Advisory Committee on Data for Evidence-Building

Perspectives from Federal Evaluation and Performance Improvement Officers on Administrative Data Needs

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Introduction

Todd Richardson, HUD

Christina Yancey, Labor

Matthew Soldner, Education

Christine Heflin, Commerce

Getting lucky

- Evaluations of programs that serve people need:
  - Patience
  - Longitudinal data
- Surveys are:
  - Expensive
  - Suffer from non-response risk
- Administrative data can be superior:
  - Currency of the information,
  - Completeness of coverage,
  - Cost.
- Getting Lucky
  - Getting administrative data is always a new effort for each study

Example 1. Moving To Opportunity

- Randomized Control Trial. Impact of neighborhood on poor families
- Three surveys: Baseline; 5-years; 12-years
  - Safer Neighborhoods and Big positive health effects for the adult women
  - No employment effects on adults or education effects on children. End of story.
- A series of lucky events changed the story.
  - A bureaucrat allowing academic use of the MTO data after the study ended
  - A consent form for unlimited data matching with no end date
  - Two Harvard professors having coffee
  - Access to IRS data

Example 2. NDNH Data

- Longitudinal data on employment and earnings is evaluation gold.
- National Directory of New Hires (NDNH) is a gold mine.
- This mine takes a lot of paperwork
  - An IAA (a contract) to pay HHS
  - MOU that needs a lot of signatures .
- The gold is not perfect
  - Deidentified data set

We need to make it easier to get a few variables from a few places

- Employment – if and when employed, hours, pay
- Education – academic achievement
- Income – amount and source
- Health – insurance coverage and amount used
- Housing – if subsidized renter, if homeowner
- Justice – arrests and incarcerations

North Star for Program Evaluation

Using administrative data to understand the impact of federal public programs on the target population(s)' outcomes of well-being so that –

- **Individuals, families, businesses, and communities benefit from government investments intended to improve their conditions.**
- **Policymakers can enact effective policies and programs.**
- **Taxpayers and the public appreciate strong government stewardship over public programs.**
- **Other funders (philanthropy/private investors) can align their resources to maximize public benefit.**

Evaluation with Administrative Data

To understand the impact *of federal public programs on the target population(s)' outcomes of well-being.*

- **Comparable individual-level information on both 'Treatment' and 'Comparison' group members.**

- **Longitudinal data structure spanning pre-program, program, and post-program time frames.**

Evaluation with Administrative Data

*To understand the impact of **federal public programs** on the target population(s)' outcomes of well-being.*

- **Breadth of evaluation reflecting breadth of the federal investment.**
- **Comparable data to capture variations in program model, fidelity, and environment.**

Evaluation with Administrative Data

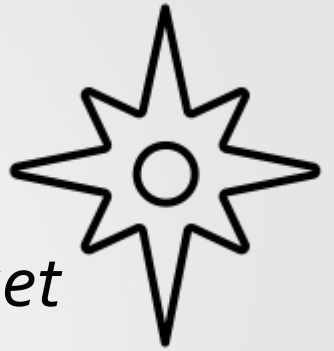
To understand the impact of federal public programs on the ***target population(s)'*** *outcomes of well-being.*

Large, representative samples in order to-

- **Detect impacts on subgroups.**
- **Increase generalizability of findings.**
- **Expand social equity in who benefits from research.**

Evaluation with Administrative Data

To understand the impact of federal public programs on the target population(s)' ***outcomes of well-being****.*



Linkable outcome information across vertical and horizontal data collection systems:

- Education, Housing, Employment, Wages & Earnings, Health, Criminal Justice, Self-Sufficiency.

Barriers (1 of 2)
What's impeding our progress in the status quo

In general, it's *process* not technology

- Poorly understood patchwork of statutory barriers to sharing/linking
  - OMB is working on a list of those barriers as we speak
- Risk aversion among GCs and other critical gatekeepers
  - Compounded by turnover among deciders in key roles
- Hyper-vigilance among data stewards to ensure high-quality use
- Inconsistent expectations and practices for informed consent

Barriers (2 of 2)
What's impeding our progress in the status quo

Sometimes, it's *data-ish …*

- Concerns about sharing data assembled via probabilistic matches
- Inconsistencies in metadata and metadata standards, within and across agencies
- Concerns about sharing linked, deidentified data at the individual level
  - Reproducibility … how does "open science" work in this context?

