



# **Budgeting for Results**

Illinois Department of Juvenile Justice  
Substance Use Disorder Program  
Program Assessment



## Introduction

The statute that created Budgeting for Results (BFR) states that in Illinois, budgets submitted and appropriations made must adhere to a method of budgeting where priorities are justified each year according to merit (Public Act 96-958). The BFR Commission, established by the same statute, has worked since 2011 to create and implement a structure for data-driven program assessment useful to decision makers.

The BFR framework utilizes the Results First benefit-cost model<sup>1</sup> and the State Program Assessment Rating Tool to produce comprehensive assessments of state funded programs.

The Pew-MacArthur Results First Initiative developed a benefit-cost analysis model based on methods from the Washington State Institute for Public Policy (WSIPP). The Results First benefit-cost model can conduct analysis on programs within multiple policy domains including; adult crime, juvenile justice, substance use disorders, K-12 education, general prevention, health, higher education, mental health, and workforce development.

The State Program Assessment Rating Tool (SPART) combines both quantitative (benefit-cost results) and qualitative components in a comprehensive report. It is based on the federal Program Assessment Rating Tool (PART)<sup>2</sup> developed by the President's Office of Management and Budget and has been modified for state use. The SPART provides a universal rating classification to allow policy makers and the public to more easily compare programs and their performance across results areas.

## Methods

BFR begins each assessment by modeling an Illinois program's design and assessing its implementation. Each program is then matched with an existing rigorously studied program or policy. BFR completes a comprehensive review of related program literature to inform the modeling and matching process.

Each rigorously studied program has an effect size determined from existing validated research that summarizes the extent to which a program impacts a desired outcome. The effect size is useful in understanding the impact of a program run with fidelity to best practices or core principles.

The Results First benefit-cost model uses the effect size combined with the state's unique population and resource characteristics to project the optimal return on investment that can be realized by taxpayers, victims of crime, and others in society when program goals are achieved.

The SPART contains summary program information, historical and current budgetary information, the statutory authority for the program, performance goals and performance measures. The SPART tool consists of weighted questions, which tally to give a program a numerical score of 1-100. Numerical scores are converted into qualitative assessments of program performance: effective, moderately effective, marginal and not effective.

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<sup>1</sup> <https://www.pewtrusts.org/en/projects/pew-macarthur-results-first-initiative>

<sup>2</sup> <https://georgewbush-whitehouse.archives.gov/omb/performance/index.html>

## **Section 1**

# **Results First Benefit-Cost Report**

## Benefit-Cost Summary – DJJ Substance Use Disorder Program

This is the benefit-cost analysis in the Juvenile Crime domain of the Illinois Department of Juvenile Justice (DJJ) substance use disorder (SUD) program. SUD among adolescents is a significant public safety and health issue, and specifically a significant concern for youth within the criminal justice system. There are numerous benefits to youth and their communities in reducing SUD, including its role in perpetuating other destructive behavior. Adolescents are uniquely impacted by peer dynamics and pressures that can influence substance use, and are also more vulnerable to the physical, cognitive and emotional effects of substances due to their stage of development.

The SUD Program uses a holistic approach towards treating SUD among youth in DJJ custody based on the Interactive Journaling Forward Thinking curriculum. This program is linked to several outcomes, including decreased substance abuse and increased high school graduation, however this report is only analyzing the program’s impact on DJJ’s primary outcome, a reduction in recidivism.

The DJJ SUD program was chosen to be analyzed using the Results First benefit-cost model due to the role of increasingly updated evidence and the potential impact of the program on the State of Illinois and DJJ. This benefit-cost analysis completed by BFR calculated that for every one dollar spent on the SUD Program by DJJ, \$1.06 of future benefits could be realized by Illinois taxpayers and crime victims.

