
Data ~ Meaning ~ Impact:

The Science of Improving the Lives of
Children and other Young People.

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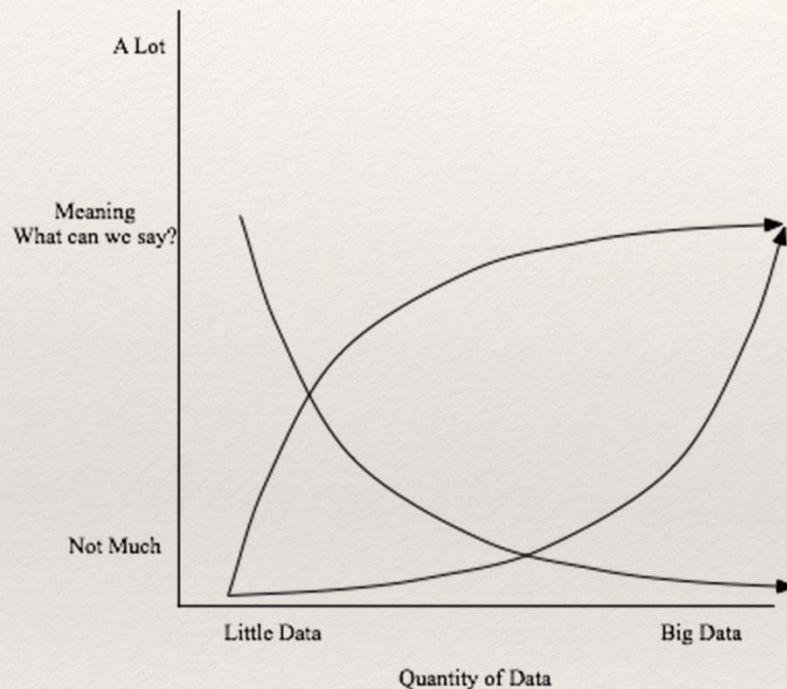
Reflections in Three Domains

- Big data and the problem of meaning
- Big science and the need for theory
- The problem of human capital

Science vs. Madison Ave.

- Big data
- Data mining
- Data warehouse
- Data marts
- Predictive analytics
- Advanced analytics
- Inter-operability

Data and Meaning



- › How big is big?
- › What value does big bring?
- › Meaning and value
- › Cost and Value

