February 2018

Inventory of Evidence-Based, Research-Based, and Promising Programs for Adult Corrections

A series of public policy reforms have moved Washington State toward investing in "evidence-based" programs to reduce crime.¹ The purpose of these reforms is to identify and implement strategies, shown through rigorous research, to improve statewide outcomes (e.g., crime rates) cost-effectively.

The 2013 Legislature passed a bill to facilitate the use of evidence-based programs in adult corrections.² The legislature directed the Washington State Institute for Public Policy (WSIPP) to:

- ✓ Define the terms "evidence-based" and "research-based;" and
- ✓ Create an inventory of adult corrections programs classified as evidence-based or research-based.³

WSIPP produced the first inventory of evidence-based and research-based programs for adult corrections in 2013.⁴ The current report is an update, classifying an additional 30 programs, for a total of 57 programs on this inventory.⁵

Section I of this report contains WSIPP's research approach and the definitions used to classify programs. Updates to the current inventory are found in Section II, limitations and next steps are discussed in Section III, and the updated Adult Corrections Inventory is located in Section IV of this report.

¹ For example, see Engrossed Second Substitute House Bill 2536, Chapter 232, Laws of 2012 or Aos, S. & Drake, E. (2013). *Prison, police, and programs: Evidence-based options that reduce crime and save money* (Doc. No. 13-11-1901). Olympia: Washington State Institute for Public Policy.

² Third Engrossed Substitute Senate Bill 5034, Chapter 4, Laws of 2013.

³ The same legislation also directed the Department of Corrections (DOC) to determine if the programs it delivers are evidence-based or research-based according to the inventory developed by WSIPP and to phase-out ineffective programs.

⁴ Drake, E. (2013). *Inventory of evidence-based and research-based programs for adult corrections* (Doc. No. 13-12-1901). Olympia: Washington State Institute for Public Policy.

⁵ Bitney, K., Drake, E., Grice, J., Hirsch, M. & Lee, S. (2017). *The effectiveness of reentry programs for incarcerated persons: findings for the Washington Statewide Reentry Council* (Doc. No. 17-05- 1901). Olympia: Washington State Institute for Public Policy.

I. WSIPP Research Approach and Definitions

The Washington State Legislature often directs WSIPP to study the effectiveness and assess the potential benefits and costs of programs and policies that could be implemented in Washington State. These studies are designed to provide policy makers with objective information about which programs or policy options ("programs") work to achieve desired outcomes (e.g., reduce crime) and the long-term economic consequences of these evaluated options. In order to produce reliable results, WSIPP employs a standardized approach across policy areas.

Research Approach

To conduct these studies, we take a three-step approach:

- 1) Identify what works (and what does not). We systematically review all rigorous research evidence and estimate the program's effect on a desired outcome or set of outcomes. The evidence may indicate that a program worked (i.e., had a desirable effect on the outcomes), caused harm (i.e., had an undesirable effect on outcomes), or had no detectable effect one way or the other.
- 2) Assess the return on investment. Given the estimated effect of a program from Step 1, we estimate—in dollars and cents—how much it would benefit people in Washington to implement the program and how much it would cost the taxpayers to achieve this result. We use WSIPP's benefit-cost model to develop standardized, comparable results that illustrate the expected return on investment. We present these results with a net present value for each program, on a per-participant basis. We also consider to whom monetary benefits accrue: program participants, taxpayers, and other people in society.
- 3) Determine the risk of investment. WSIPP assesses the riskiness of our conclusions by calculating the probability that a program will at least "break even" over the long-run if critical factors—like the actual cost to implement the program and the precise effect of the program—are lower or higher than our estimates.

We follow a set of standardized procedures (see Exhibit 1) for each of these steps. These standardized procedures support the rigor of our analysis and allow programs to be compared on an apples-to-apples basis.

For full details on our methods, see WSIPP's Technical Documentation.⁶

⁶ WSIPP's meta-analytic and benefit-cost methods are described in detail in our Technical Documentation. Washington State Institute for Public Policy (December 2017). Benefit-cost technical documentation. Olympia, WA: Author.

Exhibit 1

WSIPP's Three-Step Approach

Step 1: Identify what works (and what does not)

We conduct a meta-analysis—a quantitative review of the research literature—to determine if the weight of the research evidence indicates whether desired outcomes are achieved on average.

