



# PROGRAMMING SEMINAR SERIES

Michael Wilson

Ryan Souza

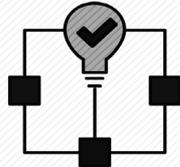
Seminar 1.5:  
Cost-Benefit Analysis, Part 2

HOUSEKEEPING/ZOOM

## STRATEGIC FRAMEWORK FOR DATA-DRIVEN AND EVIDENCE BASED PRACTICE



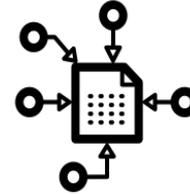
Program  
Inventory &  
Literature Review



Logic Models &  
Process Maps



Contracting  
Practices



Data Strategy  
& Dashboards



Program  
Evaluation  
& Cost Benefit  
Analysis

Seminar Series 1: Programming

Seminar Series 2: Data Strategy and Evaluation

# PROGRAMMING SEMINAR SERIES OVERVIEW

- Give counties approaches to look at their justice involved populations through a lens of evidence, shared interventions, and a system-wide view.
- Offer tools that help to operationalize and embed evidence in program design and funding
- Apply concepts of cost efficacy to program design and assessment

# PROGRAMMING SERIES CORE COMPONENTS

Program Inventory

- How do we build a program inventory and make it useful?

Oct 2020

Assessing and Applying Evidence

- How do we look at evidence and ask critical question?

Dec 2020

Program Design and Contracting

- How do we connect evidence to contracting and program design?

Feb 2021

Cost Benefit, Part 1

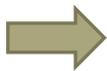
- What are the key concepts in developing a cost-benefit model?

Apr 2021

Cost Benefit, Part 2

- Tying it all together: use cost-benefit analysis to inform policy and practice?

June 2021



# SEMINAR 1.5: COST-BENEFIT ANALYSIS

# SEMINAR OVERVIEW

- Review program inventory steps
- Matching programs to the evidence
- Putting it all together to estimate costs and benefits
- County findings
- Making results accessible to decision makers



# WHAT IS A PROGRAM INVENTORY?

# WHAT IS AN INVENTORY?



An organized approach for identifying programs and practices that can span agencies, budgets, and grants.



It's a list!

# MAIN AREAS OF THE PROGRAM INVENTORY

Program  
Components

People  
Served/Capacity

Expenditures

# PROGRAM NAME AND DESCRIPTION

**Program Name:** General or local name given to the program or practice.

- Moral Reconciliation Therapy (MRT)

**Program Description:** Brief description of the program at the level an informed stakeholder would understand.

- MRT is a systematic treatment strategy that seeks to decrease recidivism among criminal offenders by increasing moral reasoning. Its cognitive behavioral approach combines elements from a variety of psychological traditions to progressively address ego, social, moral, and positive behavioral growth.

# DURATION AND FREQUENCY

**Average Duration:** How long it typically takes for someone to complete the program (e.g., 6 months or 3 years).

- 3-6 Months

**Frequency/Intensity:** Number and duration of sessions or classes (e.g., 3 times per week for one hour).

- 1-2 times per week for 90 minutes

# DELIVERY SETTING AND OVERSIGHT AGENCY

**Delivery Setting:** Where the program is offered (e.g., in a correctional facility or in the community).

- Currently in the community but can also be used for those in custody

**Oversight Agency:** Organization/Agency responsible for programmatic or fiscal operations of the program.

- Probation department
- Could also be administered by the Sheriff's Office

# TARGET POPULATION AND CRIMINOGENIC NEED

**Target Population:** Participants that the program targets (e.g., high-risk offenders, individuals with a history of substance abuse).

- Moderate to high-risk probationers
- PRCS and formal probationers

**Criminogenic Needs Addressed:** Dynamic risk factors that the program addresses (e.g., substance abuse or anti-social thinking).

- Criminal thinking
- Antisocial personality

# PEOPLE SERVED AND CAPACITY

**Annual Capacity:** Maximum number of people the program could have theoretically served in the most recent year given current resources.

- 200 participants

**Number of Participants Served:** Number of participants served by the program (even those who did not complete it) in the most recent full year the program was offered.

