviewed above highlight the importance of continuing treatment after incarceration, though benefits have been shown to

<sup>&</sup>lt;sup>30</sup> Both recidivism and psychological state and affect were assessed using the Resident Evaluation of Self and Treatment (REST) form. Individuals' level of risk was assessed on a scale of 0-9; those scored as 0-4 are considered low risk, 5-6 are considered medium risk, and 7+ are considered high risk for recidivism.

accrue even without aftercare. Research has begun to explore how the fidelity and processes of treatment is linked to decreased recidivism. Quality of programming, individual's self-esteem and background characteristics, and acknowledgment of needing support have all been suggested to lead to better reentry outcomes. Current substance use reentry programs vary widely and may not make use of best practices. Further research is needed to better understand which treatment modalities best suit clients' needs.

**Table 3: Summary of Substance Use Reentry Services Studies** 

Study Site	Date	Sample Size	Key Findings
Delaware County, OH	2016	66	1. Those in the control group were significantly more likely to experience a recidivism event (75%) compared with those who received in-jail and post-release treatment (27.27%).
Kyle, TX	1999	203	1. 42% of control subjects, 36% of participants who received treatment only in prison, and 30% of participants who received in-prison plus aftercare treatment were rearrested for new offenses during the 13-to-23-month evaluation period.
San Diego, CA	1999	478	<ol> <li>27% of those who completed aftercare returned to custody compared to 82% of those who dropped out of in-prison treatment and 79% of those who only completed in-prison treatment without aftercare.</li> <li>Of those who completed aftercare, more time spent in treatment had a positive relationship with the number of days to reincarceration for individuals who did face rearrest when examining the 36-month follow-up period.</li> </ol>
Delaware (Statewide)	2004	690	<ol> <li>Treatment participants, with and without completing aftercare, were significantly more likely to remain drug and arrest-free than those in a no- treatment comparison group.</li> </ol>
Sheridan, IL	2014	4,359	<ol> <li>Those who completed both in-prison treatment and aftercare were 46% less likely to be reincarcerated than those in the control group.</li> <li>Those who only completed in-prison treatment but not aftercare were more likely to return to prison than the control group.</li> </ol>
Texas (Statewide)	1996	279	<ol> <li>Ratings of high self-esteem and high counselor competence were significantly correlated with reduced recidivism.</li> </ol>

Mansfield, TX	1997	250	<ol> <li>Results revealed a positive association between therapeutic relationships and recognition of drug- related problems.</li> <li>Therapeutic relationships were negatively related to rearrest rates; peer deviance was positively related to rearrest rates.</li> </ol>
Connecticut (Statewide)	2004	831	In-prison substance use treatment significantly reduced rearrest rates, and more intensive substance use treatment options were cost-effective.
Pennsylvania (Statewide)	2013	1,553	<ol> <li>In-prison treatment, without aftercare, significantly reduced probability of reincarceration (59% v. 50%) after four years when compared to a control group.</li> </ol>
Chester, PA	2014	604	<ol> <li>Individuals high in negative affect had worse recidivism outcomes in therapeutic community (TC) residential treatment when compared to outpatient treatment.</li> <li>High-risk individuals in TC treatment fared worse when compared to high-risk individuals in outpatient treatment.</li> </ol>

#### IV. Wrap-Around Services

Wrap-around programming can be defined as intensive services that work across focus areas to provide comprehensive service delivery. The motivation behind providing wrap-around programming is to reduce the fragmentation that can result when addressing multiple reentry challenges, such as securing both housing and employment. Instead, wrap-around programs identify service gaps then assign responsibility to address them and reduce barriers to accessing services (Rossman 2001; Wilson 2008, 2). Additionally, wrap-around services are often more flexible and individualized than traditional, single-focus services (Osera et al. 2009, 83). The studies summarized below find positive impacts of wrap-around services on most outcome measures.<sup>31</sup>

# **Kings County, New York**

Evaluation of the Community and Law Enforcement Resources Together Program (ComALERT) revealed that program participants were 15% less likely to face rearrest two years after release from prison when compared to a control group. Additionally, ComALERT participants were more likely to be employed than control group participants (Jacobs & Western 2007).