WSIPP follows several key protocols to ensure a rigorous analysis for each program examined. We:

- Search for all studies on a topic—We systematically review the national and international research literature and consider all available studies on a program, regardless of their findings. That is, we do not "cherry pick" studies to include in our analysis.
- Screen studies for quality—We only include rigorous studies in our analysis. We require that a study reasonably attempt to demonstrate causality using appropriate statistical techniques. For example, studies must include both treatment and comparison groups with an intent-to-treat analysis. Studies that do not meet our minimum standards are excluded from analysis.
- Determine the average effect size—We use a formal set of statistical procedures to calculate an average effect size for each outcome, which indicates the expected magnitude of change caused by the program (e.g., reentry courts) for each outcome of interest (e.g., recidivism).

Step 2: Assess the return on investment

WSIPP has developed, and continues to refine, an economic model to provide internally consistent monetary valuations of the benefits and costs of each program on a per-participant basis.

Benefits to individuals and society may stem from multiple sources. For example, a program that reduces the need for government services decreases taxpayer costs. If that program also improves participants' educational outcomes, it will increase their expected labor market earnings. Finally, if a program reduces crime, it will also reduce expected costs to crime victims.

We also estimate the costs required to implement an intervention. If the program is operating in Washington State, our preferred method is to obtain the service delivery and administrative costs from state or local agencies. When this approach is not possible, we estimate costs using the research literature, using estimates provided by program developers, or using a variety of sources to construct our own estimate.

Step 3: Determining the risk of investment

Any tabulation of benefits and costs involves a degree of uncertainty about the inputs used in the analysis, as well as the bottom-line estimates. An assessment of risk is expected in any investment analysis, whether in the private or public sector.

To assess the riskiness of our conclusions, we look at thousands of different scenarios through a Monte Carlo simulation. In each scenario we vary a number of key factors in our calculations (e.g., expected effect sizes, program costs), using estimates of error around each factor. The purpose of this analysis is to determine the probability that a particular program or policy will produce benefits that are equal to or greater than costs if the real-world conditions are different than our baseline assumptions.

Definitions

The Washington State Legislature enacted statutes during the mid-1990s to promote evidence-based approaches to several public policies. "Evidence-based" was not consistently defined in the early legislation but, in general, described a program or policy that was supported by rigorous research to demonstrate effectiveness.

Since 2012, WSIPP has received legislative assignments to define evidence-based and research-based practices for other policy areas including adult behavioral health, children's services, and K–12 education.⁸ For these policy areas, an additional category of "promising" was also included. "Promising" is defined as a program or practice, with a well-established "theory of change," that shows potential for classification as either evidence-based or research-based but does not meet the specific criteria for those definitions. The current adult corrections inventory now includes promising programs.

Exhibit 2 contains the definitions used to classify programs for this report. While the definitions used to build this inventory have not changed since the initial publication in 2013, programs may be classified differently with each update as new research becomes available or as the methods or inputs for our benefit-cost approach change. Thus, it is important to emphasize that the inventory is a living document that can and does change as new evidence and information is incorporated into the most recent analysis.

⁷ Drake, E. (2012). Reducing crime and criminal justice costs: Washington State's evolving research approach. *Justice Research and Policy*, 14(1).

⁸ The definitions were subsequently enacted by the 2013 Legislature for adult behavioral health services. We classify programs in other policy areas according to the statutory definitions for adult behavioral health (See: Second Substitute Senate Bill 5732, Chapter 338, Laws of 2013).

Exhibit 2WSIPP Classifications for Adult Corrections

Evidence-based	A program or practice that has been tested in a heterogeneous or intended population with multiple randomized and/or statistically controlled evaluations, or one large multiple-site randomized and/or statistically controlled evaluation, where the weight of the evidence from a systematic review demonstrates sustained improvements in outcomes of interest. Further, "evidence-based" means a program or practice that can be implemented with a set of procedures to allow successful replication in Washington and, when possible, has been determined to be cost-beneficial.
Research-based	A program or practice that has been tested with a single randomized and/or statistically controlled evaluation demonstrating sustained desirable outcomes; or where the weight of the evidence from a systematic review supports sustained outcomes identified in the term "evidence-based" in RCW (the above definition) but does not meet the full criteria for "evidence-based." Further, "research-based" means a program or practice that can be implemented with a set of procedures to allow successful replication in Washington.
Promising practice	A program or practice that, based on statistical analyses or a well-established theory of change, shows potential for meeting the "evidence-based" or "research-based" criteria, which could include the use of a program that is evidence-based for outcomes other than the alternative use.
Null	A program or practice that has been tested in a heterogeneous or intended population with multiple randomized and/or statistically controlled evaluations yet has no significant effect on outcomes of interest.
Poor	A program or practice that has been tested in a heterogeneous or intended population with multiple randomized and/or statistically controlled evaluations where the weight of the evidence from a systematic review demonstrates produces poor (undesirable) effects on outcomes of interest.