- 150 participants

# PROGRAM EXPENDITURES

**Annual Program Expenditures:** Total annual expenditures for the program from a recent year.

- \$250,000 allocated through CCP realignment funding

**Description of How Program Costs Were Calculated:** Brief description of how program costs were calculated, including where the cost information came from.

- Wages and benefits of staff
- Curriculum
- Drug testing
- Estimate per participant cost of \$550

# EXAMPLE: MORAL RECONATION THERAPY

---

---

## EXAMPLE PROGRAM PROFILE

Name	Moral Reconciliation Therapy
Description	MRT is a systematic treatment strategy that seeks to decrease recidivism among criminal offenders by increasing moral reasoning. Its cognitive behavioral approach combines elements from a variety of psychological traditions to progressively address ego, social, moral, and positive behavioral growth.
Duration	3-6 Months
Frequency	90 minutes per day, 1-2 days per week
Setting	Community
Oversight Agency	Probation
Target Population	Moderate to high-risk offenders for both PRCS and standard probation
Needs Addressed	Criminal thinking and antisocial behavior

---



# **MATCHING TO THE EVIDENCE?**

# WHAT IS EVIDENCE?

**Programs or practices whose level of effectiveness has been determined by rigorous evaluations.**

Evidence can be found in the following places:

- Specific evaluations
- Meta-analyses
- Clearinghouses

# RIGOROUS EVALUATION

- Randomized control trials
  - Rarely used in criminal justice because of ethical and research design challenges
- Quasi-experimental design – attempts to establish a cause-and-effect relationship without random assignment
  - Control group
  - Accounting for differences between groups

# RESULTS FIRST CLEARINGHOUSE DATABASE

- Contains information from 9 reputable clearinghouses – no need to search around individual clearinghouses
- Features over 2500 programs and practices across multiple areas of social policy
- Allows users to search and filter by categories and settings
- Applies standardized rating across clearinghouses

The screenshot shows the Results First Clearinghouse Database interface. At the top, there is a search bar labeled "Search Clearinghouse Database" with a magnifying glass icon and a right-pointing arrow. Below the search bar is a navigation menu with tabs for "Overview", "Clearinghouses", "Rating Colors & Systems", and "FAQ". The "Rating Colors & Systems" tab is currently selected. On the left side, there is a sidebar menu with options for "Categories", "Settings", "Rating colors", and "Clearinghouses", each with a downward-pointing arrow. Below the sidebar is a "Legend" section with four entries: "Highest rated" (green circle), "Second-highest rated" (yellow circle), "Mixed effects" (blue circle), and "No effects" (grey circle). Each entry includes a brief description of the rating criteria. The main content area on the right contains text explaining the database's purpose, its compilation of information from nine national clearinghouses, and how it standardizes ratings across different systems. At the bottom of the main content area, there is a horizontal scale from "Negative impact" to "Positive impact" with five colored dots representing the rating levels: red for "Negative effects", grey for "No effects", blue for "Mixed effects", yellow for "Second-highest rated", and green for "Highest rated".

Search Clearinghouse Database

Overview | Clearinghouses | Rating Colors & Systems | FAQ

Categories  
Settings  
Rating colors  
Clearinghouses

**Legend**

- Highest rated**  
The program had a positive impact based on the most rigorous evidence.
- Second-highest rated**  
The program had a positive impact based on high-quality evidence.
- Mixed effects**  
The program had inconsistent impacts based on high-quality evidence. That is, study findings showed a mix of positive impact, no impact, and/or negative impact.
- No effects**  
The program had no impact based on high-quality evidence. That is, there was no difference in

The Pew-MacArthur Results First Initiative created the Results First Clearinghouse Database to provide users with an easy way to access and understand the evidence base for programs in social policy areas such as behavioral health, criminal justice, education, and public health. More specifically, it allows users to see if there have been rigorous evaluations of a program and, if so, to review information on the program's effectiveness.

The database compiles and displays key information from nine national clearinghouses, including the rating they assigned to each program and the program's description, outcomes, setting, and target population (where available). It also contains a link back to the program's original source page on the clearinghouse website so that users can obtain additional details.

Clearinghouses develop this information by reviewing and summarizing rigorous evaluations of programs within their focus area. Then, they assign a rating to each program using their own methodology and terminology (such as top tier, effective, positive, and model).

