Challenges in Linking State and Federal Data

Robert M. Goerge

The Promises and Challenges of Administrative Data in Social Policy Research U.S. DHHS/ACF/OPRE

Washington, D.C. October 1-2, 2015

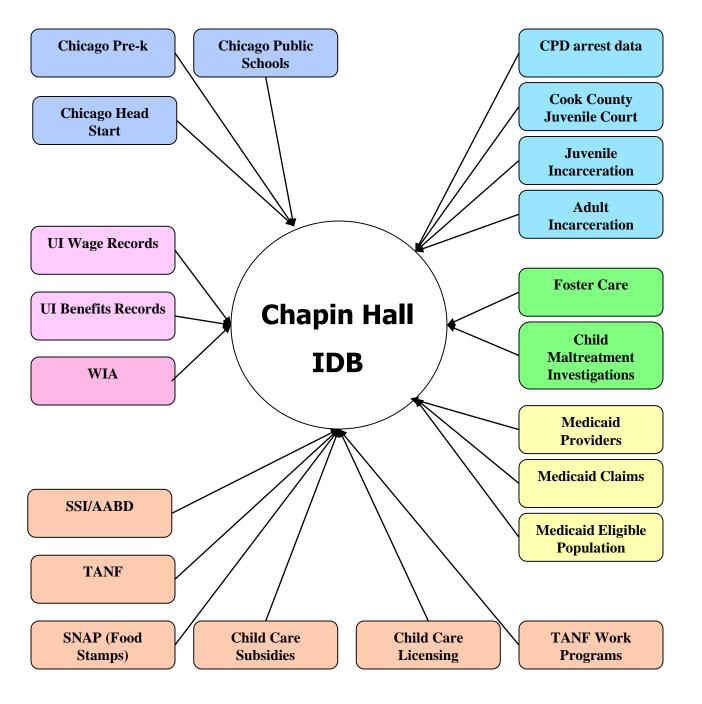


Policy research that benefits children, families, and their communities

My plan for this session

- Describe specific applications of linking state and federal data
- Describe the challenges
- Describe strategies to address challenges
- Discuss both potential opportunities and obstacles





Integrated Database on Child and Family Programs in Illinois

Linking Census Survey data with Administrative Data -an example

- Using the Census 2001 ACS (Supplementary Survey SS01), we defined a base population of child care subsidy eligible families in 2000-01.
- We prepared state databases of child care subsidy, food stamp (SNAP) and TANF receipt
- We used quarterly UI wage data for the Census Bureau's LED program.
- The state databases were "blended" with the SS01 and used to track quarterly child care subsidy eligibility, child care subsidy use, and employment outcomes for different groups of low-income families through 2003.

The Base Population

• All CCS-eligible families, with children under age 13, in Illinois, Maryland and Texas, in 2000-01, from the SS01. (The SS01 sampled households in each month of 2001 and asked about income in the prior 12 months.)



Results

- Employment Outcomes: Employment Termination
- CCS receipt was associated with longer employment spells in IL.
- TANF receipt was associated with shorter employment spells in IL.
- Low educational attainment was associated with shorter employment spells in IL.
- CCS recipients were less likely to lose CCS eligibility by exceeding the income ceiling in IL.
- Low educational attainment was associated with reduced odds of exceeding the income ceiling for CCS eligibility in all three states.
- Having at least three children under age 13 was associated with reduced odds of exceeding the income ceiling in all three states.



Benefits: Linking state data to federal data solves particular challenges

- Looking for outcomes in other states
- Adds outcomes not available in state data (e.g. employment)
- Take advantage of the SSN for easier linking of state data that has good SSNs
- Using a census survey dataset, one has a sample of the entire population, not just those in the administrative data

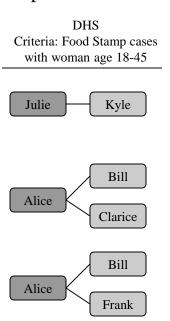
Benefits: Linking federal data to state data solves particular challenges

- Provides data on programs that is unavailable to federal agencies
- State data can enrich and improve survey data
 - e.g. National Survey of Early Care and Education
 - Meyer and Mittag

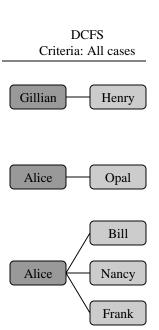
Data Challenges

- Correspondence between who is in a case or housing unit or family in each dataset reconciling differences in "rosters"
- Correspondence between events
- Identifying data available to conduct linkage

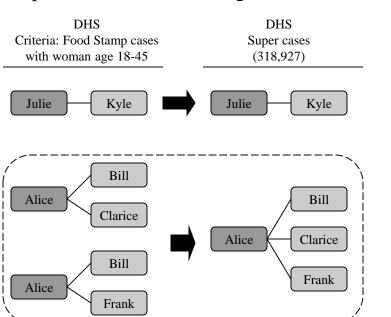
Step 1: Select all cases meeting criteria