Based in Brooklyn, New York, the ComALERT program combined substance use and counseling treatment with transitional housing, job and life skills, and twelve-step programs organized by the Doe Fund's Ready, Willing, and Able program (RWA). Through RWA, participants worked full-time in temporary manual labor jobs, earning a stipend of \$7.50 per hour, a portion of which was withheld each week for individuals' savings accounts. After nine months of temporary employment and counseling, participants shifted focus towards finding long-term employment. Having secured a job, participants were able to graduate from the program. RWA continued to provide participants with \$200 monthly payments for five months after graduation (Jacob &Wester 2007, 15).

Researchers tracked the outcomes of 750 ComALERT participants. Of these participants, 404 (54%) graduated from the program. Researchers compared the outcomes of ComALERT graduates, ComALERT non-completers, and non-treatment control group individuals. Results show that 11.5% of all ComALERT attendees, including program graduates and non-completers, were rearrested within six months of graduation. Rates of rearrest increased to 39.2% of ComALERT attendees at the two-year mark (Jacob & Western 2007, 67). When compared to the control group, ComALERT graduates were 39% less likely to be rearrested within two years of graduation. This difference was statistically significant. While ComALERT non-completers were more likely to be rearrested than program graduates, they were significantly less likely to be rearrested than the control group (39.2% vs. 47.6%, respectively). Looking at reincarceration, ComALERT graduates were significantly less likely to return to prison, both for parole

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<sup>&</sup>lt;sup>31</sup> This report does not summarize studies evaluating the Serious and Violent Offenders Reentry Initiative (SVORI), including work by Lattimore & Visher, Vishner, and Hamilton and Belenko. Those materials are however included in the references at the end of this report. Also beyond the scope of this report is Hunter et al. (2016), showing that strength-based programming allowed case managers to build strong connections with clients' families in order to better assist clients during the transition from incarceration to general society and that incarnated individuals expressed feelings of respect toward case managers and support for strengths-based programming in helping them transition from prison.

violations or new sentences, than ComALERT attendees as a whole and the control group (Jacob & Western 2007, 36). Additional survey analysis revealed ComALERT non-completers employment rate was higher than that of the control group (75.6% vs. 23.9%). Overall, the ComALERT program showed positive impacts in decreasing graduates' rates of rearrest and increasing their employment outcomes, suggesting wrap-around services that address multiple facets of reentry may be effective (Jacob & Western 2007, 37).

# Minnesota (Statewide)

Findings from this evaluation show the Minnesota Comprehensive Offender Reentry Plan (MCORP) significantly boosted employment rates, decreased homelessness, expanded social support, and increased participation in community programming for justice-involved individuals. Moreover, MCORP reduced rates of rearrest, reconviction, and new offense reincarceration. However, MCORP did not appear to impact rates of supervision revocations due to technical violations (Duwe 2012).

The Minnesota state legislature established MCORP as a pilot program in 2007 to support individuals transitioning from prison in Hennepin, Ramsey, Dodge, Fillmore, and Olmsted counties. The program focused on collaboration between case managers to ensure that individuals received the support needed for successful reentry. Specifically, MCORP focused on access to employment, housing, and social support within the community (Duwe 2012, 349). MCORP also incorporated motivational interviewing and SMART<sup>32</sup> planning objectives aligned with individuals' risk assessments. Additionally, MCORP caseworkers supported half the number of clients (35-40) compared to traditional caseworkers (70-80) to allow for more frequent and intensive support. Upon release from incarceration, MCORP participants received assistance from agents in accessing employment, vocational training, education, housing, chemical health, mentoring, faith-based programming, and income support services (Duwe 2012, 353).

To understand the impact of MCORP, researchers conducted a randomized experimental design study in which eligible participants<sup>33</sup> were randomly assigned to either a treatment group (MCORP) or a control group.<sup>34</sup> Program participation began sixty days before release from incarceration, with 175 MCORP and 94 control participants. Researchers followed participants' outcomes for a 10- to 21-month follow-up period, with data collection ending in October 2009. All participants left incarceration between February and December 2008.

