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
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AUDIENCES FOR TODAY’S EVALUATION SEMINAR

Researchers within agencies and departments who will conduct evaluations

Managers who will oversee internal researchers conducting evaluations

Managers/leadership who will oversee external evaluators
OUTLINE OF TOPICS FOR TODAY

- Theory of Change
- Data Strategy
- Program Evaluation
- Policy Evaluation
WHAT IS THE THEORY OF CHANGE?

Before evaluating a program or policy, we need to understand the theory underlies the design

A logic model is a tool to articulate the theory of change:

| Shows the key design components of the program or policy | Reveals the key assumptions that are made (and could be tested) | Represents relationship between intervention & intended outcomes | Identifies key data points required to evaluate outcomes |
Logic models include 5 core components:

1) **Resources/Inputs** needed
2) **Activities** that comprise the program
3) Planned **outputs**
4) Intended (shorter-term) **outcomes**
5) Aspired (longer-term) **impact**
COMPONENTS & ASSUMPTIONS

If you have access to them, then you can use them to accomplish your planned activities.

If you accomplish your planned activities, then you will hopefully deliver the amount of product and/or service that you intended.

If you accomplish your planned activities to the extent you intended, then your participants will benefit in certain ways.

If these benefits to participants are achieved, then certain changes in organizations, communities, or systems might be expected to occur.

Your Planned Work

1. Resources/ Inputs
2. Activities
3. Outputs
4. Outcomes
5. Impact

Your Intended Results
**Process Evaluation**

Were the expected **resources** available?
Did those resources produce the planned **activities**?

**Outcomes Evaluation**

Did those resources and activities produce the anticipated **outputs**?
Did those outputs lead to the intended **outcomes**?

**LOGIC MODELS HELP STRUCTURE EVALUATIONS**
Data strategy makes evaluation feasible

- Identifies key data elements needs to understand the population characteristics, program or policy intervention, and outcomes
- Brings these data together in one place to allow for integration
- Allows for analyses over time and across place
METHODOLOGICAL DESIGN: COMPARING OUTCOMES BEFORE AND AFTER A PROGRAM

Motivation
• Did outcomes improve for participants?

Methodological Challenges
• Participants may be at a low point prior to starting the program

Before-and-after comparisons are a good starting place, but we often want to more rigorously test a seemingly effective program
**METHODOLOGICAL DESIGN: COMPARING OUTCOMES BETWEEN PARTICIPANTS AND NON-PARTICIPANTS**

**Motivation**
- Did participants have better outcomes than non-participants?

**Methodological Challenges**
- Participants may be positively-selected (more motivated)
- Participants may also be negatively-selected (higher need)

We can often use statistical methods to adjust for observed differences between participants and non-participants.
PROGRAM EVALUATION:
METHODOLOGICAL STRATEGIES TO ADDRESS SELECTION

How do we overcome these selection problems?

Experimental Strategies

Observational Strategies
EXPERIMENTAL STRATEGIES

Randomized Control Trials (RCTs):
  • Control selection mechanism into treatment
  • Create treated group and control (comparison) group

If randomization is successful:
  • Observed characteristics should be similar in treated and control groups
  • Importantly, unobserved characteristics should also be similar
Randomized Control Trials (RCTs) may not be feasible

- Coordination challenges
- Legal or ethical issues

RCTs may be more difficult to implement on the front end, but require simple methods to determine program effects on the back end

- When randomization is successful, we simply compare participant and non-participant outcomes to determine program effects
PSEUDO-EXPERIMENTAL STRATEGIES

Regression Discontinuity

- Cutoff point for entry into program
- Theoretical randomness around that cutoff point
- Compare outcomes of small groups on either side of that cut off point (treatment and control groups)

Concerns about external validity
**Internal Validity**: How accurately your evaluation estimates the true effects of the program for those who participated in it.