For each program where research is available, we conduct meta-analysis and benefit-cost analysis to classify practices as evidence- or research-based according to the above definitions. To assemble the inventory, we operationalize each criterion for the purpose of classification. These are the same criteria WSIPP has used in assembling inventories in other policy areas. The criteria are as follows:

1) Heterogeneity. To be designated as evidence-based, the state statute requires that a program has been tested on a "heterogeneous" population. We operationalize heterogeneity in two ways. First, the proportion of program participants belonging to ethnic/racial minority groups must be greater than or equal to the proportion of persons aged 18 or older in Washington State. According to the 2010 United States Census, 81% of adults were Caucasian and 19% belonged to ethnic/racial minority groups. Thus, if the weighted average of the program participants in the outcome evaluations of the

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⁹ United States Census Bureau, 2010.

program were made up of at least 19% people from ethnic/racial minority groups, the programs are considered to have been tested on heterogeneous populations.

Second, the heterogeneity criterion can also be achieved if at least one of a program's outcome evaluations has been conducted on persons in Washington and a subgroup analysis demonstrates the program is effective for ethnic/racial minorities (p < 0.20).

Programs that do not meet either of these two criteria do not meet the heterogeneity definition.

2) Weight of the evidence. To meet the evidence-based definition, results from a random effects meta-analysis (p-value < 0.20) of multiple evaluations or one large multiple-site evaluation must indicate the practice achieves the desired outcome(s). To meet the research-based definition, one single-site evaluation must indicate the practice achieves the desired outcomes (p-value < 0.20).

If results from a random-effects meta-analysis of multiple evaluations are not statistically significant (p-value > 0.20) for desired outcomes, the practice may be classified as "Null." If results from a random-effects meta-analysis of multiple evaluations or one large multiple-site evaluation indicate that a practice produces undesirable effects (p-value < 0.20), the practice may be classified as producing poor outcomes.

- 3) <u>Benefit-cost.</u> The proposed definition of evidence-based practices requires that, when possible, a benefit-cost analysis be conducted. We use WSIPP's benefit-cost model to determine whether a program meets this criterion. Programs that do not have at least a 75% chance of a positive net present value do not meet the benefit-cost test. The WSIPP model uses Monte Carlo simulation to test the probability that benefits exceed costs. The 75% standard was deemed an appropriate measure of risk aversion.
- 4) <u>Single evaluation.</u> The program does not meet the minimum standard of multiple evaluations or one large multi-site evaluation contained in the current or alternative definitions.

The adult corrections inventory is displayed in Section IV of this report and is available on the WSIPP website.¹² Further information on the individual programs contained in the inventory can also be found on the WSIPP website.¹³ If a program is not listed on the inventory, we have not yet had the opportunity to review it or it may not have met the criteria described above.

¹⁰ In order to operationalize the benefit-cost criterion, net benefits must exceed costs at least 75% of the time. After considerable analysis, we found that a typical program that WSIPP has analyzed may produce benefits that exceed costs roughly 75% of the time with a p-value < 0.20. Thus, we determined that programs with p-values < 0.20 on desired outcomes should be considered research-based in order to avoid classifying programs with desirable benefit-cost results as promising.

¹¹ For information about WSIPP's benefit-cost model see WSIPP's Technical Documentation.

¹² http://www.wsipp.wa.gov/ReportFile/1682.

¹³ For information about specific program benefit-cost results see WSIPP's website.

II. Updates to the Inventory as of February 2018

WSIPP reviewed 30 new programs since the inventory was last published in 2013. Exhibit 3 displays these programs and classifications.