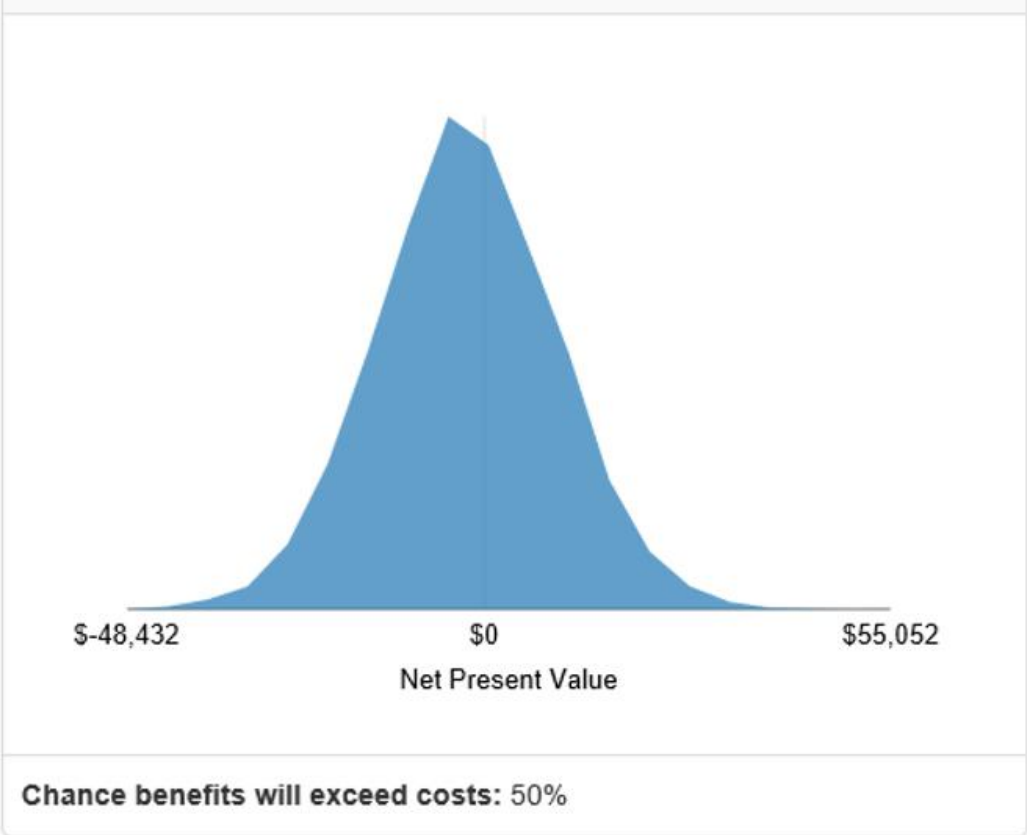
The major takeaways from this analysis can be found in Table 1 below along with its comprehensive SPART score. The optimal benefits for programs run with fidelity to best practices or core principles are determined using a standard metric called an effect size. Benefits are projected over fifty years. The real costs of a program are the sum of its direct and indirect costs. The benefits and the costs are discounted to present value. The benefit/cost ratio is the optimal return on investment (OROI) Illinois can expect from implementing the program with fidelity.

**Table 1:**

<b>Benefit-Cost Results</b>	
<b>DJJ Substance Use Disorder Program per Participant</b>	
<b>Optimal Benefits</b>	<b>\$4,440</b>
<b>Real Cost (Net)<sup>3</sup></b>	<b>\$4,184</b>
<b>Benefits – Costs (Net Present Value)</b>	<b>\$256</b>
<b>Benefits/Costs (OROI)</b>	<b>\$1.06</b>
<b>Chance Benefits Will Exceed Costs</b>	<b>50%</b>
<b>SPART Score</b>	<b>62, Moderately Effective</b>

<sup>3</sup> Cost information supplied by DJJ.

All program benefits are predictive and there is uncertainty when forecasting future outcomes. To help account for the uncertainty BFR runs each benefit-cost analysis 10,000 times with random variations in the costs and benefits. The histogram below shows the results of this risk analysis. The optimal program benefits exceeded the program costs in 50 percent of the simulations.



## Benefit-Cost Detail – DJJ Substance Use Disorder Program

### *Program Information*

Using program information gathered with DJJ, BFR identified the DJJ SUD Program as part of the broadly defined category ‘Other substance use disorder treatment for juveniles’ in the Results First benefit-cost model. This category represents the small but increasing body of literature on SUD programs for incarcerated youth. The information for the DJJ SUD Program was provided by DJJ and is described in Table 2 below. More specific program information can be found in the SPART.

**Table 2:**

Program Name	Program Description
<p align="center"><b>Substance Use Disorder Program- IYC-Warrenville</b></p>	<ul style="list-style-type: none"> <li>- Youth in the program are assessed as needing a higher level of substance use disorder treatment.</li> <li>- The program integrates pro-social values and skills using a cognitive behavioral approach combined with specialized substance use disorder services including life skill development, trauma informed practices and family engagement.</li> <li>- Average Length of stay in FY17: 62 days for successful completions</li> <li>- Groups occur four days per week, one hour per day. Additional one hour individual sessions occur per month.</li> </ul>

BFR completed a literature review of programming for residential juvenile substance use disorder. The following excerpt from Chassin, et al. (2009) explains the challenges and promises in running this program:

