

ECONOMIC ANALYSIS OF AN INTEGRATED JUVENILE DRUG COURT/RECLAIMING FUTURES MODEL: METHODS AND RESULTS FROM FIVE SITES

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Presentation Overview

- Describe objectives and approach to conducting multisite cost analysis of Juvenile Drug Court/Reclaiming Futures (JDC/RF)
- Review main categories of resources and what comprises the incremental costs of adopting RF
- Present results of mean total cost, cost per resource category, and the range across five sites
- Discuss how cost analysis results will be compared to JDC/RF outcomes to assess economic impact
- Discuss limitations and next steps

Cost Analysis - Overview

- Conduct comprehensive *economic* cost analysis at each site to account for all resources and associated costs of JDC/RF
 - ▣ *Economic costs* include both financial (direct expenditures) and opportunity costs (e.g., volunteer effort)
- Provide cost summaries for different scenarios
 - ▣ e.g., what are the anticipated start-up and operating costs for a new site that wants to adopt RF?

Cost Analysis - Background

- Previous economic study of RF conducted in 2010 (Roman et al.)
- Cost data came from the National Program Office (NPO) expenditure reports and budget reports for individual sites
- Expenditures were organized by the type of grant under which they occurred (planning grant, implementation grant, treatment enhancement grant, communications grant, local evaluation grant)
- Also looked at potential savings from reduced recidivism and estimated the number of served youth needed to “break even”
- Cost of standard operations for the average site over a four-year period was \$1.1 million (ranged from \$799,815 to \$1.2 million)
- Based on potential savings from reduced recidivism, projections indicated that a JDC/RF program needs to serve a minimum of 200 participants per year to offset operating costs

Cost Analysis - Approach

- Identified core resource categories to guide cost data collection
- Prepared letter of introduction and cost survey to distribute before site visits
- Corresponded via email and conference call to answer questions and facilitate initial cost data collection before site visit
- During site visit, held individual and group meetings to review data and collect missing information
- Extensive follow-up process after the site visit to review results, clarify questions, and finalize cost estimates

JDC/RF Program Components

- **Criminal Justice System** – court personnel, defense attorney, prosecuting attorney, probation personnel and services, detention
- **Substance Use and Mental Health Treatment** – personnel, supplies, facilities, overhead
- **Consultants, Volunteers, Interns, and Community Services**
- **Miscellaneous Resources** – training and technical assistance, GAIN assessment, evaluation, distinctive components (e.g., school)

JDC/RF Program Components

- Community Partnerships and Services
 - ▣ All sites had strong ties with a diverse set of community organizations
 - ▣ Members of community organizations regularly attended change team meetings and provided youth with pro-social activities and opportunities to complete community service requirements
 - ▣ Music and art-oriented; working with animals (equine therapy); building/construction (Habitat for Humanity); special events (e.g., 5K run, participating in county fair)
- Cost analysis includes a representative sampling of these services in addition to formal/contracted arrangements between community organizations and the JDCs

Cost Analysis - Results

- Total Annual Cost per JDC/RF program
 - ▣ Criminal justice system costs
 - ▣ Behavioral Health Treatment
 - ▣ Community Services
 - ▣ Miscellaneous Administration (training, technical assistance, evaluation)
- Estimates presented at the aggregate level (across all sites)
 - ▣ Mean, Range (Minimum and Maximum) and Standard Deviation

Cost Analysis - Results

- (Average) Total Annual Cost
- Average Annual Economic Cost Per Participant
 - Based on the average daily census per program
- Average Weekly Cost Per Participant
- Average Cost Over Duration of Program
 - Based on average number of weeks youth stayed in JDC/RF program
 - Reflects the investment to send the “average” kid through the JDC/RF program

Overall Program Costs

Program Component	Minimum	Maximum	Mean	Standard Deviation
Total annual program cost	\$782,001	\$3,442,661	\$1,712,482	\$1,063,901
Average Length-of-stay	32.3	56.7	40.9	9.280
Average daily census	12	56	35.2	16.418
Weekly cost per client	\$522	\$1,250	\$963	\$338
Episode cost per client	\$19,299	\$49,369	\$38,288	\$11,716

