Data and Measurement Challenges in Conducting Subsidy Research

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Overview of Session

• Where is the field in its research on child care subsidies?
• Why it is difficult (or nearly impossible) to conduct sophisticated subsidy research using only one data type or research method
• Benefits of linking several different types data for policy-relevant quantitative subsidy research
• Examples of several ongoing projects and lessons learned from each
• Tools and data for future research on this topic
Challenges of Conducting Research on Child Care Subsidies

• Complexity of subsidy program
  - aims to serve needs of both adults (employment) and children (child development)
  - many possible forms of care
  - rules vary by state
  - level of funding varies by state

• Serves very small portion of population so hard to observe in national surveys

• Perception of the term ‘subsidy’ varies by user

• Subsidies only one of many factors influencing outcomes for both children and adults
State of Child Care Subsidy Research

• Relatively new research field
• Complex topic because of child care’s two-directional relationship with employment
• Most early work based on qualitative studies or ‘subsidy’ variables in national surveys (e.g., SIPP, CPS)
• Over the past decade, CCB/OPRE has funded studies to better understand the operations of child care subsidy policies across the U.S.
• Recent studies often combine individual-level administrative subsidy program records, survey data and program policy data, and use many research methods
Research Questions of Interest

- Who uses child care subsidies?
- Which factors promote subsidy use among eligible families?
- How is child care paid for?
- What is the relationship between child care subsidies and outcomes of interest (e.g. economic and child well-being)?
- Which types of subsidy policies result in the best outcomes for families and children?
- To what extent do these findings vary by:
  - Type of family
  - Geography
Types of Data Used for Quantitative Research on Subsidy Policies

- **Survey data**
  - National population surveys (e.g., Census)
  - State population surveys
  - Special surveys

- **Administrative data**
  - Individual automated records for each family and child participating in subsidy programs each month
  - Similar records for programs related to CCDF (e.g., TANF, employment, pre-K)

- **Policy rules for jurisdiction and time period of study**
Advantages of Administrative Data

• Detail and accuracy of program information
• Large sample size
• Ability to conduct analysis on small states or sub-state areas in large states
• Data on the same individuals over a long period of time
• Ability to expand information by linking across programs
Limitations of Administrative Data

- Number and types of variables available for research may be limited
- Quality and completeness of ‘non-required’ variables may be suspect
- Not well suited for population-based research questions unless combined with survey data
- Computation of statistics across states must be done with caution
Advantages of Survey Data

• Can explore a topic in depth (e.g., details of employment)
• Can measure child care arrangements even while not on subsidy
• Can get viewpoints of program participants not available in administrative records (e.g., why began using subsidy)
Limitations of Survey Data

• Survey is often conducted at one point-in-time and relies on memory recall re: past events
• Child care subsidy use is short in duration and recall of program use may be inaccurate (severe under-reporting in national surveys)
• Participants may not know how child care is funded or be able to give accurate information about program policies
• Sample size is often too limited to measure policy effects in state or local areas
Benefits of Linked Data

• Administrative data can be used to link across programs (e.g., TANF, child care, earnings, pre-K, Head Start, UI earnings) over time

• Survey variables add detail on topics of interest or population data at key points in time (e.g., at eligibility)

• Policy variables that are relevant to the period and location of the study can be used:
  – in statistical models to estimate expected eligibility
  – to measure relationship of policy to outcomes
  – as context for explaining findings
Examples of Research That Can Be Conducted with Linked Data

• Experimental and quasi-experimental program evaluation
• Rates of program participation and outcomes over time
• Determination of factors associated with positive outcomes for families and children
• Relationship of specific subsidy policies to these outcomes
• ROI studies of investing public funds in subsidy programs
Featured Projects

- Reengineered SIPP
- Employment Outcomes for Low-Income Families in IL, MD and TX
- Effects of Subsidy Study in IL
- National Survey of Child Care Supply and Demand
- CCDF Rules Database
Reengineering the SIPP

• SIPP is unique source of information that measures intra-year dynamics of income, employment, program eligibility and participation for a nationally representative sample of household members

• Census Bureau is currently redesigning to take advantage of modern approaches and to improve upon weaknesses (e.g., sample attrition, undercount of program participation)

• New SIPP expects to use event history calendar to reduce frequency of surveys and administrative data to improve measures of program participation
Employment Outcomes Study

- Linked longitudinal child care subsidy, TANF and earnings records from IL, MD and TX to Census American Community Survey within Census RDC
- Used CCDF policies in each state to develop eligibility model
- Measured subsidy take-up and employment in each state
- Compared factors associated with employment for subsidy users and eligible non-subsidy users
- Developed ‘cookbook’ for other researchers
References

U.S. Census Bureau Survey of Income and Program Participation
http://www.census.gov/sipp/

National Research Council of the National Academies
Reengineering the Survey of Income and Program Participation (July 2009)

Employment Outcomes for Low-Income Families Receiving Child Care Subsidies in Illinois, Maryland and Texas (August 2009)
http://www.researchconnections.org/location/16511