A small but rapidly growing number of studies have shown that substance use treatment can produce statistically significant reductions in use among juvenile offenders (or in samples in which the majority but not all of the participants are juvenile offenders (e.g., Hser et al., 2001; Dennis et al., 2005; Randall & Cunningham, 2003). However, as noted by Morral, McCaffrey, and Ridgeway (2004), most studies of adolescent drug treatment examine 'research' therapies, which are theory-driven and delivered with high fidelity within tightly controlled research settings and designs. By contrast, Morral et al. (2004) note that the most common treatments that are actually received by adolescent offenders are not 'research therapies,' but rather 'community therapies,' which are delivered under non-standardized conditions by leaders who may not be highly trained (and perhaps themselves in recovery from drug Use Disorder). Moreover, these differences in treatment implementation are likely to affect outcomes. Studies have suggested that the treatment effects seen in tightly controlled efficacy trials are greatly reduced when treatment is implemented in real-world settings (Curtis et al., 2004).

Little is known about the effects of the variety of drug treatments that are typically delivered to juvenile offenders in the 'real world' rather than in the context of a treatment outcome research study. Morral et al. (2004) found that one such program was effective in reducing substance use among juvenile offenders, but was not successful in reducing their criminal offending. []

Moreover, within the adolescent drug treatment literature, different treatment approaches have shown some positive results (including cognitive behavior therapies, contingency management, multidimensional family therapy, multisystemic therapy, residential treatment and 12-step methods), but no one treatment modality has proved to be consistently superior (Dennis et al., 2005; Morral et al., 2006). Accordingly, rather than advocate for one particular treatment modality, several groups, including the National Institute on Drug Use Disorder (2006) and the American Academy of Child and Adolescent Psychiatry (Bukstein et al., 2005), have described a set of elements that are thought to define high quality treatment and thus constitute "best practices" or "quality elements" (Drug Strategies, 2005). For example, the NIDA (2006) principles of drug treatment for criminal justice populations note that treatment must last long enough to produce stable changes, and that those with severe drug problems or cooccurring disorders usually require treatment that lasts at least three months. Both the American Academy of Child and Adolescent Psychiatry standards and the Drug Strategies best practices note that substance use disorder treatment for adolescents requires family involvement.<sup>1</sup>

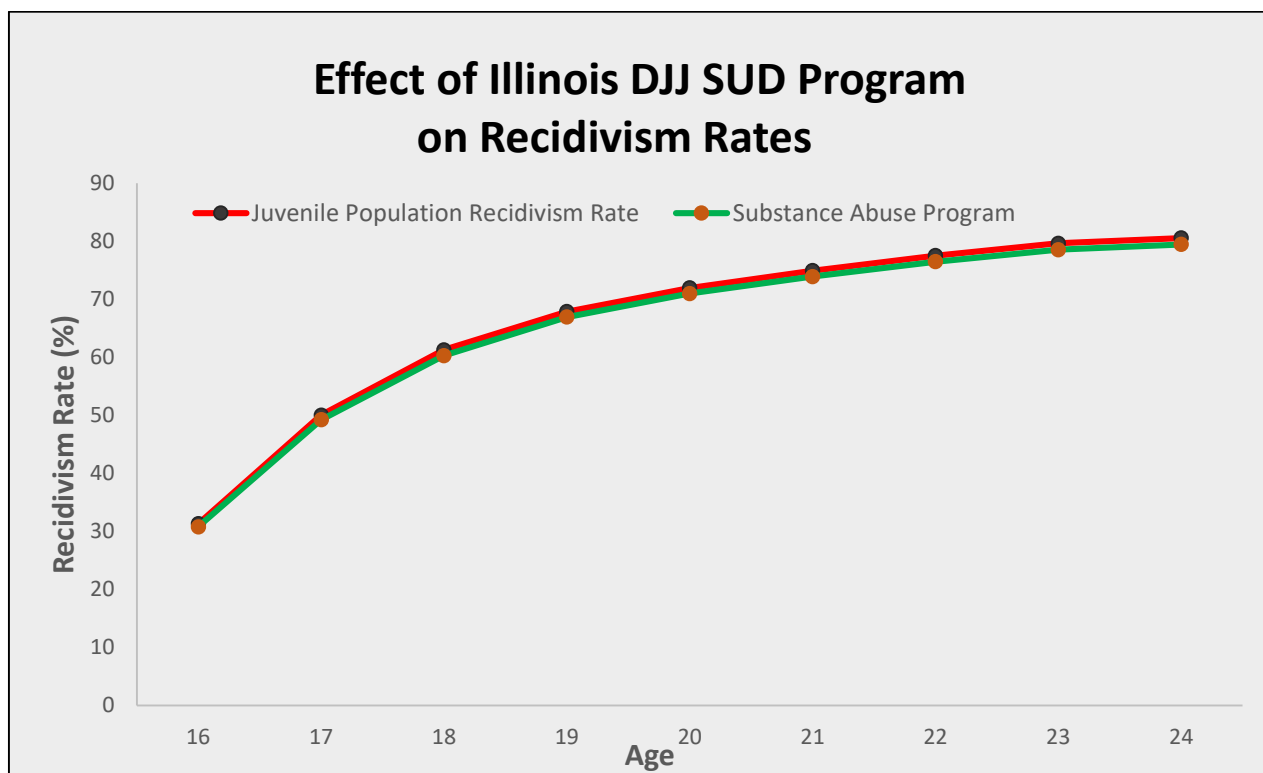
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<sup>1</sup> Chassin, L., Knight, G., Vargas-Chanes, D., Losoya, S. H., & Naranjo, D. (2009). Substance use treatment outcomes in a sample of male serious juvenile offenders. *Journal of Substance Use Disorder Treatment*, 36(2), 183-194.