Analysis suggests MCORP participants were significantly more likely to secure employment and housing, receive income support, participate in community support programming, and access educational resources within six months of release than their peers in the control group (Duwe 2012, 365). Moreover, 20% of control group participants reported receiving no social support

<sup>&</sup>lt;sup>32</sup> SMART stands for small, measurable, attainable, realistic, and timely.

<sup>&</sup>lt;sup>33</sup> Eligibility requirements included: incarceration at one of the seven participating correctional institutions (Shakopee, Lino Lakes, Stillwater, Rush City, Red Wing, Moose Lake, and St. Cloud), at least six months of community supervision remaining on their sentence, and no requirement to register as a predatory offender (Duwe 2012, 354).

<sup>&</sup>lt;sup>34</sup> Those in the control group received "business as usual" case management and supervision services (Duwe 2012, 353).

upon release compared to just 4% of MCORP participants. Findings suggest MCORP significantly reduced the rates of rearrest (37% decrease), reconviction (43% decrease), and new offense reincarceration (57% decrease) (Duwe 2012, 37). However, MCORP did not have a significant effect on supervision revocations due to technical violations (Duwe 2012, 366).

Researchers also explored how community programming, such as mentoring, restorative justice circles, faith-based programming, and MCORP services impacted recidivism. Results show that securing housing within the first six months of release was associated with reduced recidivism. Moreover, securing employment significantly reduced individuals' risk of rearrest by 45%, risk of technical violation by 53%, and risk of return to prison by 45%. Increased social support also was associated with decreased recidivism. MCORP participants engaged in social support programming saw significantly lower risks of rearrest and reconviction. Lastly, chemical dependency treatment significantly reduced the risk of re-offense (Duwe 2012, 372). Researchers point to these results to show the positive impact of MCORP while also calling for further analysis of delivery model effectiveness and cost-benefits.

#### Milwaukee, Wisconsin

The Milwaukee Safe Streets Prisoner Release Initiative (PRI) provided wrap-around services, such as substance use treatment, cognitive-behavioral programming, and support from social workers, in addition to employment-focused programming. Furthermore, programming occurred while individuals still were incarcerated. Program evaluation showed that PRI helped increase participants' wages compared to a control group. PRI did not appear to significantly impact recidivism rates.

Those eligible for PRI were males aged 35 or younger<sup>35</sup> with a history of violence or gang involvement who were scheduled for release from a Milwaukee prison with at least six months of community supervision (Cook et al. 2015, 362). Participants were randomly assigned either to a control group or to a treatment group that received the full PRI programming. All but nine of the 106 selected for the PRI treatment group were transferred to Racine, 30 miles south of Milwaukee, to allow for family visits and work release opportunities. The nine not transferred remained in Milwaukee due to custodial status. All 106 individuals were included in the evaluation to maintain comparability of the treatment and control groups. PRI programming varied depending on individuals' needs. Every individual in the PRI treatment group met with a social worker and was expected to complete the Breaking Barriers Cognitive Reality curriculum.<sup>36</sup> Each PRI participant also met with a coordinated-care team, which consisted of a social worker and a job coach, to establish housing, transportation, and job search plans prior to release. Drug and alcohol treatment, remedial education, and work release programs were also available as needed. Lastly, those in the PRI treatment group were able to access services from the Community Corrections Employment Program (CCEP), which assisted with job placement

<sup>&</sup>lt;sup>35</sup> Because researchers capped the age of participants at 35, this group may have had a younger mean age than other studies mentioned. Research has shown that proclivity towards crime decreases with age. Participant age thus may be a contributing factor to these findings. Researchers conducted multivariate analysis on the PRI sample that demonstrated that the likelihood of rearrest in the 12 months following release declined strongly with time served and with age (Cook et al. 2015, 365).