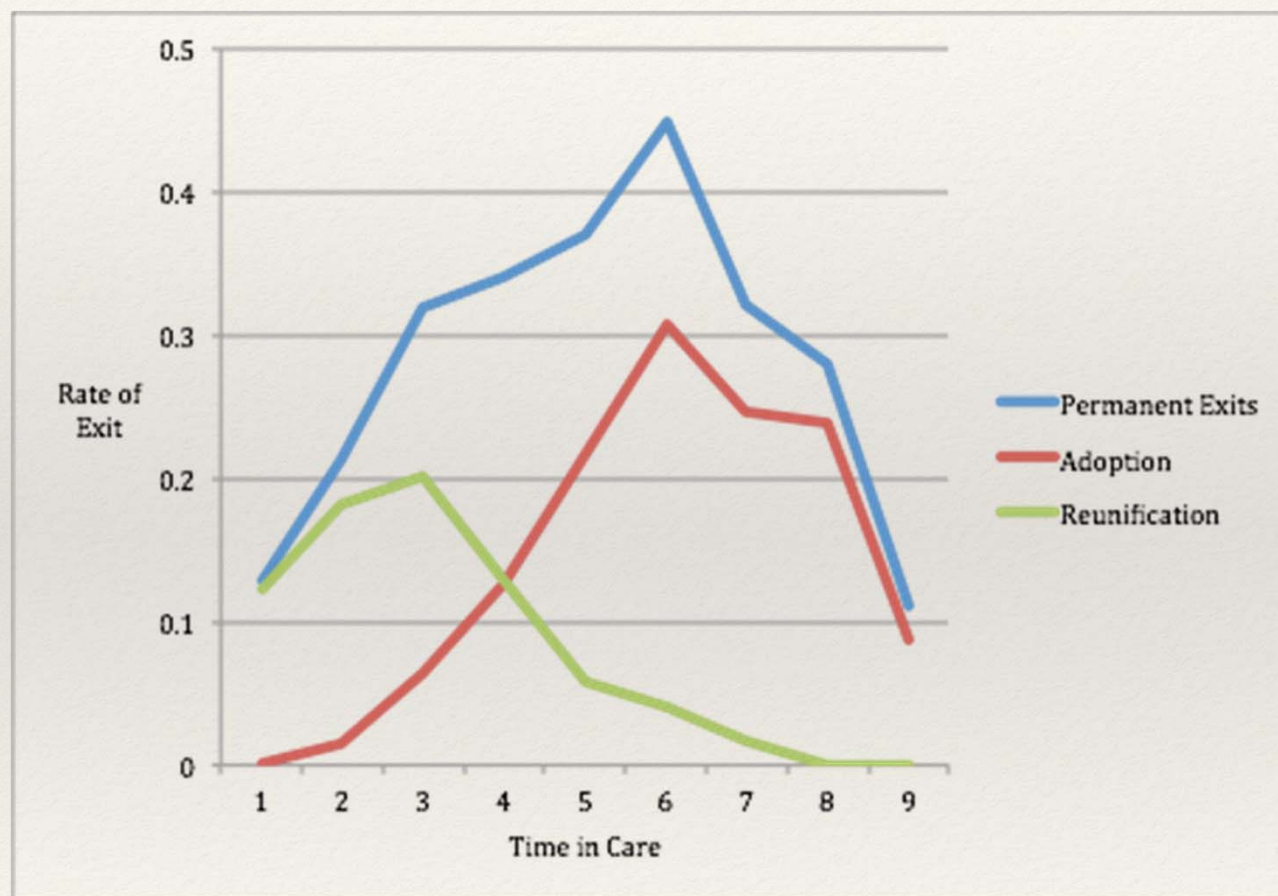
$$e = mc^2$$

- › Better value from data - big and small
- › Science makes meaning of data

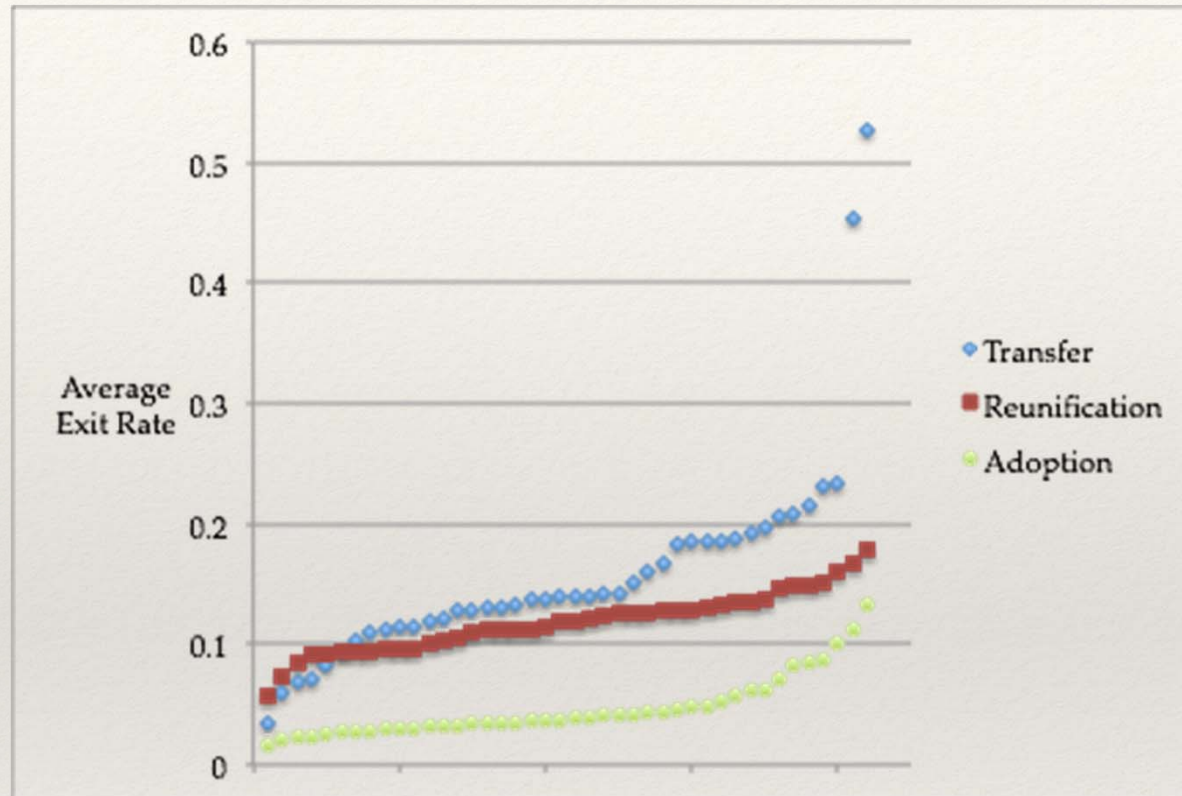
Science, Theory, and Impact

- Asymmetries in the development of theory
 - Person-centric vs. system-centric
- Person, place, and time as scientific narrative

