

# Data and Measurement Challenges in Conducting Subsidy Research

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# Overview of Session

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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 program

# Featured Projects

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- 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

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- 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

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- 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

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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)

[http://books.nap.edu/openbook.php?record\\_id=12715&page=15](http://books.nap.edu/openbook.php?record_id=12715&page=15)

Employment Outcomes for Low-Income Families Receiving Child Care Subsidies in Illinois, Maryland and Texas (August 2009)

<http://www.researchconnections.org/location/16511>