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An Assessment of Washington State's Reentry Community Services Program: *Outcome Evaluation, Potential for Expansion, and Effective Components*

In 2021, the Washington State Legislature directed the Washington State Institute for Public Policy (WSIPP) to update its evaluation of the Reentry Community Services Program (RCSP). The legislature also directed WSIPP to examine the potential expansion of the RCSP to additional groups and to investigate components that could further support individuals' reentry to the community after incarceration.[1]

Administered by the Health Care Authority (HCA), the RCSP provides support services for individuals with complex mental illness who pose a danger to themselves or to others and who are leaving a Department of Corrections (DOC) prison facility. In 2022, WSIPP published an initial report discussing the RCSP's history and prior research analyzing its effectiveness.[2]

The current study reports the findings from WSIPP's updated examination of the RCSP. In Section I, we describe the RCSP. In Section II, we present the findings from our updated evaluation. Next, we conduct a benefit-cost analysis and examine the potential of expanding the RCSP to additional populations in Section III. Then, in Section IV, we review the evidence surrounding which treatment components of the RCSP are most effective. We conclude in Section V.

Summary

The Reentry Community Services Program (RCSP) provides support services for adults leaving prison who have complex mental illness and who pose a danger to themselves or to others. Individuals are eligible to receive up to 60 months of mental health services and housing assistance.

We evaluated the RCSP by examining differences in reentry outcomes for a group of program participants and a comparison group of similar non-participants. We found that program participation is associated with improved outcomes, primarily during the first 6-12 months after prison release. During this period, RCSP participants were more likely to experience positive outcomes (e.g., mental health treatment and receipt of financial assistance) and less likely to experience negative outcomes (e.g., recidivism and homeless shelter use).

We conducted a benefit-cost analysis and found that relative to the comparison group, the RCSP returns $0.57 per dollar spent. In other words, the cost of the RCSP exceeds the benefits we can estimate. We found limited evidence that extension of the RCSP to other populations would result in net monetary benefits to society.

Finally, we explored which components of reentry programs in the research literature are linked to reduced recidivism and could be modified in the current RCSP. Among the analyzed components, only medication assistance, already available in the RCSP, was associated with reductions in recidivism.

[1] Engrossed Second Substitute Senate Bill 5304, Chapter 243, Laws of 2021.

[2] Knoth-Peterson, L. & Whichard, C. (2022). *Washington State's Reentry Community Services Program: Background and study outline* (Doc. No. 22-11-1901). Olympia: Washington State Institute for Public Policy.

I. Reentry Community Services Program

Since 1999, Washington State has operated a program that offers supportive services for adults leaving prison who meet certain eligibility criteria. Currently known as the RCSP, the program is administered by HCA in partnership with DOC to provide intensive services to qualifying individuals during reentry to the community.[3]

Although the RCSP has evolved, the program's general framework remains unchanged. This section describes program eligibility, pre- and post-release services, and the intended benefits of program participation. We then describe the current study. For a more in-depth discussion of the RCSP, see WSIPP's preliminary report.[4]

RCSP Eligibility and Designation

It is common for correctional facilities to assist incarcerated individuals as they prepare to leave prison and return to the community.[5] Compared to the standard reentry services that all individuals receive, the RCSP provides much more intensive services to a small number of individuals with complex needs.

The RCSP is intended for individuals who have a mental health disorder and pose a danger to themselves or others if released to the community.

This unique feature of the RCSP sets it apart from other reentry programs.[6] By limiting participation to these individuals, the RCSP serves a narrow segment of the correctional population that is at especially high risk for experiencing negative outcomes during reentry.

DOC reviews administrative records to identify potential candidates for the RCSP. Third parties, including family members or health providers, may also refer incarcerated persons for potential participation. A joint committee of DOC and HCA staff, including mental health professionals, screens potential participants for eligibility.

To determine eligibility, the committee reviews information related to dangerousness (e.g., criminal history, prison infractions for violent behavior), mental health (e.g., diagnosis, symptom severity), history of substance use disorders, and other relevant records. Committee members then vote on whether to designate individuals to the program. RCSP staff contact designated individuals and encourage them to participate in the program. However, the RCSP is an opt-in program, and designated individuals may refuse services. See Appendix II for RCSP's program referral form.

[3] The name of this program has changed several times. Previously known as the Dangerous Mentally Ill Offender Program and Offender Reentry Community Safety Program, we refer to the program under its current name for simplicity.

[4] Knoth-Peterson & Whichard (2022).

[5] In Washington State, adults leaving prison receive clothing, transportation, a 90-day supply of medication, and a minimum of $40 in gate money (see RCW 72.02.100). Individuals who are eligible for the Earned Release Date Housing Voucher program may also receive up to $700 per month in housing assistance for the first 6 months after prison release (see RCW 9.94A.729).

[6] To prepare for this report, we conducted a literature review to identify reentry programs similar to the RCSP. We found information on programs serving either individuals with mental health disorders or individuals at high risk of violence, but we found few programs designed for individuals who met both requirements.

Program Services

RCSP services begin during incarceration to ensure continuity of care during the transition back to the community.

Pre-release Services

Before release, participants are assigned a multisystem care planning team that coordinates the individual's release plan. The team meets at least three times with each participant before release. The purpose of the release plan is to ensure necessary arrangements are in place so participants can have an orderly transition from the prison environment to the outside community. Standard features of the plan include coordinating transportation on the day of release, securing housing, identifying medication needs, establishing a list of emergency contacts, and identifying service providers in the community who will oversee mental health treatment.

Prior to July 2017, incarcerated individuals were required to wait 90 days after prison release to apply for Medicaid.[7] This time constraint was waived for RCSP participants, which allowed the planning team to apply for Medicaid while participants were incarcerated to ensure immediate access to care following release.

Post-release Services

On the day of prison release, program staff meet with participants to help them settle in the community. HCA contracts with behavioral health organizations and other providers to provide case management and support services for RCSP participants. During the first 30 days after release, these service providers meet with participants regularly and offer intensive services related to housing, mental health treatment, and financial assistance.

Beyond the initial 30-day period of enhanced support, RCSP participants can receive up to 60 months of standard program services.[8] Participants receive $1,000 worth of benefits in each month.[9] Past WSIPP research[10] has found that these funds primarily go toward housing assistance (i.e., rent payments) and mental health care (e.g., medication and other forms of treatment).[11]

Intended Benefits

The RCSP is intended to improve three main categories of outcomes: providing needed core services, reducing recidivism, and improving other health outcomes. To ensure continuity of care, the RCSP is designed to connect participants with supportive services immediately after they leave prison. As a result, we expect program participation to be associated with the timing of reentry outcomes.

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[7] This changed with the passage of Substitute Senate Bill 6430, Chapter 154, Laws of 2016 which took effect on July 1, 2017. See Health Care Authority. (2016). *Medicaid coverage suspension for incarcerated persons*.

[8] Participants can receive services for up to eight years after leaving prison. Thus, participants can continue receiving program services until they reach 60 months of service use or have been enrolled in the program for eight years.

[9] More recently, RCSP has been providing tiered contracts, with amounts of up to $1,200 per month initially, then tapering over time.

[10] Lovell, D., & Mayfield, J. (2007). *Washington's Dangerous Mentally Ill Offender law: Program costs and developments* (Doc. No. 07-03-1901). Olympia: Washington State Institute for Public Policy.

[11] Program funds may also be used to pay for basic necessities, transportation assistance, specialized programming, non-Medicaid-funded medical expenses, and other requests on an ad-hoc basis. For more information on program components, see Exhibit 21.

Specifically, we expect to see greater impacts immediately after individuals leave prison.

Receipt of Core Services

The RCSP is designed to improve reentry conditions by providing participants with enhanced access to mental health treatment, financial assistance, and housing. If the RCSP is effective, we expect participation in the program to be associated with additional mental health treatment, increased financial assistance, and a lower likelihood of using a homeless shelter.

Recidivism

An implicit goal of the RCSP is to improve public safety by reducing recidivism.[12] Theoretically, the RCSP could indirectly influence recidivism because of the stabilizing benefits of supportive services. If conditions such as untreated mental illness, extreme poverty, and being unsheltered increase the likelihood of crime, then the RCSP could reduce recidivism by limiting participants' exposure to these conditions.

Other Health Services

RCSP could affect participants in ways that extend beyond the provision of core services and recidivism. For example, individuals who participate in the RCSP are monitored by caseworkers who can provide guidance or assistance in addressing specific needs. Given the complex needs of this population, RCSP participation might influence outcomes such as psychiatric hospitalization, receipt of medical treatment, and participation in substance use treatment.

Current Study

The 2021 Legislature directed WSIPP to conduct an evaluation of the RCSP. We include this language in Exhibit 1. The legislature included WSIPP's assignment in a broader act aimed at increasing access to behavioral health treatment and medical assistance benefits following release from confinement. This act also established a workgroup to consider ways to expand the RCSP to "enhance recovery, reduce recidivism, and improve public safety."

Exhibit 1

WSIPP's Legislative Assignment

The Washington State Institute for Public Policy shall ***update its previous evaluations*** *of the reentry community services program under RCW 72.09.370 and 71.24.470, and* ***broaden its cost-benefit analysis*** *to include impacts on the use of public services, and other factors. The institute shall collaborate with the work group established under section 9 of this act to determine research parameters and help the work group answer additional research questions including, but not limited to,* ***the potential cost, benefit, and risks involved in expanding or replicating the reentry community services program****; and* ***what modifications to the program are most likely to prove advantageous*** *based on the current state of knowledge about evidence-based, research-based, and promising programs.*

E2SSB 5304, Chapter 243, Laws of 2021.
[bold emphasis added]

[12] Recidivism refers to crime committed by individuals who were previously penalized by the criminal justice system. Recidivism is often regarded as an indicator of whether a justice system intervention is effective at reducing crime.

The current study proceeds in three parts. First, we present our findings from an updated outcome evaluation to examine how RCSP participation is associated with individual outcomes (Section II).

Second, we use the results from the outcome evaluation to update the benefit-cost analysis for the RCSP. We also examine the potential benefits and costs of expanding the RCSP to additional populations. This simulated analysis estimates the hypothetical costs and benefits that may occur if the RCSP were available to other groups (Section III).

Finally, we present our findings from an examination of the research literature on evidence-based, research-based, and promising programs to identify potential modifications to the RCSP that are most likely to increase the program's effectiveness (Section IV).

II. Outcome Evaluation

In this section, we describe our evaluation of the RCSP. After presenting the results of our analyses, we summarize our key findings.

Data and Methods

This section briefly describes the data and methods we used to conduct our evaluation. For more information on these steps, see Appendix I.

Data

This study uses data from DOC, HCA, WSIPP's Criminal History Database (CHD), and the Department of Social and Health Services (DSHS). Within DSHS, we collected information from two sources: the Behavioral Health Administration (BHA) and the Economic Services Administration (ESA).

With the help of Research and Data Analysis (RDA) at DSHS, we created a single analytic dataset containing information on program participation, pre-release characteristics, and post-release outcomes. For all outcome measures, we received data on whether individuals experienced the outcome in each month during the first 60 months after individuals were released from prison.

Sample. Our sample consists of 13,159 individuals released from prison between January 1, 2012, and December 31, 2017.

The dataset includes a treatment group of 359 individuals who participated in the RCSP and a comparison group of 12,800 non-participants. The comparison group consists of individuals who did not participate in RCSP but had histories of violent behavior or mental health disorders.[13]

We used data from DOC and WSIPP's CHD to construct measures of characteristics at the time of release. We present descriptive statistics on these measures in Exhibit 2.

Methods

As individuals are only permitted to join the RCSP if they have a mental health disorder and pose a danger to themselves or others, it is likely that program participants will differ from non-participants. The greater the baseline differences between these two groups, the harder it is to identify the effect of program participation on reentry outcomes. Some of these differences are shown in Exhibit 2.

For example, one outcome we examine is whether individuals engaged in violent crime after reentering the community. Given the RCSP's requirement that participants must pose a danger to themselves or others, it is likely that the average RCSP participant will have a higher baseline risk for engaging in violent behavior than the average non-participant. Without adjusting for this baseline difference, our analyses will be biased in favor of finding that RCSP participants engage in more violent crimes than non-participants.

[13] See Appendix I for more information on how we selected our comparison group. We did not have full information on which individuals met the eligibility criteria—we can only approximate this status using proxy measures. As a result, our comparison group includes the larger group of individuals who statistically look the most like the RCSP group, (i.e., individuals who scored high on measures of dangerousness/mental health).

Exhibit 2

Sample Descriptive Statistics

Pre-release Characteristics	RCSP (N=359)	Comparison (N=12,800)
Sex		
Male	89.4%	79.4%
Female	10.6%	20.6%
Race/ethnicity[#]		
White	57.4%	70.4%
Black	26.2%	15.6%
Hispanic	7.5%	9.2%
Asian/PI	5.0%	1.9%
AIAN	3.9%	2.9%
Age	38.9	38.2
Prior convictions	14.3	12.4
Years incarcerated	3.6	2.6
Release year		
2012	20.1%	16.7%
2013	20.3%	17.9%
2014	16.9%	18.2%
2015	14.2%	16.6%
2016	16.7%	15.9%
2017	11.7%	17.8%
"High risk" class	90.3%	83.4%
Violent infractions	7.4	2.6
% Time in RTU	48.3%	3.7%
MH diagnosis		
Schizophrenia	73.8%	7.7%
Psychosis	39.0%	9.3%
Bipolar	24.2%	13.8%
Depression	17.6%	46.3%
SUD treatment: Hours	122.5	128.7

Notes:

[#] We place all Hispanic individuals in the same category regardless of race. Other categories only include non-Hispanic individuals.

PI = Pacific Islander.

AIAN = American Indian/Alaska Native.

RTU = Residential Treatment Unit.

MH = Mental health.

SUD = Substance use disorder.

As a result, we must ensure that the comparison group we use in our analyses is as similar as possible to the RCSP group. Although we cannot do this perfectly, we attempt to minimize pre-existing differences between the groups through our methodology and sample selection strategy.

Entropy Balancing. After identifying our sample, we weight individuals using entropy balancing, a methodological technique that ensures that the treatment and comparison groups are balanced across a selected set of measures. In other words, after entropy balancing, the comparison group will, on average, have the same characteristics as the RCSP group. The descriptive statistics of this weighted comparison group will be the same as those in the RCSP column in Exhibit 2.[14]

We use several different measures in this step, including demographic characteristics (i.e., sex, race/ethnicity, age at release), criminal history (i.e., number of prior convictions for felonies and misdemeanors), and incarceration history (i.e., time spent in prison, year of prison release). We also used factors related to dangerousness (i.e., "high risk" for recidivism, number of violent prison infractions), mental illness (i.e., time spent in the Residential Treatment Unit, mental illness diagnosis), and substance use (i.e., time spent in substance use treatment programs).

Regression Analysis. Because our outcome variables are measured monthly for the first 60 months after prison release, we use different regression techniques to analyze the likelihood, quantity, and timing of individuals experiencing reentry outcomes.

[14] For full entropy balancing results, see Exhibit A3 in Appendix I.

Specifically, we use logistic regression for binary outcomes, negative binomial regression for count outcomes, and proportional-hazards Cox regression to analyze the timing of reentry outcomes.

For the main report, we translate the logistic regression results into predicted probabilities. These probabilities indicate the likelihood of experiencing the outcome for an average individual in each group.[15] They do not represent the number of individuals who experienced those outcomes in each group.

We took two steps to ensure that our results are comparable across analyses. First, every analysis controls for the same variables that we used during entropy balancing. Second, every analysis applies the same weights from the entropy balancing procedure. Thus, we use the same set of control variables and weights in every analysis.

However, this approach cannot adjust for all differences between these groups. Any differences between these groups that are unmeasured and therefore unaccounted for in our analysis could bias our results.

The results of our analyses illustrate the relationship between program participation and reentry outcomes, but it cannot establish whether the RCSP caused these differences. There may be underlying differences between the groups that caused the differences in outcomes and were unrelated to participation in the RCSP.

Outcomes

As discussed in Section I, we focus on three types of reentry outcomes: receipt of core services, recidivism, and other health services. We display the specific outcomes we examine in Exhibit 3.

Exhibit 3
Outcomes

1. Receipt of core services
   a. Mental health treatment
      i. Participation in outpatient treatment
      ii. Mental illness diagnosis
      iii. Receipt of psychiatric medication
   b. Receipt of financial assistance
      i. Aged, Blind, and Disabled (ABD) cash assistance program
      ii. Basic Food program
   c. Homeless shelter use
2. Recidivism
   a. Any recidivism
   b. Most serious offense
3. Other health services
   a. Psychiatric hospitalization
      i. State-run psychiatric hospitals
      ii. Community-run mental health facilities
   b. Medical treatment
      i. Hospitalization for inpatient medical care
      ii. Emergency department (ED) use for inpatient care
      iii. ED use for outpatient care
   c. Substance use treatment
      i. Outpatient treatment for substance use disorder (SUD)
      ii. Medication-assistance treatment (MAT) for SUD
      iii. MAT for alcohol use disorder

[15] Specifically, this probability represents the likelihood that a person with the mean level of each covariate (e.g., criminal history or age) will experience the outcome.

Receipt of Core Services

The RCSP is designed to provide participants with enhanced access to mental health treatment, financial assistance, and housing. Our first set of reentry outcomes is intended to measure the receipt of these services.

Mental Health Treatment. We use three measures related to mental health treatment: participation in outpatient treatment, mental illness diagnosis, and receipt of psychiatric medication.

Participation in outpatient treatment is designed to capture whether an individual participated in talk therapy, counseling, or other forms of mental health treatment that occur in an outpatient setting.

We use health records to measure the prevalence and timing of diagnoses for different mental health conditions during reentry. It is unlikely that participating in the RCSP would cause individuals to develop a mental health condition. However, a diagnosis represents an interaction with the health system for the treatment of that condition. We examine changes in the prevalence of mental health diagnoses to better understand differences in treatment between the RCSP group and the comparison group. In addition, the timing of diagnosis indicates how quickly individuals receive treatment after leaving prison, which could be affected by RCSP services.

We measure the following conditions: psychotic disorder,[16] bipolar/mania disorder, disruptive/impulse-control/conduct disorder,[17] anxiety disorder, major depressive disorder, attention-deficit hyperactivity disorder (ADHD), and adjustment disorder.[18]

To measure receipt of psychiatric medication, we use information on prescriptions filled for the following types of medications: antipsychotic, antimanic, anti-anxiety, antidepressants, anticonvulsants, and sedatives.

Receipt of Financial Assistance. We focus on two welfare programs that provide financial assistance. The Aged, Blind, and Disabled (ABD) cash assistance program provides financial assistance to low-income individuals with disabilities or other conditions that limit their ability to work. Basic Food offers financial assistance to low-income individuals to help them purchase food.[19]

Homeless Shelter Use. This outcome indicates whether individuals used a homeless shelter. We use this to approximate housing status after reentering the community. A direct measure of housing status would indicate whether individuals were *housed* (i.e., staying in a residence they own or rent), *unhoused but sheltered* (i.e., staying with family, friends, or a homeless shelter), or *unhoused and unsheltered* (i.e., living outdoors).

[16] Psychotic disorders are characterized by symptoms such as hallucinations, delusions, and disordered thinking.
[17] Disruptive/impulse-control/conduct disorders refer to a collection of mental health conditions characterized by limited self-control and frequent involvement in anti-social behavior (e.g., aggression, theft, lying, rule-breaking).
[18] Adjustment disorders are characterized by heightened emotional or behavioral reactions to stress. For example, affected individuals may respond to stressful events by experiencing mood disturbances (e.g., excessive crying, feeling hopeless) and/or impulsively engaging in risky behavior (e.g., substance use, aggression).
[19] Basic Food is the name Washington State uses to refer to the Supplemental Nutrition Assistance Program (SNAP).

Because we do not have access to such a measure, we rely on "homeless shelter use" to approximate housing status.

Recidivism

We measure recidivism based on whether individuals were convicted of an offense after leaving prison.[20] We used this approach to construct two recidivism measures.

First, we created a measure of any recidivism, which does not distinguish offense severity (i.e., infraction, misdemeanor, felony) or offense type (i.e., property, drug, violent).

Second, we created a measure of the most serious offense committed. In descending order of severity, we sorted individuals into five hierarchical categories: violent felony, non-violent felony, misdemeanor, infraction, and no recidivism.[21] If an individual was convicted of multiple offenses, we selected the most serious offense. For example, if an individual was convicted of a violent felony and a misdemeanor during a specific period, we categorized them into the "violent felony" category.

Other Health Services

For our final set of reentry outcomes, we measure whether individuals experienced psychiatric hospitalization, received medical treatment, or participated in substance use treatment.

Psychiatric Hospitalization. We measure psychiatric hospitalization based on whether individuals were admitted to mental health facilities and stayed overnight for inpatient treatment.[22] We separately measure two kinds of psychiatric hospitalization events based on the type of facility: state-run psychiatric hospitals and community-run mental health facilities.

Medical Treatment. We separately measured three types of treatment: hospitalization for inpatient medical care, emergency department (ED) use for inpatient care, and ED use for outpatient care.

Substance Use Treatment. For substance use treatment, we separately measured outpatient substance use treatment, medication-assisted treatment (MAT) for substance use disorder, and MAT for alcohol use disorder.[23]

[20] Since individuals can only be convicted of a crime if there is compelling evidence linking them to an offense, convictions are highly reliable as measures of recidivism. However, individuals in our sample may have committed offenses during reentry that they were never convicted of. Thus, a limitation of this measure is that it underestimates recidivism for individuals in our sample.

[21] The infraction category also includes traffic infractions.

[22] The data we received does not indicate how long individuals stayed after being admitted to the mental health facility.