Exhibit 3Classifications of Programs New to the Inventory

Program/intervention	Classification*
"Swift, certain, and fair" supervision	Evidence-based
Case management (not "swift, certain, and fair") for drug-involved persons	Evidence-based
Circles of Support and Accountability	Evidence-based
Civil legal aid	Research-based
Community-based correctional facilities (Halfway houses)	Poor
Day fines	Promising
Day reporting centers	Evidence-based
Deferred prosecution of DUI offenses	Research-based
Dialectical behavior therapy	Evidence-based
Domestic violence perpetrator treatment (Non-Duluth models) **	Evidence-based
Driving Under the Influence (DUI) courts	Research-based
Electronic monitoring (parole) **	Evidence-based
Employment counseling and job training (transitional reentry from incarceration into the community)	Evidence-based
Employment counseling and job training with paid work experience in the community **	Research-based
Housing assistance with services	Null
Housing assistance without services	Evidence-based
Ignition interlock devices for alcohol-related offenses	Research-based
Jail diversion for individuals with mental illness (post-arrest)	Null
Legal financial obligation repayment interventions	Evidence-based
Life skills education	Null
Parenting programs (for incarcerated parents)	Evidence-based
Police diversion for individuals with mental illness (pre-arrest)	Promising
Police diversion for low-severity offenses (pre-arrest)	Promising

Exhibit 3 (Continued)

Classifications of Programs New to the Inventory

Program/intervention	Classification*
Reentry courts	Evidence-based
Restorative justice conferencing	Null
Revocation reduction programs	Research-based
Serious and Violent Offender Reentry Initiative (SVORI)	Evidence-based
Sex offender registration and community notification	Null
Therapeutic communities for individuals with personality disorders	Research-based
Violence reduction treatment	Null

Notes:

Previously, the inventory classified two programs as having "null or poor outcomes." WSIPP now distinguishes between programs that produce null results (no significant effect on desired outcomes) versus those that produce poor (undesirable) outcomes.

Exhibit 4 displays changes in classification due to "Null" definition revisions. Two programs classified previously as null/poor were revised to null because their effects on crime were not statistically significant.

Exhibit 4Revised Classifications of Null/Poor Programs

Program/intervention	Prior classification*	Current classification	Reason for classification change
Domestic violence perpetrator treatment (Duluth-based model)	Null/Poor	Null	Revised null definition
Intensive supervision (surveillance only)	Null/Poor	Null	Revised null definition

Note:

^{*}Programs with multiple evaluations that do not demonstrate statistically significant results are classified as "Null." Programs with multiple evaluations that produce statistically significant poor (undesirable) outcomes are classified as "Poor."

^{**}Program was previously collapsed into a larger category in the 2013 Adult Corrections Inventory.

^{*}Classifications from 2013 Adult Corrections Inventory.

Since the previous inventory, WSIPP updated the analyses of all programs in this report. Because the inventory is a living document that can and does change as we incorporate new research evidence or improve our methods, classification of programs can also change. ¹⁴ Exhibit 5 displays programs where the classification changed since the last inventory was published and the reason for the change.

Exhibit 5Classification Revised Due to Updated Meta-Analyses or Benefit-Cost Modeling

Program/intervention name	Prior classification*	Current classification	Reason for classification change
Drug Offender Sentencing Alternative (for persons convicted of drug offenses)	Research-based	Evidence-based	Updated statistical calculations
Drug Offender Sentencing Alternative (for persons convicted of property offenses)	Research-based	Promising	Updated statistical calculations
Employment counseling and job training in the community **	Evidence-based	Research-based	Revised included studies, Updated statistical calculations
Employment counseling and job training with paid work experience in the community **	Evidence-based	Research-based	Revised included studies, Updated statistical calculations
Inpatient or intensive outpatient drug treatment in the community	Evidence-based	Null	Included new research, Revised included studies, Updated statistical calculations
Offender Reentry Community Safety Program (for individuals with serious mental illness)	Research-based	Evidence-based	Updated statistical calculations
Treatment during incarceration for individuals convicted of sex offenses	Evidence-based	Research-based	Included new research, Revised included studies, Updated statistical calculations
Treatment in the community for individuals convicted of sex offenses	Evidence-based	Research-based	Included new research, Revised included studies, Updated statistical calculations

Notes

^{*}Classification from 2013 Adult Corrections Inventory.

^{**} Program was previously collapsed into a larger category in the 2013 Adult Corrections Inventory.

¹⁴ Programs can change classification when new research evidence has been located, revisions to the list of studies included in the meta-analysis, updating statistical calculations, and revising program costs.