The database applies color-coding to the clearinghouses' distinct rating systems, creating a common language that allows users to quickly see where each program falls on a spectrum from negative impact to positive impact. This coding consists of five rating colors that correspond to different levels of impact as shown below.

← Negative impact | Positive impact

Negative effects | No effects | Mixed effects | Second-highest rated | Highest rated

# CLEARINGHOUSE DEMO

<https://www.pewtrusts.org/en/research-and-analysis/data-visualizations/2015/results-first-clearinghouse-database>



# OVERVIEW OF CRIMINAL JUSTICE COST-BENEFIT ANALYSIS

# CRIMINAL JUSTICE CBA: BIG PICTURE

- Estimate the cost of crime in your jurisdiction
- Examine programs/policies that impact crime
- Apply the cost of crime to programs/policies to estimate their monetary benefits to taxpayers and society

# FOUR MAIN SECTIONS OF THE COST-BENEFIT MODEL



Program  
effectiveness and  
costs



Recidivism analysis



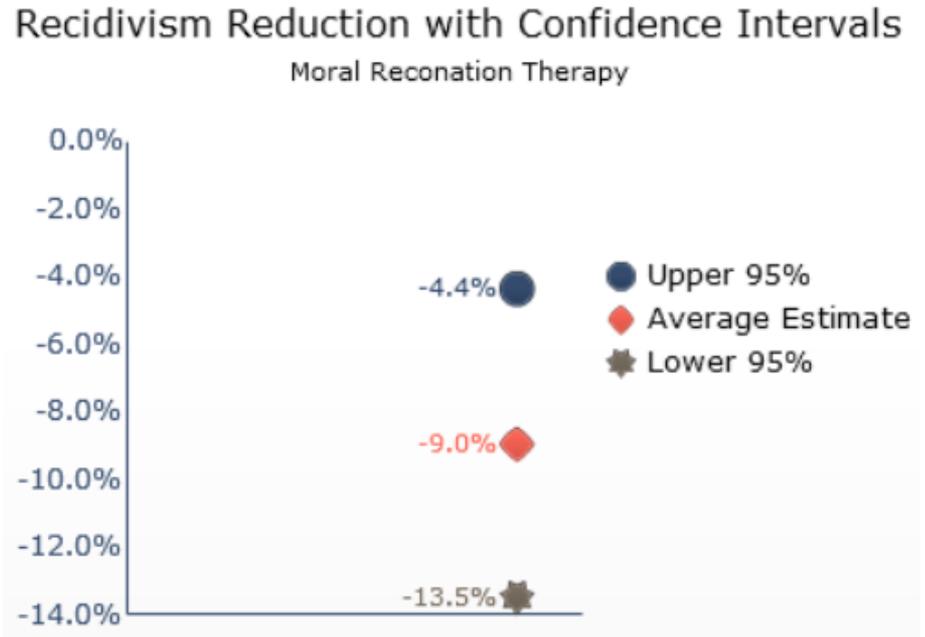
System resource use



System costs

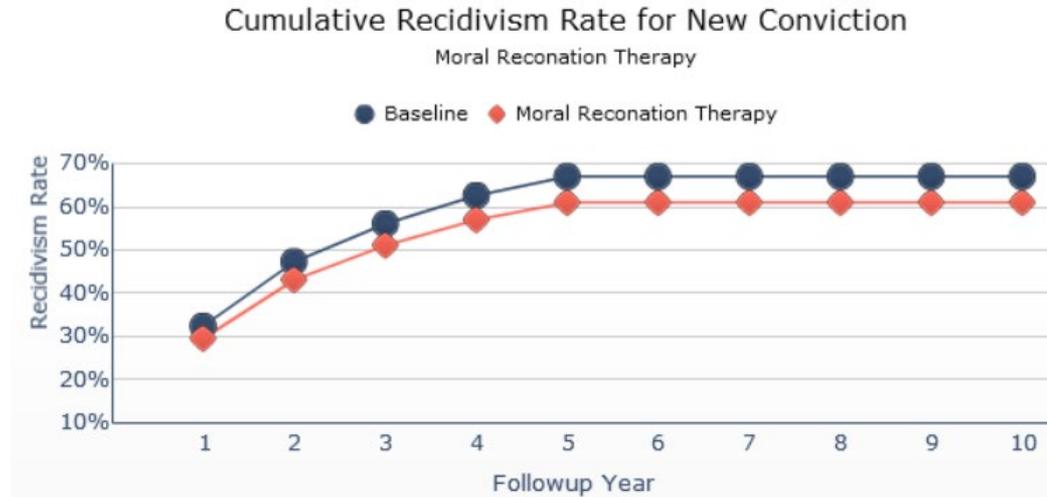
# PROGRAM EFFECTIVENESS AND COSTS

- Local rigorous evaluation
- Match programs from the program inventory to those found in the cost-benefit model
- Calculate the marginal costs per participant for each of the programs found in the cost-benefit model



# RECIDIVISM ANALYSIS

- Establish a baseline to predict program outcomes in your jurisdiction
- Matches a cohort to the types of programs offered in the jurisdiction
