



THE UNIVERSITY OF
CHICAGO

SCHOOL OF SOCIAL SERVICE ADMINISTRATION

The Nuts and Bolts of Working with Administrative Data:
**Linking Data Across Multiple
States and Multiple Data Sources**

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Outline

- Part 1: Using administrative data for **multi-state comparison studies**
- Part 2: Using **multiple sources of data** in combination with administrative data

IL/NY Child Care Research Partnership

- Partnership with Univ. of Chicago & Urban Institute & State Child Care Administrators
 - Funded by OPRE/ACF, Grants #90YE0133 & #90YE0151-01-00
- To gain knowledge about child care subsidy dynamics and factors associated with subsidy (in)stability and its implications for child care quality and continuity
- 4 Targeted Regions
 - New York – Nassau and Westchester Counties
 - Illinois – Cook County and Southwestern IL
- Non-school aged new entrants in subsidy program
- Multi-component, mixed-method study, including admin child care records over 18 months in four regions

Part 1: Using administrative data from multiple states

- Multi-state comparisons can be interesting and useful but present challenges
 - Not only inadequate control of contexts,
 - Programs vary,
 - Data vary.

“States don’t collect the same stuff”

-- Amy Claessens

How do state data sources vary?

- Level of the record
 - e.g, family vs child
- Type of information
 - Differences in state definitions of variables, in what is collected, and in reliability/validity.
- Time Unit
 - Weekly vs Monthly Records: Example from MN/MD Child Care Research Partnership (Liz Davis)

Spells with the same number of weeks may include a different number of months

	Month 1				Month 2					Month 3					Month 4						
CASE NUM	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	# Weeks	# Months
1	X	X	X	X																4	1
2				X	X	X	X													4	2
3										X	X	X	X	X	X	X				7	3
4													X	X	X	X	X	X	X	7	2

*Krafft, C., Davis, E.E., & Forry, N.D. (Dec. 2014). Continuity of child care subsidy receipt: Why definitions of spells and gaps matter. Technical Brief. http://www.childtrends.org/wp-content/uploads/2015/02/2014-55MDTechnical_Brief.pdf

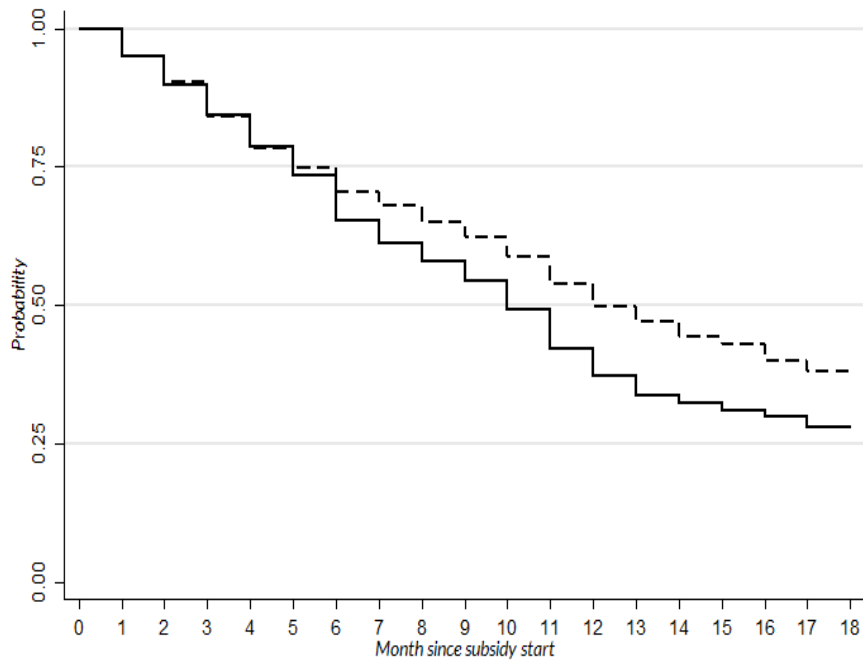
State-Specific Research Agreements and Protocols

- States have different orientations toward research
 - Process for establishing data sharing agreement and what the agreement is varies by state
 - States have different in-house data capacities
- These issues affect not only research plan in each state but timeliness of data access

Even with these challenges
and caveats, you can
nevertheless learn a lot from
multi-state comparisons using
administrative data.

