Measurement Issues Related to Research on Subsidies

Description
This workshop focused on methodological issues related to child care subsidy research. Three research teams presented information and strategies for designing and analyzing survey and administrative data. Presentations focused on recent work assessing the reliability of parent reports of child care subsidy receipt, successful strategies in designing survey questions about child care subsidy status and related topics, and strategies and implications of alternate strategies for examining subsidy duration. Following these presentations, a facilitated discussion explored methodological challenges and strategies currently being faced in the field. Participants were encouraged to share methodological challenges they face in their work.

Facilitators
Nicole (Nikki) Forry, Child Trends
Yoonsook Ha, Boston University
Chris Herbst, Arizona State University

Presenters
Elizabeth (Liz) Davis, University of Minnesota
Chris Herbst, Arizona State University
Nicole Forry, Child Trends

Scribe
Tabitha Isner, Child Trends

1. Documents in Session Folder
   - “Measurement Issues Related to Research on Subsidies” Nikki Forry
   - “Measurement Issues Related to Research on Subsidies: Common Challenges in the Study of Continuity of Subsidy Participation;” Elizabeth Davis, Deana Grobe and Bobbie Weber
   - “Can We Trust Parental Reports of Child Care Subsidy Receipt?” Anna Johnson and Chris Herbst
   - “Collecting Survey Data on Subsidy Receipt;” A. Rupa Datta, National Opinion Research Center

2. Summary of Presentations
   - Overview of the Child Care Subsidy Workgroup. Nikki Forry indicated that there are several products from this group that are currently under development or review. If others would like to join the group, contact Nikki Forry or Karen Tvedt.

   - **Summary of Presentation #1:** Elizabeth Davis
Liz discussed common challenges in the study of continuity of subsidy participation, starting with the question, “when we ask about continuity, what exactly are we asking?” We’re essentially asking about duration. For how long are children receiving subsidized care without interruption? Answering requires longitudinal data, but it’s more complicated than that.

Among the questions Liz raised were:

- How will you define a spell? Child-level or family-level?
- When will you measure the family, community, and provider characteristics (when they begin subsidy use, on average or now)?
- Will you include multiple spells?
- Who will you include or exclude in a study of participation over time? Will you use a point-in-time approach or entry cohort approach? Left-censoring?

The end of a subsidy spell should be defined as when care actually ends, regardless of whether eligibility ended. How long of a break counts as the end of a spell? Usually researchers define the end of a spell as a break of at least one month or two months. Your decision may depend on the state’s absence policy.

What are appropriate analytical methods for analyzing this data: Event history or survival analysis methods; look at 25th percentile, median, and 75th percentile of spell length among subgroups; look at a survival analysis plot diagram to see a continuous picture; multivariate models produce a hazard ratio for each variable.

How do we describe/analyze the stability of the subsidized arrangements? Once families/children leave subsidies, we don’t know if they stayed with the same provider or not, so we’ll need additional data sources to know how leaving subsidy affects stability. Having more than one provider during a spell may mean instability, but it’s relative to the length of the spell.

**Summary of Presentation #2: Chris Herbst**

Chris discussed a project that focuses on parental reports of child care subsidy receipt that grew out of the CCPRC pre-session on subsidy measurement issues.

A number of large surveys include questions about help parents may be getting to pay for child care, i.e., ECLS-K and Fragile Families; lots of current research about the impact of subsidies is based on parent reports of subsidy receipt.

- Why do we worry that parents might be poor reporters: Recall or memory lapses; stigma tied to receipt of public assistance; confusion about forms of subsidized care (like tax credits); and lack of awareness that the child receives a subsidy (parents only know what they pay, which might be a co-pay or nothing if the full price is covered).

When is this kind of measurement error a problem in OLS regressions?

- If we’re doing a predictor study (predicting use of subsidy using other covariates), then the measurement error is unobserved, and there is no bias, just inflated standard errors.
- If we’re doing an impact study (about what outcomes are impacted by subsidy receipt), then the measurement error is unobserved and there is the potential for a downward bias in the subsidy effect (biased against finding any impact of subsidy receipt)
An analysis was conducted using Fragile Families data, in which providers and parents are asked about supports.

- Providers were asked whether any of the child’s care is paid for by government support, and if so, what local, State, or Federal programs provided these funds. The child is coded as receiving support (according to provider report) if the provider explicitly says that the CCDF directly or indirectly pays for the child care.
- The parent is asked if they receive any help paying for their care. The child is coded as receiving support (according to the parent) if the parent says that they received help in paying for care from a government agency or from the child care center.
- In 78% of cases, the provider and parent agree about whether subsidies are used.
- Demographic characteristics were then used to predict to parent-reported use of subsidies, and provider-reported use of subsidies. There were no major differences in these two analyses.
- Are there characteristics that predict that parents and providers will disagree about subsidy use? If they are predictive, then we should worry more about measurement errors biasing our results. However, it turns out that no big differences were found in characteristics between those who agree and those who disagree with their providers.
- This suggests that there is some measurement error, but it is more “signal” than noise. In terms of implications, use of multiple measures is best and linked survey and administrative data would be beneficial.

- **Summary of Presentation #3:** Rupa Datta’s materials, presented by Nicole Forry
  - Why survey data on subsidy receipt? Administrative data is limited and includes only families receiving child care subsidies, and those families are included only during spells of subsidy receipt. In addition, administrative data has limited information about families.
  - However, it’s not easy to survey subsidy families. They are hard to accurately sample and hard to reach. Providers deal with blended funding and multiple children, and may also have difficulty reporting. Often we use terms that differ from those used by parents and providers.
  - So how do we ask parents? Use local “lingo” and have realistic expectations.
    - Parents can report on whether they are getting help paying, but they have a harder time when they’re not paying anything. We can’t ask parents about things they don’t understand; need to ask them about their piece of the puzzle (i.e., what paperwork they do).
  - Collecting additional data can help you determine whether families are eligible for subsidies.

3. **Summary of Discussion with Presenters and Participants**
   - Administrative data is good for learning about subsidy spells, but longitudinal data is needed, and it would be great to have shared definitions of spells and shared approaches to measuring.
• We have reason to be worried about parental reports of subsidy use, but preliminary research indicates that the resulting measurement error is not creating significant biases in our findings. More research on the accuracy of parental and provider reports would be helpful.
• Survey data remains very important. We may be able to get better information from parents if we prepare more intensely by gathering as much data from other sources as possible, and learning to ask questions using parents’ own terms.