III. Limitations and Next Steps

The benefit-cost analyses in this report reflect only those outcomes that were measured in the studies we reviewed. We focus primarily on outcomes that are "monetizable" with WSIPP's current benefit-cost model. "Monetizable" means that we can associate the outcome with future economic consequences such as criminal justice involvement or labor market earnings. At this time, we are unable to monetize some outcomes for criminal justice-involved individuals (e.g., homelessness and obtaining a high school diploma or college degree).

The next update to this inventory is contingent upon funding.

February 2018 Inventory of Evidence-Based, Research-Based, and Promising Programs for Adult Corrections

				Effect size						
Program/intervention	Manual	Prior classificiation	Current classification	Cost- beneficial	Reason program does not meet evidence- based criteria (see full definitions at the end of the inventory)	Percent minority	Outcome	Effect size (adjusted)	p-value	Number in treatment group
"Swift, certain, and fair" supervision	Yes	N/A	•	87%		38%	Crime	-0.095	0.069	6,790
Case management ("swift, certain, and fair") for drug- involved persons	Varies*	•	•	100%		54%	Crime	-0.183	0.023	4,570
Case management (not "swift, certain, and fair") for drug- involved persons	Varies*	N/A	•	85%		72%	Crime	-0.047	0.163	3,625
Circles of Support and Accountability	Yes	N/A	•	93%		77%	Crime	-0.321	0.032	110
							Court burden	0.027	0.789	248
Civil legal aid	Varies*	N/A	•	N/A	Weight of the evidence	77%	Litigation success	0.278	0.051	860
Cognitive behavioral therapy (CBT) (for individuals classified as high- or moderate-risk)	Varies*	•	•	100%		24%	Crime	-0.109	0.001	32,831
Community-based correctional facilities (Halfway houses)	Yes	N/A	0	0%	Weight of the evidence	60%	Crime	0.016	0.071	22,371
Correctional education (basic skills) **	Varies*	•	•	97%		62%	Crime	-0.114	0.008	8,603
Correctional education (post-secondary education) **	Varies*	•	•	100%		38%	Crime	-0.227	0.001	486
Correctional industries in prison	Varies*	•	•	100%		43%	Crime	-0.057	0.001	1,182
							Crime	-0.163	0.343	191
Day fines	Varies*	N/A	Р	N/A	Weight of the evidence	47%	Payments/fines/ restitution	0.327	0.267	383
							Technical violations	-0.556	0.002	191
Day reporting centers	Varies*	N/A	•	75%		89%	Crime	-0.242	0.030	400
Deferred prosecution of DUI offenses	Varies*	N/A	•	N/A	Heterogeneity	12%	Alcohol-related offenses	-0.165	0.003	3,647
Dialectical behavior therapy	Yes	N/A	•	N/A		43%	Psychiatric symptoms	-0.356	0.082	49

Evidence-based

⊕ Research-based P Promising
 ○ Poor outcomes
 Null Null outcomes
 NR Not reported

Notes:

N/A: Information not available at this time and/or program was not classified in previous inventory

The classifications in this document are current as of February 2018. For the most up-to-date results, please visit the program's page on our website http://www.wsipp.wa.gov/BenefitCost

^{*} This is a general program/intervention classification. Some programs within this classification have manuals and some do not. The results listed on the inventory represent a typical, or average, implementation.

[^] Heterogeneity criterion is achieved because at least one of the studies has been conducted on adults in Washington, and a subgroup analysis demonstrates the program is effective for minorities (p < 0.20).

^{**} Program was collapsed into larger category in previous inventory.

February 2018
Inventory of Evidence-Based, Research-Based, and Promising Programs for Adult Corrections