<sup>&</sup>lt;sup>36</sup> This is a 12-to-16-week program designed to change behavior, thinking, and attitudes known to contribute to criminality and to address the dynamic risk factors for criminal behavior (Cook et al. 2015, 363).

and job creation through subsidies to employers post-release.<sup>37</sup> Fifty-four percent of treatment participants received assistance through CCEP, 11% went on work release, 72% attended at least one session of Breaking Barriers, and 62% received substance use treatment.

Program evaluation focused on employment outcomes and recidivism during individuals' first year of release. Analysis showed PRI to be effective at increasing employment. Using data from parole officers, 81% of PRI treatment subjects earned wages post-release compared to 59% of control subjects. Those in the PRI treatment group were 20 percentage points more likely to be employed at any one point during the year than those in the control group; this finding was statistically significant. Results also showed PRI treatment increased average wages by \$400 per quarter (three months) compared to the control group. This comparison includes the entire sample, including those who did not work.

Additionally, there is evidence that PRI decreased the likelihood of rearrest during the first year post-release. The researchers note that two-thirds of all offenders followed for this study were arrested at least once during their first year of release. However, rearrest rates were lower for the PRI treatment subjects (63% for PRI treatment subjects versus 72% for control subjects) (Cook et al. 2015, 373). The average number of arrests during the observational first year was 1.32 for the PRI treatment group and 1.45 for the control group; these were not statistically significant differences. In light of these results, the researchers concluded that they were uncertain of the cost-benefit tradeoff of the PRI programming. Researchers estimate the PRI programming costs about \$5,000 per participant, based on the total program funding of \$500,000 for 106 treatment participants. They then estimated that the program would pass a cost-benefit test if the average social cost of the crimes committed by these individuals were \$7,700 or more. The true social cost of their offenses remains unclear due to imprecise estimates (Cook et al. 2015, 377).

#### Conclusion

The studies summarized above show largely positive impacts of wrap-around reentry services on outcomes metrics such as rearrest and employment. More research, however, is needed to fully understand the impact of these services.

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<sup>&</sup>lt;sup>37</sup> These types of treatment services existed prior to PRI. The PRI program simply guaranteed access to services for those in the treatment group, while those in the control group had to wait in line and potentially not receive services. In effect, the PRI treatment was to provide the participant with all of the services the Wisconsin Department of Corrections had to offer. Some of the inmates in the control group completed in-prison treatments: 3% completed high school education, 25% received counseling, and 13% received substance use treatment. No control subject received CCEP services.

**Table 4: Summary of Wrap-Around Reentry Services Studies** 

Study Site	Date	Sample Size	Key Findings
Kings County, NY	2007	1,198	<ol> <li>ComALERT graduates were 39% less likely to be rearrested within 2 years of graduation compared to control group.</li> <li>ComALERT attendees' employment rate was higher than that of the control group (75.6% vs 23.9%).</li> </ol>
Minnesota (Statewide)	2012	269	<ol> <li>MCORP significantly reduced the rearrest (37% decrease), reconviction (43% decrease), and new offense reincarceration (57% decrease).</li> <li>Securing housing within the first six months of release was associated with decreased recidivism.</li> <li>Securing employment significantly reduced individuals' risk of recidivism.</li> <li>Chemical dependency treatment significantly reduced the risk of reoffending.</li> </ol>
Milwaukee, WI	2015	236	<ol> <li>81% of PRI treatment subjects earned wages post-release compared to 59% of control subjects.</li> <li>Treatment participants were significantly more likely to be employed at any one point during the year than those in the control group.</li> </ol>