[23] Medication-assisted treatment (MAT) combines psychotherapy with the use of prescription medications that are designed to block the euphoric effects of drug/alcohol use and reduce the symptoms of withdrawal. In our data, individuals who participated in MAT for substance use disorder were prescribed Naltrexone, Buprenorphine, or Buprenorphine-Naloxone. Individuals who participated in MAT for alcohol use disorder were prescribed Disulfiram or Acamprosate.

Results

In this section, we present the results from analyses that estimate the association between participation in the RCSP and reentry outcomes during the first 60 months after prison release.

For simplicity, we use graphs and predicted probabilities to visualize the results from logistic regression models. However, we occasionally reference the results of other analyses in the text to provide a more comprehensive summary of our findings. See Appendix I for the full results of all these analyses.

The differences between the RCSP and comparison groups represent differences in the predicted probability that individuals in that group would experience that outcome. These differences may exist because of the program or because of existing differences between the groups that we could not completely account for.

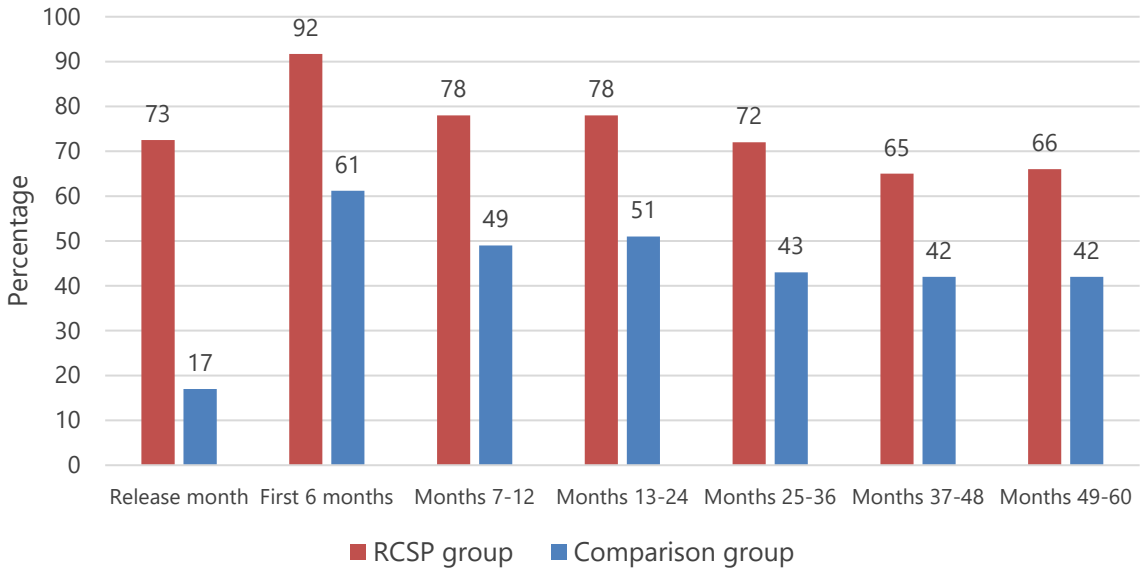
We begin by reviewing the results for outcomes corresponding to the RCSP's core services. Next, we describe the results from our analyses of recidivism. Finally, we show the results for outcomes related to other health services.

Receipt of Core Services

Outpatient Mental Health Treatment. There is strong evidence that participating in the RCSP is associated with increased use of outpatient mental health treatment. Exhibit 4 shows between-group differences in the predicted probability of receiving outpatient mental health treatment following the individual's release from prison.

Exhibit 4

Predicted Probability of Receiving Outpatient Mental Health Treatment: Detailed view of the follow-up period



Notes:
N=13,159.
All differences shown are statistically significant at the 0.05 level.

During the month they were released from prison, our analysis predicts that there is a 73% chance that those in the RCSP group would receive outpatient mental health treatment, compared to 17% among the comparison group. Although this difference became smaller over time, RCSP participants were substantially more likely to receive this form of treatment throughout the follow-up period.

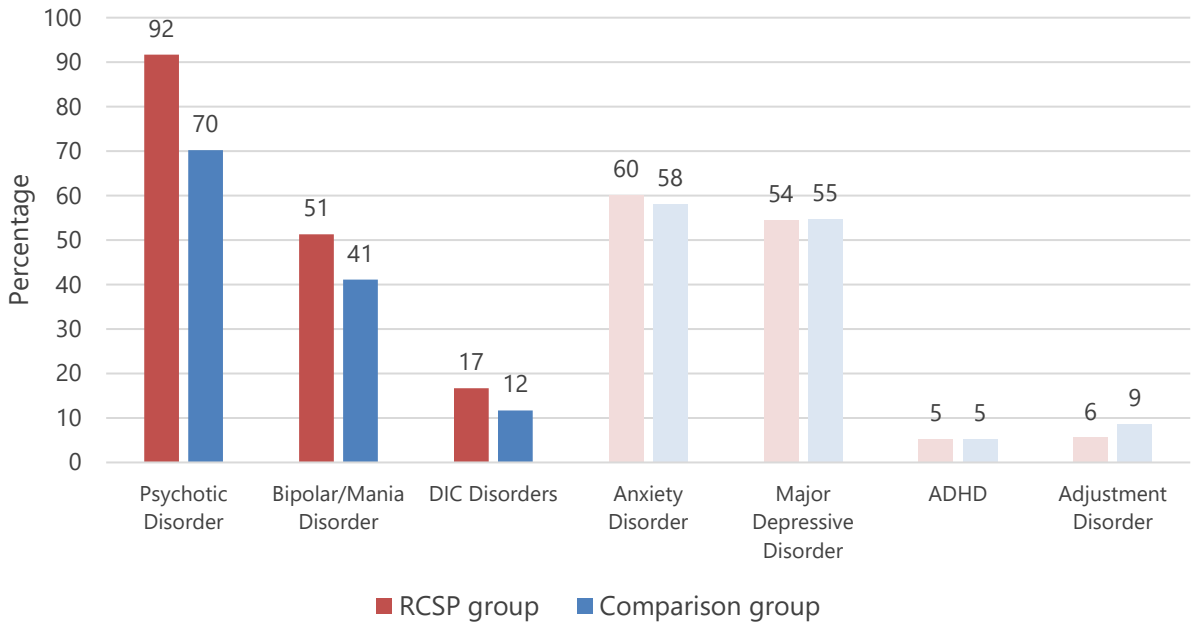
In addition, we found that RCSP participants spent more time in outpatient mental health treatment than non-participants. At the end of the follow-up period, the RCSP group received an average of 29.4 months of outpatient mental health treatment versus 13.3 months for the comparison group.

Overall, the results suggest that those in the RCSP have increased use of outpatient mental health treatment, particularly during the period immediately after their release from prison. Relative to the comparison group, RCSP participants were more likely to receive outpatient mental health treatment, start treatment sooner, and spend more time in treatment.

Mental Illness Diagnosis. We next examine between-group differences in the likelihood and timing of diagnoses for mental illness. Exhibit 5 shows the predicted probability of being diagnosed with different mental health conditions by the end of the five-year follow-up period.

Exhibit 5

Predicted Probability of Mental Illness Diagnosis:
Within Five Years of Prison Release



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.
DIC = Disruptive/Impulse-control/Conduct.
ADHD = Attention Deficit Hyperactivity Disorder

We found that RCSP participants were significantly more likely than non-participants to be diagnosed with psychotic disorders, bipolar/mania disorders, and disruptive/impulse-control/conduct disorders after leaving prison. In addition, RCSP participants were diagnosed with these conditions sooner than non-participants.

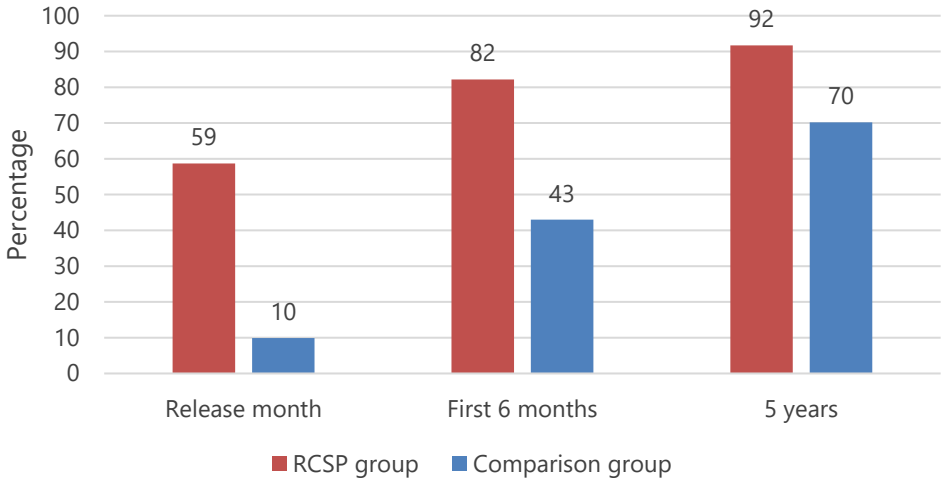
Since these diagnoses likely do not represent new conditions, this indicates that individuals are receiving treatment for conditions they already had. Individuals must have contact with mental health care professionals to receive a diagnosis. The increase in diagnoses, therefore, suggests that those in the RCSP are receiving more treatment earlier for those existing conditions.

However, we found no meaningful differences in the likelihood or timing of diagnoses for anxiety disorders, major depressive disorders, ADHD, or adjustment disorders.

More generally, the results highlight the pervasiveness of psychotic disorders among RCSP participants and how quickly they are diagnosed in the community after leaving prison (see Exhibit 6). During the month they were released from prison, our analysis predicts a 59% likelihood of being diagnosed with a psychotic disorder for RCSP participants and a 10% likelihood for non-participants. Within six months, the predicted likelihood of receiving this diagnosis increases to 82% for RCSP participants and 43% for non-participants.

Exhibit 6

Predicted Probability of Psychotic Disorder Diagnosis:
Within the Release Month, the First Six Months, and Five Years



Notes:
N=13,159.
All differences shown are statistically significant at the 0.05 level.

Receipt of Psychiatric Medication. We examined differences in receiving six types of psychiatric medication. We found that participants were significantly more likely to receive all six types of psychiatric medication. However, this across-the-board increase only occurred during the month when individuals were released from prison (see Exhibit 7).

After the first month of reentry, there were no meaningful differences in the likelihood of receiving four out of six medications (see Exhibit 8).

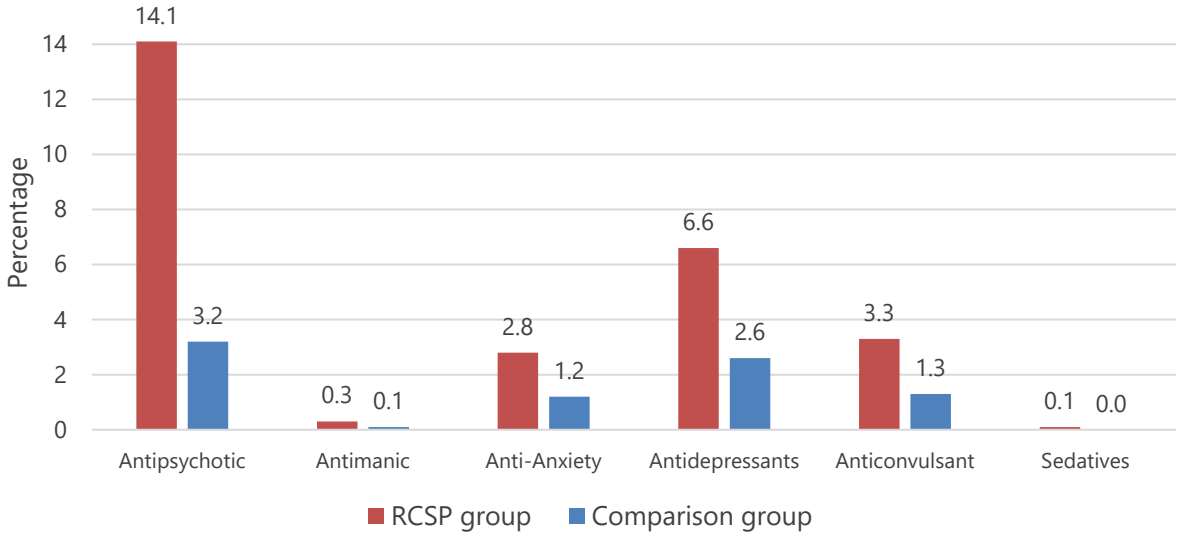
This pattern may reflect the impact of the RCSP's pre-release services (e.g., expedited Medicaid enrollment, identification of medication needs) and post-release medication management services, which enable participants to obtain medication soon after leaving prison.

In contrast, non-participants may require several weeks in the community to establish connections with prescribers before they can begin receiving medication. However, the advantage RCSP participants have in obtaining medication seems to fade within a few months after leaving prison.

We also found evidence that RCSP participation is associated with increased receipt of antipsychotic and antimanic medication throughout the entire follow-up period. Relative to the comparison group, RCSP participants were more likely to receive these medications and began receiving them significantly sooner after leaving prison. Moreover, the difference was particularly large for antipsychotic medication. By the end of the follow-up period, the average number of prescriptions filled for antipsychotic medication was twice as high for RCSP participants as non-participants.

Exhibit 7

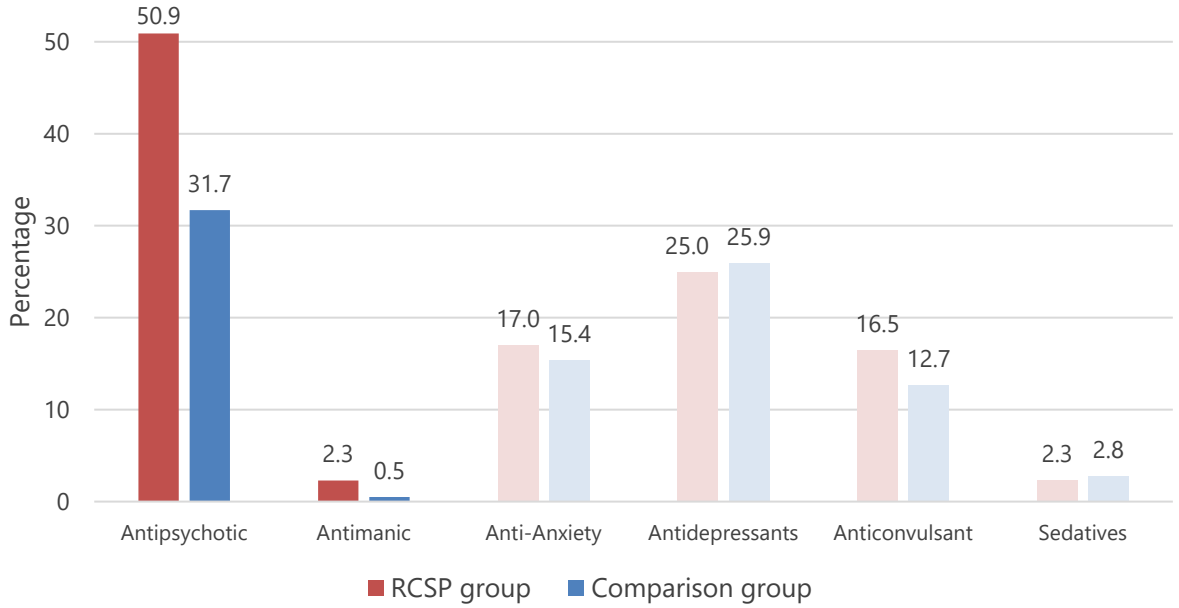
Predicted Probability of Receiving Medication:
Within 30 Days of Prison Release



Notes:
N=13,159.
All differences shown are statistically significant at the 0.05 level.

Exhibit 8

Predicted Probability of Receiving Medication:
Within Six Months of Prison Release



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.

Receipt of Financial Assistance. We examined between-group differences in receipt of payments for ABD assistance and Basic Food.[24] During the first six months after leaving prison, RCSP participants were more likely than non-participants to receive both forms of financial assistance (Exhibit 9), receive payments sooner, and receive payments with a higher average dollar value (Exhibit 10). However, these differences disappear after the first six months of reentry.

This initial boost in access to financial assistance is consistent with the intended design of the RCSP, which facilitates enrollment in welfare programs through pre-release services and the intensive case management services offered during the first 30 days of release.

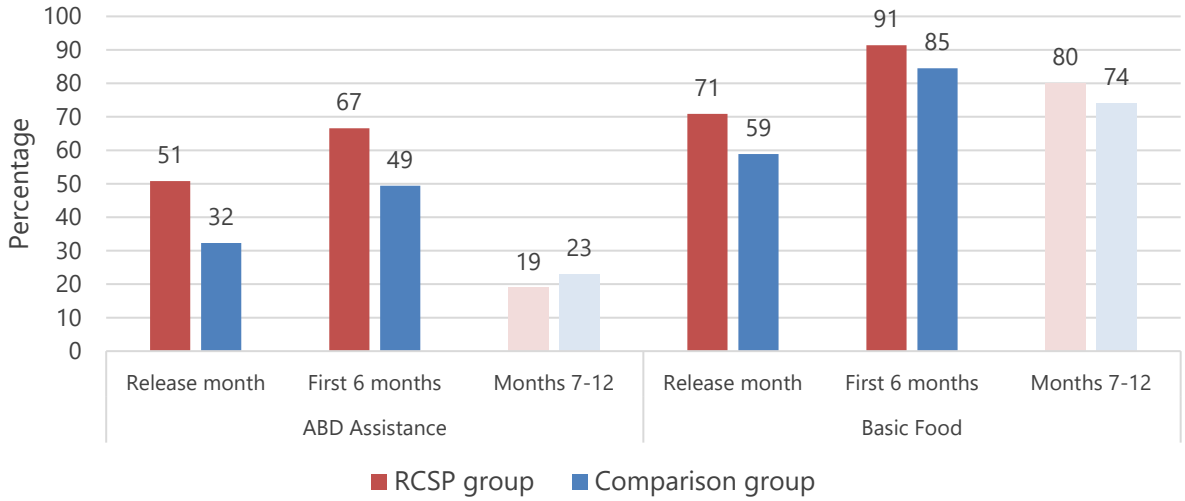
Beyond the six-month mark, however, RCSP participants were just as likely as non-participants to receive both types of financial assistance and received significantly less money from ABD payments.[25] These patterns persisted for the remainder of the follow-up period.

[24] In results not shown, we also examined the likelihood of receiving Temporary Assistance for Needy Families (TANF) and Housing and Essential Needs (HEN). There were no discernable differences between RCSP participants and non-participants in the likelihood of receiving either TANF or HEN. More generally, we found that it was uncommon for individuals in the sample to receive assistance from these programs.

[25] There is a marked decline in receipt of ABD assistance after six months in the community. One explanation for this pattern is that to receive ABD assistance, individuals must apply for Supplemental Security Income (SSI). Thus, it is

Exhibit 9

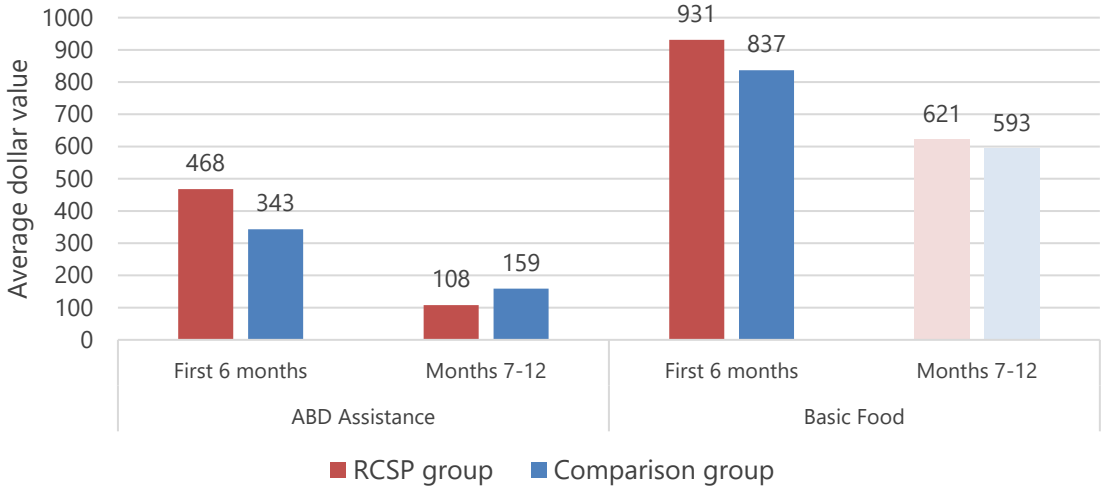
Predicted Probability of Receiving Financial Assistance:
Detailed View of the First Year After Prison Release



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.
ABD = Aged, Blind, and Disabled.

Exhibit 10

Average Dollars Received from Financial Assistance:
Within the First Year of Prison Release



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.
Amounts represent the average dollar amount participants received over six months.

possible that many individuals who received ABD assistance during the first six months of reentry subsequently stopped receiving these payments because they either failed to pursue SSI and were no longer eligible for ABD or successfully transitioned to SSI and no longer required ABD.

Homeless Shelter Use. As the final core service, we examined between-group differences in homeless shelter use. We found that RCSP participants were less likely than non-participants to use homeless shelters. This difference is only statistically significant during the first year after leaving prison (see Exhibit 11).

In addition, we examined differences in the timing and frequency of homeless shelter use. The results indicate that individuals in the comparison group began using homeless shelters significantly sooner than the RCSP group. We also found that the frequency of shelter use was higher for the comparison group.