- Identifies how many people have new convictions, as well as when



# SYSTEM RESOURCE USE

- Informs how often an event happens in the criminal justice system and for how long
- Estimates the probability of a certain set of sentencing outcomes
- Estimates the average length of time spent in each part of the system

# SYSTEM AND SOCIETAL COSTS

Police

Courts, District  
Attorney and  
Public Defender

Probation

Jail

Prison

Parole and  
PRCS

Victimization

# VALUE OF AVOIDING SOMEONE GOING THROUGH THE CRIMINAL JUSTICE SYSTEM

- Inputs described above are used to calculate how much criminal justice resources are used by an offender
- Criminal justice resource usage is multiplied by the cost per event
- Recidivism data is used as a baseline to which effective programs can be applied to

# MORAL RECONATION THERAPY EXAMPLE

- Program cost of \$550
- Every 100 people through the program avoids 6 recidivists
- The value of avoiding a recidivist is \$98,000
- Cost-benefit calculation:
  - Costs =  $100 * \$550 = \$55,000$
  - Benefits =  $\$98,000 * 6 = \$588,000$
- Benefit to cost ratio =  $\$588,000 / 55,000 = \$10.69$



# CBA MODEL DEMONSTRATION

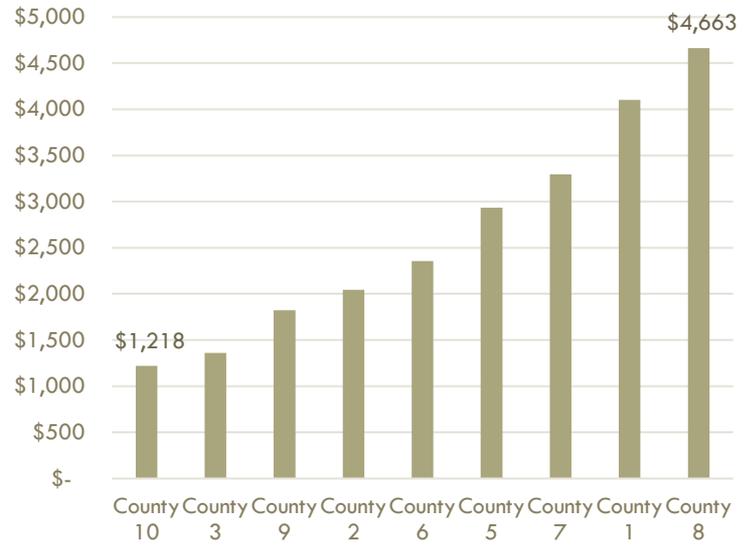


# COUNTY FINDINGS

# PROBATION COSTS

- Criminal justice costs vary by county
  - Wages and benefits are the largest cost drivers
  - Caseload sizes impact cost per probationer
- The most expensive probation cost is nearly four time more than the least expensive
  - Combination of more expensive resources, smaller caseloads and variation in methodology