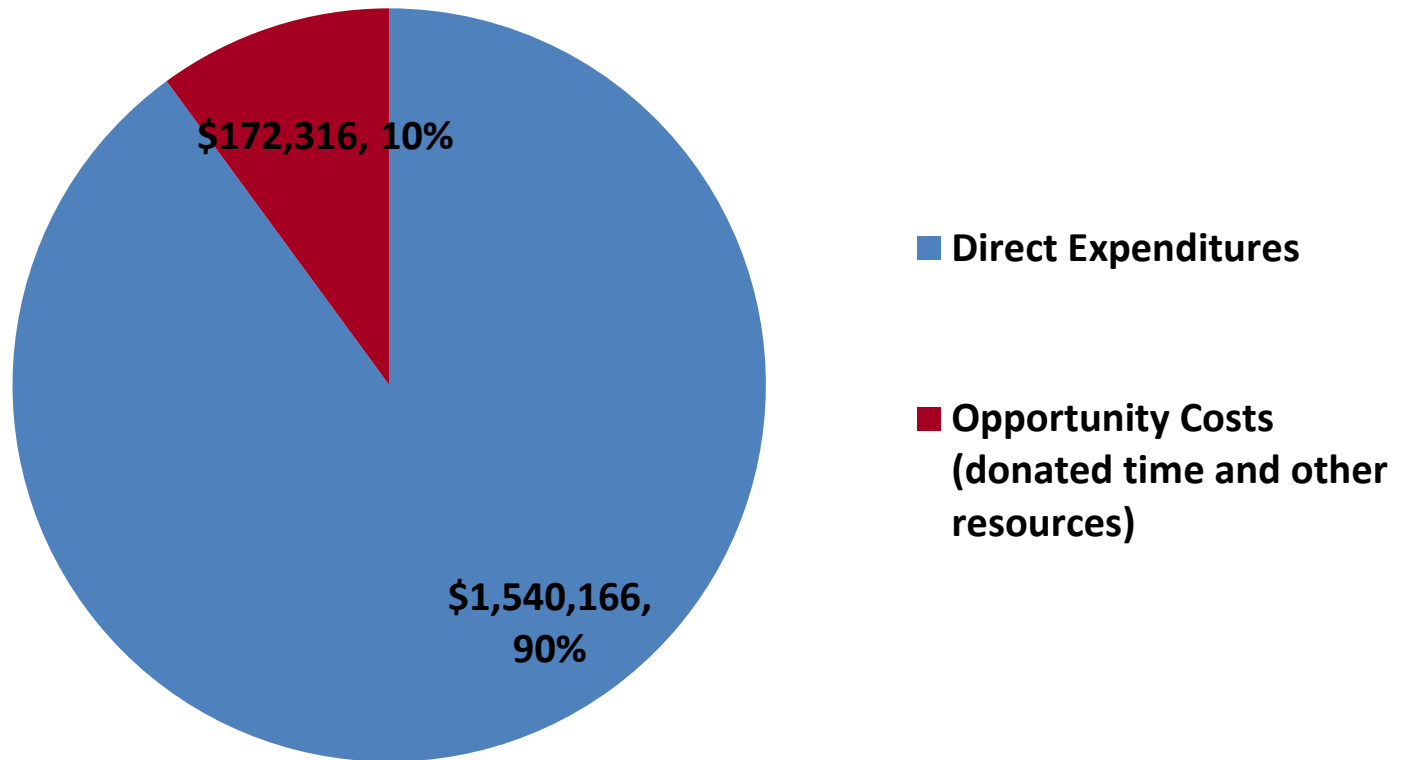
Cost of JDC/RF Program Components

Program Component	Minimum	Maximum	Mean	Standard Deviation
Criminal Justice System	\$322,951	\$1,663,504	\$867,350	\$519,857
Substance use & mental health treatment	\$65,165	\$1,320,309	\$401,169	\$524,876
Consultants, volunteers, interns, & community services	\$7,117	\$322,587	\$120,035	\$119,699
Miscellaneous	\$136,048	\$762,124	\$323,886	\$255,207

Direct Expenditures vs. Opportunity Costs

- These cost estimates represent the full value of all resources invested in the JDC/RF programs
- Opportunity costs include:
 - ▣ Unpaid time contributed by the Community Fellow
 - ▣ Unpaid time contributed by interns and volunteers
 - ▣ Donated time and resources contributed by community service organizations
 - ▣ Training and technical assistance provided by the Reclaiming Futures National Program Office and National Association for Juvenile and Family Court Judges
- The difference between direct expenditures to run the program (i.e., standard operating costs) and the opportunity cost of the program (full value of all resources invested in the program, regardless of cost or funding source) is notable