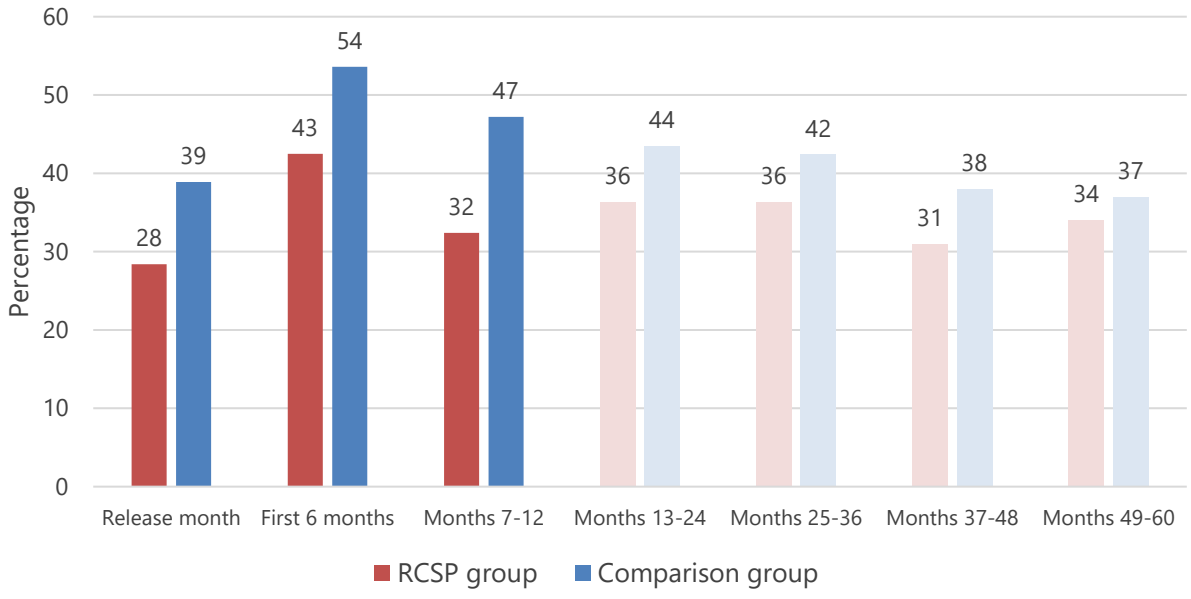
On average, the number of months individuals used a homeless shelter at least once was 13.8 months for the RCSP group and 17.3 months for the comparison group.

Overall, the evidence suggests that those in the RCSP do not need to rely on homeless shelters as much during the first year of reentry. These findings are broadly consistent with the intended design of the RCSP, which prioritizes helping participants secure housing when they first leave prison.

Ultimately, our results only allow us to make inferences about *shelter use*, so the exact relationship between RCSP participation and *housing status* remains unclear.

Exhibit 11

Predicted Probability of Homeless Shelter Use:
Detailed View of the Follow-up Period



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.

Recidivism

Any Recidivism. We begin by examining between-group differences in any recidivism. The results indicate that RCSP participants are generally less likely to recidivate than non-participants, but this is statistically significant only during the first year of reentry (Exhibit 12). The largest difference occurs during the first six months of reentry when the predicted probability of recidivism is 20% for the RCSP group and 27% for the comparison group.

We also examined differences in the timing and frequency of recidivism offenses. We found that the speed with which individuals engaged in recidivism for the first time was significantly slower for RCSP participants, but this result was only statistically significant in models examining the first six months.

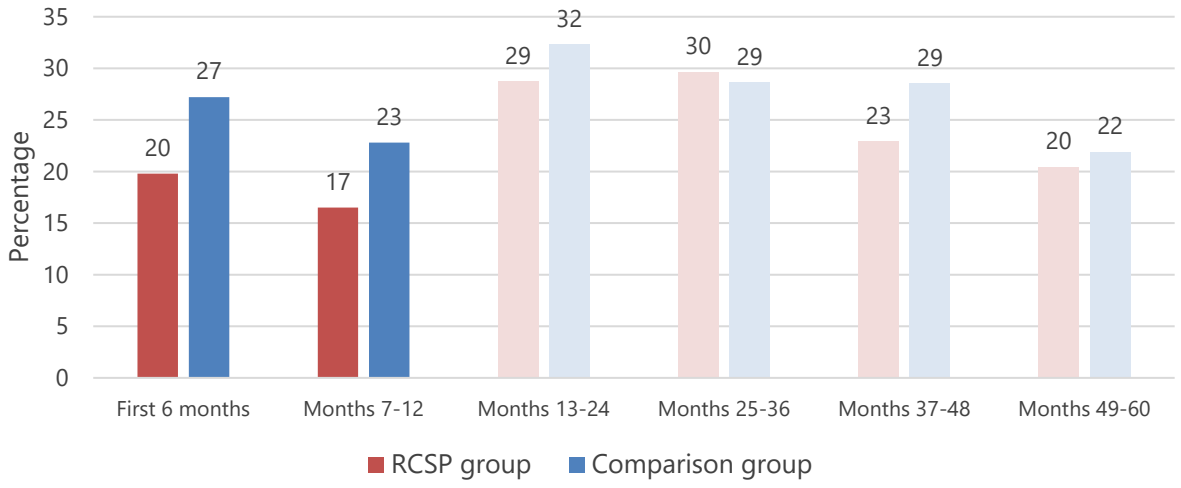
Similarly, we found that RCSP participants committed significantly fewer offenses than non-participants, but only during the first year of reentry.

The evidence suggests that RCSP participation is associated with reductions in recidivism, primarily during the first 6-12 months after leaving prison. However, there was no statistically significant relationship between RCSP participation and recidivism beyond the first year of reentry.

Most Serious Offense. Next, we examine between-group differences in recidivism based on the most serious offense that resulted in conviction after prison release. This approach allows us to compare the offense profile for each group and identify potential differences in the types of crimes that resulted in a conviction.

Exhibit 12

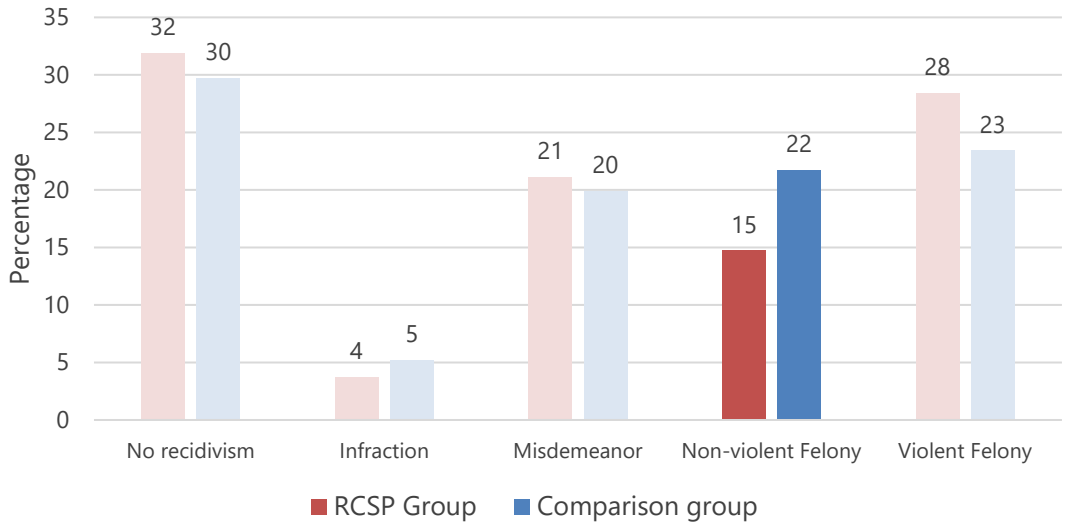
Predicted Probability of Committing Any Offense that Resulted in Conviction: Detailed View of the Follow-up Period



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.

Exhibit 13

Predicted Probability of Recidivism by Most Serious Offense:
Within Five Years of Prison Release



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.

Exhibit 13 shows the predicted probability of recidivism by the most serious offense during the five-year follow-up period.

Three noteworthy patterns emerged from this analysis. First, we found that both groups exhibited a similar offense profile by the end of the follow-up period. For example, the distribution across *most serious offense* categories was nearly identical across both groups for no recidivism (≈ 30%), infractions (≈ 5%), and misdemeanors (≈ 20%). Although we found larger discrepancies in convictions for felony offenses, these differences were relatively small.

Second, we only observed a statistically significant difference for non-violent felony recidivism. Five years after prison release, our analysis predicts a 15% likelihood that an RCSP participant would be convicted of a non-violent felony as their most serious recidivism offense, compared to a 22% likelihood for a non-participant. This pattern was mainly driven by differences in criminal activity during the first year of reentry.[26]

Many of the offenses classified as non-violent felonies are financially motivated,[27] such as property crimes (e.g., theft, burglary) and drug crimes (e.g., selling/distributing controlled substances).

[26] We also analyzed the *most serious offense* recidivism across different segments of the follow-up period. We only found a statistically significant difference between RCSP participants and the comparison group during the first 12 months of reentry for non-violent felony recidivism.

[27] Felson, R.B., Osgood, D.W., Horney, J., & Wiernik, C. (2012). Having a bad month: General versus specific effects of stress on crime. *Journal of Quantitative Criminology*, *28*, 347-363.

Because the RCSP connects individuals to services that cover the cost of food, housing, mental health treatment, and basic life expenses, the financial benefits of program participation may reduce motivation to engage in such crimes during the first year of reentry.

Finally, the results highlight the prevalence of violent felony recidivism. By the end of the five-year follow-up period, roughly a quarter of our sample were convicted of a violent felony. Thus, we find no evidence that RCSP participation is associated with reductions in serious violent crime.

Other Health Services

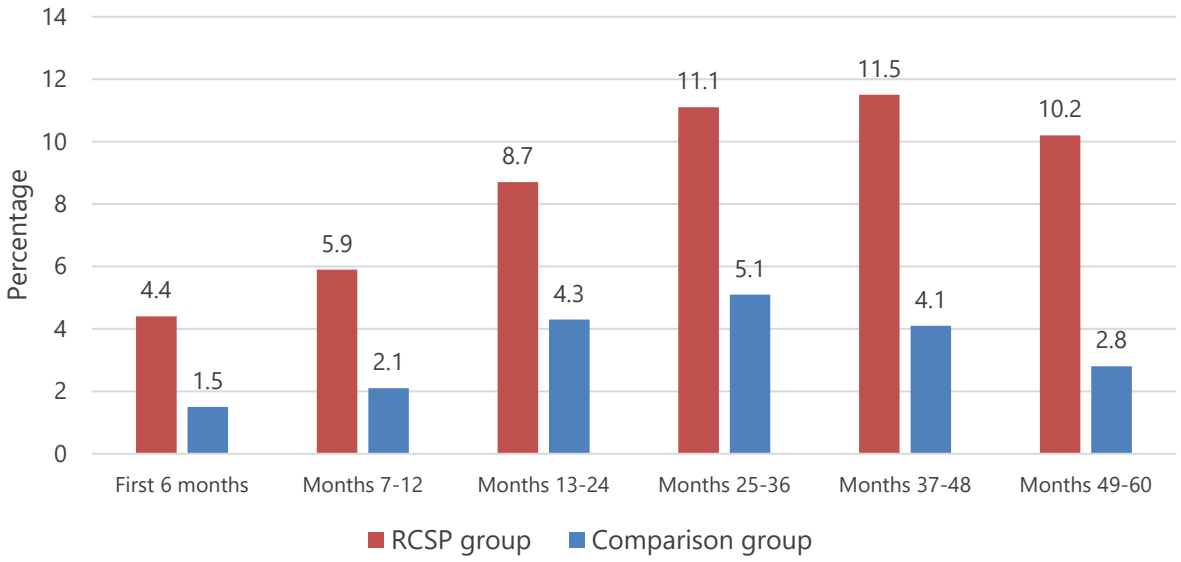
Psychiatric Hospitalization. There was strong evidence that RCSP participation was associated with an increased likelihood of psychiatric hospitalization after leaving prison.

Relative to the comparison group, individuals in the RCSP group were significantly more likely to be admitted to state psychiatric hospitals throughout the follow-up period (See Exhibit 14). The results were similar for admission to community mental health facilities, but the patterns were less consistent (See Exhibit 15).

We also examined differences in the timing and frequency of psychiatric hospitalization events. The results generally indicate that RCSP participants were hospitalized sooner and more frequently than non-participants. However, the patterns were larger and more consistent for state psychiatric hospital events. For example, RCSP participants were admitted to state psychiatric hospitals significantly sooner than non-participants, but there were no differences in how quickly individuals were admitted to community mental health facilities.

Exhibit 14

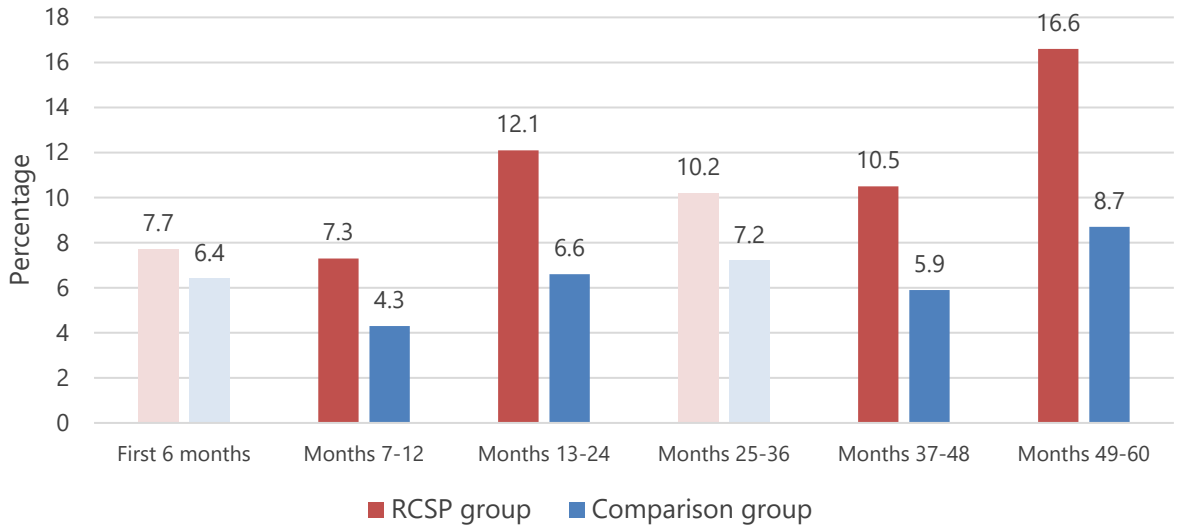
Predicted Probability of Admission to State Psychiatric Hospital: Detailed View of the Follow-up Period



Notes:
N=13,159.
All differences shown are statistically significant at the 0.05 level.

Exhibit 15

Predicted Probability of Admission to Community Mental Health Facility: Detailed View of the Follow-up Period



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.

Medical Treatment. We examined the association between RCSP participation and receipt of three types of medical treatment: hospitalization for inpatient medical care, emergency department (ED) use for inpatient care, and ED use for outpatient care.

Two noteworthy findings emerged from these analyses. First, the evidence indicates that RCSP participation was associated with increased use of medical services involving *inpatient* treatment. Relative to the comparison group, individuals in the RCSP group were significantly more likely to receive inpatient medical care because of being hospitalized or visiting the ED (see Exhibit 16).[28] We also found that the number of times individuals received inpatient medical care after leaving prison was significantly higher for RCSP participants than non-participants.[29]

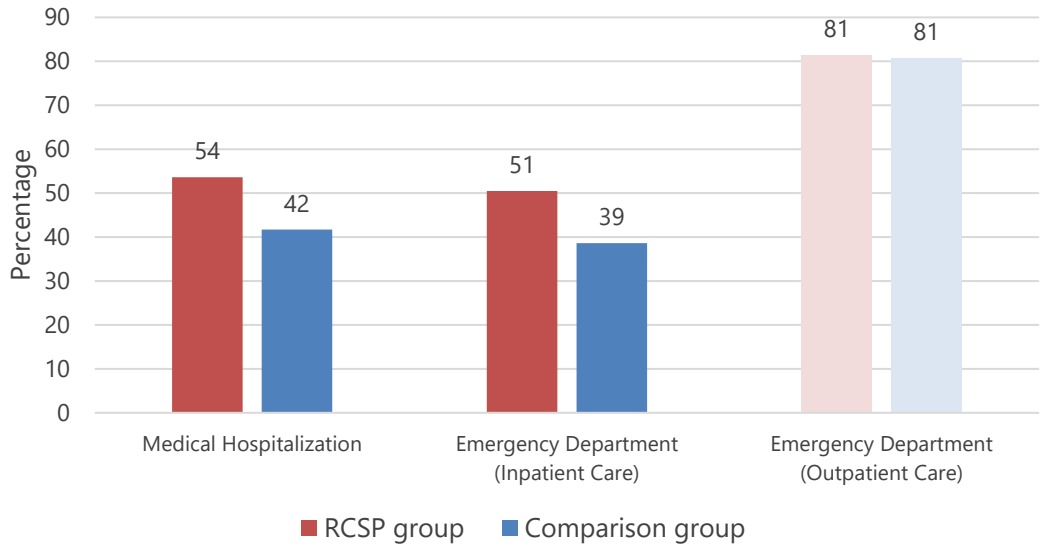
Second, the results reveal that it was common for individuals in our sample to use the ED for *outpatient* medical care. During the first five years after leaving prison, our analysis predicts an 81% likelihood that an individual in our sample received outpatient ED care at least once (see Exhibit 16).

[28] In Section III, we include medical hospitalization and ED use in the benefit-cost analysis. For that analysis, we focus on the differences between program participants and non-participants during the first six months of reentry. Within six months of leaving prison, the predicted probability of experiencing medical hospitalization was slightly higher for RCSP participants than the comparison group (12.4% RCSP and 11.6% comparison group), similar for visiting the ED for inpatient care (11.3% RCSP and 11.2% comparison group), and slightly lower for visiting the ED for outpatient care (40.6% RCSP vs. 43.6% comparison group).

[29] By the end of the five-year follow-up period, we found that RCSP participants were hospitalized for inpatient care an average of two times (vs. 1.3 times for non-participants) and visited the ED for inpatient care an average of 1.7 times (vs. 1.2 times for non-participants). Although these differences are statistically significant, they are relatively small in size.

Exhibit 16

Predicted Probability of Medical Treatment:
Within Five Years of Prison Release



Notes:
N=13,159.
Dark bars indicate statistical significance at the 0.05 level. Light bars represent a non-significant difference.

We also found that individuals in the sample visited the ED for outpatient care an average of ten times. Although outpatient ED care was not associated with RCSP participation, these patterns highlight the prevalence of ED use.

Outpatient Substance Use Treatment. We found that individuals in the RCSP group were just as likely to participate in outpatient substance use treatment as individuals in the comparison group. Although the RCSP group was slightly more likely than the comparison group to participate in this treatment throughout the follow-up period, the differences were small and not statistically significant.[30]

Medication-Assisted Treatment. We also examined differences in the likelihood that individuals participated in medication-assisted treatment (MAT) for substance use disorder and MAT for alcohol use disorder. However, it was rare for individuals in our sample to participate in these forms of treatment. By the end of the follow-up period, the predicted probability of participating in MAT for substance use disorder was only 1.3% for the RCSP group and 3% for the comparison group.[31] Participation in MAT for alcohol use disorder was even less common.

[30] Within five years of leaving prison, the predicted probability of participating in outpatient substance abuse treatment at least once was 30.2% for the RCSP group and 29.2% for the control group.

[31] In our sample of individuals released between 2012 and 2017, those who were released in 2016 and 2017 were most likely to participate in this form of treatment. This suggests that MAT for substance use disorder became more widely available over time.

Conclusion

The purpose of our outcome evaluation was to assess whether the RCSP is effective at achieving its intended goals. To do this, we compared a group of program participants with a similar group of non-participants to estimate the association between RCSP participation and different outcomes measured during the first five years after prison release. In the text below, we review our key findings and describe the limitations of the analysis.

Key Findings

Receipt of Core Services. Our findings suggest that RCSP participants are more likely to receive supportive services during the first 30 days after leaving prison.[32] During this period, RCSP participants were more likely than non-participants to receive mental health treatment and financial assistance and less likely to use homeless shelters. These patterns were statistically significant, and—in some cases—the differences between participants and non-participants were large.[33] This evidence is consistent with the intended design of the RCSP, which provides enhanced support for program participants during the first month of reentry.

However, we also found that most of these initial advantages disappear 6-12 months after leaving prison.[34]

These results are consistent with past WSIPP research on the RCSP, which found that participants were most heavily engaged with program services during the first six months of reentry.[35] One explanation for this pattern is that participants may be more engaged with the program upon release but become less engaged after spending more time in the community.

Recidivism. We found that RCSP participation was associated with reductions in recidivism relative to the comparison group. However, this pattern mainly occurred during the first 12 months of reentry and was limited to non-violent felony recidivism.

RCSP could influence recidivism through the beneficial effects of program services. Since many non-violent felony offenses are financially motivated (e.g., burglary, selling drugs), the material benefits of RCSP participation (e.g., rent payments, cash assistance, Basic Food) could disincentivize this type of recidivism.

Other Health Services. Our findings indicate that RCSP participation is associated with increased use of inpatient health services. Within five years of leaving prison, RCSP participants were more than twice as likely as non-participants to experience psychiatric hospitalization. We also found that program participation was associated with a 12% increase in the likelihood of receiving inpatient medical care.

[32] These results are consistent with past WSIPP research. See Lovell, D., Gagliardi, G.J., & Phipps, P. (2005). *Washington's Dangerous Mentally Ill Offender law: Was community safety increased?* (Doc. No. 05-03-1901). Olympia: Washington State Institute for Public Policy.

[33] During the first 30 days of reentry, we found that RCSP participants were four times more likely than non-participants to begin outpatient treatment, 4.5 times more likely to be first diagnosed with a psychotic disorder, and 4.4 times more likely to receive antipsychotic medication.