## Benefit-Cost Analysis- DJJ Substance Use Disorder Program

The standard in Illinois is to track youth cohorts released from DJJ in the same year and record their recidivism over the next three years. For participants in national studies on incarcerated juveniles in SUD programs, the benefit-cost analysis predicts a modest 1.5% decrease in the recidivism rate<sup>2</sup> three years from release from DJJ custody, as shown in *Figure 1*. This recidivism rate represents the decrease that can be expected from participation in a generic SUD program for youth in detention. As previously stated, there are challenges in matching the DJJ SUD program to specific evaluations in available literature.

**Figure 1:**



DJJ tracks the recidivism rate for participants in its own program. The SUD program as it exists currently began in 2016 at IYC – Warrenville. DJJ has provided cohort recidivism information since the program began. The DJJ recidivism rate for program participants is 27% vs the most recent three-year general population rate of 52%, a decrease of 25%. The DJJ SUD program is so far showing better results than the generic SUD research predicts.

<sup>2</sup> Recidivism for juveniles is defined as conviction after release from custody.



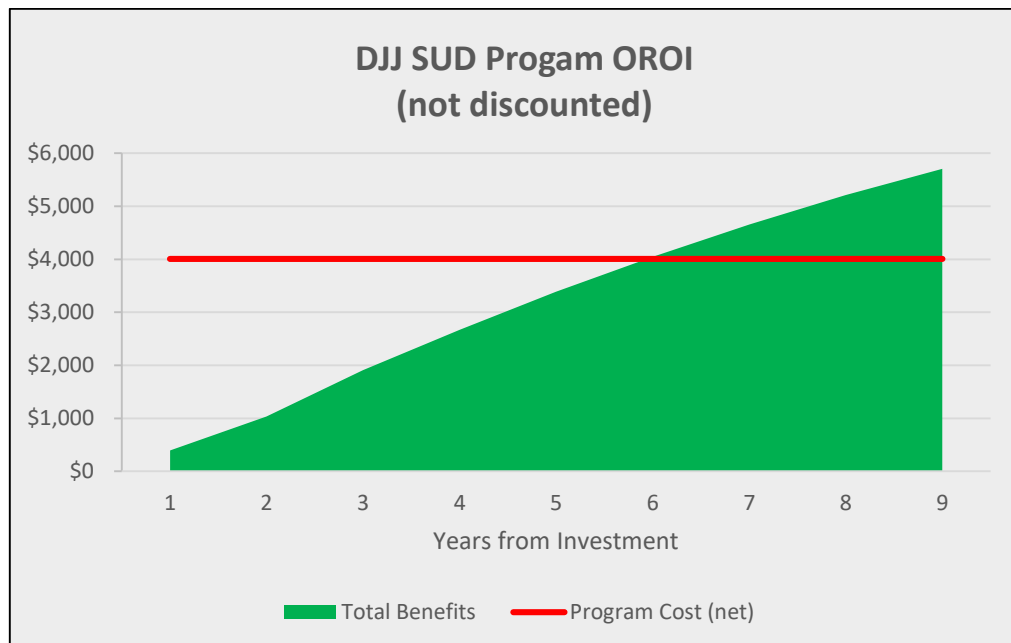
The benefits from the SUD program to DJJ come from reducing recidivism. Other benefits or costs related to substance abuse are not included in this report. The benefits are determined by calculating DJJ's avoided future costs, classified as either fixed, variable or step costs. Fixed costs do not change based on the DJJ population. Variable costs change as the population increases or decreases marginally. Step costs only change once a threshold level of DJJ population numbers are reached. The cost that could be avoided by reducing recidivism are determined by calculating the fixed, variable and step costs that would change with a change in population.