				Effect size						
Program/intervention	Manual	Prior classificiation	Current classification	Cost- beneficial	Reason program does not meet evidence- based criteria (see full definitions at the end of the inventory)	Percent minority	Outcome	Effect size (adjusted)	p-value	Number in treatment group
Domestic violence perpetrator treatment (Duluth-based model) **	Yes	Null/poor	Null	24%	Weight of the evidence	N/A	Crime	0.016	0.894	1,140
							Alcohol use	-0.026	0.756	38
Domestic violence perpetrator treatment (Non-Duluth							Crime	-0.071	0.046	560
models) **	Varies*	N/A	•	N/A		47%	Domestic violence	-0.064	0.045	713
							Substance use	0.109	0.197	38
Driving Under the Influence (DUI) courts	Varies*	N/A	•	19%	Benefit-cost/heterogeneity	17%	Crime	-0.223	0.001	474
Drug Offender Sentencing Alternative (for persons convicted of drug offenses) ^	Yes	•	•	99%		N/A	Crime	-0.272	0.014	264
Drug Offender Sentencing Alternative (for persons convicted of property offenses) ^	Yes	•	Р	71%	Single evaluation	N/A	Crime	-0.151	0.504	59
Drug courts	Varies*	•	•	100%		42%	Crime	-0.255	0.001	29,452
Electronic monitoring (parole) **	Varies*	•	•	100%		41%	Crime	-0.069	0.001	11,777
Electronic monitoring (probation) **	Varies*	•	•	93%		40%	Crime	-0.164	0.130	7,036
Employment counseling and job training (transitional reentry from incarceration into the community)	Varies*	N/A	•	97%		58%	Crime	-0.224	0.019	338
Employment counseling and job training in the community **	Varies*	•	•	73%	Benefit-cost	56%	Crime	-0.059	0.111	2,830
Employment counseling and job training with paid work experience in the community **	Varies*	•	•	46%	Benefit-cost	91%	Crime	-0.087	0.021	4,973
Housing assistance with services	Varies*	N/A	Null	3%	Weight of the evidence	80%	Crime	-0.079	0.267	1,143
Housing assistance without services	Varies*	N/A	•	92%		36%	Crime	-0.098	0.021	1,794
Ignition interlock devices for alcohol-related offenses	Varies*	N/A	•	N/A	Heterogeneity	18%	Alcohol-related offenses	-0.265	0.004	3,363
Inpatient or intensive outpatient drug treatment during incarceration	Varies*	•	•	98%		58%	Crime	-0.123	0.013	1,968

Evidence-based

N/A: Information not available at this time and/or program was not classified in previous inventory

● Research-based P Promising○ Poor outcomesNull outcomesNR Not reported

The classifications in this document are current as of February 2018. For the most up-to-date results, please visit the program's page on our website http://www.wsipp.wa.gov/BenefitCost

^{*} This is a general program/intervention classification. Some programs within this classification have manuals and some do not. The results listed on the inventory represent a typical, or average, implementation.

[^] Heterogeneity criterion is achieved because at least one of the studies has been conducted on adults in Washington, and a subgroup analysis demonstrates the program is effective for minorities (p < 0.20).

^{**} Program was collapsed into larger category in previous inventory.

February 2018 **Inventory of Evidence-Based, Research-Based, and Promising Program for Adult Corrections**

	Inventory definition								Effect size			
Program/intervention	Manual	Prior classificiation	Current classification	Cost- beneficial	Reason program does not meet evidence- based criteria (see full definitions at the end of the inventory)	Percent minority	Outcome	Effect size (adjusted)	p-value	Number in treatment group		
Inpatient or intensive outpatient drug treatment in the community	Varies*	•	Null	33%	Weight of the evidence	59%	Crime	-0.007	0.239	8,683		
Intensive supervision (surveillance and treatment)	Varies*	•	•	100%		50%	Crime	-0.156	0.004	3,078		
Intensive supervision (surveillance only)	Varies*	Null/poor	Null	53%	Weight of the evidence	65%	Crime	-0.005	0.921	2,095		
Jail diversion for individuals with mental illness (post-arrest)	Varies*	N/A	Null	50%	Weight of the evidence	58%	Crime	-0.020	0.627	556		
Legal financial obligation repayment interventions	Varies*	N/A	•	N/A		41%	Payments/fines/ restitution	0.158	0.151	1,116		
Life skills education	Varies*	N/A	Null	34%	Weight of the evidence	61%	Crime	0.009	0.877	1,130		
Mental health courts	Yes	•	•	95%		65%	Crime	-0.168	0.001	1,424		
Offender Reentry Community Safety Program (for individuals with serious mental illness)	Yes	•	•	96%		28%	Crime	-0.756	0.001	172		
Outpatient or non-intensive drug treatment during incarceration	Varies*	•	•	99%		66%	Crime	-0.098	0.008	2,205		
Outpatient or non-intensive drug treatment in the community	Varies*	•	•	100%		44%	Crime	-0.122	0.014	42,338		
Parenting programs (for incarcerated parents)	Varies*	N/A	•	N/A		58%	Parenting success	0.280	0.074	49		
Police diversion for individuals with mental illness (prearrest)	Varies*	N/A	Р	1%	Single evaluation	64%	Crime	0.089	0.275	290		
Police diversion for low-severity offenses (pre-arrest)	Varies*	N/A	Null	87%	Weight of the evidence	61%	Crime	-0.093	0.260	247		
Reentry courts	Yes	N/A	•	95%		98%	Crime	-0.174	0.008	584		
Restorative justice conferencing	Varies*	N/A	Null	58%	Weight of the evidence	28%	Crime	-0.072	0.641	266		

Evidence-based

N/A: Information not available at this time and/or program was not classified in previous inventory

A Heterogeneity criterion is achieved because at least one of the studies has been conducted on adults in Washington, and a subgroup analysis demonstrates the program is effective for minorities (p < 0.20).