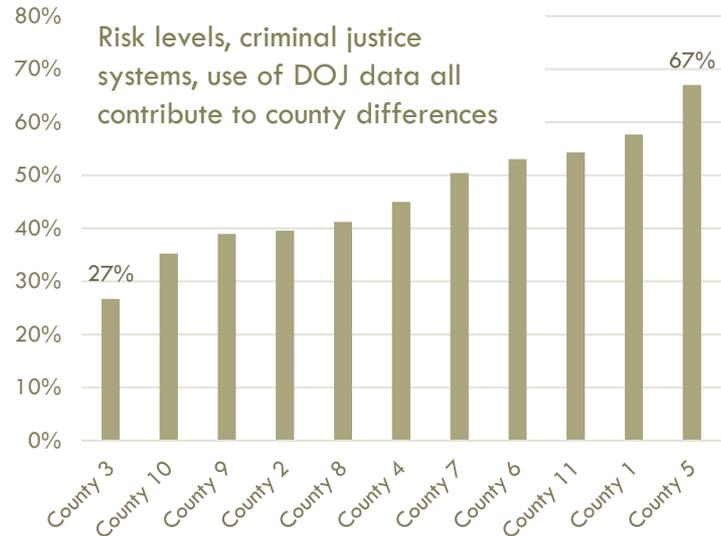
Annual Cost per Probationer



# VARIATION IN COUNTY RECIDIVISM ESTIMATES (APPLES TO PEARS COMPARISON)

- Both the likelihood of recidivism and the crime type of recidivists vary by county
- Higher volume of recidivism and higher likelihood of violent crime means effective programs avoids more costs
- All counties defined recidivism as reconviction, but risk levels of probationers vary by county
- Using DOJ data increases recidivism rates as out of county recidivist are included

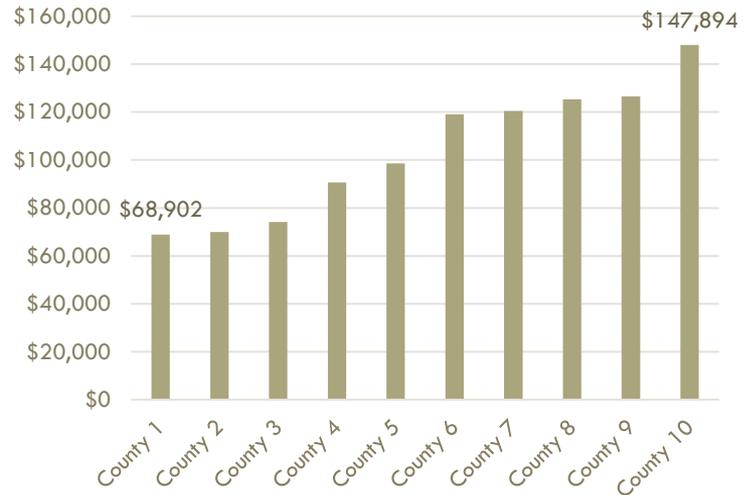
Five Year Recidivism Rates by County



# THE HIGH COST OF RECIDIVISM

- Calculation uses state inputs for the cost of an arrest, prison, and parole
- Local inputs for jail, court processing, probation, and crime patterns
- Local inputs for recidivism and tracking offenders through the system
- Highest cost county is more than twice as expensive as the lowest cost county

Value of Avoiding a Recidivist by County

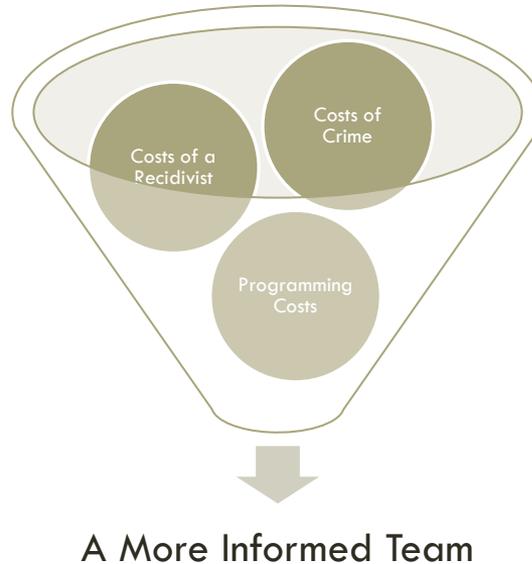




# **IMPORTANCE TO DECISION MAKERS**

# IT'S MUCH MORE THAN JUST THE RESULTS

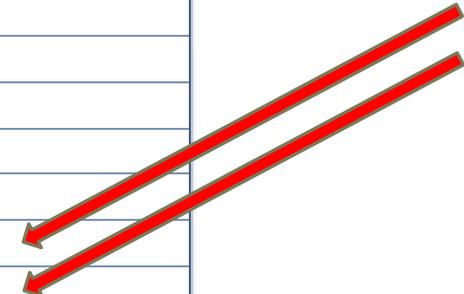
- The pieces developed in the tool are just as important as the final outcomes.