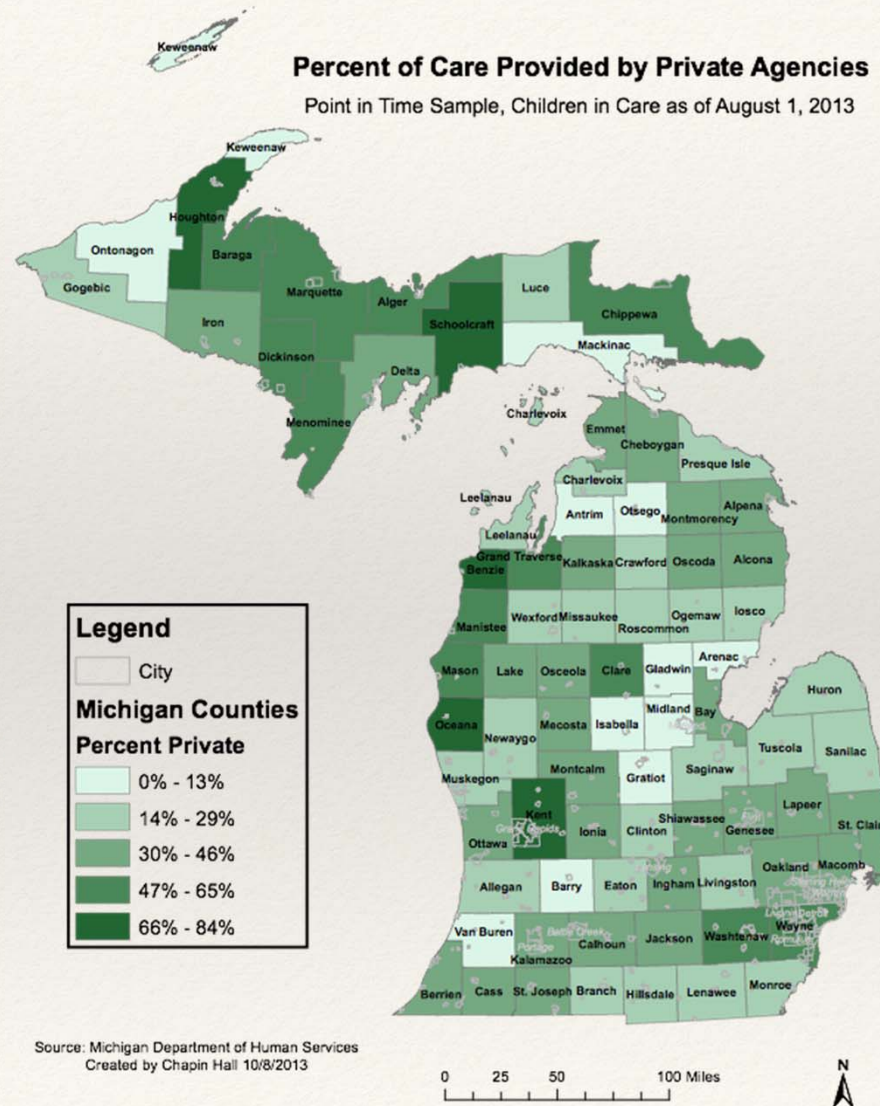
Person-centric view of leaving placement