[34] The only exception was outpatient mental health treatment. We found that individuals in the RCSP group were substantially more likely than the control group to participate in outpatient treatment throughout the follow-up period.

[35] Lovell & Mayfield (2007).

These patterns may emerge because the RCSP is effective at facilitating access to inpatient health services, program participants have greater health needs than non-participants, or both.

In contrast, we found no evidence that RCSP participation was associated with receipt of outpatient medical care. Similarly, we found little evidence that the RCSP was associated with participation in substance use treatment. Individuals in the RCSP group were slightly more likely than the comparison group to participate in outpatient substance use treatment throughout the follow-up period, but the differences were small. We also examined participation in medication-assisted treatment (MAT) for alcohol use disorder and substance use disorder, but these forms of treatment were uncommon for individuals in our sample.

Limitations

Although the current study updates and improves upon prior WSIPP evaluations of the RCSP, there are limitations to our data and research design. We describe one main limitation below.[36]

Selection Bias. Our evaluation is based on comparisons between RCSP participants and a comparison group of similar non-participants. However, selecting a comparison group of individuals who are truly similar to RCSP participants is difficult. The RCSP is designed for a unique subset of incarcerated individuals who have extensive records of violent behavior and severe mental health disorders.

Based on our review of the data, it is rare for incarcerated individuals to meet both requirements.[37] Indeed, it appears as though virtually everyone who met the RCSP's eligibility criteria was recruited to participate in the program.

As a result, our research design cannot isolate the causal effect of RCSP participation on reentry outcomes. Although we used statistical techniques (e.g., entropy balancing) to ensure that the selected comparison group closely resembled the RCSP group on various measures, this approach cannot adjust for *unmeasured* differences. If the RCSP group differs from the comparison group in ways not measured in our data, these differences could bias our results.

For example, our data does not include measures of the severity of mental illness symptoms during reentry. If RCSP participants experienced more severe forms of mental illness than non-participants, this could explain why we find that RCSP participants are more heavily involved in mental health treatment than non-participants.

Ultimately, the results of our analyses indicate how program participation is associated with differences in reentry outcomes. Our study cannot establish whether the RCSP caused these differences.

[36] For more details on the limitations of the current study, see Appendix I.

[37] This is partially reflected in the size of the participant pool. Between 2012 and 2017, the RCSP admitted an average of only 71.8 individuals into the program each year.

III. Benefit-Cost Analysis

In this section, we conduct a benefit-cost analysis of the RCSP and address the legislative requirement to examine the potential costs and benefits involved in expanding or replicating it for other populations.

To address these research objectives, we use WSIPP's benefit-cost model. WSIPP developed this model to estimate the long-run return on state investments in social programs or interventions. This includes evaluating the program's benefits and costs. This economic model provides a standardized and internally consistent method for applying a monetary value to outcomes across policy areas.[38]

RCSP Benefit-Cost Analysis

We begin by discussing the program's benefits and costs separately. Then, we combine the benefits and costs to calculate the program's overall net benefit.

Benefits

Section II presented the results from an outcome evaluation that estimated the association between RCSP participation and reentry outcomes during the first five years after prison release. We use those results as inputs for the benefit-cost model to estimate the overall monetary value of the RCSP per participant.

We examined a variety of outcomes for our evaluation. Of those, WSIPP's benefit-cost model can attach dollar values to the following:

- Financial assistance
  - ABD
  - Basic Food
- Recidivism (any)
- Psychiatric hospitalization
- Medical hospitalization
- ED use

We were not able to include other outcomes. Notably, the economic effects of housing are complex and not currently built into our model.

Our outcome evaluation found that the association between RCSP participation and reentry outcomes varied depending on the follow-up period. We generally found the largest differences between the RCSP and comparison groups during the first six months of reentry. As a result, we use the results from the outcome evaluation during the first six months after release as the program's initial effect.

Our evaluation also found evidence that these effects did not persist over time. Instead of assuming that the effects would persist in our benefit-cost analysis, we assumed that these effects would decay to zero over time, where applicable.[39]

[38] For more information on the benefit-cost model, see WSIPP's Technical Documentation. Washington State Institute for Public Policy. (2023). *Benefit-cost technical documentation*. Olympia, WA.

[39] The time when we assume an effect of zero corresponds to the follow-up period with an estimated effect of zero. If the effect never went to zero, we assumed the effect would disappear after five years, when participants could no longer participate in the program. For more information on this methodology, see Appendix III.

Exhibit 17

Effects Input into the Benefit-Cost Model

Outcome	Predicted probability of experiencing outcome within six months	
	RCSP group	*Comparison group*
ABD	66.6%	49.4%
Basic Food	91.4%	84.5%
Recidivism	19.8%	27.2%
Psychiatric hospitalization		
Community Hospital	7.7%	6.4%
State Hospital	4.4%	1.5%
Medical hospitalization	12.4%	11.6%
ED use		
Inpatient	11.3%	11.2%
Outpatient	40.6%	43.6%

In Exhibit 17, we summarize these inputs for each outcome. The exhibit includes the predicted probabilities for each outcome using a six-month follow-up. The corresponding effect sizes are found in Appendix III.

Input Adjustments. Our model uses information about the outcomes typically experienced by individuals reentering the community after incarceration to represent what would have happened to these individuals in the absence of the RCSP. However, because this population has unique needs, we adjusted certain assumptions in the model to match what we observed in the comparison group. We describe these adjustments in more detail in Appendix III.

Perspectives. We categorize benefits into four different perspectives based on who receives them:

1) The benefits that accrue solely to program participants;
2) Those received by taxpayers: federal, state, and local;
3) The direct benefits received by other members of society; and
4) The indirect benefits received by society.

Benefits for program participants include monetary benefits that accrue directly to the participant, such as increases in income and decreases in out-of-pocket health care costs. Benefits for taxpayers include reductions in government spending on public assistance or the criminal justice system. For this category, we separately examine benefits at the federal, state, and local levels.

Other members of society might also benefit from an intervention through reduced costs for private healthcare insurers or a decreased likelihood of criminal victimization. Indirect benefits are driven by effects like changes in projected mortality or the deadweight costs of taxation.[40]

Benefits Results. After inputting the results from Exhibit 17 into our model, we estimate the monetary benefits for each outcome and each perspective. Exhibit 18 provides a detailed accounting of outcomes according to the main perspectives.

For financial assistance, we find that RCSP participants personally benefit from the increased use of these programs, but due to administrative and other costs required to administer financial assistance programs, the increased costs to taxpayers outweigh the benefits to participants.

We estimate a total negative benefit of $1,139 for ABD and $2,390 for Basic Food.

The largest positive total benefit comes from the reduction in recidivism. Less crime means less money spent on arrests, prosecution, and incarceration. This is reflected in the estimated benefits to taxpayers of $12,103 per RCSP participant.

In addition, fewer crimes mean less victimization, which saves money by eliminating expenses associated with theft and violence. This is reflected in the estimated benefits to society at large of $27,591 per participant.

Overall, the expected value of this reduction in recidivism is substantial, at $45,745 per participant.

Exhibit 18

Detailed Monetary Benefits Results per Participant

Outcome	Participants	Taxpayer	Federal	State	Local	Other	Indirect	Total
ABD	$1,604	($1,829)	($1,709)	($120)	$0	$0	($914)	($1,139)
Basic Food	$3,438	($3,885)	($3,630)	($255)	$0	$0	($1,943)	($2,390)
Recidivism	$0	$12,103	$0	$8,646	$3,457	$27,591	$6,051	$45,745
Psychiatric hospitalization	($38)	($2,792)	($2,031)	($761)	$0	($629)	($1,396)	($4,855)
Medical hospitalization	($7)	($152)	($135)	($16)	$0	($150)	($76)	($383)
ED use	$19	$69	$56	$13	$0	$102	$34	$224
Adjustment for deadweight cost							($17,398)	($17,398)
Total	$5,016	$3,514	($7,449)	$7,506	$3,457	$26,914	($15,641)	**$19,803**

[40] Deadweight costs estimate the economic losses (or gains) that result when taxes cause people to change their behavior. This acts as a counterbalance to net benefits.

On average, healthcare costs were higher for those in the RCSP following their release from prison. The increase in psychiatric hospitalization leads to a total societal cost of $4,855. We estimate that the increased medical hospitalization results in an overall cost of $383 per participant. However, emergency department (ED) use decreases somewhat, with expected benefits to society of $224 per participant.[41]

Although we could not monetize all potential benefits, we estimate that the large benefits of reducing recidivism, combined with mixed results in social and health services, resulted in a total benefit to society of $19,803 per participant. Of this, $5,016 accrues to the participant, $3,514 accrues to taxpayers, while others (mainly crime victims) also stand to gain $26,914. From the total of these sums, we adjust for the sum of net deadweight losses ($17,398) to arrive at an estimated total benefit to society of $19,803.

Costs

As mentioned previously, during our study period, the monthly allowable payment to behavioral health centers that serve RCSP participants is $1,000 for a maximum of 60 months from the release date.

However, not all participants use the entire amount. Using data on program participation, we calculated that participants in the RCSP used an average of 36 months of services ($12,000 per year).

We apply a discount rate of 3.5% on future payments to equate them with present dollar values. In the first year, the costs are not discounted. After applying the discount to the two future years, the total estimated cost across the three years is $34,796.

Benefit-Cost Results

Finally, we combine all the costs and benefits to estimate the total monetary value the model predicts would result from the RCSP.

We calculated a total benefit of $19,803 and a total cost of $34,796 per participant. Combined, we have total net benefits of - $14,993.

Although we find evidence that the RCSP produces positive benefits to participants, taxpayers, and crime victims, the results suggest that, on average, the program is not cost-beneficial. In other words, the costs of providing RCSP are larger than the expected monetary benefit to society among the outcomes we can incorporate.

We also acknowledge that our benefit-cost analysis is incomplete. We are unable to estimate the monetary benefits of the reductions in shelter use we found in our evaluation, nor can we place a monetary value on the sustained increase we observed in outpatient mental health treatment.

[41] Note that this result uses a different follow-up period than the main results presented in Section I. We found that RCSP participants were slightly less likely to use the ED in the short-term (i.e., after six months), although this was not statistically significant. In the long-term (i.e., after five years), RCSP participants were statistically significantly more likely to visit the ED for inpatient care. Since we used outcomes measured at six months for this analysis, we used the short-term effect here.

Exhibit 19 summarizes the benefit-cost results and includes information on how likely the program's benefits will exceed its costs. We conducted a Monte Carlo simulation, running the model 10,000 times, each time allowing several assumptions of the model to vary. These simulations indicate that there are many scenarios where RCSP participation leads to benefits to the participant, to the crime victim, and to society. Participants gain in all cases, and in the vast majority (98%) of cases, crime victims stand to gain.

The benefit-to-cost ratio of $0.57 means that every dollar the state spends on the program returns 57 cents in benefits.

In a previous study, WSIPP found that this program was cost-beneficial based solely on our estimate of its impact on criminal recidivism.[42] The current report's results differ from those of prior WSIPP studies for several reasons. First, the overall evaluation method is different, likely leading to some of the differences in the magnitudes of effects that were input into our model.[43]

Second, in this study, we adjusted our decay periods differently. Notably, for recidivism, the estimated effect decayed to zero at the end of the follow-up period. Although this change better reflects our current findings, this had a large effect on the monetizable benefit of recidivism, decreasing the value substantially.

Exhibit 19

Net Benefits Results

Benefit-cost summary statistics per participant			
Benefits to:			
Taxpayers	$3,514	Benefits minus costs	($14,993)
Participants	$5,016	Benefit-to-cost ratio	$0.57
Others	$26,914	Chance the program will produce	
Indirect	($15,641)	benefits greater than the costs	29%
Total benefits	$19,803		
Net program cost	($34,796)		
Benefits minus cost	($14,993)		

[42] Mayfield, J. (2009). *The Dangerous Mentally Ill Offender Program: Four-year felony recidivism and cost effectiveness.* (Doc. No. 09-02-1901) Olympia: Washington State Institute for Public Policy.

[43] See Appendix I for more information on why the current study differed from previous studies.

In addition, we included many more outcomes than prior studies included. Several of these outcomes decreased the overall monetary benefit of the RCSP since they represent increased uptake of services that cost the state money (e.g., public assistance and inpatient health services). While this pattern of increased service uptake represents positive outcomes for participants and reflects the intended effects of the RCSP, it also leads to increased state spending and reduces the net benefit of the program.

Finally, recidivism rates are generally lower today than when WSIPP previously evaluated the program. Any decrease in recidivism will be less likely to be cost-beneficial because the overall baseline rate is lower, leaving less potential for further improvement.

Program Simulations on Other Populations

The RCSP has served only those individuals leaving a DOC prison facility who meet strict eligibility criteria. As previously mentioned, E2SSB 5304 established a workgroup to discuss a series of potential modifications of the RCSP, including the expansion to additional groups. The legislature asked WSIPP to consider the potential costs and benefits of expanding the RCSP to include additional populations identified by the legislature and workgroup.

The groups we included in our simulations were those who were:

- criminally committed to a state psychiatric facility,
- civilly committed to a state psychiatric facility,
- committed to juvenile rehabilitation facilities (JR), or
- committed to jails.

Data and Methods

We could not conduct an outcome evaluation of the RCSP on these other populations. The program does not serve these populations, so we have no information about what effect the program would have on them. We first conducted a literature review to understand if other programs that provided similar benefits (e.g., housing) to these populations had been evaluated.

Next, we requested summary data from DSHS-RDA using data from HCA, DOC, the Administrative Office of the Courts (AOC), DSHS, and the Department of Children, Youth, and Families (DCYF).

We used these summary data to update the inputs to our benefit-cost model to reflect each of those populations. As before, these inputs represent our baseline estimate of what would happen to these populations in the absence of treatment. The summary counts represent aggregate counts and costs of public service usage for each of the populations listed. Exhibit 20 provides a summary of the parameters that we used to adjust the benefit-cost model. We also provide the original inputs for the benefit-cost results in the previous section for comparison in Column (5) of the exhibit.

Under the assumption that the effects are identical, we can rerun the benefit-cost model with different sets of underlying population characteristics and determine if the estimated effects from the RCSP population indicate that the program would lead to cost-beneficial outcomes.

Exhibit 20

Differences Among Simulated Populations:
Five-Year Post-Release Averages

Population:	(1) Criminally committed	(2) Civilly committed	(3) Juvenile committed	(4) Jailed	(5) Comparison group
	N=141	N=4,837	N=6,283	N=334,434	N=12,867
Avg. months of ABD	2.4	2.1	0.4	1.2	4.7
Avg. months of Basic Food	19.2	21.3	20.7	21.4	30.3
Recidivism rate (5 years)	18%	20%	55.9%	24.3%	55.7%
Avg. # of trips through CJ system	6.6	5.4	8.3	5.0	7.5
% with psychiatric or community hospital use	10.2%	26.7%	2.4%	2.2%	4.6%
% with ED use	41.3%	50.9%	45.1%	44.4%	56.5%
% with inpatient hospitalization	18.1%	32.5%	8.9%	11.6%	14%

For example, the juvenile group has a much higher recidivism rate than the group of individuals civilly committed. This means that even if the program reduces recidivism in the exact same proportion for both groups, we are more likely to see cost-beneficial results for the juvenile group.

Note the fundamental limitation here—these other populations are quite different from the RCSP population. There is no reason to believe that the RCSP program would have the same magnitude of effects on different groups of individuals, so these results should be read cautiously. As one example, we found that those in the RCSP were more likely than the comparison group to receive ABD assistance. There is no reason to think that providing the same level of services to the juvenile population would have the same effect.

At the same time, the RCSP effects from our evaluation provide our best available estimate about what effects the program would have on any population. Further, our benefit-cost model accounts for the fact that this juvenile population has a lower prevalence of ABD uptake, so while the estimated program effect is the same as the RCSP population, the resulting change will be smaller in monetary terms.

Literature Review

To address the limitation of universally applying identical sizes of effects of the RCSP to all simulated populations, we explored the larger research literature to understand if we could find a better estimate of the effect of a program like RCSP on these other populations. Most individuals in the RCSP use housing assistance, so our review focused on housing as the intervention of interest and its effects on recidivism.

WSIPP has previously reviewed the effects of housing assistance on formerly incarcerated populations in two separate analyses. These analyses showed reductions in recidivism, but we only found a statistically significant reduction in one analysis.[44]

Overall, we were unable to locate rigorous evaluations of solely housing assistance for any of these specific populations.[45] Due to a lack of evidence providing reasonable alternatives, we applied the effects measured for our RCSP population.

Simulation Results

Next, we discuss the simulation results for each population and highlight differences among the groups.

As with the main benefit-cost results, the results of the Monte Carlo simulations we run in this section allow us to indicate the level of risk in terms of the chance the program would provide benefits to taxpayers, participants, and others in society.

Simulation 1: Individuals Criminally Committed to Psychiatric Facilities. Under RCW 10.77, a person is "criminally insane" if they are—

> *acquitted of a crime charged by reason of insanity, and thereupon found to be a substantial danger to other persons or to present a substantial likelihood of committing criminal acts jeopardizing public safety or security unless kept under further control by the court or other persons or institutions.*[46]

These individuals are then committed to state psychiatric facilities. They may be released after a hearing in which a petitioner demonstrates that the individual is no longer a danger or that management of the mental disease is possible. The number of individuals in this category is relatively small. Our data showed only 141 such releases during our study period.

As shown in Exhibit 20, the population of those committed to state hospitals differs from our comparison group in that the annual average frequency of treatment for outpatient mental health services is much higher. Recidivism rates are also much lower.

The results of our benefit-cost simulation are provided in Column (1) of Exhibit 21. The results suggest that applying the RCSP to those committed under RCW 10.77 would benefit the participants but not be cost-beneficial to others in society.

We conducted a Monte Carlo simulation, rerunning the model 10,000 times, each time allowing several assumptions of the model to vary. Almost all of those runs resulted in monetary costs that outweighed the monetary benefits for society.

[44] Only the effect on housing assistance without services was statistically significant. Washington State Institute for Public Policy. (2023, December). *Housing assistance with services benefit-cost/meta-analytic results*. Olympia, WA; Washington State Institute for Public Policy. (2023, December). *Housing assistance without services benefit-cost/meta-analytic results*. Olympia, WA.

[45] Evaluations of housing programming exist for chronically homeless adults with substance use disorders and mental health symptoms, though they do not report recidivism as an outcome. For juveniles, the literature focuses on youth participation in reentry programs that incorporate transitional housing and is not comparable to the housing available under the RCSP. Generally, these studies find non-significant effects on recidivism. Finally, we were unable to find any study examining a program providing housing to the population of jailed adults. Housing is available for chronically homeless individuals who have criminal justice histories, but these evaluations did not report the effects on recidivism.

[46] RCW 10.77.010.

Simulation 2: Individuals Civilly Committed. The second group we considered were those under civil commitment authority at Western State Hospital and Eastern State Hospital and released during the study period.[47]

This group of individuals differs from the comparison population in many ways, as shown in Exhibit 20. They have a higher predicted probability of outpatient mental health treatment, and the overall rate of convictions following release is lower than other groups. The seriousness of crime is also lower among this group.

We summarize the benefit-cost results in Column (2) of Exhibit 21. The simulated results suggest that applying an RCSP-style program would benefit participants and others but is not cost-beneficial to society.

In our Monte Carlo analysis, the program produced benefits greater than the costs in less than 1% of simulations for this population.

Exhibit 21

Simulated Net Benefits Results

Population:	(1) Criminally committed N=141	(2) Civilly committed N=4,837	(3) Juvenile committed N=6,283	(4) Jailed N=334,434	(5) Comparison group N=12,867
Total benefits	($29,947)	($35,092)	$42,659	($12,631)	$19,803
Benefits to taxpayers	($12,261)	($15,445)	$9,536	($4,997)	$3,514
Benefits to participants	$4,624	$4,807	$2,589	$4,646	$5,016
Benefits to others	$1,218	$667	$43,164	$7,616	$26,914
Indirect	($23,529)	($25,121)	($12,630)	($19,896)	($15,641)
Cost per participant	($34,796)	($34,796)	($34,796)	($34,796)	($34,796)
Benefits minus costs	($64,744)	($69,888)	$7,863	($47,427)	($14,993)
Benefit-to-cost ratio	($0.86)	($1.01)	$1.23	($0.36)	$0.57
Chance the program will produce:					
Benefits to taxpayers	11.8%	17.1%	92.3%	20.7%	66.9%
Benefits to participants	100%	100%	99.9%	100%	100%
Benefits to others	68.9%	63.0%	99.1%	94.9%	98.2%
Benefits greater than costs	0.1%	0.5%	61.7%	0%	29.4%

[47] We were asked to look at the population committed under RCW 71.05 (the Involuntary Treatment Act, or "Ricky's Law"). However, since the law was passed in 2018, we could not examine this population. In a separate assignment, WSIPP reviewed outcomes for those undergoing involuntary treatment. See Miller, M., Spangler, M., Adams, N., & Grob, H. (2023). *Involuntary treatment for substance abuse: Client outcomes* (Doc. No. 23-06-3401). Olympia: Washington State Institute for Public Policy.

Simulation 3: Juveniles Committed to Rehabilitation. This group includes juveniles aged 13-21 who were released from the Juvenile Rehabilitation Administration (JRA) between Jan 1, 2012 and Dec 31, 2017. In our data, there were 6,283 such releases.

Recidivism among the juvenile committed population is high. Among our sample, 55.9% have subsequent criminal convictions within the first five years following release (see Exhibit 20).