#### References

- Antenangeli, Leonardo, and Matthew, Durose. 2021. "Recidivism of Prisoners Released in 24 States in 2008: A 10-Year Follow-Up Period (2008–2018)." U.S. Department of Justice: Office of Justice Programs, Bureau of Justice Statistics NCJ 256094: 1-29. https://bjs.ojp.gov/BJS\_PUB/rpr24s0810yfup0818/Web%20content/508%20compliant% 20PDFs.
- Belenko, S., M., Hiller, & L., Hamilton. 2013. "Treating substance use disorders in the criminal justice system." *Current Psychiatry Reports* 15, 414. http://dx.doi.org/10.1007/s11920-013-0414-z.
- Belenko, S., Houser, K., and Welsh W. 2012. "Understanding the impact of drug treatment in correctional settings." In The Oxford handbook of sentencing and corrections. *Oxford University Press*.
- Belenko, S., N. Patapis, and M.T. French. 2005. "Economic benefits of drug treatment: A critical review of evidence for policy makers." *Treatment Research Institute*, University of Pennsylvania.
- Belenko, S. & Peugh, J. 1998. "Fighting crime by treating drug abuse." *Issues in Science and Technology* 15, 1, 53-60.
- Bloom, Dan, Cindy Redcross, Gilda, Azurdia, Janine, Zweig, Janine, and Nancy, Pindus. "Transitional Jobs for Ex-Prisoners: Implementation, Two-Year Impacts, and Costs of the Center for Employment Opportunities (CEO) Prisoner Reentry Program." New York: MDRC, (2009), Available at SSRN: https://ssrn.com/abstract=1667003.
- Bronson, J., J., Stroop, S., Zimmer, & M., Berzofsky. 2017. "Drug use, dependence, and abuse among state prisoners and jail inmates, 2007–2009." U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics 250546 1-27. www.ojp.usdoj.gov.
- Broome, Kirk, M., Knight, Kevin, Hiller, Matthew L., Simpson, D. Dwayne. 1996. "Drug Treatment Process Indicators and Prediction of Recidivism." *Journal of Substance Abuse Treatment*, 13 (6): 487-491.
- Broome, K. M., Knight, D. K., Knight, K., Hiller, M. L., & Simpson, D. D. 1997. "Peer, family, and motivational influences on drug treatment process and recidivism for probationers." *Journal of Clinical Psychology*, 53, 387-397.
- Center for Employment Opportunities. Accessed October 1, 2021. https://ceoworks.org/.
- Clark, Valerie. 2015. The Effect of Community Context and Post-Release Housing Placements on Recidivism: Evidence from Minnesota. Minnesota Department of Corrections. April 2015. https://mn.gov/doc/assets/Ecology\_Study\_-\_April\_2015\_tcm1089-272810.pdf.

- Clark, Valerie. 2016. "Predicting Two Types of Recidivism Among Newly Released Prisoners: First Addresses as "Launch Pads" for Recidivism or Reentry Success." *Crime & Delinquency*, Vol. 62(10) 1364–1400. DOI: 10.1177/0011128714555760.
- Cook, P.J., S., Kang, A. A., Braga, J., Ludwig, M. O'Brien. "An Experimental Evaluation of a Comprehensive Employment-Oriented Prisoner Re-entry Program." *Journal of Quantitative Criminology*, 31, 355–382 (2015). <a href="https://doi-org.libproxy.lib.unc.edu/10.1007/s10940-014-9242-5">https://doi-org.libproxy.lib.unc.edu/10.1007/s10940-014-9242-5</a>.
- Couloute, Lucius. 2018. "Nowhere to Go: Homelessness among Formerly Incarcerated People." *Prison Policy Initiative*, 2018. https://www.prisonpolicy.org/reports/housing.html.
- Daley, Marilyn, Craig T., Love, Donald S. Shepard, Cheryl B. Petersen, Karen L. White, and Frank B. Hall. 2004. "Cost-effectiveness of Connecticut's in-prison substance abuse treatment." *Journal of Offender Rehabilitation* 39, 3: 69-92.
- Denney, Andrew, Richard Tewksbury, and Richard Jones. 2014. "Beyond Basic Needs: Social Support and Structure for Successful Offender Reentry." *Journal of Qualitative Criminal Justice & Criminology*, 2:1, 39-67.
- Duran, Le'Ann, Martha Plotkin, Phoebe Potter, and Henry Rosen. Rep. 2013. Integrated Reentry and Employment Strategies: Reducing Recidivism and Promoting Job Readiness. New York, NY: The Council of State Governments Justice Center.
- Durose, Matthew R., Cooper, Alexia D., and Snyder, Howard N. 2014. Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010. Washington, DC: Bureau of Justice Statistics, US Department of Justice.
- Duwe, Grant. 2012. "Evaluating the Minnesota Comprehensive Offender Reentry Plan (MCORP): Results from a Randomized Experiment." *Justice Quarterly*, 29:3, 383, DOI: 10.1080/07418825.2011.555414.
- Equivant. 2019. Practitioner's Guide to COMPAS Core. Northpointe Inc. <a href="http://www.equivant.com/wp-content/uploads/Practitioners-Guide-to-COMPAS-Core040419.pdf">http://www.equivant.com/wp-content/uploads/Practitioners-Guide-to-COMPAS-Core040419.pdf</a>.
- Farabee, David, Sheldon Zhang, and Benjamin Wright. 2014. "An Experimental Evaluation of a Nationally Recognized Employment Focused Offender Reentry Program." *Journal of Experimental Criminology*, vol. 10, no. 3: 309–322., <a href="https://doi.org/10.1007/s11292-014-9201-z">https://doi.org/10.1007/s11292-014-9201-z</a>.
- Farmer E. M., S., Dorsey, & S. A., Mustillo. 2004. Intensive home and community interventions. *Child & Adolescent Psychiatric Clinics of North America*, *13*, 857-84.
- Field, G. 1985. The Cornerstone Program: Client Outcome Study. *Federal Probation*, 49 (2), 50-55.