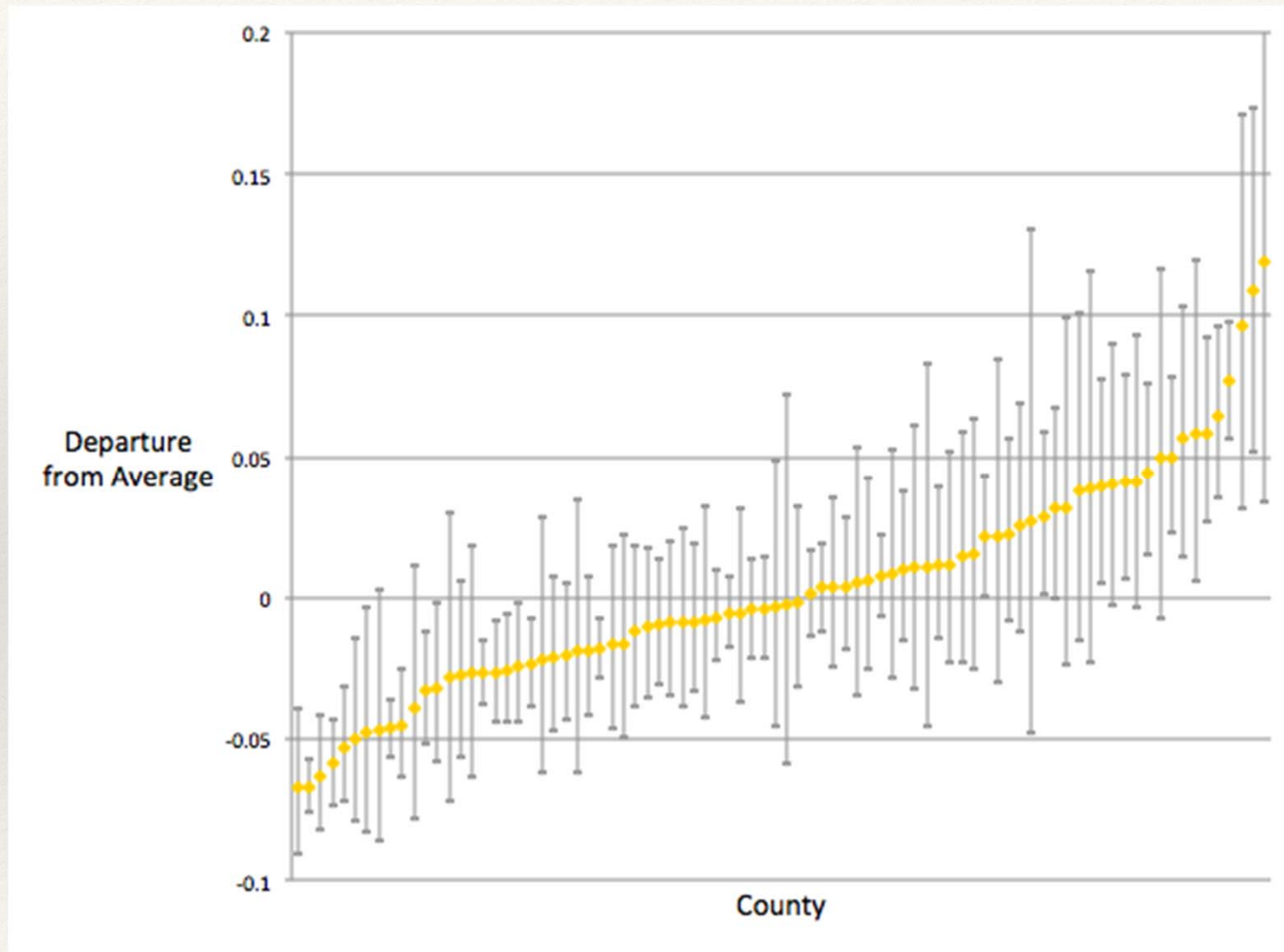
System-centric view of leaving placement