Column (3) of Exhibit 21 summarizes the benefit-cost results and includes information on how likely the program's benefits will exceed its costs.[48]

Assuming the same program effect estimated in Section II, we estimate that expanding the program to this population would result in positive benefits for taxpayers, participants, and others in society. Again, most of the effect is driven by the expected reductions in crime costs and crime victimizations associated with reduced recidivism. In this case, however, applying deadweight losses of taxation and the costs of the program result in a positive net present value of $7,863. The benefit-cost ratio is $1.23, above the break-even point of $1, and 61.7% of the Monte Carlo runs resulted in benefits that outweighed the costs.

Simulation 4: Persons Confined to Jails. The fourth and final group we considered were individuals confined to jail. There were 334,434 people in this category in our dataset.

As shown in Exhibit 20, the predicted probability of recidivism, at 24.3%, is also lower for this group than for the comparison group.

Column (4) in Exhibit 21 summarizes the benefit-cost results and includes information on how likely the program's benefits will exceed its costs. The benefit-cost analysis suggests that reentry programs applied to jail populations are likely to assist participants and victims of crime but are unlikely to add overall cost savings to the state.

None of our Monte Carlo runs resulted in benefits that outweighed the costs.

Comparison Group. There was also interest in examining the expansion of the RCSP to a broader DOC population. The most natural group this would apply to is what we have called our comparison group—those individuals who already meet some or all the RCSP eligibility criteria but did not participate in the program. A simulation of this group is redundant—they are simply our main results of RCSP participants. We summarize these benefit-cost outcomes in Column (5) of Exhibit 21 for convenience.

Conclusion

The goal of the benefit-cost analysis is to provide information about the costs and potential monetary benefits of the RCSP program. We then use available information to estimate potential costs, benefits, and risks of expanding the program to other groups. We review our key findings and describe the current study's limitations.

[48] Benefits from changes in psychiatric hospitalizations were $0 for the juvenile population.

Key Findings

Benefit-cost Analysis. Our benefit-cost analysis suggests significant benefits to taxpayers, participants, and crime victims from participating in the RCSP.

Reductions in recidivism are estimated to result in over $45,000 of benefits per participant from reduced criminal justice system costs and crime victimizations. Participants also benefit monetarily from access to social services, particularly the ABD cash assistance and Basic Food programs. Taxpayers also gain through decreased criminal justice system costs.

However, the program's costs outweigh these benefits. As a result, our model suggests that the program does not break even from the societal perspective.

Again, we caution that our model cannot estimate the direct monetary effects of decreased shelter use or increased outpatient mental health treatment for participants.

We allow our assumptions to vary and repeat the analysis 10,000 times. In 29% of those cases, the program breaks even.

Simulations. Using results from our evaluation of the RCSP, we simulated estimated benefit-cost outcomes for other populations. We adjusted our model for key characteristics and analyzed the results using our standard benefit-cost methods.[49]

Our model suggests that participants in each population would benefit from a similar program.

If the program were to be applied to the juvenile committed population, our simulations also suggest that the program could benefit taxpayers by reducing recidivism. Benefits from reduced crime victimization are also apparent in all populations.

However, in three of the four simulations, the costs to taxpayers, the costs of the program, and the indirect costs to society are estimated to outweigh the benefits. They also lead to a negative benefit-to-cost ratio, where any dollar of state expenditures results in additional expenditures. On the other hand, our simulation of the juvenile population was net positive, mainly due to the large benefit of reducing recidivism in this population.

Here, we again vary our assumptions and repeat the analysis 10,000 times for each population. The chance that benefits would exceed costs was above 1% only for the juvenile population (62%).

Limitations

Benefit-Cost Analysis. The benefit-cost model does not allow us to monetize every possible outcome. Local providers operating the RCSP report that expenditures mainly go toward intensive rental assistance and mental health care. However, our benefit-cost model does not monetize the outcomes associated with these services. For example, we cannot monetize the benefit of reduced reliance on homeless shelters, even though this may be a primary effect of the program. While we do include the costs of providing rental assistance, this means that we include the costs of providing the program but are unable to measure the intended benefits of these services adequately.

[49] Washington State Institute for Public Policy. *Overview of WSIPPs Benefit-Cost Model.* Olympia, WA.

In addition, we may double-count some expenditures. For example, program costs go directly toward providing services, like medical care, which are also billed to Medicaid and monetized as a benefit in the model.

In other words, we may count increased medical services as a part of the program cost and as a negative benefit of the program (since the program leads to additional medical services). However, since most money goes toward housing, this effect will likely be minor.

The model does not project additional benefits beyond those that could be observed and monetized with five follow-up years of information.

Finally, we would like to caution that a program could have positive impacts on the overall health and well-being of individuals and their families while exhibiting negative monetary benefits for society.

Our model quantifies the financial costs and benefits of health services and economic transfers as they impact participants, taxpayers, and others. These economic outcomes do not necessarily indicate overall societal value or quality of life.

Any benefit-cost analysis we perform using our model is designed to provide information about the average situation facing an individual in that population. We cannot know how a program would affect any individual in the group we choose for analysis. Individuals in sub-groups of the populations may have different experiences. While we have attempted to adjust for some differences in our baseline measures, treatment and comparison groups may differ in their initial level of resources and experiences.

Simulations. For our simulations, we do not have any information on what the effect would be for these other populations. We assumed the effects would be similar to those experienced under the RCSP, but this may not be true.

It also may be the case that RCSP would be effective among subsets of these populations. The RCSP is designed for a specific group of high-risk individuals. Restricting any potential expansion to a more similar population would be more likely to yield similar results. We cannot speak to those issues in this report.

Simulations of program effects in populations other than RCSP participants are *not* evaluations of existing programs. Instead, we provide insight into whether a program with the same impact on outcomes would be cost-beneficial among other populations. Further study would help to determine what kind of specific support would be effective and cost-beneficial for each population or sub-population.

IV. Program Components Analysis

In this section, we address the piece of the legislative assignment directing WSIPP to consider modifications to the RCSP that may improve its effectiveness.

The RCSP is one of many programs intended to reduce recidivism by assisting adults as they leave prison and reenter the community. While these programs vary, they may have common practices, services, and characteristics (which we refer to as "components"). In particular, a common goal for reentry programs is to reduce recidivism.

Previous research in juvenile justice suggests that certain components might be associated with larger reductions in recidivism.[50] We take a similar approach and explore components of successful reentry programs to establish which are most strongly associated with reductions in recidivism.[51]

Methods

First, we conducted a systematic review to identify studies that examine the association between various reentry programs and recidivism. From each study, we collected information on program components and program effectiveness.

Second, we used meta-regression to understand which components were associated with lower recidivism.

Systematic Review

We reviewed the research literature to find studies on programs like the RCSP.

We first searched for relevant studies already included in WSIPP's published analyses. This included pulling studies that WSIPP had already identified (382) and finding newly published research on these programs (257).

At this point, we screened the initial pool of articles for relevance and methodological rigor, eliminating studies that did not meet our standards.

For relevance, we required that studies meet three criteria:

1) Studies must evaluate participants who are similar to those eligible for the RCSP—those with complex mental illness or at high risk for recidivism.
2) Studies must evaluate programs designed for individuals reentering the community after a stay in prison.
3) Studies must evaluate the effectiveness of the program on recidivism.

[50] Notably, one study found that programs that included therapeutic interventions, served high-risk individuals, and had a high-quality implementation were more effective. Lipsey, M. (2009). The primary factors that characterize effective interventions with juvenile offenders: A meta-analytic overview. *Victims and Offenders, 4,* 124-147.

[51] WSIPP has previously assessed the evidence on rehabilitation for adults in the corrections systems, including those that specifically intend to reintegrate individuals into the community. Our most recent report was in 2018. Wanner, P. (2018). *Inventory of evidence-based, research-based, and promising programs for adult corrections* (Doc. No. 18-02-1901). Olympia: Washington State Institute for Public Policy.

Studies that fall outside this scope were excluded from our analysis. For example, we excluded studies that only included low-risk individuals or evaluated programming during incarceration.

We also screened studies for methodological rigor and quality. This resulted in a final pool of 56 studies covering 38 different reentry programs.[52]

Next, we captured information about the program components and effect size from each study.

To identify the programmatic components present in each study, we carefully reviewed each study and recorded the relevant factors. Specifically, we used binary indicators to record each study's presence or absence of specific components. We captured components in categories such as program philosophy or counseling type. Some of these common programmatic factors are features of the RCSP, and others are not. We present the components we explored and their definitions in Exhibit 22.

Next, we calculated each study's effect size using WSIPP's standard approach.[53] This effect size standardizes the various program effects measured in these different studies.

After converting the results from each study to this standardized measure, they can be combined or compared.

Meta-Regression

We use regression analysis to examine the relationship between these components and recidivism. In these analyses, we regress the effect size on various program components.[54] The resulting coefficients are changes in the effect size associated with a particular component. In other words, we estimate how program components may influence individuals' probability of recidivating.

Results

First, we examine the relationship between the effect size and each component separately.[55] We present these results in Exhibit 23. For these results, negative effects represent reductions in recidivism, meaning the presence of the component is associated with reduced criminal behavior upon reentry to the community. The numerical values represent the effect size for programs with certain characteristics. It is difficult to interpret these effect sizes by themselves, but one common interpretation is that an effect size of 0.2 is small, 0.5 is medium, and 0.8 is large.[56] Using that lens, most of these components are associated with small reductions in recidivism.

[52] See Appendix IV for more information.
[53] See WSIPP's Technical Documentation.
[54] For our analyses, we use a random effects meta-regression model where studies are weighted by the inverse variance of the effect size and a random variance component.
[55] We do this by running a series of meta-regressions, where each meta-regression contains one component.
[56] Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Exhibit 22

Programmatic Components and Definitions

Component	Definition
Program philosophy	
Deterrence	Aims to deter reoffending by dramatizing the negative consequences of the behavior.
Surveillance	Provides enhanced monitoring based on the idea that closer monitoring inhibits reoffending.
Restorative	Aims to repair the harm done to victims.
Counseling	Aims to create a personal relationship between the returning adult and a separate, responsible adult (counselor).
Skill building[#]	Provides instruction, practice, incentives, and activities to control behavior or support the ability to participate in normative prosocial activities.
Multiple coordinated services[^]	Provides a package of multiple services rather than focusing on a single primary service type.
Counseling type	
Individual counseling	Aims to create a personal relationship between the returning adult and a separate, responsible adult (counselor) through one-on-one counseling sessions.
Mentoring	Provides a coaching relationship where the participant is partnered with someone with formal training or seniority to provide guidance, either by a volunteer or a trained professional.
Family counseling	Counseling programs that either have all family members together in the session or have separate sessions for the individual and their spouse, children, parents, etc.
Group counseling	Aims to create a personal relationship between the returning adult and a separate, responsible adult (counselor) and peers through group counseling sessions.
Peer counseling	Aims to create a personal relationship between the returning adult and separate adults (peers) without seniority who have a shared experience with the participant. The peer group plays much of the therapeutic role and includes guided group interactions.
Focus of treatment	
Behavioral & cognitive-behavioral[#]	Cognitive-behavioral (CBT) programs focus on challenging and changing cognitive distortions (e.g., thoughts, beliefs) and their associated behaviors to improve emotional regulation. CBT is considered "problem-focused" and "action-oriented." Behavioral programs include behavior management, contingency contracting, token economies, and programs that award selected behaviors.
Social skills[#]	Provides direct instruction to clients, teaching them interpersonal skills necessary for everyday living
Academic training[#]	Participants work toward formal schooling. Includes GED, high school diploma, and higher education.
Job training[#]	Participants receive formal training in a field. Includes vocational counseling and job training placement
Multiple coordinated services	
Case management[^]	Connects participants with a case manager or team who develop(s) an individualized treatment plan and provide(s) service referrals.
Additional elements	
Religious	A program grounded in a formalized or recognized religion.
Services in home	Participant engages with the requirements of the program in their primary residence.
Mandatory participation	Participants are mandated to participate in programming as part of their supervision requirements.
Direct funding	Programs are directly funded by the department that provides the services.
Program duration	Indicates how long, on average, does the treatment last for participants in months.
Transportation[#]	Directly provides transportation to services or provides funds earmarked for transport to the treatment location.
Childcare	Directly provides childcare for participants or provides funds earmarked for childcare while the participant engages in treatment.
Public assistance applications[^]	Aids in the paperwork associated with public assistance
Food	Directly provides food for participants or provides funds earmarked for food while the participant engages in treatment.
Clothing	Directly provides clothing for participants or provides funds earmarked for clothing while the participant engages in treatment.
Physical health services[#]	Provides medical services, including physical health screening, disease testing, or immunizations.
Medication assistance[^]	Aids in paying the costs associated with medication prescribed by a doctor. Includes instances where medication is prescribed to treat a substance use disorder.

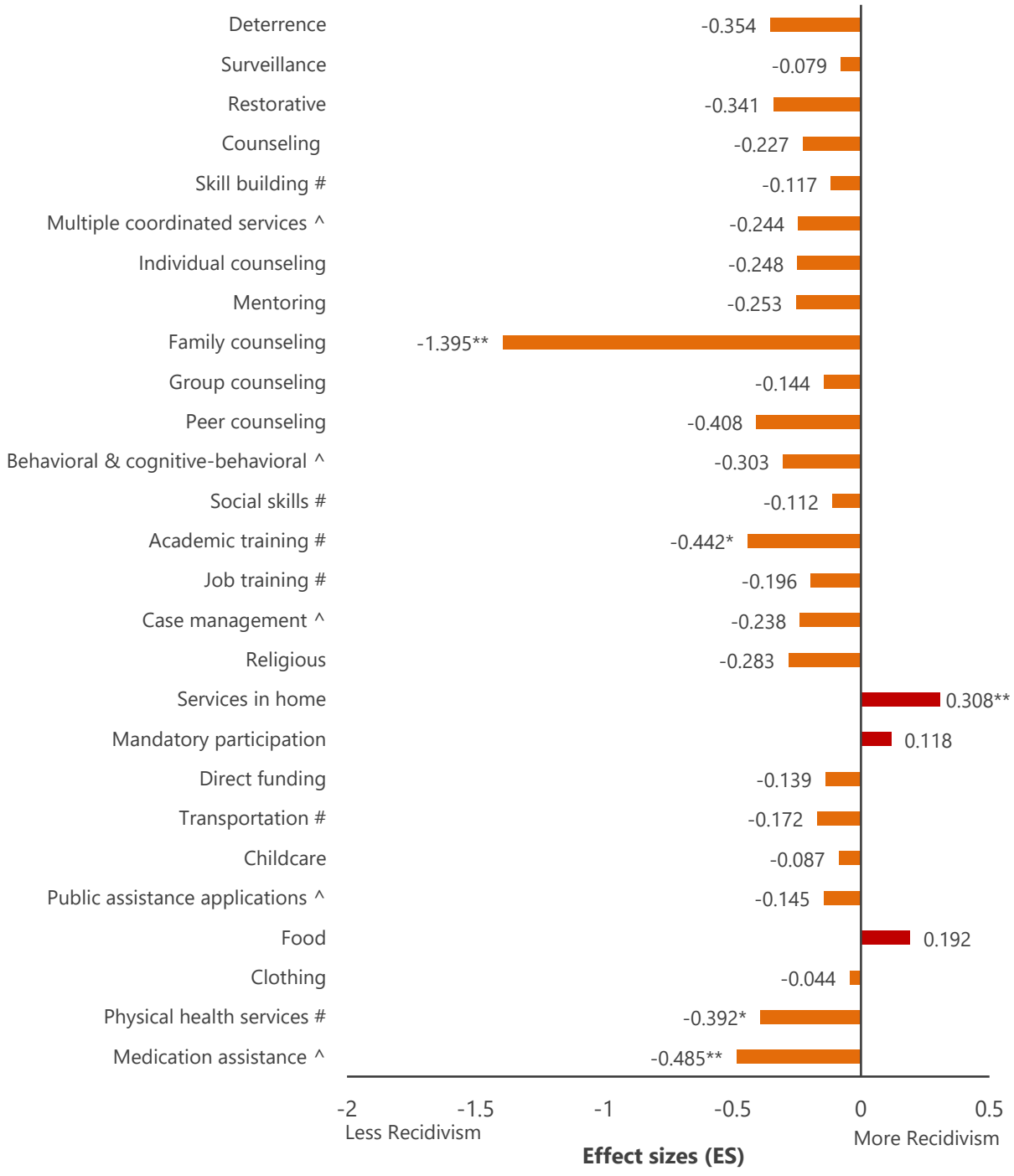
Notes:

[^] Core component available in the RCSP.

[#] Ancillary component available in the RCSP.

Exhibit 23

Effect Sizes for Program Components



Notes:
* Statistically significant at the 0.05 level; ** statistically significant at the 0.01 level.
^ Core component available in the RCSP.
# Ancillary component available in the RCSP.
We do not report an effect size for program duration since it is a continuous variable and has a different interpretation.
For more details, see Exhibit A7 in Appendix IV.

Due to the low number of studies in our sample (56), we cannot say whether *adding* a certain component to an existing program would lead to the same reduction in recidivism. Instead, we show that, historically, programs with certain components have been more successful in reducing recidivism.

Across all the components measured in our analysis, five had statistically significant relationships with recidivism. Specifically, programs that provide family counseling, academic training, physical health services, or medication assistance components are related to decreases in recidivism. On the other hand, services provided in the home are related to increases in recidivism.

However, specific components may always appear together, making it impossible to disentangle which component is associated with the increase or decrease in recidivism. For example, programs in our sample with a mentoring component always had a transportation component. Therefore, we cannot tell which factor matters more to recidivism without further analysis.[57]

To further disentangle these components, we conducted a series of meta-regressions that included multiple components. By controlling for multiple components simultaneously, we can better understand if a given component has an independent impact or if it relies on other simultaneous components. Ideally, we could run a single meta-regression with all components. However, due to missing information on studies, this was not possible.[58]

We could only look at patterns among smaller subsets of components.

We run four separate meta-regressions groups on components. Our first model includes the components associated with specific services: transportation, childcare, public assistance applications, food, clothing, physical health services, and medication assistance. We report the results of this model in Exhibit 24.

In the other models, shown in Exhibit A8 of Appendix IV, the statistical significance disappears for physical health services, services in the home, academic training, and family counseling, even though they were significant on their own.

Exhibit 24

Meta-Regression – Model 1

	Coefficient (SE)
Transportation#	-0.065
	(0.115)
Childcare	-0.106
	(0.158)
Public assistance applications^	0.052
	(0.111)
Food	0.062
	(0.249)
Clothing	0.234
	(0.164)
Physical health services#	-0.185
	(0.128)
Medication assistance^	-0.297 *
	(0.138)
Constant	-0.093
	(0.060)

Notes:
* Statistically significant at the 0.05 level; ** statistically significant at the 0.01 level.
N = 56.
^ Core components available in the RCSP.
# Ancillary component available in the RCSP.

[57] An exploration of the correlations across the complete list of components reveals that the characteristics are highly correlated with one another. A full correlation table for all components is available upon request.

[58] Only seven studies had all these components coded, far below the number of observations required to run the meta-regression.

This suggests that combinations of components lead to reductions in recidivism rather than a single component. For example, the large reduction in recidivism from family counseling disappears when controlling for other components. This means that the combination of components that typically appear with family counseling is likely effective, but it would be incorrect to assume that family counseling by itself has that large of an effect.

Only medication assistance was associated with statistically significant reductions in recidivism in any of our models.

Conclusion

The goal of the current analysis was to explore what possible modifications to the RCSP are most likely to prove advantageous based on the current state of knowledge of other reentry programs. We investigated existing studies of adult reentry programs using meta-regression to explore the associations between particular program components and program impacts on recidivism.

Key Findings

Our analyses found that reentry programs that provide medication assistance are associated with statistically significant reductions in recidivism.[59] The RCSP allows for the provision of medication and other healthcare services for those who need it. Because the RCSP already provides services related to medication assistance, we cannot suggest any advantageous modifications to the current RCSP.

Overall, our analyses suggest there is little current evidence that modification to the current RCSP would result in decreased recidivism. It is also important to note that the RCSP is flexible—local providers can decide what services to provide based on the needs of the specific individuals. However, additional components to the RCSP could be tested empirically through randomized controlled trials comparing the current RCSP to an RCSP with additional programmatic components.

Limitations

Overall, our analyses were limited by the small number of studies that met our criteria for inclusion. Because we were trying to locate studies with a sample of participants that were similar in eligibility to Washington's RCSP, we had to exclude many studies evaluating programs for individuals reentering the community following confinement. Without more studies, we were limited in our ability to estimate the relative effects of various components.

When conducting meta-regression, we rely on the information reported in the studies we find in our literature search. Studies vary in the level of detail they report, meaning components could very well be present in a particular program but are not explicitly mentioned and, therefore, would not appear in our dataset. In addition, we have no information about program implementation.

[59] For the list of citations included in the analysis that report medication assistance as a component, see Appendix IV.

V. Conclusion

For nearly 25 years, Washington State has operated a program for individuals reentering the community after confinement in a DOC facility who have a mental illness and pose a risk to public safety or themselves. The RCSP provides supportive services to qualifying individuals as they exit prison and reenter the community.

Outcome Evaluation

We evaluated the RCSP by examining differences in reentry outcomes for a group of program participants and a comparison group of similar non-participants. We focused on three types of outcomes.

First, we examined the RCSP's core services, which are designed to increase access to mental health treatment, financial assistance, and housing. The results of our evaluation suggest that the RCSP is effective at delivering its core services. Within 30 days of prison release, RCSP participants were more likely than non-participants to receive mental health treatment and financial assistance and less likely to use homeless shelters. However, most of these patterns only lasted for the first 6-12 months after release.

Second, we examined recidivism. We found that RCSP participants were less likely than non-participants to recidivate, but primarily during the first 12 months after release and only for non-violent felony offenses (e.g., burglary, selling drugs).

Third, we examined other health services. We found that RCSP participants were more likely than non-participants to use health services involving inpatient care. However, participants were just as likely as non-participants to use health services involving outpatient care. Unfortunately, it is unclear how much participation in the RCSP caused these patterns.