Kaplan-Meier Survival Curve of First Subsidy Spell, 18-month window

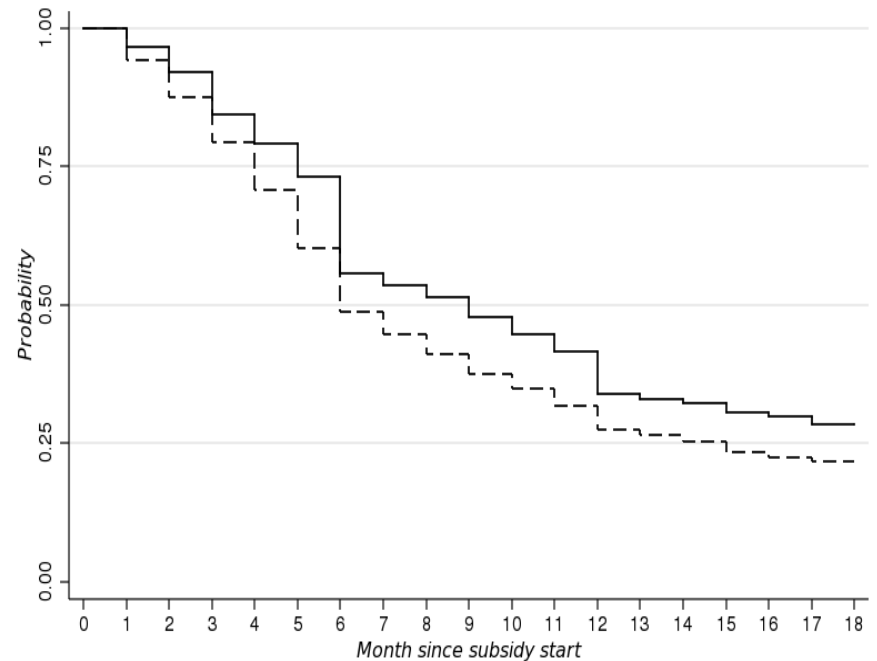
- New York



— Westchester - - - - Nassau

Median spell
Nassau: 12 months
Westchester: 10 months

- Illinois

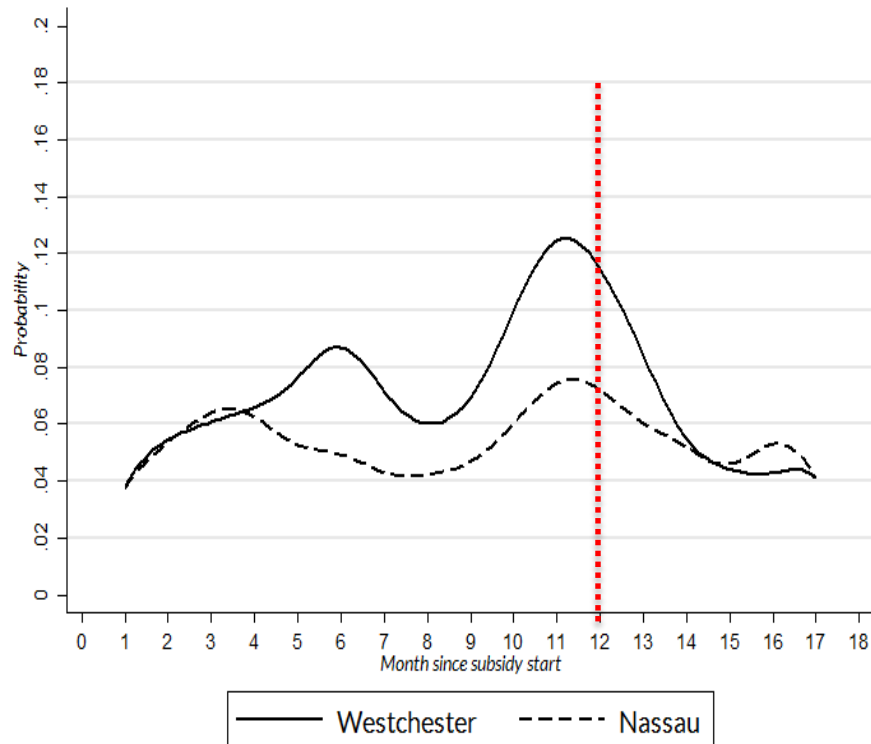


— Cook - - - - Southwestern IL