- Field, G. 1989. The effects of intensive treatment on reducing the criminal recidivism of addicted offenders. *Federal Probation*, 63, 51-56.
- Garcia, Marie, and Nancy Ritter. 2016. Improving access to services for female offenders returning to the community. *National Institute of Justice Journal, No.296*.
- Hamilton, Leah, and Steven Belenko. 2019. "Substance Use Disorder Treatment in the Reentry Environment: Service Receipt and Prisoner Community Reintegration." *Criminal Justice and Behavior*, 46 (9):1295–1318. https://doi.org/10.1177/0093854819846528.
- Hiller, Matthew L., Kevin Knight, and D.D. Simpson. 1999. "Prison-Based Substance Abuse Treatment, Residential Aftercare, and Recidivism: (Alcoholism and Drug Addiction)." *Addiction*, 94 (6) (06): 833-42. <a href="http://libproxy.lib.unc.edu/login?url=https://www.proquest.com/scholarlyjournals/prison-based-substance-abuse-treatment/docview/199658121/se2?accountid=14244">http://libproxy.lib.unc.edu/login?url=https://www.proquest.com/scholarlyjournals/prison-based-substance-abuse-treatment/docview/199658121/se2?accountid=14244</a>.
- Hiller, M., K. Knight, and D. D. Simpson. (1999). Risk factors that predict dropout from corrections-based treatment for drug abuse. *The Prison Journal*, 79, 411-430.
- Hughes, Timothy A., Doris James Wilson, and Allen J. Beck. 2001. Trends in State Parole, 1990–2000. Bureau of Justice Statistics Special Report NCJ 184735. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
- Hunter, Bronwyn, A. Stephen Lanza, Mike Lawlor, William Dyson, and Derrick M. Gordon. 2016. A Strengths-Based Approach to Prisoner Reentry: The Fresh Start Prisoner Reentry Program. *International Journal of Offender Therapy and Comparative Criminology*, 60:11, 1298-1314. DOI: 10.1177/0306624X15576501.
- "Incarceration & Reentry." ASPE, 2015. Accessed October 1, 2021. https://aspe.hhs.gov/topics/human-services/incarceration-reentry-0.
- Inciardi, J. A., S.S. Martin, C. A. Butzin, R. M. Hooper, and L.D. Harrison 1997. An effective model of prison-based treatment for drug-involved offenders. *Journal of Drug Issues*, 27 (2), 261-278.
- Inciardi, J. A., S. S. Martin, and C. A. Butzin. 2004. Five-year outcomes of Therapeutic Community treatment of drug-involved offenders after release from prison. *Crime & Delinquency* 50, 88-107. doi:10.1177/001112870325887.
- Jacobs, Leah and Arron Gottlieb. 2020. The Effect of Housing Circumstances on Recidivism: Evidence from a Sample of People on Probation in San Francisco. *Criminal Justice and Behavior*, Vol. 47, No. 9: 1097–1115. https://doi.org/10.1177/0093854820942285.
- Jacob, Erin and Bruce Western. 2007. Report on The Evaluation of The ComALERT Prisoner Reentry Program. *U.S. Department of Justice, Office of Justice Programs*.

