DRAFT 2015 CCPRC Annual Meeting Session Template for Scribes

File Naming Convention: D3 - Opportunities and Challenges in Linking Admin Data in Social Policy Research 12.3.15

1. Descriptive Information

Workshop D-3 (9:45-11:00)

Opportunities and Challenges in Linking Administrative Data in Social Policy Research

Description

Presenters will share insights from studies linking administrative data and will discuss, more broadly, the opportunities and challenges in using linked administrative data in social policy research.

Facilitator

• Kelly Maxwell, Child Trends

Presenters

- Wladimir Zanoni, Chapin Hall at the University of Chicago
- Alejandra Ros Pilarz, University of Wisoncin - Madison

Scribe

• Erin Bultinck, Child Trends

- 2. Documents in Session Folder (Please list any electronic documents or web links used during the session.)
 - PowerPoint presentation (for each presenter)

3. Brief Summary of Presentations

Summary of Presentation #1: Conducting ECE Research Using Administrative Data, by Wladimir Zanoni

- Objectives
 - o Comprehensive administrative databases (measures they collect, longitudinal, follow broad populations)
 - o The attraction for ECE research idea of "big enough" data due to those attributes
- Limitations
 - High "barriers to entry"
 - o Hard to assess advantages/disadvantages of other data sources
 - o Can be difficult to access data and data sources due to politics, approval by state administrators, etc.
- Basic elements of administrative data research include:
 - o 1. Supply and quality of data
 - Incentives to collect data: eligibility
 - Ex. In examining eligibility, children's DOB is low quality data compared to income and family size, which would be considered high quality
 - Supply side permeates the quality
 - 2. Research design
 - They are based on what the research questions are
 - Sample or population frame?
 - Cross sectional or longitudinal?
 - Single vs. multiple databases
 - There are more challenges in using multiple databases
 - There are shared attributes with survey research methods that can be used in conceptualizing research
 - 3. Data linkage
 - Usually administrative data is linked at the individual levels (i.e. to determine if two fields are the same)
 - Within the same databases: deduplication
 - This is not the only way, however; data linkage can be linked across-databases
 - Ex. Geographical based data linkage

- Look for a common unit to link data by
- Probabilistic record linkage
 - Are pairs of data records associated to the same entity?
 - o Same quality?
 - o De-duplication or data involves moving beyond population-based to sample-based data records
 - Example: How do childcare subsidies affect child development?
 - Policy problem: How to balance intergenerational effects of childcare subsidies on economic success and income inequality?
 - Who will you prioritize? Parents, children → two-generational problem
 - Challenges in answering the research question include having to rely on observational data, limited availability and/or quality of data, and endogeneity-selection problems.
 - To addresses these challenges, create a unique dataset to identify the effects

Implications

Data linkage in administrative data can be used to effect policy

Summary of Presentation #2: Linking CCAP Administrative Data Across Multiple States by Alejandra Ros Pilarz

- IL/NY Child Care Research Partnerships
 - o To gain knowledge about child care subsidy dynamics and factors associations with subsidy (in)stability and its implications for child care quality and continuity
 - Admin data plus survey data, qualitative interviews
- Potential challenges
 - States collect and store administrative data in different ways
 - o How do states store and collect the data? Do all states collect their data at the same level?
 - Ex. Family level vs child level data
 - What are the data telling you: the family's experiences of the child's experiences
 - We want data to be similar for comparison
 - Use your research guestion to determine type or level of data you want to look at
 - Type of information may differ across states in terms of definitions
 - Communicate with program administrators to have a more meaningful understanding of the type of information that will be collected
 - Because of these differences across states, a recommendation is to analyze data from each state separately.
 - o Time unit:
 - The administrative data you receive across states may vary in its time unit (e.g., receiving records weekly vs. monthly).
 - Lengths based on weekly data are not directly comparable to those based on monthly data
 - Spells that have the same number of weeks may include a different number of months
 - This issue is discussed in a technical brief that Liz Davis and colleagues wrote using data from the MN/MD Child Care Research Partnership
 - o Interpreting Results:
 - What does it mean if program spells are longer in one state or another? Are these differences due to factors unrelated to the program themselves or truly attributable to actual program differences?
 - Relying on findings from multi-state comparisons of administrative analyses could lead to erroneous conclusions if you are not careful.
- Potential Benefits
 - o Administrative records from multiple states can be useful in comparing longitudinal patterns in program use
 - Using data from multiple states is important is important for understanding whether data from a particular state is an anomaly, understanding variations in program use across states and "typical" vs "atypical" experiences.
 - o Administrative records are one of the most reliable sources for looking at program use over time
- Disadvantages:
 - o Administrative records can only tell you about a family's experiences while they attend a program

- Examples of possible comparisons across states (ex. IL/NY)
- Summary
 - o Challenges are important to keep in mind when comparing admin data, especially across states
 - o → understand local context, consult with program admin,
 - o → use caution in interpreting results

4. Brief Summary of Discussion

- Important to have long-term relationships and good communication between researchers and state administrators when analyzing administrative data.
- Also part of the challenge is taking findings from the research but also identifying appropriate/meaningful responsibilities for state administrative staff (i.e. clean data this way to get meaningful data).
- It is important to help states identify a clear focus. Give them guidance into defining terms and processes for collecting data, and overall improving the quality of their data.
- Using additional surveys or qualitative interviews can be beneficial data as well, to use complimentary to administrative data in being able to get an accurate picture.
- **5. Summary of Key issues raised** (facilitators are encouraged to spend the last 3-5 minutes of workshops summarizing the key issues raised during the session; bullets below are prompts for capturing the kinds of issues we're looking for)
 - There are many opportunities but also challenges involved in the use of administrative data. It is important to look at the supply of data, a data's quality, the research designs, and linking data on an individual level vs. across-databases level
 - Data linkage in administrative data can be used to inform policy
 - Multi-state comparisons can be interesting and useful, in comparing longitudinal patterns, understanding variations in program use across states, and looking at dynamics in program use.
 - However, administrative records can only tell you about participants' experiences while they are using the program. It is important to try to understand what potential sources of error there may be in data entry or inconsistencies in how data is reported, which can vary across states.