Direct vs. Opportunity costs



Incremental Costs of Reclaiming Futures

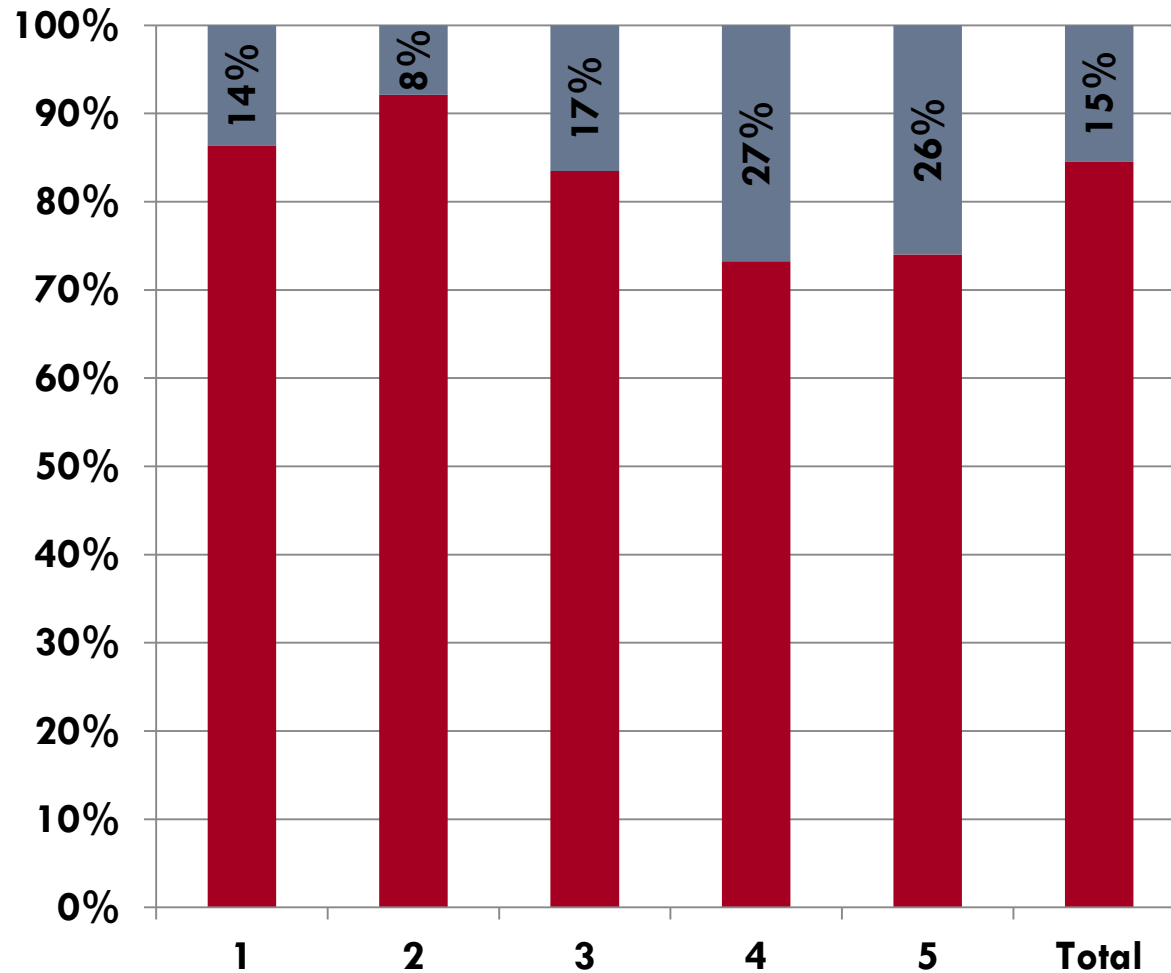
- Cost estimates reflect total cost of juvenile court programs operating within the RF framework
 - ▣ Tells us the economic cost of RF integrated within existing juvenile justice system
- Also want to describe the incremental costs of RF
- Solicited feedback from multiple staff at each site regarding financial and other implications of RF
 - ▣ What costs and/or additional responsibilities did adopting RF impose

Incremental Costs of RF – Sites' Perspective

- Time – additional time invested by court, probation, treatment, and other staff to attend change team meetings, engage with community, families, etc.
- Time invested by Community Fellows and other volunteers
- Community Services
- Training activities provided by NPO
- Use of GAIN for assessment/evaluation
- Adopting a particular evidence-based treatment (e.g., Seven Challenges)*

* At this time, the cost of adopting an EBTx is not included as part of the RF costs; data are not yet available

JDC + RF Costs Across the Five Sites



RF costs ranged from 8% to 27% across the five sites

■ % RF Costs (RF/Total)