Opportunities
A Longer-Term Vision (1 of 2)

- A common federal evidence-building requirement follows this pattern:
  1. Congress or an agency institutes a new program;
  2. Annually, they'll expect quarterly monitoring of performance targets;
  3. In two years, they want some form of interim report describing the program's implementation; and
  4. In five years, they want a final report, perhaps focused on:
     - Outcomes, which we typically interpret as some form of non-causal analysis;
     - Effectiveness, which we typically interpret as requiring causal analysis.

- *Imagine:* Congress launches a program requiring ED to distribute funds to colleges to support students and institutions during a national emergency.

- *Challenge:* What data collection and analysis system would provide ED timely performance, outcomes, and efficacy data when:
  - Grantees are 7000 colleges and universities across the country
  - Beneficiaries are 21 million college students nested within those colleges
  - Performance and short-term outcome data for students (e.g., persistence, completion) lives in privacy-protected student information systems at colleges
  - Long-term outcome data for students (e.g., benefit use, employment, wages) lives multiple potential systems, including state UI systems and federal wage and/or benefit systems.

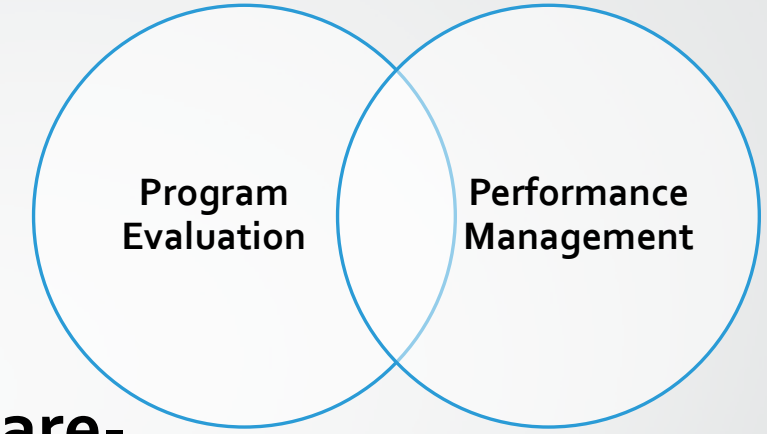
- *Extending this example:* What if this wasn't a one-time program, but one that continued in perpetuity—and so you wanted this example to operate, effectively, automatically?

Opportunities
Quick wins to accelerate ACDEB's progress

- Smooth administrative barriers through the development of:
  - Standard operating procedures;
  - Common data-sharing agreements; and
  - Common consent forms that protect privacy and support reuse.

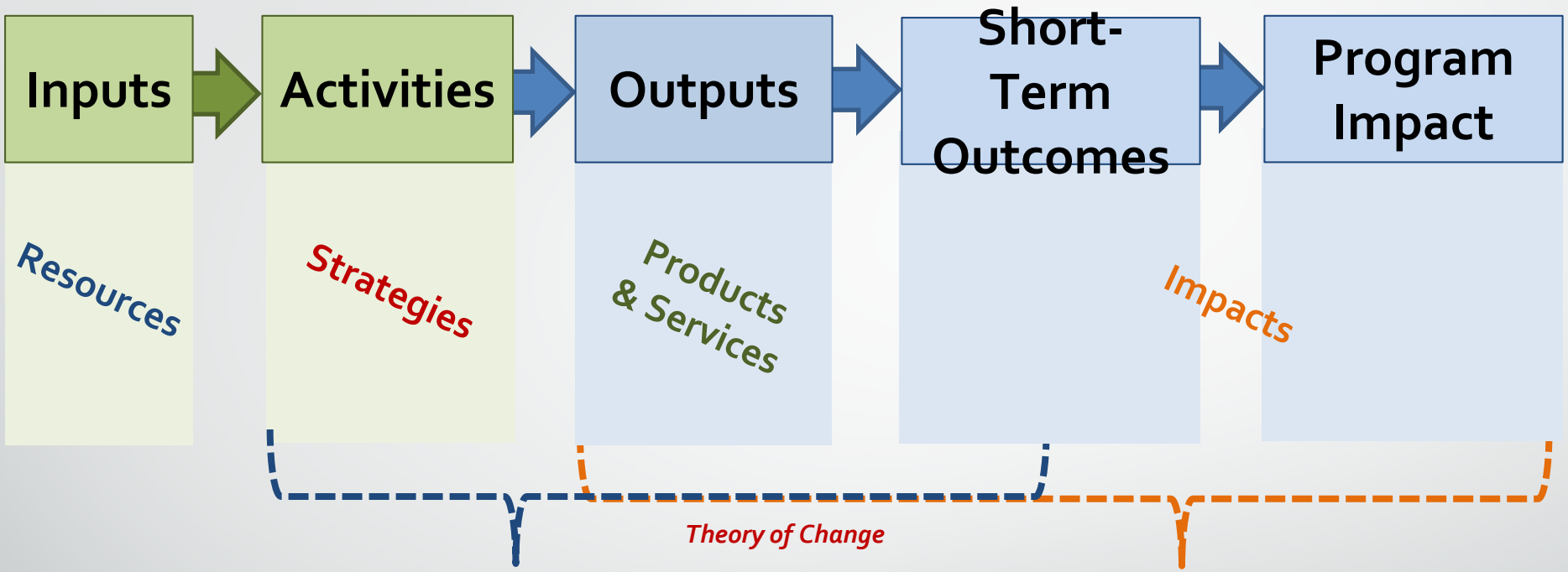
- Test procedures on matching activities that leverage high-value data sets with known/knowable statutory barriers (e.g., LEHD, IRS, NDNH).