Median spell
Cook County: 9 months
Southwestern IL: 6 months

Smoothed Hazard Curve of the First Subsidy Spell, 18-month window

- New York



- Illinois

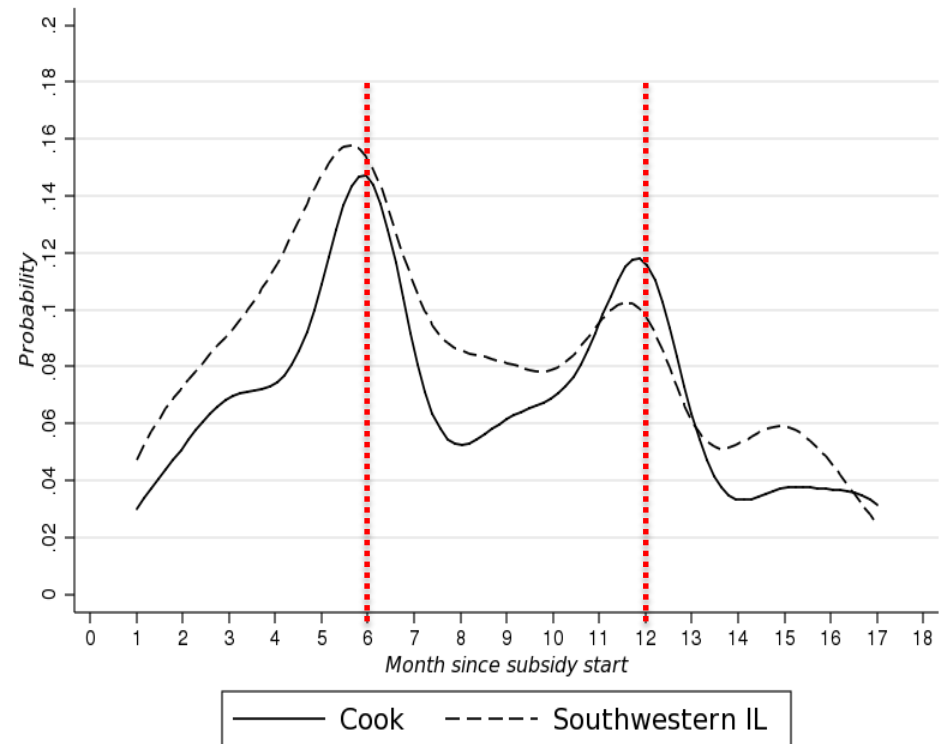


Figure 1. Illinois: Patterns of Subsidy Use Over 18 Months (N=5,893)