Overall, the results of our outcome evaluation are generally consistent with the intended design of the RCSP. However, considering that the RCSP provides services for up to 60 months, it is unclear why the apparent benefits of program participation mainly emerge during the first 6-12 months after prison release.

Due to the RCSP's unique eligibility criteria, it is difficult to identify a comparison group of individuals who are truly similar to RCSP participants. The comparison group we selected may be different from RCSP participants in ways that are not measured in our data. As a result, while we can estimate differences in reentry outcomes that are associated with program participation, we cannot be certain that the RCSP caused these differences.

Benefit-Cost Analysis

Where possible, we applied the results of our outcome evaluation to our benefit-cost model. We find positive benefits to participants, taxpayers and others in society. These benefits are largely due to reduced criminal justice costs and reduced crime victimization.

However, when including the costs of the program, our benefit-cost analysis suggests that the program's cost outweighs the benefits. We estimate that the program will return $0.57 in benefits for every dollar spent on the program. We are unable to monetize the potential benefits of housing and mental health.

We also estimated what would happen to our benefit-cost analysis if other populations experienced the same change in outcomes. The four populations we considered were those criminally committed to state psychiatric facilities, those civilly committed, juveniles committed to juvenile rehabilitation, and those jailed. However, benefits are not projected to recover every dollar spent for three of the populations. For the JR population, we found limited evidence that benefits would exceed the costs.

We caution that our approach has some very significant limitations in that we do not know how effective RCSP would be in each of the populations. We use our best available estimate, which is our finding from the evaluation described in this study. We then use what we know about underlying population differences to come to the best estimate of costs, benefits, and potential risks for each simulation.

Changes from Previous Evaluations

WSIPP last evaluated this program in 2009, primarily by measuring felony recidivism among program participants compared with a small group of formerly incarcerated individuals. Using the improved methods described in this report, we found a comparatively smaller effect on recidivism than we did in the previous study. We also found evidence that the effect faded to zero over time, something we were not able to observe in the previous study. Further, we observed increases in the uptake of health care services among program participants, which we did not measure in the earlier study.

In combination, these differences led to smaller projected monetary benefits than we estimated in the past. While in the 2009 study, we estimated that benefits would likely outweigh the costs, our improved methods lead us to estimate that the benefits do not outweigh the costs.

Program Components Analysis

The components analysis, aiming to explore possible modifications to the RCSP that could prove advantageous, found few individual components that were robustly associated with improvements in recidivism. Our analyses found that reentry programs that provide medication assistance (a component already available under the current RCSP model) are associated with statistically significant reductions in recidivism. There was no evidence that any other components led to a reduction in recidivism.

Appendices

An Assessment of Washington State's Reentry Community Services Program: *Outcome Evaluation, Potential for Expansion, and Effective Components*

Appendices

I. Outcome Evaluation

This appendix details the data and methods we used to conduct the outcome evaluation discussed in Section II. We begin by describing how we processed the source data and selected our analytic sample. Next, we provide additional information on the measures, analyses, and results that inform the findings we presented in the main body of this report. Finally, we review the contributions and limitations of our evaluation.

Data Processing

This study uses data from the Department of Corrections (DOC), Health Care Authority (HCA), Department of Social and Health Services (DSHS) – Economic Services Administration (ESA), DSHS-Behavioral Health Administration (BHA), and WSIPP's Criminal History Database (CHD).[60] We processed the data in three steps.

First, DOC provided WSIPP with data on all individuals released from prison between January 1, 2012, and December 31, 2017. We used this dataset to identify individuals who participated in the RCSP and a comparison group of non-participants. After identifying our analytic sample, we used DOC records to create measures related to incarceration history, dangerousness, mental illness, and substance use. We then linked this sample to records in the CHD and created measures related to demographic characteristics, criminal history, and recidivism. This process resulted in a dataset containing personal identifiers, pre-release characteristics, and recidivism information.

Second, we shared this dataset with RDA at DSHS. RDA linked individuals in this dataset to records from HCA, DSHS-ESA, and DSHS-BHA. After this linking process was complete, RDA extracted records for the period between January 1, 2012, and December 31, 2022.[61] RDA used these records to create monthly indicator variables to serve as reentry outcomes for our evaluation. Specifically, RDA used:

[60] We requested and received quarterly indicator variables related to employment status, hours worked, and wages earned from the Employment Security Department (ESD) but ultimately did not use that information in our analysis. We discuss this decision in more detail later in this appendix.

[61] Our study uses a five-year follow-up period to examine reentry outcomes for individuals released from prison between January 1, 2012, and December 31, 2017.

- HCA records for measures related to mental health treatment, medical treatment, substance use treatment, and psychiatric hospitalization in community-run facilities;
- ESA records for measures related to financial assistance and homeless shelter use; and
- BHA records for measures related to psychiatric hospitalization in state-run facilities.

Third, RDA sent us a deidentified dataset that contained information on pre-release characteristics and reentry outcomes measured between 2012 and 2022. To clean this dataset, we used information on the date of prison release to retain observations for reentry outcomes during the first five years after release. This resulted in an analytic dataset containing measures for 13,159 individuals.

Sample Selection

RCSP Participants (N = 359)

We measure RCSP participation based on designation status at the time of prison release. RCSP participants are those who were eligible and opted into the program. However, some individuals may not have received services. Thus, we use the "intention-to-treat" principle to define program participation.

The "intention-to-treat" principle describes a type of research design in which the definition of a treatment group is based on whether individuals were assigned to receive treatment, regardless of whether they received any treatment or followed treatment protocol.

Comparison Group (N = 12,800)

We used the RCSP eligibility criteria and latent class analysis (LCA) to systematically select the comparison group from an initial pool of 47,020 individuals who were released from prison between 2012 and 2017. LCA is a data reduction technique that sorts individuals into groups (called "latent classes") based on underlying similarities in measured characteristics.[62]

To approximate the eligibility criteria for the RCSP (i.e., individuals must "pose a danger to themselves or others" and "have a mental health disorder"), we applied LCA to measures of *dangerousness* and *mental health disorder*. To capture *dangerousness*, we used three binary measures from DOC data indicating whether the individual scored as "high risk" for violence/recidivism on a DOC risk assessment instrument, whether the individual had at least one prison infraction for serious violent behavior and/or behavior flagged by the Prison Rape Elimination Act (PREA), and whether the individual was younger than age 25 and serving time for a violent offense.

To capture *mental health disorders*, we used four binary measures from DOC data indicating whether the individual spent more than 30 days in the Residential Treatment Unit, whether DOC psychiatric staff ever assessed the individual as having a mental health condition with a severity code ("s-code") between 2-5, whether the highest s-code recorded was a 4 or 5, and whether the individual was prescribed psychiatric medication during incarceration.

[62] Sinha, P., Calfee, C.S., & Delucchi, K.L. (2021). Practitioner's guide to latent class analysis: Methodological considerations and common pitfalls. *Critical Care Medicine*, *49*(1), e63–e79.

After applying LCA to these seven measures, we identified our comparison group by selecting individuals in latent classes with a high prevalence of factors associated with dangerousness or mental health disorders. The benefit of this approach is that it roughly approximates the screening process that prison staff and program administrators use to identify incarcerated individuals who are potential candidates for the RCSP. This allowed us to identify individuals with histories of violent behavior or mental health disorders but who did not participate in the RCSP.

Pre-release Measures

The outcome evaluation results that appear in the main body of the report come from regression analyses. These analyses include control variables and entropy balancing weights that were created using information collected on individuals prior to prison release. We provide more details on these pre-release measures below.

Demographics

We used records from WSIPP's CHD to measure sex, age, and race/ethnicity.

- We measure age based on the date of birth and the date of prison release. To improve the model fit, we transformed the original age variable by taking the natural logarithm. Our analyses include a log-transformed measure of age at prison release.
- We constructed our race/ethnicity measure using two separate variables: an indicator of Hispanic ethnicity and a categorical variable indicating whether individuals are Black, White, Native American, or Asian. We sorted all individuals of Hispanic origin into the same category regardless of race. This resulted in a new categorical variable with the following categories: Hispanic, non-Hispanic Black, non-Hispanic White, non-Hispanic Native American, and non-Hispanic Asian.

Criminal History

We used CHD records to measure criminal history.

- We measure criminal history based on the number of convictions the individual had accumulated by the date of prison release. Our analyses include a log-transformed version of this variable.

Incarceration History

We used DOC records to create variables capturing time in prison and the year of prison release.

- We measure time in prison based on the number of days between the admission and release date. In our analyses, we include a log-transformed version of this variable.
- The year of prison release is based on the release date. This is a categorical variable that ranges between 2012 and 2017.

Dangerousness

We used DOC records to measure "high risk" for recidivism and the number of violent prison infractions.

- We measure "high risk" for recidivism based on whether the individual was ever classified by DOC risk assessment instruments as either "high risk for violent recidivism" or "high risk for non-violent recidivism." We coded individuals as "high risk" or "not high risk."
- We measure violent prison infractions based on the number of infractions accumulated for serious violent behavior or behavior flagged by the PREA. Our analyses include a log-transformed version of this variable.

Mental Illness

We used DOC records to measure time spent in the Residential Treatment Unit (RTU) and mental illness diagnosis.

- Individuals confined in state prison facilities can be transferred to the RTU if they require treatment for serious mental health conditions. We measure time spent in the RTU by dividing the days spent in the RTU by the total days spent in prison. Values on this measure represent the proportion of prison time that individuals spend inside the RTU.
- We used principal components analysis (PCA) to construct three measures related to mental health diagnoses.[63] We provide more details on this approach below.

DOC records indicated whether individuals had been diagnosed with eight conditions: schizophrenia, bipolar disorder, major depressive disorder, psychotic disorder, delusional disorder, mood disorder, thought disorder, and organic disorder. Because these conditions are not mutually exclusive, we were unable to use a simple coding scheme to sort individuals into discreet categories.

We used PCA to resolve this issue. Similar to LCA, PCA allows analysts to simplify complex data while retaining important information. We present the results of this analysis in Exhibit A1.

Three factors account for over 99% of the variation in the eight measures of mental health diagnoses. Factor 1 is positively associated with thought disorders and psychotic disorders. Factor 2 is positively associated with mood disorders and major depressive disorder. Factor 3 is positively associated with schizophrenia and thought disorders but negatively associated with psychotic disorders.

We used the PCA results to assign scores to individuals for each factor and saved these scores as three new variables. Exhibit A2 shows how these factor variables correlate with the mental health diagnosis indicators.

We included these factor variables in our analyses to control for mental health status during incarceration.

Substance Use

We used DOC records to measure how much time individuals spent in substance use treatment programs during incarceration.

[63] Bryant, F.B., & Yarnold, P.R. (1995). Principal-components analysis and exploratory and confirmatory factor analysis. In L.G. Grimm & P.R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 99–136). American Psychological Association.

Exhibit A1

Factor Loadings from PCA with Varimax Rotation

Diagnosis	Factor 1	Factor 2	Factor 3
Schizophrenia	-0.073	-0.005	0.634
Bipolar	-0.004	0.004	0.001
Depression	0.003	0.438	0.015
Psychotic	0.192	0.003	-0.662
Delusion	-0.014	-0.001	-0.020
Mood	0.002	0.510	0.012
Thought	0.854	0.009	0.229
Organic	0.008	0.035	0.006
	Proportion of Variance		
Factor 1	0.524		
Factor 2	0.368		
Factor 3	0.101		
Total	*0.993*		

Exhibit A2

Correlation Matrix

	Factor 1	Factor 2	Factor 3
Factor 2	-0.003		
Factor 3	0.105*	-0.017	
Schizophrenia	0.678*	-0.045*	0.742*
Bipolar	0.079*	0.191*	0.040*
Depression	-0.022*	0.921*	-0.017
Psychotic	0.871*	0.010	-0.320*
Delusion	0.099*	-0.004	-0.005
Mood	-0.007	0.943*	-0.011
Thought	0.988*	-0.016	0.253*
Organic	0.060*	0.165*	0.021*

Note:
*Statistically significant at the 0.05 level.

DOC tracks the number of minutes that incarcerated individuals spend in different prison-based rehabilitation programs. We identified programs that focused on substance use treatment and calculated the total hours each individual spent in these programs. To improve the model fit, we transformed the original variable by adding one and taking the natural logarithm. In our analyses, we include a log-transformed measure of hours spent in substance use treatment programs.

Entropy Balancing

We use entropy balancing to minimize pre-existing differences between the RCSP group and the comparison group.[64] Entropy balancing accomplishes this via a two-step process. During the first step, the analyst runs an algorithm that identifies differences between the treatment and comparison groups across a collection of measured characteristics.

During the second step, the algorithm generates weights that adjust the data so that the comparison group closely resembles the treatment group on those measured characteristics.

Exhibit A3 shows descriptive statistics on pre-release measures for the analytic sample before and after entropy balancing were applied.

[64] Hainmueller, J. (2012). Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. *Political Analysis*, *20*(1), 25-46.

Exhibit A3

Results of Entropy Balancing Procedure

Characteristics	RCSP group			Comparison group: Unweighted			Comparison group: Weighted		
	Mean	Variance	Skewness	Mean	Variance	Skewness	Mean	Variance	Skewness
Female	0.106	0.095	2.562	0.205	0.163	1.461	0.106	0.095	2.562
Age[a]	3.626	0.072	-0.029	3.600	0.087	-0.021	3.626	0.088	-0.116
Hispanic	0.075	0.070	3.221	0.092	0.084	2.823	0.075	0.070	3.221
Black	0.262	0.194	1.083	0.156	0.132	1.894	0.262	0.193	1.083
Asian/PI	0.050	0.048	4.123	0.019	0.018	7.096	0.050	0.048	4.123
AIAN	0.039	0.038	4.763	0.028	0.028	5.674	0.039	0.037	4.763
Prior convictions[a]	2.424	0.698	-0.444	2.311	0.645	-0.451	2.424	0.729	-0.515
Years incarcerated[a]	6.405	1.506	0.365	6.263	1.121	0.080	6.405	1.370	0.064
Released 2012	0.201	0.161	1.496	0.167	0.139	1.787	0.201	0.160	1.496
Released 2013	0.203	0.162	1.474	0.179	0.147	1.676	0.203	0.162	1.474
Released 2015	0.142	0.122	2.051	0.166	0.138	1.800	0.142	0.122	2.051
Released 2016	0.167	0.140	1.784	0.159	0.134	1.861	0.167	0.139	1.784
Released 2017	0.117	0.104	2.383	0.148	0.126	1.988	0.117	0.103	2.383
"High risk" class	0.903	0.088	-2.714	0.835	0.138	-1.804	0.903	0.088	-2.714
Violent infractions[a]	1.270	1.377	0.781	0.754	0.758	1.168	1.270	1.287	0.917
Time in RTU	0.483	0.132	-0.164	0.037	0.022	4.505	0.483	0.153	-0.151
MH factor 1	1.562	1.037	-1.195	-0.044	0.847	2.228	1.562	1.028	-1.187
MH factor 2	-0.444	0.582	0.795	0.012	0.795	-0.178	-0.444	0.671	0.846
MH factor 3	1.154	1.938	-0.135	-0.032	0.470	1.921	1.154	2.119	-0.225
SU treatment hours[a]	1.026	4.667	1.912	1.748	6.027	0.890	1.026	4.876	1.891

Notes:

[a] Log-transformed.

PI = Pacific Islander; AIAN = American Indian/Alaska Native.

RTU = Residential Treatment Unit.

MH = Mental health.

SU = Substance use.

RCSP group (N = 359); Comparison group (N = 12,800).

Analyses

To conduct our outcome evaluation, we use regression analysis to estimate the association between RCSP participation and reentry outcomes measured during the first 60 months after prison release. The following conditions apply to every analysis:

- We use a sample of 13,159 formerly incarcerated adults, which includes a group of RCSP participants (N = 359) and a comparison group of non-participants (N = 12,800).
- The variable of interest is a binary measure of RCSP participation.
- We include the same set of control variables to capture individual characteristics measured at the time of prison release.
- We apply the same entropy balancing weights.
- The dependent variables represent reentry outcomes that are measured on a monthly basis.

Because the reentry outcomes are measured in multiple ways, we use three types of regression analysis. We also vary the length of the follow-up period to examine whether the association between RCSP participation and reentry outcomes changes over time. We provide more details on each analysis in the text below.

Logistic Regression

We use logistic regression to analyze reentry outcomes that are measured as binary variables. This type of analysis estimates the *likelihood* that an individual ever experienced a given outcome during the specified follow-up period. We run each logistic regression analysis across eight segments of the follow-up period: the first month after prison release, months 0-6, months 7-12, months 13-24, months 25-36, months 37-48, months 49-60, and months 0-60 (i.e., the entire follow-up period).

In Exhibit A4, we present all the results from our logistic regression analyses. To save space, we only provide the odds ratios and standard errors for the RCSP indicator variable. Full results are available upon request.

Negative Binomial Regression

We use negative binomial regression to analyze reentry outcomes measured as count variables. This type of analysis estimates differences in the *quantity* of outcomes during the specified follow-up period. We run each negative binomial analysis across seven segments of the follow-up period: months 0-6 after prison release, months 7-12, months 13-24, months 25-36, months 37-48, months 49-60, and months 0-60 (i.e., the entire follow-up period).

In Exhibit A5, we present all the results from our negative binomial regression analyses. To save space, we only provide the incident rate ratios and standard errors for the RCSP indicator variable. Full results are available upon request.

Proportional-Hazards Cox Regression

We use proportional-hazards Cox regression (hereafter, Cox regression) to analyze the timing of reentry outcomes. This type of analysis estimates differences in the speed with which individuals first experience reentry outcomes after leaving prison.

In our study, individuals who are returned to prison or admitted to state mental hospitals may be subsequently unable to experience other outcomes. For example, if an individual is returned to prison after six months in the community, then that person cannot collect Basic Food assistance in month seven. In survival analysis, this issue is known as "censoring," and if unaddressed, it can lead to biased results.

We configure our Cox regression analyses to adjust for two sources of censoring: return to prison and psychiatric hospitalization in state mental hospitals. We apply this adjustment to the analyses for every reentry outcome with one exception. When we analyze psychiatric hospitalization in state mental hospitals, we only adjust for censoring due to re-incarceration.

We run each Cox regression analysis across two segments of the follow-up period: months 0-6 after prison release and months 0-60 (i.e., the entire follow-up period).

In Exhibit A6, we present all the results from our Cox regression analyses. To save space, we only provide the hazard ratios and standard errors for the RCSP indicator variable. Full results are available upon request.

Robustness Checks

We also conducted robustness checks using various model specifications and different comparison groups. The general patterns of our original findings remain, where we see short-term increases in core services and short-term decreases in recidivism. We omit these results for the sake of brevity.