The cumulative annual costs and benefits for the DJJ SUD Program can be seen below in *Figure 2*. For this program all costs are incurred in the first year and benefits accrue over time. The red line across the graph depicts net program costs. The costs per person for the DJJ SUD program change based on the number of youth served each year. Over the 10,000 simulations BFR runs, a range of possible costs are used in order to achieve a more accurate analysis.

The green area shows how program benefits accumulate. As illustrated, the program benefits exceed the program costs beginning six years after the initial investment. The analysis indicates that over the next six years the program could recoup its investment per participant in benefits to the State and society.

The return on investment from the benefit-cost analysis only calculates the crime related outcomes. There are currently not enough studies to support a positive outcome in other result areas.

**Figure 2:**



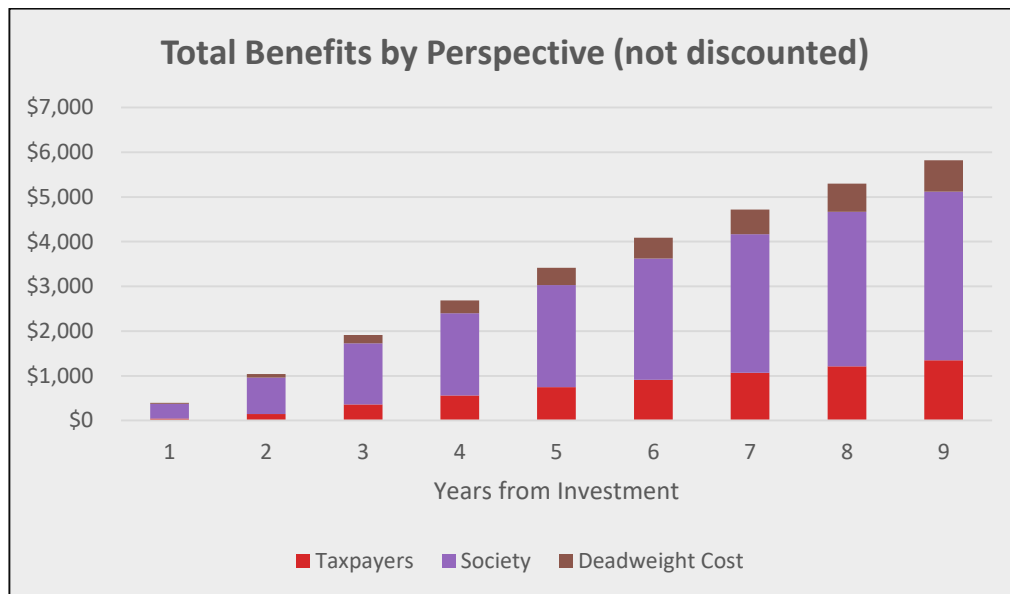
The DJJ SUD program accumulates benefits over time to various groups. The benefits to Illinois are based on avoided criminal justice expenses and avoided private costs incurred as a result of fewer crime victims. The private victimization costs include lost property, medical bills, wage loss, and the pain and suffering experienced by crime victims.

Taxpayers avoid paying for additional criminal justice system costs of arrests and processing; prosecutions, defense, and trials; and incarceration and supervision. Lower incarceration rates lead to fewer prisoners that need to be paid for by the State.

Additional indirect benefits accrue to society as well, including better use of the tax dollars that are currently raised, and future taxes that won't have to be raised to pay for avoidable costs due to recidivism. When tax revenue is spent on one program, it has an opportunity cost of revenue that cannot be spent on other beneficial programs and services like public safety or economic development. Money that is taxed is also not available for private consumption and investment. The indirect benefits of making effective, economically efficient investments to reduce criminal recidivism are quantified within the Results First model using the Deadweight Cost of Taxation.

Figure 3 below illustrates how benefits accumulate. The majority of the benefits come from future avoided victimization costs. The remaining benefits come from taxpayer costs and other avoided indirect deadweight costs.

**Figure 3:**



This is analysis run by BFR using the Results First benefit-cost model. Please see [Budget.Illinois.gov](http://Budget.Illinois.gov) for additional benefit-cost reports and supporting information.

## **Section 2**

# **State Program Assessment Rating Tool**

**State Program Assessment Rating Tool (SPART)**  
**Substance Use Disorder Treatment Program**  
425 – Illinois Department of Juvenile Justice

This report was compiled by the Budgeting for Results Unit of the Governor’s Office of Management and Budget with the support of the Department of Juvenile Justice (DJJ). The SPART is an assessment of the performance of state agency programs. Points are awarded for each element of the program including: Program Design and Benefit-Cost and Performance Management/Measurement. This combined with benefit-cost analysis through Results First establishes an overall rating of the program’s effectiveness, which can be found on the final page of this report.