**External Validity**: How well your evaluation estimates generalize beyond the treated group in the study environment.
OBSERVATIONAL STRATEGIES: ADJUST FOR DIFFERENCES IN OBSERVED CHARACTERISTICS BETWEEN PROGRAM PARTICIPANTS AND NON-PARTICIPANTS

**Characteristics**
Assess the demographic and criminal history characteristics of program participants and non-participants

**Differences**
Identify significant differences in their characteristics

**Matching**
Use a matching strategy to narrow the comparison group of non-participants to those with similar characteristics of those who participated

**Regression**
Additionally, use a regression model to adjust for remaining differences in characteristics and estimate the effects of the program on outcomes
OBSERVATIONAL STRATEGIES: LEVERAGE VARIATION IN PROGRAM EXPOSURE

Variation in program implementation helps us to address individual self-selection into treatment.

Program implementation dynamics that may be helpful:

• Program available at point in time
• Program available in certain places
• Program available to certain participants

Leverage these sources of variation to construct treatment and comparison groups.
APPLYING PROGRAM EVALUATION FINDINGS TO DECISION-MAKING

If found to be effective:
• Should the program be expanded? To whom?

If not found to be effective:
• Was the program implemented as intended?
• Should the program be better targeted?
• Should the model be changed or replaced?
QUESTIONS AND DISCUSSION
Policy evaluation is distinguished from program evaluation:

- Evaluates high-level change in state or county policy
- There are “pre” and “post” periods of policy implementation
- This variation over time creates opportunities to conduct a “natural policy experiment”
Comparing outcomes before an after a policy change is an effective methodological strategy because:

• Treated and control (comparison) groups are likely to have similar observed and unobserved characteristics

• In a narrow time window of policy change, it is unlikely that other factors (which may affect outcomes) have changed
METHODOLOGICAL DESIGN: COMPARING OUTCOMES BEFORE AND AFTER A CHANGE IN POLICY

**Characteristics**
Assess the demographic and criminal history characteristics of the pre-policy and post-policy groups

**Differences**
Identify significant differences in their characteristics

**Matching**
Use a matching strategy to narrow the pre-policy comparison group to those with similar characteristics to those who were affected (or treated) by the policy change

**Regression**
Additionally, use a regression model to adjust for remaining differences in characteristics and estimate the effects of the policy on outcomes
Public Safety Realignment dramatically changed the policy treatment for different groups of individuals.

Individuals who would have been sentenced to prison and released on parole now experienced a range of local sanctions depending on their criminal characteristics.

- In this study, we use a pre-post design and leverage the natural policy experiment to estimate the causal effects of realignment for different treated groups.
METHODOLOGICAL DESIGN: ADJUSTING FOR BROADER CHANGES OVER TIME

A difference-in-differences model estimates the effects of a policy change on outcomes for a pre-post treated cohort. It then allows us to “difference out” any broader changes over time, as captured by the change in outcomes for a pre-post untreated cohort.

This study of the effects of Prop 47 employs a differences-in-differences analysis.
APPLYING POLICY EVALUATION FINDINGS TO DECISION-MAKING

State level
• County variation is especially helpful to researchers in designing studies to accurately assess the effects of those statewide policies.
• Evaluations of those changes can inform county advocacy and state level decision-making.

County level
• Policy evaluations at the county level can better inform advocacy and adaptation among departments and agencies, as well as higher-level county decision making.
WORKSHOP: EFFECTS OF ZERO BAIL (UNDER COVID) ON PRETRIAL MISCONDUCT, RECIDIVISM, AND CRIME?

WHAT QUESTIONS WOULD YOU LIKE TO ANSWER IN YOUR COUNTY?

HOW MIGHT YOU DESIGN A POLICY EVALUATION?
QUESTIONS AND DISCUSSION
MATERIALS, GUIDES, AND TEMPLATES

Materials available:

Step-by-Step Guide to Evaluation

Key Items to Get Right When Conducting RCTs

Data & Evaluation Series Info:
https://www.counties.org/framework-seminar-series

Support Hub Website:
https://www.counties.org/csac-support-hub
LOOKING AHEAD
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