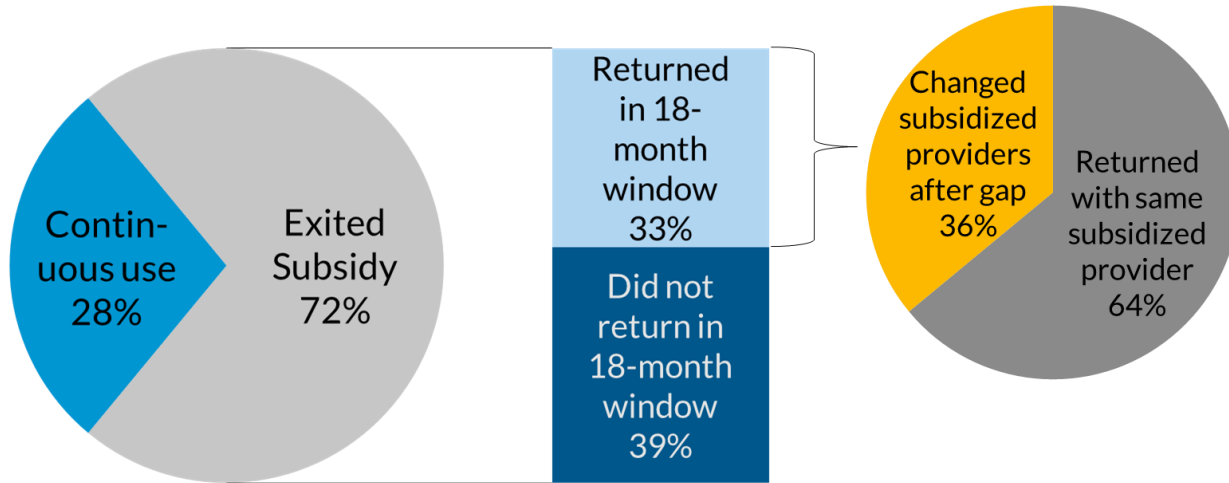
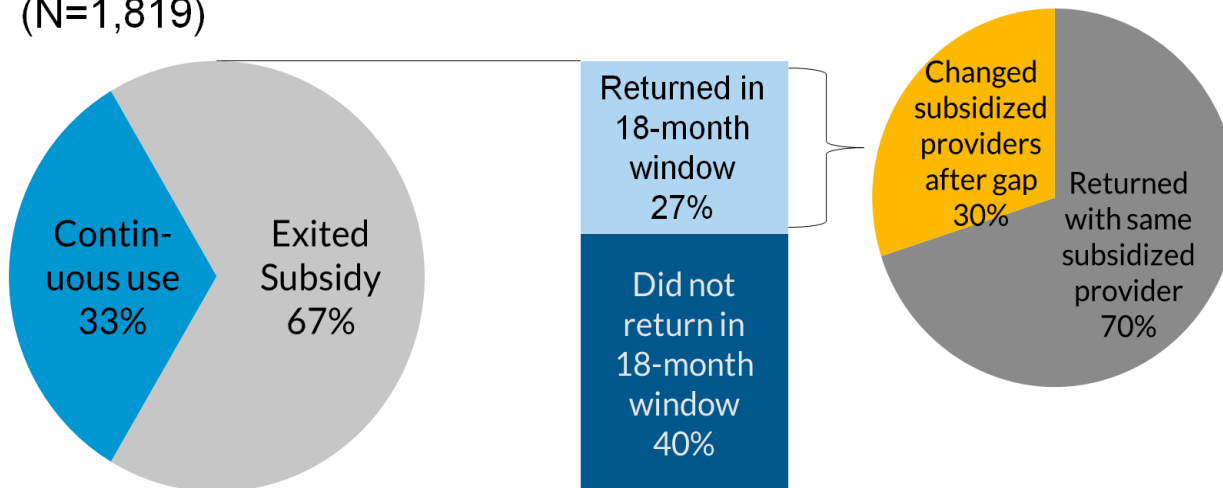


Figure 2. New York: Patterns of Subsidy Use Over 18 Months (N=1,819)



Part 2: Linking administrative data with additional data sources

- Admin data have advantage of telling story over time for large sample
- But story only as good as the data
- Several advantages to linking admin data to other sources
 - Surveys, qualitative interviews, participant observation, etc.