- Jonson, Cheryl L., and Francis T. Cullen. 2015. Prisoner Reentry Programs. Crime and Justice. Vol. 44, No. 1: 517-575. https://www.jstor.org/stable/10.1086/681554.
- Keene, Danya E., Rosenberg, Alana, Schlesinger, Penelope, Guo, Monica, and Blankenship, Kim M. 2018. Navigating Limited and Uncertain Access to Subsidized Housing After Prison. *Housing Policy Debate*, 28:2, 199-214, DOI: 10.1080/10511482.2017.1336638.
- Knight, K., Simpson, D.D., Chatham, L.R Camacho, L.M. 1997. "An Assessment of Prison Based Drug Treatment: Texas' in-Prison Therapeutic Community Program," Journal of Offender Rehabilitation 24, no. 3-4 75-100.
- Kubrin, Charis, and Stewart, Eric. 2006. Predicting Who Reoffends: The Neglected Role of Neighborhood Context in Recidivism Studies. *Criminology*, Vol. 44. No. 1. DOI: 10.1111/j.1745-9125.2006.00046. x.
- Langan, Patrick A., and David J. Levin. 2002. Recidivism of Prisoners Released in 1994. Washington, DC: Bureau of Justice Statistics, US Department of Justice.
- Lattimore, Pamela K., and Christy A. Visher. 2009. The multi-site evaluation of SVORI: Summary and synthesis. *Research Triangle Park, NC: RTI International*. Report No. 230421
- Lattimore, Pamela K., and Christy A. Visher. 2013. "The Impact of Prison Reentry Services on Short-Term Outcomes: Evidence from a Multisite Evaluation." *Evaluation Review* 37, no. 3–4: 274–313. https://doi.org/10.1177/0193841X13519105.
- Lattimore, Pamela K., and Danielle M. Steffey. 2009. The multi-site evaluation of SVORI: Methodology and analytic approach. *Research Triangle Park, NC: RTI International*.
- Lutze, Faith, Jeffrey Rosky, and Zachary Hamilton. 2014. Homelessness and Reentry: a multisite outcome evaluation of Washington state's reentry housing program for high-risk Offenders. *Criminal Justice and Behavior*, Vol. 41, No. 4, 471–491. DOI:10.1177/0093854813510164.
- Martin, S. S., C. A. Butzin, C. A. Saum, & J. A. Inciardi. 1999. Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare. *The Prison Journal* 79, 294-320. doi:10.1177/0032885599079003002.
- Miller, J.M., H. V. Miller, and J. C. Barnes. 2016. "Outcome Evaluation of a Family-Based Jail Reentry Program for Substance Abusing Offenders." *The Prison Journal*, 96, 1: 53-78.
- Mitchell, O., D. B. Wilson, & D. L. MacKenzie. 2007. Does incarceration-based drug treatment reduce recidivism? A meta-analytic synthesis of the research. *Journal of Experimental Criminology*, 3, 353-375.