Exhibit A4

Odds Ratios from Logistic Regression Analyses

Reentry outcome	*Release month*	*Months 0-6*	*Months 7-12*	*Months 13-24*	*Months 25-36*	*Months 37-48*	*Months 49-60*	*Months 0-60*
Outpatient mental health treatment	12.83	7.03	3.67	3.43	3.44	2.49	2.62	5.82
	(2.27)	(1.42)	(0.60)	(0.56)	(0.54)	(0.38)	(0.40)	(1.68)
Mental health diagnosis								
Psychotic disorder	12.77	6.09	4.38	3.88	3.53	2.84	2.76	4.68
	(2.34)	(1.09)	(0.71)	(0.64)	(0.57)	(0.45)	(0.44)	(0.09)
Bipolar/mania disorder	2.06	0.97	1.26	1.41	1.70	1.29	1.65	1.51
	(0.57)	(0.18)	(0.25)	(0.25)	(0.32)	(0.24)	(0.32)	(0.23)
DIC disorder	--	2.19	1.45	1.25	1.11	0.98	2.50	1.52
		(0.96)	(0.64)	(0.45)	(0.39)	(0.36)	(0.75)	(0.31)
Anxiety disorder	1.69	0.92	0.82	0.93	1.21	1.01	1.12	1.09
	(0.39)	(0.15)	(0.15)	(0.16)	(0.19)	(0.17)	(0.19)	(0.17)
Major depressive disorder	0.71	0.67	0.78	0.88	0.71	0.81	1.15	0.98
	(0.21)	(0.12)	(0.14)	(0.15)	(0.13)	(0.14)	(0.20)	(0.15)
ADHD	--	1.23	0.71	0.90	0.91	1.31	1.74	1.03
		(0.50)	(0.38)	(0.42)	(0.35)	(0.49)	(0.68)	(0.25)
Adjustment disorder	--	0.59	0.75	0.94	1.02	0.83	0.55	0.63
		(0.29)	(0.43)	(0.52)	(0.56)	(0.43)	(0.29)	(0.17)
Psychiatric medication								
Antipsychotic	4.94	2.24	1.65	1.95	1.96	1.71	1.29	1.73
	(1.19)	(0.35)	(0.27)	(0.32)	(0.33)	(0.28)	(0.23)	(0.27)
Antimanic	7.86	4.26	1.25	2.22	2.46	2.06	2.16	1.67
	(5.79)	(1.65)	(0.49)	(0.85)	(1.02)	(0.74)	(0.93)	(0.41)
Anti-anxiety	2.38	1.13	0.90	1.16	0.82	0.99	0.84	0.93
	(0.86)	(0.22)	(0.19)	(0.22)	(0.17)	(0.20)	(0.17)	(0.14)
Antidepressants	2.61	0.96	0.79	0.97	1.03	1.01	0.71	0.78
	(0.78)	(0.17)	(0.15)	(0.17)	(0.19)	(0.19)	(0.14)	(0.12)
Anticonvulsants	2.61	1.36	1.39	1.12	1.10	1.09	0.80	0.97
	(1.11)	(0.28)	(0.28)	(0.22)	(0.22)	(0.22)	(0.17)	(0.15)
Sedatives	19.58	0.83	0.66	0.97	1.30	1.06	1.23	1.36
	(24.79)	(0.38)	(0.31)	(0.33)	(0.45)	(0.42)	(0.49)	(0.28)
Financial assistance								
ABD assistance	2.17	2.04	0.81	0.75	0.78	0.79	0.96	1.74
	(0.34)	(0.31)	(0.15)	(0.15)	(0.16)	(0.16)	(0.19)	(0.28)
Basic food	1.70	1.96	1.37	1.21	1.16	1.10	1.08	1.70
	(0.27)	(0.42)	(0.24)	(0.2)	(0.18)	(0.17)	(0.16)	(0.46)
Homeless shelter use	0.60	0.64	0.54	0.74	0.78	0.74	0.88	0.95
	(0.09)	(0.09)	(0.08)	(0.12)	(0.12)	(0.12)	(0.14)	(0.16)

Exhibit A4 (Continued)

Odds Ratios from Logistic Regression Analyses

Reentry outcome	*Release month*	*Months 0-6*	*Months 7-12*	*Months 13-24*	*Months 25-36*	*Months 37-48*	*Months 49-60*	*Months 0-60*
Recidivism (Any)	0.66	0.66	0.67	0.84	1.05	0.74	0.92	0.87
	(0.23)	(0.11)	(0.12)	(0.14)	(0.17)	(0.12)	(0.17)	(0.15)
Recidivism (most serious)								
Infraction	--	0.44	0.97	0.94	0.96	0.44	0.50	0.66
		(0.21)	(0.39)	(0.28)	(0.31)	(0.13)	(0.17)	(0.23)
Misdemeanor	--	0.64	0.65	0.78	1.11	1.06	0.92	0.98
		(0.15)	(0.16)	(0.18)	(0.25)	(0.24)	(0.24)	(0.23)
Non-violent felony	--	0.53	0.49	0.80	0.64	0.68	1.41	0.63
		(0.16)	(0.17)	(0.21)	(0.2)	(0.22)	(0.45)	(0.14)
Violent felony	--	0.97	0.97	1.05	1.83	0.83	1.93	1.13
		(0.31)	(0.42)	(0.32)	(0.54)	(0.26)	(0.66)	(0.24)
Psychiatric hospitalization								
State mental hospital	--	3.00	2.93	2.13	2.33	3.09	3.87	3.03
		(1.13)	(0.83)	(0.57)	(0.62)	(0.83)	(1.19)	(0.58)
Community mental health facility	--	1.23	1.76	1.95	1.47	1.86	2.09	2.39
		(0.35)	(0.51)	(0.44)	(0.38)	(0.46)	(0.49)	(0.41)
Medical treatment								
Medical hospitalization	--	1.07	1.41	1.75	1.33	1.37	1.84	1.62
		(0.23)	(0.32)	(0.32)	(0.26)	(0.27)	(0.36)	(0.25)
Emergency department: Inpatient care	--	1.01	1.39	1.74	1.29	1.24	1.83	1.63
		(0.23)	(0.32)	(0.33)	(0.27)	(0.26)	(0.37)	(0.25)
Emergency department: Outpatient care	--	0.89	0.93	1.06	0.93	1.03	1.02	1.04
		(0.14)	(0.15)	(0.16)	(0.14)	(0.16)	(0.16)	(0.2)
Outpatient SUD treatment	2.27	1.39	1.21	1.25	1.45	1.29	0.74	1.05
	(1.19)	(0.31)	(0.27)	(0.28)	(0.31)	(0.27)	(0.17)	(0.17)

Notes:
N = 13,159.
Odds ratios with standard errors in parentheses. Control variables not shown.
DIC = Disruptive/impulse control/conduct.
ADHD = Attention-deficit/hyperactivity disorder.
ABD = Aged, Blind, or Disabled.
SUD = Substance use disorder.

Exhibit A5

Incident Rate Ratios from Negative Binomial Regression Analyses

Reentry outcome	*Months 0-6*	*Months 7-12*	*Months 13-24*	*Months 25-36*	*Months 37-48*	*Months 49-60*	*Months 0-60*
Outpatient mental health treatment	2.16	2.07	2.28	2.22	2.24	2.07	2.19
	(0.12)	(0.14)	(0.17)	(0.19)	(0.19)	(0.18)	(0.12)
Psychiatric medication							
Antipsychotic	2.49	2.03	2.13	2.38	2.01	1.58	2.06
	(0.28)	(0.28)	(0.29)	(0.34)	(0.32)	(0.26)	(0.23)
Antimanic	2.03	1.39	1.06	1.73	3.34	1.73	1.76
	(0.77)	(0.49)	(0.44)	(0.77)	(1.44)	(0.72)	(0.70)
Anti-anxiety	1.43	0.82	0.91	1.24	0.90	0.93	1.07
	(0.28)	(0.19)	(0.20)	(0.26)	(0.19)	(0.19)	(0.16)
Antidepressants	1.17	0.88	1.11	1.37	1.05	0.82	1.07
	(0.18)	(0.16)	(0.21)	(0.29)	(0.23)	(0.19)	(0.15)
Anticonvulsants	1.38	1.37	1.44	1.38	1.35	0.80	1.22
	(0.29)	(0.33)	(0.3)	(0.29)	(0.29)	(0.18)	(0.19)
Sedatives	0.59	0.37	0.79	0.47	0.85	1.00	0.93
	(0.18)	(0.12)	(0.27)	(0.17)	(0.29)	(0.38)	(0.22)
Financial assistance							
ABD assistance	1.36	0.68	0.45	0.44	0.41	0.64	0.84
	(0.10)	(0.12)	(0.11)	(0.09)	(0.11)	(0.15)	(0.08)
Basic food	1.11	1.05	1.02	0.97	1.01	0.96	1.01
	(0.05)	(0.06)	(0.07)	(0.07)	(0.07)	(0.07)	(0.05)
Homeless shelter use	0.74	0.68	0.74	0.75	0.79	0.95	0.80
	(0.07)	(0.07)	(0.08)	(0.09)	(0.09)	(0.11)	(0.06)
Recidivism (any)	0.72	0.67	0.89	0.95	0.71	0.88	0.83
	(0.09)	(0.09)	(0.09)	(0.12)	(0.09)	(0.12)	(0.06)
Psychiatric hospitalization							
State mental hospital	5.08	3.44	2.34	2.85	3.93	3.69	3.17
	(1.42)	(0.91)	(0.54)	(0.68)	(0.98)	(1.09)	(0.57)
Community mental health facility	1.54	2.61	1.99	1.70	1.79	3.12	2.25
	(0.36)	(0.65)	(0.45)	(0.38)	(0.39)	(0.64)	(0.32)
Medical treatment							
Medical hospitalization	1.02	1.30	1.74	1.42	1.41	1.73	1.49
	(0.18)	(0.29)	(0.30)	(0.25)	(0.26)	(0.32)	(0.18)
Emergency department: Inpatient Care	1.00	1.30	1.75	1.38	1.33	1.84	1.49
	(0.18)	(0.29)	(0.31)	(0.25)	(0.26)	(0.34)	(0.19)
Emergency department: Outpatient care	0.92	0.72	0.86	0.84	1.07	1.11	0.93
	(0.12)	(0.11)	(0.12)	(0.11)	(0.16)	(0.17)	(0.10)
Outpatient SUD treatment	1.19	1.24	1.54	1.71	1.42	0.84	1.39
	(0.25)	(0.28)	(0.36)	(0.43)	(0.34)	(0.21)	(0.23)

Notes:
N=13,159.
Incident rate ratios with standard errors in parentheses. Control variables not shown.
ABD = Aged, Blind, or Disabled.
SUD = Substance use disorder.

Exhibit A6

Hazard Ratios from Proportional-Hazard Cox Regression Analyses

Reentry outcome	*Months 0-6*	*Months 0-60*
Outpatient mental health treatment	2.20	2.54
	(0.13)	(0.27)
Mental health diagnosis		
Psychotic disorder	2.75	2.84
	(0.23)	(0.37)
Bipolar/mania disorder	1.68	2.65
	(0.29)	(0.57)
DIC disorder	3.37	1.19
	(1.45)	(0.43)
Anxiety disorder	1.17	1.06
	(0.18)	(0.19)
Major depressive disorder	0.84	0.97
	(0.15)	(0.19)
ADHD	1.84	2.39
	(0.81)	(0.81)
Adjustment disorder	0.78	0.85
	(0.36)	(0.29)
Psychiatric medication		
Antipsychotic	2.09	2.09
	(0.23)	(0.39)
Antimanic	5.07	3.48
	(2.35)	(1.99)
Anti-anxiety	1.28	1.16
	(0.27)	(0.30)
Antidepressants	1.21	1.10
	(0.17)	(0.25)
Anticonvulsants	1.46	1.24
	(0.32)	(0.30)
Sedatives	1.08	0.79
	(0.48)	(0.52)
Financial assistance		
ABD assistance	1.35	0.89
	(0.09)	(0.09)
Basic food	1.18	1.22
	(0.04)	(0.08)
Homeless shelter use	0.82	0.80
	(0.08)	(0.09)
Recidivism (any)	0.69	0.81
	(0.12)	(0.09)

Exhibit A6 (Continued)

Hazard Ratios from Proportional-Hazard Cox Regression Analyses

Reentry outcome	*Months 0-6*	*Months 0-60*
Psychiatric hospitalization		
State mental hospital	4.28	2.52
	(1.64)	(0.70)
Community mental health facility	1.43	1.64
	(0.55)	(0.49)
Medical treatment		
Medical hospitalization	1.01	1.36
	(0.24)	(0.35)
Emergency department: Inpatient care	0.99	1.42
	(0.24)	(0.39)
Emergency department: Outpatient care	0.96	1.13
	(0.11)	(0.17)
Outpatient SUD treatment	1.11	1.22
	(0.27)	(0.26)

Notes:
N = 13,159.
Hazard ratios with standard errors in parentheses. Control variables not shown.
DIC = Disruptive/impulse control/conduct.
ADHD = Attention-deficit/hyperactivity disorder.
ABD = Aged, Blind, or Disabled.
SUD = Substance use disorder.

Changes from Previous Evaluations

The current study improves upon prior WSIPP evaluations of the RCSP by using a larger sample, a five-year follow-up period, and contemporaneous release cohorts. We briefly review these contributions below.

Sample Size and Follow-up Period

Prior WSIPP evaluations of the RCSP were based on small samples of formerly incarcerated individuals who were followed for relatively short periods of time.[65] In contrast, the current study uses a sample of 13,159 formerly incarcerated individuals who were followed for five years after prison release. Our large sample size allows us to include more information in our analyses than was possible in past studies. Similarly, the length of our follow-up period more closely matches the duration of the program. As a result of these advantages, the current study represents the most rigorous and comprehensive evaluation of the RCSP that WSIPP has conducted.

Contemporaneous Release Cohorts

Past WSIPP evaluations of the RCSP were based on comparisons between program participants released from prison in the early 2000s and a comparison group of non-participants released in the late 1990s.[66] However, comparing release cohorts from two different time periods is challenging because if the RCSP group exhibits different reentry outcomes than the comparison group, it is unclear whether the results are due to program participation or differences in the time period when reentry took place (i.e., period effects).[67]

In the current study, we address this problem by using data on contemporaneous release cohorts and configuring our analyses to control for the year of prison release. By comparing individuals who were released from prison during the same time period, our approach avoids bias from period effects that may have affected prior WSIPP evaluations of the RCSP.

Limitations

Housing Status and Homeless Shelter Use

One of the primary goals of the RCSP is to help individuals obtain housing after prison release. In the current study, we examine housing as an outcome by estimating the association between RCSP participation and homeless shelter use. However, there are limitations to this approach.

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[65] The first WSIPP study of the RCSP (Phipps, P., & Gagliardi, G. (2002). *Washington's Dangerous Mentally Ill Offender Law: Program selection and services interim report*. (Doc. No. 03-05-1901) Olympia: Washington State Institute for Public Policy) was based on 36 program participants followed for three months after leaving prison. The most recent WSIPP evaluation of the program (Mayfield 2009) was based on 172 matched pairs followed for four years.

[66] More specifically, prior WSIPP evaluations compared RCSP participants released from prison in 2000-2003 to two control groups: participants in the Community Transition Study who were released from prison in 1996-1997 and a matched group of non-participants who were released from prison from 1996-2000.

[67] For example, Mayfield (2009) found that RCSP participants released during the early 2000s engaged in significantly less violent crime after leaving prison than a control group of non-participants released in the late 1990s. However, the violent crime rate in Washington State was substantially higher in the late 1990s than it was in the early 2000s. Because the control group was released from prison during a high-violence period and the RCSP group was released during a low-violence period, this *period effect* is a plausible alternative explanation for the observed between-group differences in violent crime.

Adult housing status falls into three categories: *housed*, where an adult stays in a residence that they own or rent; *unhoused but sheltered*, where an adult does not have a residence that they own or rent but accesses housing by temporarily staying with family, friends, or a homeless shelter; and *unhoused and unsheltered*, where an adult lacks housing and resorts to living outdoors.

For the purposes of our evaluation, the first category (*housed*) clearly indicates program success, and the third category (*unhoused and unsheltered*) clearly indicates program failure. However, the second category (*unhoused but sheltered*) is ambiguous. In the current study, the only available measure of housing status was homeless shelter use, which falls into this second category.

Ultimately, we found that RCSP participants are less likely than non-participants to use homeless shelters during the first year of reentry. Because the RCSP provides extensive support and funding to ensure that participants have housing immediately after leaving prison, it seems likely that this pattern emerges because RCSP participants are more likely to be *housed* during this time period than non-participants. However, without a direct measure of housing status, we are limited in our ability to draw conclusions regarding whether the program is effective at helping individuals obtain housing.

Violent Crime

An implicit goal of the RCSP is to reduce violent behavior during reentry.[68] In the current study, we examine violence as an outcome by identifying differences in violent felony recidivism between RCSP participants and the comparison group. This approach requires that RCSP participants and the comparison group have an equivalent propensity for violent behavior before leaving prison. However, the program's unique selection criteria make it difficult to meet this requirement.

By design, the RCSP targets incarcerated individuals who are at high risk for violence after leaving prison. Although the joint combination of these factors was highly prevalent for RCSP participants, this was *not* the case for our comparison group. As a result, it is possible that RCSP participants were at greater risk for engaging in violence during reentry than the comparison group. This could explain why we found that the predicted probability of being convicted of a violent felony within five years of prison release was 28% for RCSP participants, which is slightly higher than the predicted probability for non-participants (23%).

Medical Treatment

We measure medical treatment based on whether individuals were hospitalized for inpatient care, visited the emergency department (ED) for inpatient care, or visited the ED for outpatient care. However, our data do not include information on *why* individuals received medical treatment. Although we found that RCSP participants were more likely than non-participants to receive inpatient medical care, we cannot determine whether this is due to physical health issues (e.g., major illness, traumatic injury, surgery) or mental health issues (e.g., acute psychosis, risk of harm to self or others).

In addition, our data does not include information on individual health status prior to prison release. As a result, we cannot adjust our analyses to account for the basic fact that individuals with worse health prior to release are more likely to require medical treatment during reentry. This limits our ability to analyze the receipt of medical treatment as a reentry outcome.

[68] This is apparent from the program's eligibility criteria, which limits participation to incarcerated individuals who "pose a danger to themselves or others if released to the community without additional supportive services."

Finally, records related to medical treatment come from Medicaid data. It may be the case that individuals in both the treatment group and the comparison group are not on Medicaid and, therefore, may receive these treatments but not appear in the data. This may bias our results if this censoring of data is correlated with treatment status.

Employment

We obtained data on employment outcomes measured every quarter during the first five years after prison release. This allowed us to examine the association between RCSP participation and employment status, hours worked, and wages earned. Overall, we found that individuals in the RCSP group had significantly worse employment outcomes than non-participants. However, we decided not to include the results in this report due to concerns about the limitations of our research design for analyzing employment outcomes.

Given that the RCSP is only available to individuals with severe mental illness and histories of serious violent behavior, it is likely that RCSP participants are different from non-participants on factors that matter for employment outcomes, such as prior employment history and education status. However, our analyses do not adjust for these differences because the necessary measures were not included in our data. As a result, we cannot rule out the possibility that individuals in the RCSP group experience worse employment outcomes simply because they are less employable than individuals in the comparison group.

II. Reentry Community Services Program Referral

Department of Corrections
WASHINGTON STATE

REENTRY COMMUNITY SERVICES PROGRAM REFERRAL

Name:	DOC number:	Earned release date:	Max Ex date:
Current offense:	Referral initiated by:		Date of birth:
Last RCSP referral date (General Info OMNI):	Sex offender risk category:		Sex offender level:

COMPLETED BY PRIMARY THERAPIST/MENTAL HEALTH EMPLOYEE/CONTRACT STAFF

Current mental health diagnosis: _____

	Current	Highest	Date of highest
S Code:	_____	_____	_____
U Code:	_____	_____	_____
R Code:	_____	_____	_____
H Code:	_____	_____	_____

☐ Yes ☐ No History of psychiatric hospitalizations?
Where: _____

☐ Yes ☐ No History of community mental health treatment?
Where: _____

Employee/contract staff	Position/title	Facility	Date
_____	_____	_____	_____

COMPLETED BY CASE MANAGER

Risk Level Classification: ☐ High Violent (HV) ☐ High Property (HP) ☐ High Drug (HD)
☐ High Violent Property Drug (HVPD) ☐ Moderate (M) ☐ Low (L)

☐ Yes ☐ No History of substance use disorder or dependence?
☐ Yes ☐ No History of felony violent or serious violent conviction?
☐ Yes ☐ No Sex offender Level III?
☐ Yes ☐ No Use of a weapon during an offense?
☐ Yes ☐ No History of violent serious infractions?

Assigned supervision: _____

Case manager	Position/title	Facility	Date
_____	_____	_____	_____

CRITERIA FOR RCSP DESIGNATION

Mental disorder criteria:

Mental disorder means any organic, mental, or emotional impairment which has substantial adverse effects on an individual's cognitive or volitional functions per RCW 71.05.020.

- Substantial adverse effects will be supported by identification of significant functional impairment, such as an inability to complete activities of daily living without support.

The RCSP Review Committee will take into consideration the clinical history of each candidate being reviewed. The following factors will be considered, at a minimum:

- Substantiation of the qualifying diagnosis through documented observations from mental health providers.
- Corroboration of symptom presentation across time and setting or recent evidence of an acute episode.

Dangerousness criteria:

Dangerousness includes danger to self and/or others.

The following factors will be considered, at a minimum:

- Risk Level Classification (RLC)
- Substance use disorder/dependence history
- Current offense and criminal history
- Sex offender Level III
- Sex offender risk category
- History of violent/serious violent infractions (i.e., Infraction Group Number and seriousness)
- Danger to self, including:
  - Substantiated history of suicide attempt(s)
  - Significant self-injury behavior in the last 2 years

Distribution: **ORIGINAL** - Health Record **COPY** - RCSP

III. Benefit-Cost Analysis

WSIPP's standard approach to benefit-cost analysis is to estimate a program's effects and monetary consequences in Washington, given what we know about the Washington population.[69] In this report, we observe outcomes for a specific population of individuals participating in the RCSP, and we compare these effects among those in our comparison group. Since the comparison group is a specific population with experiences that differ from our standard model approach, we adjusted our baselines using actual data from our comparison group analysis.

Exhibit A7 shows the effect sizes that we entered in our benefit-cost model. These effect sizes are calculated from the coefficients and standard errors reported from odds ratios from the same analyses described in the report. Effect sizes show relative differences in outcomes between the treatment and comparison groups.

Decay Analysis

As program effects typically do not persist forever, WSIPP's benefit-cost model has built-in follow-up periods for specific outcomes to represent when effects typically decay. For this report, we tailored the benefit-cost model to include decays based on the results of our outcome evaluation.

We include non-statistically significant effects in our benefit-cost model, so we look for the follow-up period when the magnitude of the effect is estimated to be zero, not when statistical significance disappears. These effects are all listed as odds ratios in Exhibit A4 of Appendix I. Since they are odds ratios, the magnitude of the effect is zero when the odds ratio is one.

For Aged, Blind, or Disabled (ABD), there is an initial positive effect in the first six months, but it immediately drops below one for every subsequent follow-up period. We code ABD as having a decay of one year, with no effect after one year. The effect on basic food is initially higher than one and slowly decays to one over the course of five years. Thus, we code this as a decay of five years.

Exhibit A7

Effects Entered in the Primary Benefit-Cost Analysis

Outcome	Effect size	SE	p-value
Receipt of ABD	0.432	0.091	0.001
Receipt of Basic Food	0.407	0.131	0.002
Recidivism	-0.252	0.104	0.015
Psychiatric hospitalization	0.322	0.202	0.111
ED use	-0.048	0.064	0.420
General hospitalization	0.041	0.131	0.755
Homelessness (not monetized)	-0.271	0.090	0.003

[69] See WSIPP's Technical Documentation.

Recidivism is less straightforward. For any recidivism, there is a reduction in recidivism in years one, two, four, and five but a slight increase in recidivism in year three. This makes it challenging to code a single decay. For our main results, we chose a decay where the first two years had the full effect but assumed the effect decayed to zero by the end of the fifth year. We also ran a model where the results decay to zero by the end of year three. If using the three-year decay, the benefits of recidivism are lower but do not change any substantive conclusions—the program is not cost-beneficial. These results are available upon request.

The remaining outcomes dealing with psychiatric hospitalization (a composite from two different facility types), ED use (a composite from inpatient and outpatient), and medical hospitalization all exhibited a more consistent magnitude of effect size over the course of the five years. For these outcomes, we assumed the effect would persist over the entire five years and then return to zero afterward.