The classifications in this document are current as of February 2018. For the most up-to-date results, please visit the program's page on our website http://www.wsipp.wa.gov/BenefitCost

 [⊕] Research-based P Promising
 ○ Poor outcomes
 Null Null outcomes
 NR Not reported

^{*} This is a general program/intervention classification. Some programs within this classification have manuals and some do not. The results listed on the inventory represent a typical, or average, implementation.

^{**} Program was collapsed into larger category in previous inventory.

February 2018 Inventory for Evidence-Based, Research-Based, and Promising Programs for Adult Corrections

	Inventory definition							Effect size				
Program/intervention	Manual	Prior classificiation	Current classification	Cost- beneficial	Reason program does not meet evidence- based criteria (see full definitions at the end of the inventory)	Percent minority	Outcome	Effect size (adjusted)	p-value	Number in treatment group		
							Crime	-0.328	0.084	162		
Revocation reduction programs	Varies*	N/A	•	N/A	Single evaluation	68%	Technical violations	-0.203	0.312	162		
Risk Need and Responsivity supervision (for individuals classified as high- and moderate-risk)	Varies*	•	•	98%		36%	Crime	-0.109	0.001	8,575		
Serious and Violent Offender Reentry Initiative (SVORI)	Varies*	N/A	•	89%		64%	Crime	-0.279	0.001	1,772		
Sex offender registration and community notification	Varies*	N/A	Null	33%	Weight of the evidence	30%	Crime	0.016	0.836	19,142		
Therapeutic communities (during incarceration) for individuals with substance use disorders	Varies*	•	•	96%		55%	Crime	-0.089	0.001	6,263		
Therapeutic communities (in the community) for individuals with co-occurring disorders	Varies*	•	•	87%		66%	Crime	-0.160	0.001	588		
Therapeutic communities (in the community) for individuals with substance use disorders	Varies*	•	•	80%		86%	Crime	-0.102	0.001	669		
Therapeutic communities for individuals with personality disorders	Varies*	N/A	•	N/A	Single evaluation	N/A	Crime	-0.175	0.159	694		
Treatment during incarceration for individuals convicted of sex offenses	Varies*	•	•	62%	Benefit-cost	28%	Crime	-0.070	0.013	2,939		
Treatment in the community for individuals convicted of sex offenses	Varies*	•	•	60%	Benefit-cost	44%	Crime	-0.050	0.090	960		
Violence reduction treatment	Varies*	N/A	Null	29%	Weight of the evidence	34%	Crime	-0.019	0.765	409		
Vocational education in prison	Varies*	•	•	97%		47%	Crime	-0.167	0.001	1,950		
Work release	Varies*	•	•	99%		38%	Crime	-0.036	0.061	24,013		

Evidence-based

● Research-based P Promising○ Poor outcomesNull outcomesNR Not reported

N/A: Information not available at this time and/or program was not classified in previous inventory

The classifications in this document are current as of February 2018. For the most up-to-date results, please visit the program's page on our website http://www.wsipp.wa.gov/BenefitCost

^{*} This is a general program/intervention classification. Some programs within this classification have manuals and some do not. The results listed on the inventory represent a typical, or average, implementation.

[^] Heterogeneity criterion is achieved because at least one of the studies has been conducted on adults in Washington, and a subgroup analysis demonstrates the program is effective for minorities (p < 0.20).

^{**} Program was collapsed into larger category in previous inventory.

Definitions and Notes:

Classification Definitions:

Evidence-based: A program or practice that has been tested in heterogeneous or intended populations with multiple randomized and/or statistically-controlled evaluations, or one large multiple-site

randomized and/or statistically-controlled evaluation, where the weight of the evidence from a systematic review demonstrates sustained improvements in outcomes of interest. Further, "evidence-based" means a program or practice that can be implemented with a set of procedures to allow successful replication in Washington, and when possible, has been

determined to be cost-beneficial.