Evaluation & Performance Administrative Data Needs



- **Both require that administrative data are-**
  - **High-quality**
  - **Linkable**
  - **Timely**
  - **Comparable across different data collection systems**
  - **Longitudinal**
  - **Comprehensive**

Performance-Evaluation Logic Model



Performance Management

Assess whether **activities** produce desired **outputs**; and **meet service level standards;** are a **dashboard** to keep operations on track.

Evaluation

Assess whether **outputs** produce desired **outcomes/impacts;** assess if the system achieved the intended benefit

About Performance Management

- Uses performance metric data to track implementation of the **Strategic Plan**
  - Commerce Examples: jobs retained; new jobs supported $ exports facilitated; cycle time for patents; time from lab to commercialization; accuracy of hurricane tracking
  - Need updates three times a year
- Uses data for dashboards that help **steer operations**
  - Commerce Examples: mix and volume of intended impacts; cycle time; customer satisfaction; leading indicators (deals in progress); backlog
  - Need monthly/quarterly updates
- Uses data for **budgeting and planning**
  - Commerce Examples: economic impact; supply v demand; cost trends; cost/benefit of alternatives; compliance with service standards
  - Need annual information (early)

Challenges Regarding Statistical & Admin Data (most can be addressed through evaluation)

- Attribution – If a location is reaching its economic development goals did a Commerce project influence the progress
- Point of Failure – If a program is underachieving, is it because of a flaw in the theory of change; problems with the delivery system; the level of resources provided; an externality
- Timeframe – If impacts are expected in 2 to 5 years (or more), how can policies and funding be assessed short term
- Leading Indicators – If the relationship between leading and lagging indicators are based on assumptions, following the data could lead to poor decisions

Aspiration	Current State	Possible Advance
Strategic Plan Monitoring		
Actual Impact of Programs	Estimated/Projected Impact	Trends in Validated Leading Indicators
Steering Operations		
Actual Volume v Target Characteristics of Pipeline Customer Satisfaction by Phase Cycle Time by Phase Actual Demand Backlog	Obligations to Date Customer Relationship Management (CRM) data Grants Management Systems Apparent Demand Backlog	Standard Elements in Customer Relationship Management Systems Standard Elements in Grant Management System Harmonized Grants Reporting Needs Assessments Exception Reporting/Key Driver Analysis
Budget and Planning		
Actual Demand & Need Actual Impact of Programs Effectiveness/Efficiency of Delivery System	Backlog Projected Impact At best, highly aggregated customer feedback	Modeling on Need Nationally, State, and Local Frequent Cost-Effective Evaluation Using Statistical & Admin Data Validated Interim Outcome indicators

In sum

- We have used administrative data successfully
- It can help us answer critical questions that original data can't do, and it can answer the questions faster and cheaper
- Many of the barriers are administrative, and that is the low-hanging fruit for this group; once those are solved there are some technological barriers to resolve
- This opens up the data for more people to answer questions around programs; the data needs to be more of a public good to accelerate learning
- Solving the problems will help us steer more accurately toward the impacts we are trying to create and result in more cost-effective impacts