**Section 1: General Information**

PY 2015	PY 2016	PY 2017	PY 2018	CY 2019	FY 2020
N/A	N/A	N/A	\$313,956	\$322,157	\$340,704

Is this program mandated by law?      Yes\_\_                      No X  
Identify the Origin of the law.            State\_\_                      Federal\_\_\_\_      Other\_\_\_\_  
Statutory Cite \_\_\_\_\_ n/a  
Program Continuum Classification        \_\_\_\_\_ Treatment, Case Identification

**Evaluability**

*Provide a brief narrative statement on factors that impact the evaluability of this program.*

The holistic approach of DJJ programming makes isolating the effect of the SUD program difficult. There is also limited research nationally on SUD programs for juveniles in facilities, creating an obstacle to BFR when matching the effect of the DJJ SUD program to other SUD programs nationally.

Each juvenile in the custody of DJJ is given an assessment and linked to a menu of services. The dose and length of the services provided depend on the juvenile and the substance use disorder counselor. This program was designed to be flexible to meet the needs of the participant. This intentional flexibility makes determining program fidelity difficult.

Key Performance Measure	FY 2014	FY 2015	FY 2016	Reported in IPRS Y/N
SUD Program recidivism rate	NA	NA	27%	N
DJJ recidivism rate	57.8%	52.1%	NA	Y

**Section 2: Program Design and Implementation**

**Total Points Available: 60**

Total Points Awarded: 32

Question	Points Available	Yes/Partial/No	Points Awarded
2.1 Is the Program: Evidence Based 25 pts Theory Informed 15 pts Unknown Effect 0 pts Negative Effect -5 pts What are the program’s core principles?	25	Theory Informed	15

**Explanation:**

The substance use disorder (SUD) treatment program throughout DJJ facilities is based on the Forward Thinking curriculum from The Change Companies. The Forward Thinking curriculum is tailored to juveniles involved with the criminal justice system. The Change Companies specializes in a clinical tool called Interactive Journaling (IJ).

DJJ began using this curriculum in 2012. At the time, IJ was one of the only juvenile residential SUD programs listed in the National Registry of Evidence-based Programs and Practices (NREPP), a database run by the Substance Abuse and Mental Health Services Administration (SAMHSA). The program endorsement has been subsequently removed as it was determined additional evidence was needed to prove its outcomes. The curriculum used by DJJ before Forward Thinking was designed for adults and deemed inappropriate programming for youth.

In its format, IJ combines elements of bibliotherapy (therapeutic reading material) and therapeutic writing, both of which have been shown to have benefits for addressing a variety of mental health concerns. In its content, IJ draws on several established change theories and frameworks including Motivational Interviewing, cognitive behavioral therapy, and the Transtheoretical Model of Change. The Forward Thinking curriculum provides a set of facilitator guides with instructions for guiding youth through the journals. Suggestions for activities and additional assignments to tailor the program to the youths’ needs are also included.

There is still a need for more rigorous evidence on IJ, and in particular on the use of IJ for juvenile offenders within a SUD program. There has been one randomized controlled trial (RCT) of IJ on substance-dependent adults in a county jail, which showed significant effects in reducing recidivism (Proctor, Hoffman, and Allison, 2012). These results are especially promising given the short and unpredictable stays of the inmates and the fact that the journals were simply provided for the inmates to work through on their own, with no additional treatment or support. In two other RCTs, one of which was on adolescents, IJ performed as well as or better than a comparison treatment group, but the studies were not designed to isolate the effect of IJ specifically (Miller, 2014).

As far as the broader research on SUD programs for juvenile offenders (on which the Results First benefit-cost analysis for this program is based), no particular program or programs have emerged as more effective than others based on rigorous evidence. However, studies have indicated certain best practices that ought to be part of a successful program. In particular, longer-duration programs (90 days or more) and programs that involve participants’ families tend to be more successful. The SUD program at IYC-Warrenville lasts a minimum of 60 days, with an average completion time of 62 days. There does not appear to be any family involvement in the SUD program specifically.

**Best Practices:**

BFR worked with the Illinois Criminal Justice Information Authority and the Sentencing Policy Advisory Council to better understand the Best Practices for a Theory-informed incarceration-based juvenile SUD program. BFR’s initial assessment is that The Forward Thinking curriculum excels at some of these practices and needs to be supplemented in others. A complete program evaluation is beyond the scope of BFR, but is recommended for the DJJ SUD program.

Question	Points Available	Yes/Partial/No	Points Awarded
2.2 Is the Program implemented and run with fidelity to the program design?	25	Partial	12

**Explanation:**

The Change Company notes that the IJ facilitator program guides are designed to give program facilitators “flexibility to present Journal material according to facilitators’ own schedules and capabilities”. Conversations with program staff have indicated that DJJ’s SUD Counselors implement the Forward Thinking curriculum with varying degrees of flexibility based on the Counselor and the juvenile, both in how they guide the youth through the journals and in which journals they use or emphasize. It is not totally clear to what extent this flexibility goes beyond the scope intended by the curriculum designers.