Research-based: A program or practice that has been tested with a single randomized and/or statistically-controlled evaluation demonstrating sustained desirable outcomes, but does not meet the

full criteria for "evidence-based."

Promising: A program or practice that, based on statistical analyses or a well-established theory of change, shows potential for meeting "evidence-based" or "research-based" criteria, which

could include the use of a program that is evidence-based for outcomes other than the alternative use.

Null: A program or practice that has been tested in a heterogeneous or intended population with multiple randomized and/or statistically-controlled evaluations, and yet has no significant

effect on improvements in outcomes of interest.

Poor: A program or practice that has been tested in a heterogeneous or intended population with multiple randomized and/or statistically controlled evaluations where the weight of the

evidence from a systematic review demonstrates produces poor (undesirable) effects on outcomes of interest.

Other Definitions:

Cost-beneficial: A program or practice where the monetary benefits exceed costs with a high degree of probability according to the Washington State Institute for Public Policy.

Manual/implementation A program has a manual to allow implementation with a set of procedures to allow successful replication. WSIPP operationalizes this element by following the recommendations of

Lipsey et al., (2010). Lipsey et al., (2010) found four important characteristics for effective programs. First, programs must be targeted towards higher-risk offenders. Second, programs should follow theoretical principles of a therapeutic approach that focuses on changing behaviors or skills (as opposed to programs that are rooted in punishment or deterrence). Third, model programs such as *Thinking 4 a Change* are good choices, but generic or local programs are rooted in those same principles are also effective. Lastly, quality assurance and fidelity to the model are essential and indicators such as high dropout rates or staff turnover can indicate poor quality assurance. When a broad grouping of programs, such as cognitive behavioral therapy (CBT), does not have a specific manual, but follow the aforementioned four principles of implementation, we classify the program as evidence-based. However, some programs within these categories (e.g., *Thinking 4 a Change* in the CBT category) have very specific "off-the-shelf" manuals as indicated in the column,

"Manual," on the inventory.

Reasons Programs May Not Meet Suggested Evidence-Based Criteria:

Benefit-cost: The proposed definition of evidence-based practices requires that, when possible, a benefit-cost analysis be conducted. We use WSIPP's benefit-cost model to determine whether a

program meets this criterion. Programs that do not have at least a 75% chance of a positive net present value do not meet the benefit-cost test. The WSIPP model uses Monte Carlo

simulation to test the probability that benefits exceed costs. The 75% standard was deemed an appropriate measure of risk aversion.

Heterogeneity: To be designated as evidence-based, the state statute requires that a program has been tested on a "heterogeneous" population. We operationalize heterogeneity in two ways. First,

the proportion of program participants belonging to ethnic/racial minority groups must be greater than or equal to the proportion of minority children aged 0 to 17 in Washington. From the 2010 Census, for adults aged 18 or older, 81% were white and 19% were minorities. Thus, if the weighted average of program participants in the outcome evaluations of the

program is at least 19% ethnic/racial minority, then the program is considered to have been tested in heterogeneous population.

Single evaluation: The program does not meet the minimum standard of multiple evaluations or one large multiple-site evaluation contained in the current or proposed definitions.

Weight of the evidence: To meet the evidence-based definition, results from a random effects meta-analysis (p-value < 0.20) of multiple evaluations or one large multiple-site evaluation must indicate the

practice achieves the desired outcome(s). To meet the research-based definition, one single-site evaluation must indicate the practice achieves the desired outcomes (p-value < 0.20). If results from a random-effects meta-analysis of multiple evaluations are not statistically significant (p-value < 0.20) for desired outcomes, the practice may be classified as "Null." If results from a random-effects meta-analysis of multiple evaluations or one large multiple-site evaluation indicate that a practice produces undesirable effects (p-value < 0.20), the

practice may be classified as producing poor outcomes.

¹⁵ Lipsey, M., Howell, J., Kelly, M., Chapman, G., & Carver, D. (2010). Improving the effectiveness of juvenile justice programs: A new perspective on evidence-based practice. Center for Juvenile Justice Reform.

Suggested citation: 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.

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Document No. 18-02-1901



Washington State Institute for Public Policy

The Washington State Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the legislature, the governor, and public universities—governs WSIPP and guides the development of all activities. WSIPP's mission is to carry out practical research, at legislative direction, on issues of importance to Washington State.