IL/NY Child Care Research Partnership: Relationship between Data Components

Phase 1

Family-level child
care payment
records

Parent
Telephone
Survey

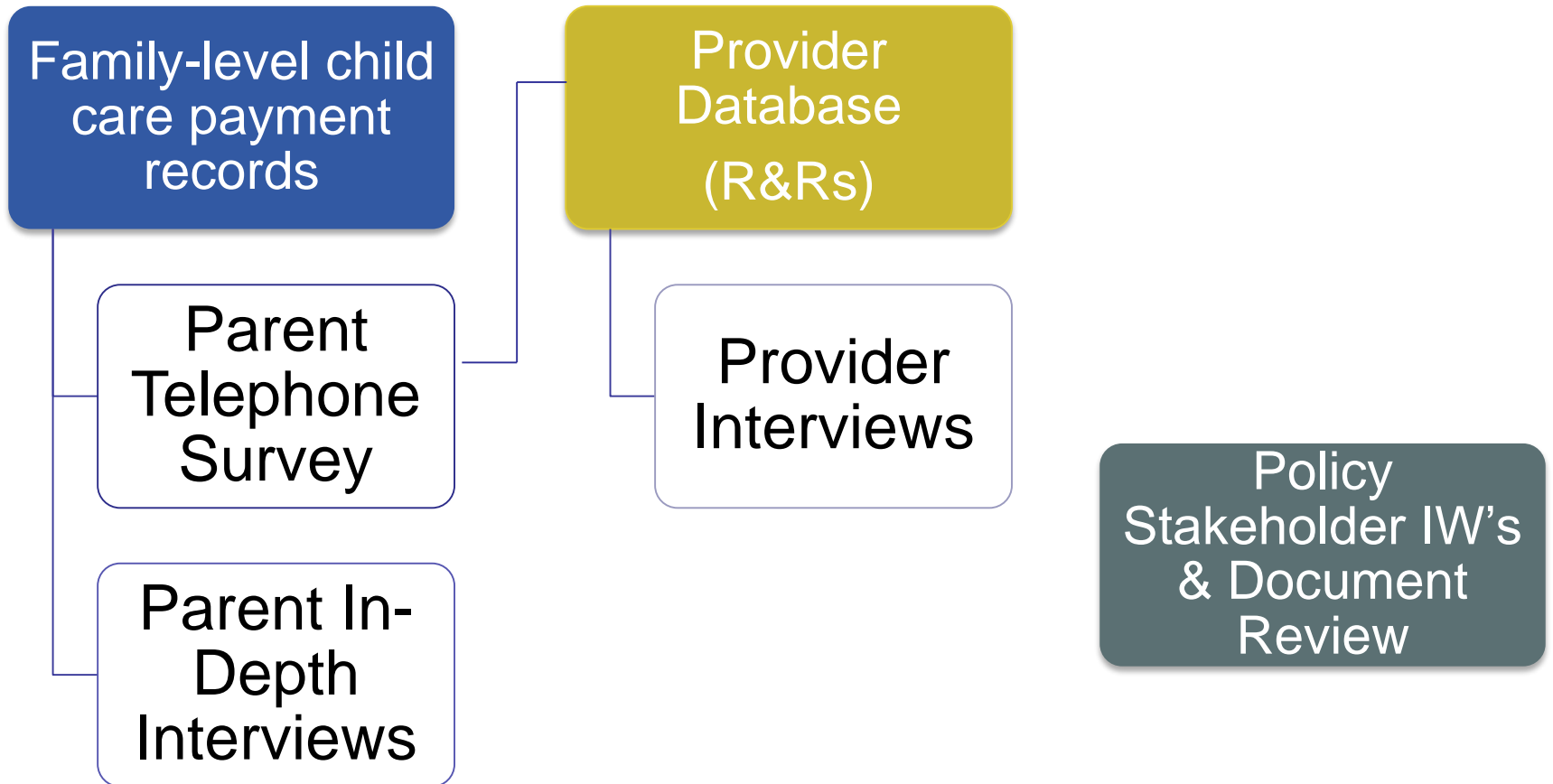
Parent In-
Depth
Interviews

Phase 2

Provider
Database
(R&Rs)

Provider
Interviews

Policy
Stakeholder IW's
& Document
Review



Concluding thoughts

- Many benefits to conducting multi-state studies using administrative data
 - But not as easy as comparing or linking a bunch of files together
 - Expect process to be slow, with political, organizational, and data challenges.
- Combining administrative data with other sources has many advantages, and can clarify and expand knowledge gained through administrative data analysis alone.

It takes a lot of people to do multi-state, multi-method research

- Program Officers: Susan Jekielek; Ivelisse Martinez-Beck; Ann Rivera
- Investigators. PI: Julia Henly; Co-PI's: Amy Claessens, UC-Harris & Heather Sandstrom, Urban Institute
- State and Local Partners: Linda Saterfield, Illinois Department of Human Services; Janice Molnar, New York State Office of Children and Family Services; Maria Whelan & David Alexander, Illinois Action for Children; SuzAnne Kollman Children's Home and Aid, Southern Region; Melinda Denham, NY Office of Children and Family Services.
- Key Research Staff: Alejandra Ros Pilarz, JaeSeung Kim, Carolyn Barnes, University of Chicago; Julia Gelatt & Olivia Healy, Urban Institute

Thanks!

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