■ % Non-RF costs

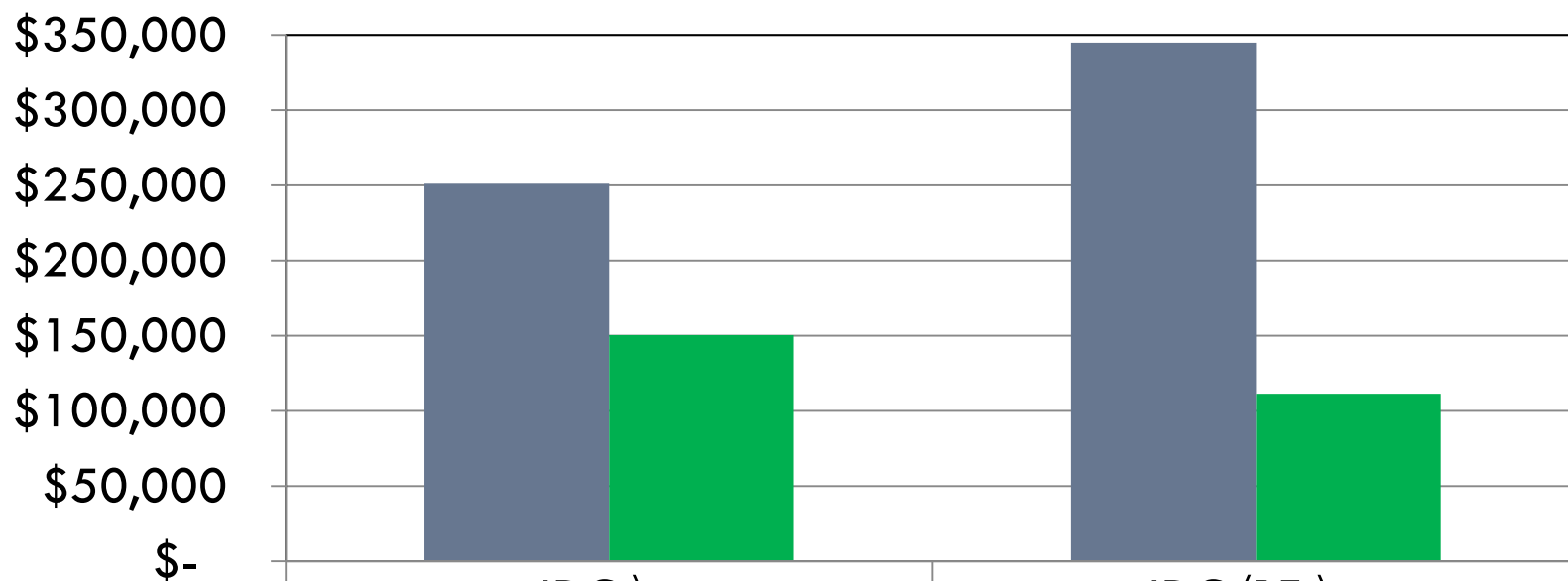
Discussion

- Significant variation in average cost per JDC/RF participant across sites reflecting uniqueness of local resources, community involvement, and sociodemographics
- The value of donated and subsidized resources added an additional 10% to total program costs
 - ▣ Important to differentiate direct expenditures from the opportunity cost of resources devoted to the JDC/RF programs

Discussion (continued)

- Results of the cost analysis represent one side of a comprehensive economic analysis
- Examining outcomes using GAIN data to determine how JDC/RF impacts substance use, crime, family functioning and other key measures of desired change
- Preliminary evidence comparing JDC/RF to standard JDC programs shows
 - ▣ That JDC's implementing evidence based practices are effective at improving outcomes including reduced substance use, recidivism, family problems, and school/work problems

JDC vs. JDC/RF: Cost of Crime



	JDC \a	JDC/RF \a
■ Year Prior	\$251,129	\$345,024
■ Year After \b	\$150,330	\$111,487
Raw Change	\$(99,465)	\$(232,728)
% Change	-40%	-67%

* Based on the frequency of crime (crimes capped at 99th percentile to minimize the impact of outliers) times the average cost to society of that crime estimated by McCollister, et al., (2010) in 2012 dollars.

\a p<.05 that post minus pre change is statistically significant

\b p<.05 that JDC/RF was lower than JDC in the year after intake

Limitations

- Some sites had multiple treatment tracks for clients
- Not all sites were able to provide financial data at the same level of detail
 - ▣ Some costs could not be provided directly, and had to be estimated based on self-report from the GAIN and existing cost estimates for services
- Unable to capture full range of community services JDC/RF participants engaged in
 - ▣ Indirect costs include a few community services that were used regularly by JDC/RF participants during the chosen year for the cost analysis
- Could not track costs of services received at the individual client level

Conclusions

- First comprehensive analysis of resources and costs across unique JDC/RF programs
- Provide cost estimates that represent different perspectives
 - ▣ Provider/JJ system: direct costs
 - ▣ Societal perspective: opportunity costs (direct plus indirect costs)
- Results provide a guide for the anticipated costs of implementing RF within other JDC programs