# DESCRIBES PROGRAM BENEFITS

- Describes expected return-on-investment while highlighting areas of potential focus.
- How can you make it more cost-effective? Are there ways to streamline the service?

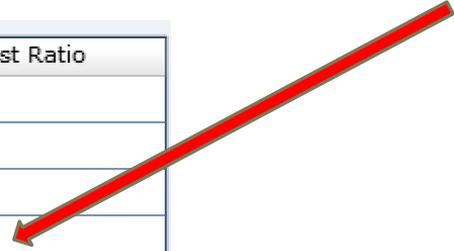
Program	Recidivism Reduction	Program Cost	Benefit to Cost Ratio
Job Counseling	● -2%	\$133	● \$7.92
Graduated Sanctions	● -15%	\$720	● \$10.40
Probation EM	● -13%	\$1,332	● \$5.04
Bridges Home(Jail)	● -1%	\$1,349	● \$0.21
Home for Good	● -10%	\$805	● \$6.25
Work Release	● -3%	\$526	● \$2.82
RNR Supervision	● -9%	\$1,454	● \$3.09
Thinking 4 a Change	● -9%	\$1,460	● \$3.07
Welcome Home	● -6%	\$2,097	● \$1.55
Drug Court	● -21%	\$5,440	● \$1.91



# HELPS SET RESEARCH PRIORITIES

- Gives a guide to potentially reviewing a program in more depth.

Program	Recidivism Reduction	Program Cost	Benefit to Cost Ratio
Job Counseling	● -2%	\$133	● \$7.92
Graduated Sanctions	● -15%	\$720	● \$10.40
Probation EM	● -13%	\$1,332	● \$5.04
Bridges Home(Jail)	● -1%	\$1,349	● \$0.21
Home for Good	● -10%	\$805	● \$6.25
Work Release	● -3%	\$526	● \$2.82
RNR Supervision	● -9%	\$1,454	● \$3.09
Thinking 4 a Change	● -9%	\$1,460	● \$3.07
Welcome Home	● -6%	\$2,097	● \$1.55
Drug Court	● -21%	\$5,440	● \$1.91



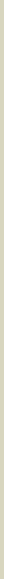
# FOUNDATION FOR VARIOUS COHORTS

- The current tool allows the ability to build off the foundation for more nuanced cohorts.

Program	Recidivism Reduction	Program Cost	Benefit to Cost Ratio
Job Counseling	● -2%	\$133	● \$7.92
Graduated Sanctions	● -15%	\$720	● \$10.40
Probation EM	● -13%	\$1,332	● \$5.04
Bridges Home(Jail)	● -1%	\$1,349	● \$0.21
Home for Good	● -10%	\$805	● \$6.25
Work Release	● -3%	\$526	● \$2.82
RNR Supervision	● -9%	\$1,454	● \$3.09
Thinking 4 a Change	● -9%	\$1,460	● \$3.07
Welcome Home	● -6%	\$2,097	● \$1.55
Drug Court	● -21%	\$5,440	● \$1.91







**OPEN DISCUSSION ON  
PROGRAMMING SERIES**



# RESOURCES

# MATERIALS, GUIDES AND TEMPLATES

Programming Series Info:

<https://www.counties.org/framework-seminar-series>

Support Hub Website:

<https://www.counties.org/csac-support-hub>

# Q AND A



**LOOKING AHEAD**

# DATA AND EVALUATION SERIES, SEMINAR 2.5 (JULY)

Our final seminar in this series will provide an overview of outcomes evaluation. We will explain the key differences between (1) using data to monitor outcomes and (2) conducting an evaluation that generates findings about the effects of a program on outcomes. We will explain the key methodological steps in conducting an evaluation and discuss how evaluation findings can be used to inform decision-making.



Contact:

Ryan Souza, Program Director

[RSouza@counties.org](mailto:RSouza@counties.org)

(m) 916-628-1404