At most DJJ facilities, youth who are in the SUD program live together in their own cottage or wing. This is not possible at IYC-Warrenville because it is a co-ed facility, which houses all female detainees in the DJJ system as well as some minimum and medium security males. For this reason, IYC-Warrenville cannot operate a full Therapeutic Community, a core component of which is a communal living arrangement for participants. Therapeutic Communities is the model of SUD treatment in use at other DJJ facilities.

Question	Points Available	Yes/Partial/No	Points Awarded
2.3 If the program achieved full credit in question 2.2, can we expect the Optimal Return on Investment (OROI) for this program to be equal to or greater than \$1 for each \$1 spent?	10	Partial	5

**Explanation:**

All program benefits are predictive and there is uncertainty when forecasting future outcomes. To help account for the uncertainty BFR runs each benefit-cost analysis 10,000 times with random variations in the costs and benefits. According the results for the attached benefit-cost analysis, there is a 50% chance that the optimal benefits will exceed the costs. On average, the program is expected to return \$1.06 in benefits from reducing recidivism for every dollar spent. Due to limitations of existing research, this OROI does not include any benefits that may come from other outcomes, including changes in substance use among program participants.

**Section 3: Performance Management/Measurement****Total Points Available: 40**

Total Points Awarded: 20

Question	Points Available	Yes/Partial/No	Points Awarded
3.1 Does the program regularly collect timely and credible performance measures?	10	Yes	10

**Explanation:**

DJJ collects quarterly metrics the SUD program-specific youth recidivism rate. This is defined as the percentage of youth who complete the SUD program at IYC-Warrenville who are paroled, vacated, or discharged, and then return to DJJ or as adults to the Illinois Department of Corrections (IDOC) within three years of their release. DJJ also collects data on what percentage of these youth return for drug-related issues or charges. Because the SUD program at IYC-Warrenville has existed in its current format only since 2016, there has not yet been a cohort of youth tracked for a full three years after completing the program. The BFR Unit recommends that DJJ report these SUD program recidivism figures in IPRS as they become available. DJJ currently reports the overall youth recidivism rate as a metric under its Aftercare program.

Question	Points Available	Yes/Partial/No	Points Awarded
3.2 Do the performance measures focus on outcomes?	10	Yes	10

**Explanation:**

The primary outcome DJJ is seeking from its SUD program is the reduction of juvenile recidivism. The department is directly tracking its desired outcome. As stated above, it is recommended that DJJ report the recidivism data in IPRS for this program in addition to reporting the number of youth enrolled in treatment as it currently does. It is also recommended that DJJ consider whether there are other outcomes of interest, such as substance use, that could be tracked.



Question	Points Available	Yes/Partial/No	Points Awarded
3.3 Are independent and thorough evaluations of the program conducted on a regular basis or as needed to support program improvements and evaluate effectiveness?	10	No	0

**Explanation:**

There are no independent evaluations of DJJ's SUD program. There exists an independent watchdog, the John Howard Association, which periodically produces monitoring reports on DJJ facilities generally. Recent reports do not comment on the SUD program at IYC-Warrenville in any meaningful way.

Question	Points Available	Yes/Partial/No	Points Awarded
3.4 Does the Agency use performance information (including that collected from program partners) to adjust program priorities, allocate resources, or take other appropriate management actions?	10	Yes	10

**Explanation:**

Flexibility and adaptation to youth needs is a core component of the Interactive Journaling curriculum. DJJ uses information from the SUD program's Quarterly Quality Improvement Meetings to adjust program priorities, and make other appropriate management decisions, which may include additional group topics/materials, curriculum changes, program schedule changes, staff trainings, etc.

### Concluding Comments

Research on the effectiveness of SUD programs for youth in detention is limited. The broad variety of SUD programs and the need for more research on how these programs work for youth in detention present challenges for an assessment of DJJ's SUD program. The most rigorous studies on SUD programs for youth in detention are inconclusive due to the difficulty in evaluating this type of program, as mentioned in the evaluability comments above. A full program evaluation of DJJ's program is therefore recommended, in line with DJJ's embrace of an agency-wide culture moving toward greater evidence-based practices.

DJJ's SUD program curriculum, Interactive Journaling, was considered evidence-based at the time of selection, but current evidence has shown a need for greater research. DJJ has made an effort to customize the program based on updated research and observations of youths' specific needs. DJJ has also begun collecting program-specific recidivism data. Although data for a full three-year cohort is not yet available for DJJ's program, the preliminary results seem to indicate that the program may be achieving lower recidivism rates than the national research would predict. BFR encourages DJJ to continue collecting data and refining program measures.