Baseline Adjustments

To estimate the magnitude of these changes and, thereby, the monetary value, we adjusted our baseline to incorporate the experiences among people in the comparison group selected for this study. For example, individuals in our comparison group have a higher rate of ED use than the average Washingtonian. Therefore, we used the specific rates of health care and social service utilization observed for the comparison group for this study. A similar method was used to adjust other parameters. Each of the following adjustments for the comparison population and for the population effects we simulated were made based on summary counts provided to WSIPP from DSHS-RDA.

Receipt of ABD

A new addition to WSIPP's benefit-cost model includes average expected benefits from the ABD cash assistance program. In our model, ABD operates similarly to other transfer programs, such as TANF and Basic Food.[70] The average ABD payment of $384.17 per month was obtained by calculating the average of the last ten months of state fiscal year 2023 as reported by DSHS.[71] The average number of months with assistance is 24.6 (with a standard deviation of 23.5) for the general population. We adjusted this to 4.7 and 9.7, respectively, to reflect the probability of utilization and the length of time receiving assistance in the five years following release from prison among our comparison group.

Receipt of Basic Food

We updated our model's average Basic Food allowance expenditures to $418.25 per month.[72] The average number of months with assistance among this population was adjusted to 30.29 months with a standard error of 20.2 months based on five years of post-release information.

Psychiatric Hospitalization

The average annual percentage of the population with a psychiatric hospitalization admission among the comparison group was 4.6%. We assumed that if psychiatric hospitalization occurs, this population incurs the same yearly cost as the seriously mentally ill population.[73]

[70] Ibid, Exhibit 4.2.2.
[71] Economic Services Administration. (2023). *Aged, Blind or Disabled (ABD) Briefing Book*. Department of Social and Health Services. Average expenditures per person were increased by statute in September 2022, so we used the 10 months following this change.
[72] Economic Services Administration. (2023). *Basic Food Briefing Book*. Department of Social and Health Services.
[73] WSIPP Technical Document, Exhibit 4.6.5.

We updated our estimation of psychiatric hospitalization costs using a composite of information from state hospitals and psychiatric centers as reported by the Comprehensive Hospital Abstract Reporting System.[74] We estimated the cost of psychiatric hospitalization to be $23,961, with a standard deviation of $23,564 in 2023 dollars.

Emergency Department Use

ED use is higher for the comparison group than for the general population. In our benefit-cost model, we replaced the annual percentage of the population with an ED visit among those with serious mental illness (42.2%) to reflect those in the comparison group, which has a slightly higher annual average utilization rate of 56.5%. This includes both inpatient and outpatient visits. We assumed that if the ED is used, this population incurs the same costs as frequent ED users.[75] The average expenditures for ED use were updated in our model to reflect information from the 2021 Medical Expenditures Panel Survey and are expected to be $1,908 (standard deviation of $3,652) in 2021.

General Hospitalization

To capture additional hospitalizations that were not psychiatric admissions, we adjusted the hospitalization rate for the seriously mentally ill (24.3%) to the average annual rate of hospitalizations observed among the comparison group, 14.0%. We assumed that if hospitalization occurs, this population incurs the same yearly cost as the seriously mentally ill population.[76] Health care costs were updated to 2021 using WSIPP's calculation of the Medical Expenditures Panel Survey, employing the same method as explained in the Technical Appendix to WSIPP's Benefit Cost Model.[77] We estimate the average expenditure of general hospitalization to be $20,812 (standard deviation of $24,278).

Crime (Convictions)

Our model requires that we identify the crime patterns that are likely to result among the comparison group to measure expected benefit-cost effects on crime.[78] DSHS-RDA receives information from DOC and WSIPP's CHD to match records of criminal justice proceedings to the study groups. We were able to obtain a five-year follow-up of criminal activity following treatment years to model the costs of crime given the follow-up period, the amount of crime, the types of crime, and the timing of crime. The comparison group had a cumulative rate of recidivism for any crime of 55.7%, with 7,170 individuals receiving 53,457 convictions. There were 7.46 "trips" through the criminal justice system (the basis of our cost calculations) per recidivist. The types of crimes over the five-year follow-up period are:

- Murder: 0.35%
- Felony sex offenses: 0.86%
- Robbery: 2.30%

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[74] We estimated psychiatric hospitalization costs using the Comprehensive Hospital Abstract Reporting System (CHARS). The number of patients served by Washington State psychiatric hospitals (Western State Hospital and Eastern State Hospital) in state fiscal year 2023 was obtained from DSHS-RDA. We applied inflation-adjusted cost data from prior WSIPP analyses of state hospitalization costs and weighted cost estimates by the estimated number of patients. Total health care expenditures in Washington State were updated to 2022 using the methodology explained in Section 4.2e of WSIPP's Technical Document. The hospital cost-to-change ratio (0.349) was obtained from the Washington Department of Health.

[75] WSIPP Technical Document, Exhibit 4.3.6.

[76] Ibid, Exhibit 4.6.5.

[77] We note that the new MEPS survey employs the ICD-10 diagnostic codes, which may somewhat alter respondents' answers regarding the type of diagnosis from prior survey years. Information on average costs and the percentage of patients experiencing hospital readmissions was updated to 2018 using published information from the Agency for Healthcare Research and Quality. Healthcare Cost and Utilization Project. (2021). Statistical Brief #278.

[78] Our benefit-cost calculations exclude infractions, traffic violations, sentence violations, miscellaneous fish and game violations, failure to register as a sex offender, bail jump, interlock violations, and other miscellaneous alcohol crimes. DUI/DWI are included in the calculations.

- Aggravated assault: 13.85%
- Felony property: 19.73%
- Felony drug and other: 17.94%
- Misdemeanor: 44.97%

To evaluate the risk of recidivism for the serious mentally ill population of people with a prison sentence, we obtained data on the probability of being reconvicted of a crime in the five years following release for the comparison group. We modeled the cumulative probability and the hazard rate curves on that five-year follow-up period using a fourth polynomial fit. Using these estimations of the time and extent of convictions, we can project costs associated with criminal activity. The cost estimation method is further described in our Technical Document.[79]

Other Updates

In addition to the above adjustments, we also updated our inflation calculations using more recent inflation data. We apply the Implicit Price Deflator for Personal Consumption Expenditures (IPD-PCE) updated to 2023 dollars.[80] Where appropriate, we use the IPD for Health Services. These indexes use a different base year, 2017, from prior WSIPP reports.

Baseline Adjustments for Simulations

We examined four other populations. WSIPP received summary data from DSHS-RDA on each of these groups so that we could recalibrate our baseline changes in outcome measurements. Exhibit 20 illustrates the parameters applied for each population.

We were unable to determine the degree to which individuals overlap these categories.

DSHS-RDA also provided counts of convictions that occurred in each year following release that we used to estimate the time to recidivism, the extent of recidivism per year, and the type of convictions. Because the group of individuals criminally committed to state psychiatric facilities was so small, we were unable to determine statistically reliable patterns of recidivism with this small number. Therefore, we applied the group's overall recidivism percentage (18%) and the number of trips per recidivist (6.6). We assumed the pattern for crime types approximates that for our comparison group.

[79] WSIPP Technical Document Exhibit 4.11.31.
[80] Bureau of Economic Analysis, National Income and Product Accounts. Table 2.3.4.

IV. Program Components

The current assignment required WSIPP to estimate "what modifications to the program are most likely to prove advantageous based on the current state of knowledge about evidence-based, research-based, and promising programs."[81]

To address the question, WSIPP systematically reviewed relevant reentry programs across the adult reentry literature. Once compiled, the studies were examined for their methodological rigor and programmatic components. Using these pieces of information, in conjunction with the calculated effect sizes from the studies, we completed meta-regression analyses to explore the associations between a particular component and recidivism.

Systematic Review

WSIPP used our Adult Corrections Inventory[82] as the starting point for our systematic review. Of the 382 studies from 57 programs published as part of the inventory, we identified 160 studies to review. Upon further investigation, an additional 257 studies were located for review. In all, WSIPP screened 417 studies for possible inclusion in our analyses. Of those studies, only 56 were found to be methodologically rigorous on a population similar to those individuals eligible for the RCSP and with enough information to calculate an effect size.[83]

See Exhibit A8 for a flowchart of the systematic review process and Exhibit A9 for the list of programs we reviewed.

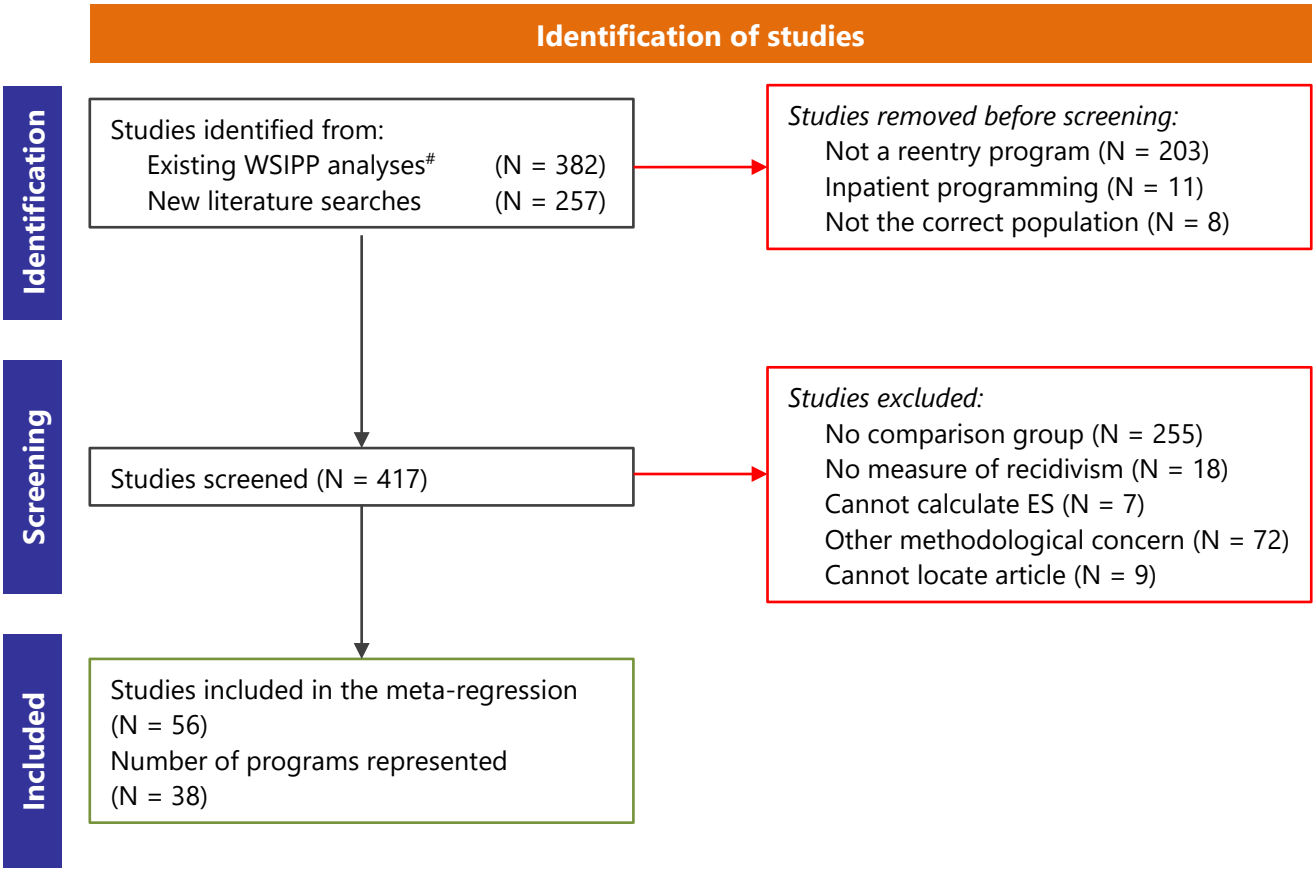
[81] E2SSB 5304.

[82] Wanner, P. (2018). *Inventory of evidence-based, research-based, and promising programs for adult corrections* (Document Number 18-02-1901). Olympia: Washington State Institute for Public Policy.

[83] See WSIPP's Technical Documentation for information on screening criteria, methodological considerations, and information for calculating effect sizes.

Exhibit A8

Process for Systematic Review



Note:

#Existing WSIPP analyses refer to the programs already published as part of the Adult Corrections Inventory (2018) or published on WSIPP's website on the Benefit-Cost tab.

Exhibit A9

Programs Reviewed as part of Current Study

Program/intervention	No. of ES
Buprenorphine for opioid use disorder for adults post-release[&]	0
Case management ("swift, certain, and fair") in the community[&]	4
Case management (not "swift, certain, and fair") in the community[&]	0
Circles of Support and Accountability[&]	0
Cognitive behavioral therapy (CBT) (for individuals classified as high- or moderate-risk)[&]	0
Community-based correctional facilities (Halfway houses)[&]	5
Correctional education (basic skills) in the community	1
Correctional education (post-secondary education) in the community	0
Domestic violence perpetrator treatment (Duluth-based model)[&]	0
Domestic violence perpetrator treatment (Non-Duluth models)[&]	1
Employment counseling and job training (transitional reentry from incarceration into the community)[&]	1
Employment counseling and job training in the community[&]	0
Employment counseling and job training with paid work experience in the community[&]	11
Housing assistance with services[&]	6
Housing assistance without services[&]	2
Injectable naltrexone for opioid use disorder for adults post-release[&]	2
Outpatient and intensive outpatient drug treatment in the community	0
Intensive supervision (surveillance and treatment)[&]	3
Life skills education[&]	1
Offender Reentry Community Safety Program (for individuals with serious mental illness)	2
Reentry courts[&]	1
Restorative justice conferencing[&]	10
Revocation reduction programs[&]	0
Risk Need and Responsivity supervision (for individuals classified as high- and moderate-risk)[&]	2
Serious and Violent Offender Reentry Initiative (SVORI)[&]	1
Therapeutic communities (in the community) for individuals with co-occurring disorders[&]	3
Therapeutic communities (in the community) for individuals with substance use disorders[&]	2
Violence reduction treatment	0
Vocational education in the community	0
Critical Time Intervention (CTI) programs	0
Mentoring for high-risk and/or SMI	0
Thresholds Jail Program	0
Whole Person Care	0
Connection to Care	0
Mental Health Services Continuum Program	0
Mentally Ill Offender Crime Reduction (MIOCR) Program	0
Maryland Reentry Partnership Initiative	0

Note:

[&] Program on WSIPP's Adult Corrections Inventory (2018).

Meta-Regression Results

We examined the relationship between the effect size and each component separately.[84] We present these results in Exhibit A10. For these results, negative effects represent reductions in recidivism, meaning the presence of the component is associated with reduced criminal behavior upon reentry to the community.

We ran four different meta-regressions using the following components:

- Model 1 (specific services): transportation, childcare, public assistance applications, food, clothing, physical health services, medication assistance
- Model 2 (philosophy types): discipline, deterrence, surveillance, restorative, counseling, skill building, multiple coordinated services[85]
- Model 3 (other components): religious, services provided in-home, mandatory participation, direct funding
- Model 4: duration of the program[86]

We reported our findings for Model 1 in Exhibit 24. In the findings for Model 2 in Exhibit A11, skill building has a statistically significant estimate at the 5% level. However, this estimate is highly sensitive to the choice of specification, and the point estimate changes depending on what else is in the model. Although we cannot rule out a true statistically significant increase in recidivism associated with these programs, it seems likely that this is an artifact of our low sample size and low variation.

Finally, Models 3 and 4, presented in Exhibit A11, did not produce statistically significant results for any component.

[84] We do this by running a series of meta-regressions, where each meta-regression contains one component.
[85] We also conduct two separate meta-regressions on counseling and skill-building types for studies that report a counseling or skill-building philosophy type, respectively. We do not report these results due to the limited sample size.
[86] We examine duration separately because of missing data.

Exhibit A10

Effect Sizes for Program Components

Component	Effect size (ES)	Number coded	Number with component	Number missing
Deterrence	-0.354 (0.256)	39	2	17
Surveillance	-0.079 (0.125)	39	28	17
Restorative	-0.341 (0.360)	39	1	17
Counseling	-0.227 (0.117)	39	19	17
Skill building#	-0.117 (0.116)	39	35	17
Multiple coordinated services^	-0.244 (0.117)	39	42	17
Individual counseling	-0.248 (0.209)	22	19	37
Mentoring	-0.253 (0.283)	22	4	34
Family counseling	-1.395 ** (0.362)	22	4	34
Group counseling	-0.144 (0.385)	22	4	34
Peer counseling	-0.408 (0.231)	22	6	34
Behavioral & cognitive-behavioral#	-0.303 (0.126)	34	12	22
Social skills#	-0.112 (0.138)	34	11	22
Academic training#	-0.442 * (0.148)	34	20	22
Job training #	-0.196 (0.144)	34	36	22
Case management^	-0.238 (0.217)	29	42	27
Religious	-0.283 (0.258)	39	2	17
Services in home	0.308 ** (0.198)	37	4	19
Mandatory participation	0.118 (0.257)	36	15	20
Direct funding	-0.139 (0.110)	26	25	30
Transportation#	-0.172 (0.147)	38	18	18
Childcare	-0.087 (0.188)	38	6	18
Public assistance applications^	-0.145 (0.159)	38	15	18

Exhibit A10 (Continued)

Effect Sizes for Program Components

Component	Effect size (ES)	Number coded	Number with component	Number missing
Food	0.192 (0.355)	38	2	18
Clothing	-0.044 (0.157)	38	6	18
Physical health services[#]	-0.392 * (0.128)	38	14	18
Medication assistance[^]	-0.485 ** (0.127)	38	11	18

Notes:

* Statistically significant at the 0.05 level; ** statistically significant at the 0.01 level.

"Number coded" refers to the number of studies where we could determine whether the program had the component or not.

"Number with component" refers to the number of studies with the component.

"Number missing" refers to the number of studies where we were unable to determine whether the program had the component or not. It is equivalent to 56 minus the number coded.

^ Core component available in the RCSP.

[#] Ancillary component available in the RCSP.

Exhibit A11

Meta-Regression – Models 2, 3, and 4

Model 2	Coefficient (SE)
Deterrence	-0.048 (0.238)
Surveillance	0.136 (0.086)
Restorative	0.033 (0.330)
Counseling	-0.104 (0.093)
Skill building ^	0.196 * (0.097)
Multiple coordinated services ^	-0.144 (0.104)
Constant	-0.230 (0.111)
N	56
Model 3	
Religious	-0.017 (0.251)
Services provided in the home	-0.014 (0.235)
Mandated participation	0.095 (0.104)
Direct funding	0.031 (0.104)
Constant	-0.208 (0.102)
N	38
Model 4	
Duration of program	-0.007 (0.005)
Constant	-0.101 (0.063)
N	32

Notes:

* Statistically significant at the 0.05 level; ** statistically significant at the 0.01 level.

^ Component available in the RCSP.

Medication Assistance – Studies Included in the Analysis

A total of 11 studies reported "medication assistance" as a component of the evaluated intervention. We list those studies below.

Braga, A.A., Piehl, A.M., & Hureau, D. (2009). Controlling violent offenders released to the community: An evaluation of the Boston Reentry Initiative. *Journal of Research in Crime and Delinquency*, *46*(4), 411-436.

Cunningham, M., Hanson, D., Gillespie, S., Pergamit, M., Oneto, A.D., Spauster, P., O'Brien, T., Sweitzer, L., & Velez, C. (2021). Breaking the homelessness-jail cycle with Housing First: Results from the Denver Supportive Housing Social Impact Bond Initiative. *The Urban Institute: Justice Policy Center*.

de Jong McKay, A. (2019). *An evaluation of Clackamas County's Transition Center using propensity score modeling* (Doctoral dissertation, Portland State University).

Fontaine, J., Gilchrist-Scott, D., Roman, J., Taxy, S., & Roman, C. (2012). Supportive housing for returning prisoners. *The Urban Institute: Justice Policy Center*.

Grabert, B.K., Gertner, A.K., Domino, M.E., Cuddeback, G.S., & Morrissey, J.P. (2017). Expedited Medicaid enrollment, service use, and recidivism at 36 months among released prisoners with severe mental illness. *Psychiatric Services*, *68*(10), 1079-1082.

Lee, J.D., Friedmann, P.D., Kinlock, T.W., Nunes, E.V., Boney, T.Y., Hoskinson Jr, R.A., . . . O'Brien, C.P. (2016). Extended-release naltrexone to prevent opioid relapse in criminal justice offenders. *New England Journal of Medicine*, *374*(13), 1232-1242.

Lee, J.D., McDonald, R., Grossman, E., McNeely, J., Laska, E., Rotrosen, J., & Gourevitch, M.N. (2015). Opioid treatment at release from jail using extended-release naltrexone: A pilot proof-of-concept randomized effectiveness trial. *Addiction*, *110*(6), 1008-1014.

Listwan, S. J., Hartman, J. L., & LaCourse, A. (2018). Impact of the MeckFUSE Pilot Project: Recidivism among the chronically homeless. *Justice Evaluation Journal*, *1*(1), 96-108.

Mayfield, J. (2009). The Dangerous Mentally Ill Offender Program four-year felony recidivism and cost effectiveness (Document No. 09-02-1901). *Olympia, WA: Washington State Institute for Public Policy*.

Sacks, S., Chaple, M., Sacks, J.Y., McKendrick, K., & Cleland, C.M. (2012). Randomized trial of a reentry modified therapeutic community for offenders with co-occurring disorders: Crime outcomes. *Journal of Substance Abuse Treatment*, *42*(3), 247-259.

Sacks, S., Sacks, J.Y., McKendrick, K., Banks, S., & Stommel, J. (2004). Modified TC for MICA offenders: Crime outcomes. *Behavioral Sciences & the Law*, *22*(4), 477-501.

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