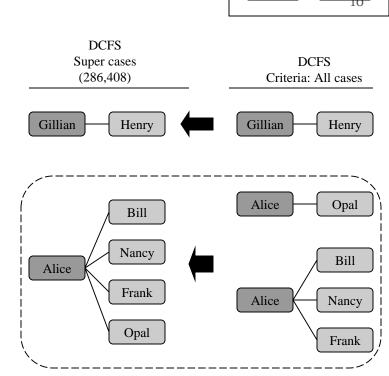






Step 2: Link cases within agencies



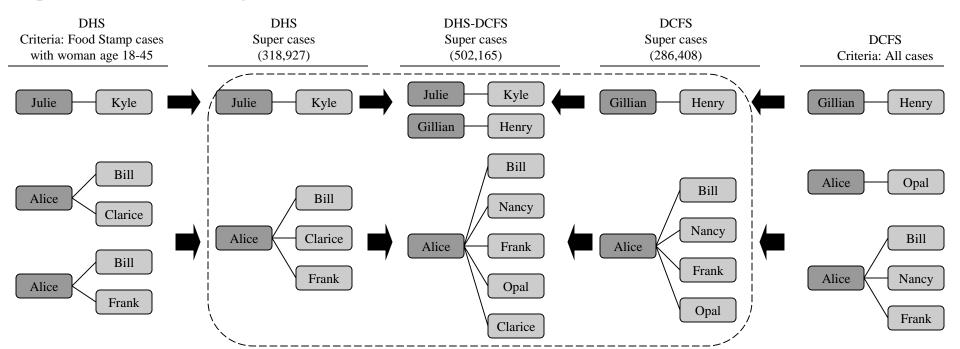


Member

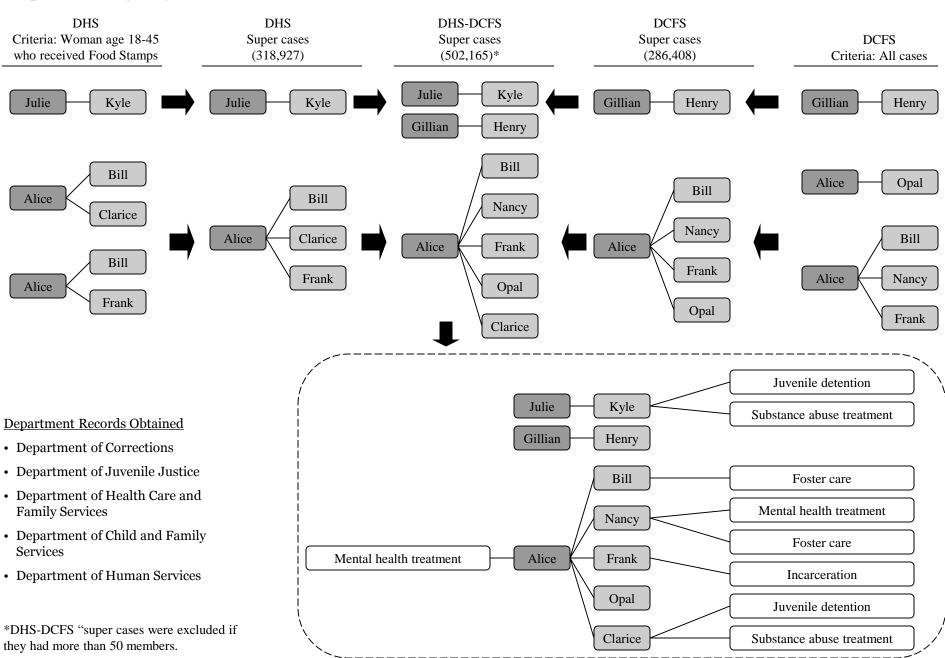
Index

Step 3: Link cases across agencies





Step 4: Link agency service records to families



Member

Index

"Good luck getting the data sharing agreement through our lawyers...."



It's nobody's job to provide access

- There is no divine right to administrative data at either the state or federal level
- Requestor always has to actively engage an local, state or federal agency and apply to (often negotiate with) that agency to receive the data
- Welfare and benefit programs, human services, law enforcement, education, employment/wages, Medicaid, public health Chapin Ha

Strategies to improve access

- Develop a relationship with an agency that can provide you with access
- Develop a relationship with someone who has access
- Use your political capital to have a policymaker (Governor or Director of agency) tell lawyers, program and IT staff to provide you with access
- Get a contract or do free work, but all that may require the above

Long way to go?

- Big increase in integrated, "research-ready" data happening to different degrees in different cities, counties, and states (AISP).
- There is a wide variation in who has access to the data that is being created and the quality of the data that is being built.
- It's also taking many years to develop these efforts in states and cities
- Best practices have not been disseminated to a sufficient extent
- States often rely on large corporate vendors, who will only go so far, and government agencies don't have the skilled staff necessary to take full advantage of the efforts
- Much of this is because ...



Silos of all kinds

- Across levels of gov't federal, state, county, city
- Within levels of government agency silos
- Within agencies and across agencies program silos
- Across domains health, education, workforce/employment, law enforcement, anti-poverty
- Academic/professional silos disciplines have their own interests
- Advocacy silos
- All work to the detriment of comprehensive data made available in an format conducive to research and analysis

Local public sector not in sync with feds

- 30 years ago, when there was less data, most public sector agencies had handfuls of analysts
- Now, we're lucky if there is one per agency
- Increasing focus on compliance, but that's not all that new
- At the same time, the federal government is requiring evidence-based practice and evaluation in many areas of social programs, which is a major challenge, given the lack of research expertise in these agencies

A new model for accessing data

- Data sits in government or private databases continuously being updated by the transactions completed by the government agency.
- When needed or periodically, data is transferred to an analytic engine that conducts a specified analysis descriptive, multivariate, mapped ...
- OR, it is posted on a data portal with API capability for anyone (?) to access
- Challenge: How to apply this to data about individuals who participate in programs in a political environment.

The end

- There are haves and have nots
- There are real barriers that lead to data not flowing to those that need it
- The nature of these barriers vary from sector to sector and place to place, but there are common themes
- These barriers can be addressed and those that don't have must learn from those that have
- Incentives have to be put into place for all jurisdictions to use their data to get smarter about what they are doing —
- Reviewing all federal research projects so that they are effectively using administrative data

Robert Goerge <u>rgoerge@chapinhall.org</u>