### Final Program Score and Rating

Final Score	Program Rating
62	Moderately Effective

### SPART Ratings

Programs that are **PERFORMING** have ratings of Effective, Moderately Effective, or Adequate.

- **Effective.** This is the highest rating a program can achieve. Programs rated Effective set ambitious goals, achieve results, are well-managed and improve efficiency. Score 75-100
- **Moderately Effective.** In general, a program rated Moderately Effective has set ambitious goals and is well-managed. Moderately Effective programs likely need to improve their efficiency or address other problems in the programs' design or management in order to achieve better results. Score 50-74
- **Marginal.** This rating describes a program that needs to set more ambitious goals, achieve better results, improve accountability or strengthen its management practices. Score 25-49

Programs categorized as **NOT PERFORMING** have ratings of Ineffective or Results Not Demonstrated.

- **Ineffective.** Programs receiving this rating are not using your tax dollars effectively. Ineffective programs have been unable to achieve results due to a lack of clarity regarding the program's purpose or goals, poor management, or some other significant weakness. Score 0-24
- **Results Not Demonstrated.** A rating of Results Not Demonstrated (RND) indicates that a program has not been able to develop acceptable performance goals or collect data to determine whether it is performing.

## Glossary

**Best Practices:** Policies or activities that have been identified through evidence-based policymaking to be most effective in achieving positive outcomes.

**Evidence-Based:** Systematic use of multiple, rigorous studies and evaluations which demonstrate the efficacy of the program's theory of change and theory of action.

**Illinois Performance Reporting System (IPRS):** The state's web-based database for collecting program performance data. The IPRS database allows agencies to report programmatic level data to the Governor's Office of Management and Budget on a regular basis.

**Outcome Measures:** Outcomes describe the intended result of carrying out a program or activity. They define an event or condition that is external to the program or activity and that is of direct importance to the intended beneficiaries and/or the general public. For example, one outcome measure of a program aimed to prevent the acquisition and transmission of HIV infection is the number (reduction) of new HIV infections in the state.

**Output Measures:** Outputs describe the level of activity that will be provided over a period of time, including a description of the characteristics (e.g., timeliness) established as standards for the activity. Outputs refer to the internal activities of a program (i.e., the products and services delivered). For example, an output could be the percentage of warnings that occur more than 20 minutes before a tornado forms.

**Program:** An intervention designed to achieve an agency objective or statutory mandate.

**Results First Clearinghouse Database:** One-stop online resource providing policymakers with an easy way to find information on the effectiveness of various interventions as rated by eight nation research clearinghouses which conduct systematic research reviews to identify which policies and interventions work.

**Target:** A quantifiable metric established by program managers or the funding entity established as a minimum threshold of performance (outcome or output) the program should attain within a specified timeframe. Program results are evaluated against the program target.

**Theory Informed:** A program where a lesser amount of evidence and/or rigor exists to validate the efficacy of the program's theory of change and theory of action than an evidence-based program.

**Theory of Change:** The central processes or drives by which a change comes about for individuals, groups and communities.

**Theory of Action:** How programs or other interventions are constructed to activate theories of change.

## References

Chassin, L., Knight, G., Vargas-Chanes, D., Losoya, S. H., & Naranjo, D. (2009). Substance use treatment outcomes in a sample of male serious juvenile offenders. *Journal of Substance Abuse Treatment, 36*(2), 183-194.

Complete Set of Facilitator Guides – Forward Thinking (description). Retrieved from <https://www.changecompanies.net/products/?id=FTGC>

Kelly, W.R. (2001). *An outcome evaluation of the Texas Youth Commission's chemical dependency treatment program, final report*. Austin, TX: University of Texas.

Mee-Lee, D. (2014). Interactive Journaling: Incorporating evidence-based practices in a person-centered change process. *Paradigm, 18*(4), 6-8.

Miller, W.R. (2014). Interactive Journaling as a clinical tool. *Journal of Mental Health Counseling, 36*(1), 31-42.

Proctor, S. L., Hoffmann, N. G., & Allison, S. (2012) The Effectiveness of Interactive Journaling in Reducing Recidivism Among Substance-Dependent Jail Inmates. *International Journal of Offender Therapy and Comparative Criminology Volume 56 Issue 2*, April 2012.

Tanner-Smith, E., Wilson, S. J., & Lipsey, M. (2013). The Comparative Effectiveness of Outpatient Treatment for Adolescent Substance Abuse: A Meta-Analysis. *Journal of Substance Abuse Treatment, 44*(2), 145-158.