- Moore, K. E., R. L. Hacker, L. Oberleitner, & S. A. McKee. 2020. Reentry interventions that address substance use: A systematic review. *Psychological Services*, 17 (1): 93–101. https://doi.org/10.1037/ser0000293.
- Olson, David E., Arthur J. Lurigio. 2014. The Long-Term Effects of Prison-Based Drug Treatment and Aftercare Services on Recidivism. *Journal of Offender Rehabilitation* 53, 8: 600-619.
- Osera, Carrie, Hannah Knudsen, Michele Staton-Tindall, and Carl Leukefeld. 2008. The adoption of wraparound services among substance abuse treatment organizations serving criminal offenders: The role of a women-specific program. *Drug and Alcohol Dependence*, 103, 82–90. DOI: 10.1016/j.drugalcdep.2008.12.008.
- Pelissier, B., N. Jones, & T. Cadigan. 2007. Drug treatment aftercare in the criminal justice system: A systematic review. *Journal of Substance Abuse Treatment*, 32, 311-320.
- Pettus-Davis, Carrie, Tanya Renn, Christopher A. Veeh, and Jacob Eikenberry. 2019. Intervention development study of the five-key model for reentry: An evidence-driven prisoner reentry intervention. *Journal of Offender Rehabilitation*, 58:7, 614-643, DOI: 10.1080/10509674.2019.1635242.
- Prendergast, Michael L. 2009. Interventions to Promote Successful Re-Entry Among Drug Abusing Parolees. *Addiction Science and Clinical Practice*, April 2009: 4-13.
- Prendergast, M., E. Hall, H. Wexler, G. Melnick, and Y. Cao. 2004. Amity Prison-Based Therapeutic Community: 5-Year Outcomes. *The Prison Journal*, 84, 1: 36–60. https://doi.org/10.1177/0032885503262454.
- Riley, John. 2003. Freed into Limbo: Laws, Lack of Preparation Leave Ex-Cons Struggling to Stay Straight. *Newsday*.
- Roman, Caterina G., and Travis, Jeremy. 2006. Where will I sleep tomorrow? Housing, homelessness, and the returning prisoner. *Housing Policy Debate*, 17:2, 389-418, DOI:10.1080/10511482.2006.9521574.
- Rossman, S. 2001. From prison to home: The effect of incarceration and reentry on children, families, and communities. *The Urban Institute*.
- Visher, Christy A., Daniel, O'Connell. Workforce Development Program: A Pilot Study of Its Impact in the U.S. Probation Office, District of Delaware. *Federal Probation*, 74, no. 3 (2010): 16-21.
- Visher, Christy A., Pamela K. Lattimore, Kelle Barrick & Stephen Tueller. 2017. Evaluating the Long-Term Effects of Prisoner Reentry Services on Recidivism: What Types of Services Matter? *Justice Quarterly*, 34:1, 136-165, DOI: 10.1080/07418825.2015.1115539.

- Welsh, W. N., and G. Zajac. 2013. A Multisite Evaluation of Prison-Based Drug Treatment: Four-Year Follow-up Results. *The Prison Journal*, 93, 3: 251–71. https://doi.org/10.1177/0032885513490265.
- Welsh, W.N., G. Zajac, and K.B. Bucklen. 2014. "For whom does prison-based drug treatment work? Results from a randomized experiment." *J Exp Criminol*, 10, 151–177. https://doi.org/10.1007/s11292-013-9194-z.
- Wexler, H. K., G. De Leon, D. Kressel, & J. Peters. 1999a. The amity prison TC evaluation: Reincarceration outcomes. *Criminal Justice and Behavior*, 26, 147-167.
- Wexler, H.K., G. Melnick, L. Lowe, & J. Peters. 1999b. Three-year reincarceration outcomes for Amity in-prison therapeutic community and aftercare. *Prison Journal*, 79, 321-336.
- Wilson, Kate. 2008. Literature Review: Wraparound Services for Juvenile and Adult Offender Populations. *Center for Public Policy Research*, University of California, Davis.
- Winterfield, L., P. K. Lattimore, D. Steffey, C. Lindquist, and S. Brumbaugh. 2006. "The Serious and Violent Offender Reentry Initiative: Measuring the Effects on Service Delivery." *Western Criminology Review*, 7, 3–19.
- Wodahl, Eric. 2006. The Challenges of Prisoner Reentry from a Rural Perspective. *Western Criminology Review*, 7(2), 32–47.
- Zweig, Janine, Jennifer Yahner, and Cindy Redcross. For Whom Does a Transitional Jobs Program Work? *Criminology & Public Policy*, 10, no. 4 (2011): 945–72. https://doi.org/10.1111/j.1745-9133.2011.00767.x.

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