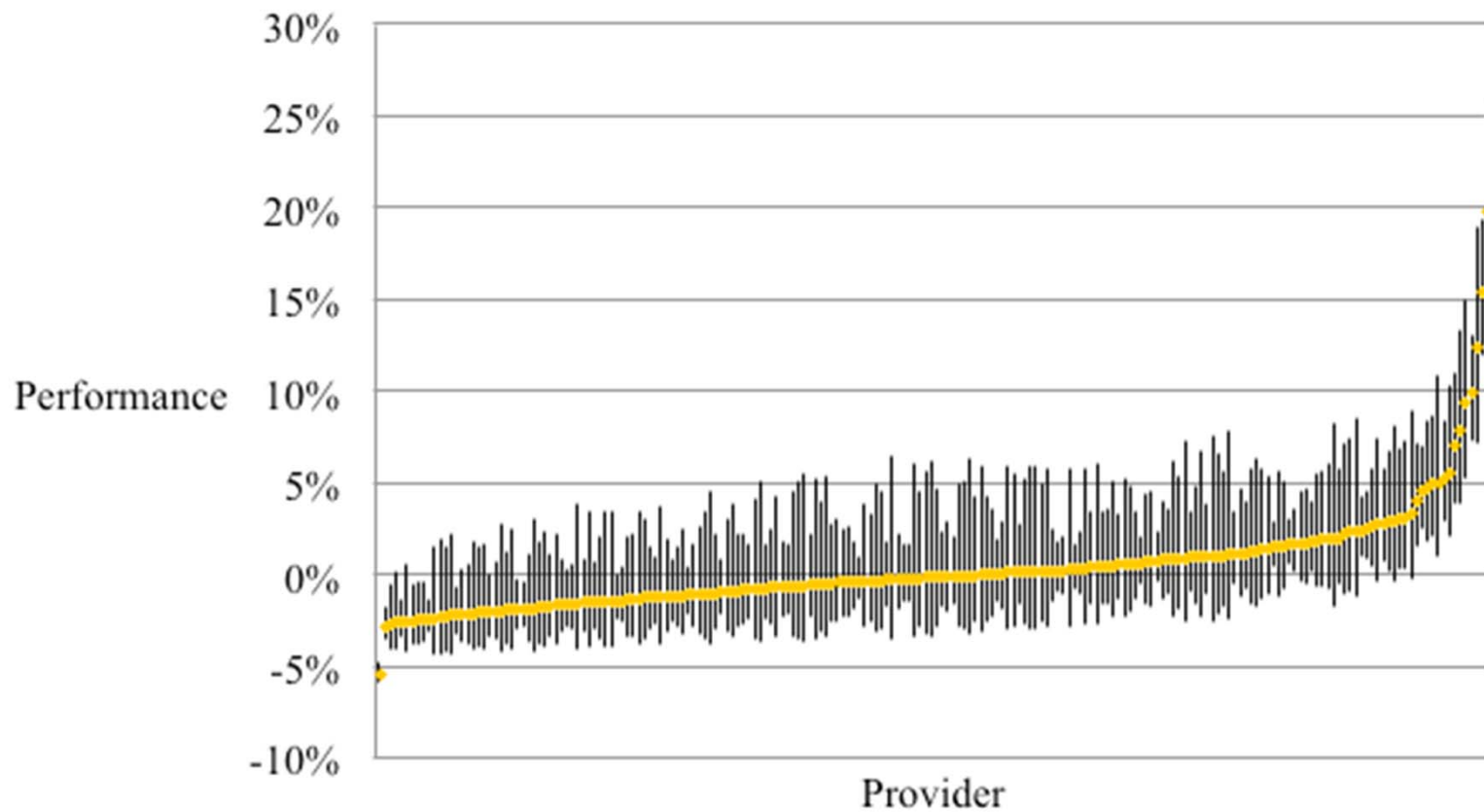
System-centric View of System Structure



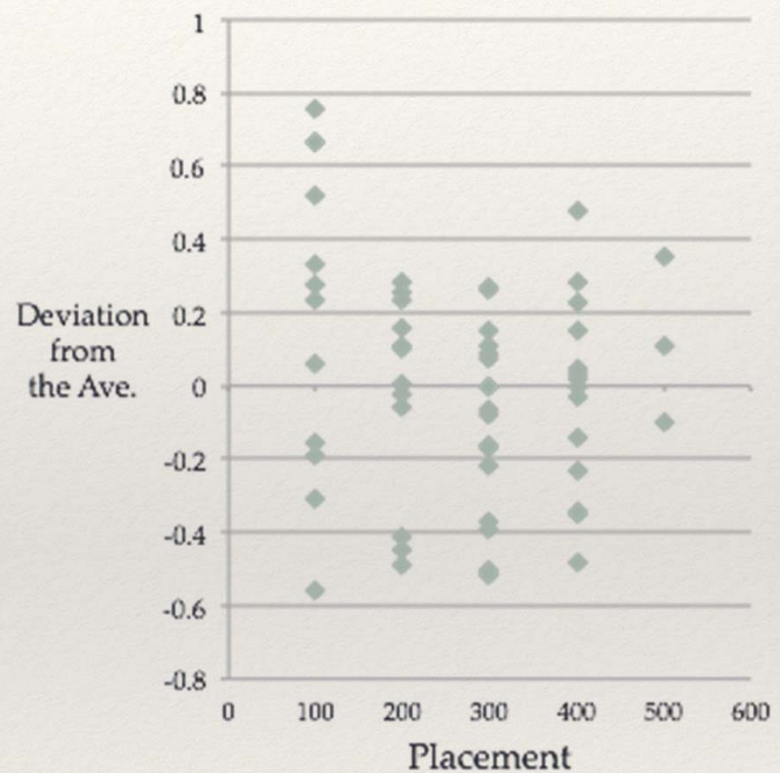
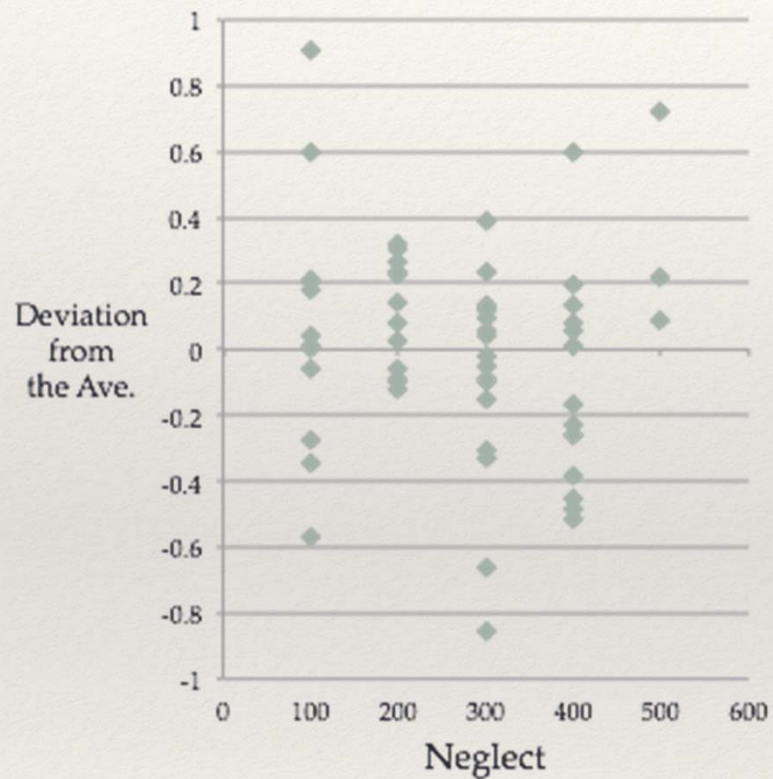
System Centric View of County Performance



System-centric View of Provider Performance



System-centric View of Neglect and Placement



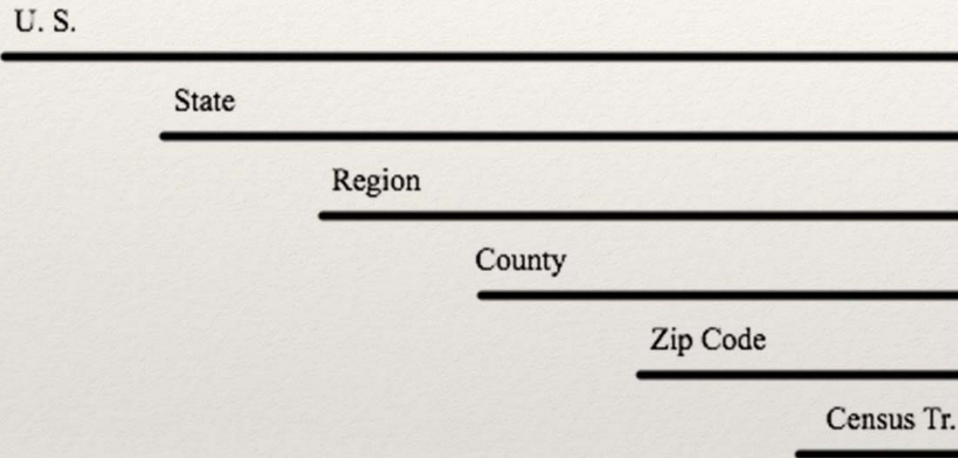
System-centric View of Service Allocation and Impact

Community Area	Slots per 100 Victims			Placement Impact
	Expected	Observed	Residual	
High Need 1	36.94	26.2	-11.000	-1
High Need 2	36.94	32.4	-5.000	0
High Need 3	36.94	34.8	-2.000	0
High Need 4	36.94	37.6	1.000	-1
High Need 5	36.94	41.2	4.000	0
Low Need 1	33.45	1.7	-32.000	0
Low Need 2	33.45	30.3	-3.000	0
Low Need 3	33.45	27.7	-6.000	0
Low Need 4	33.45	37.6	4.000	0
Low Need 5	33.45	38.8	5.000	-1
Low Need 6	33.45	57.1	24.000	1

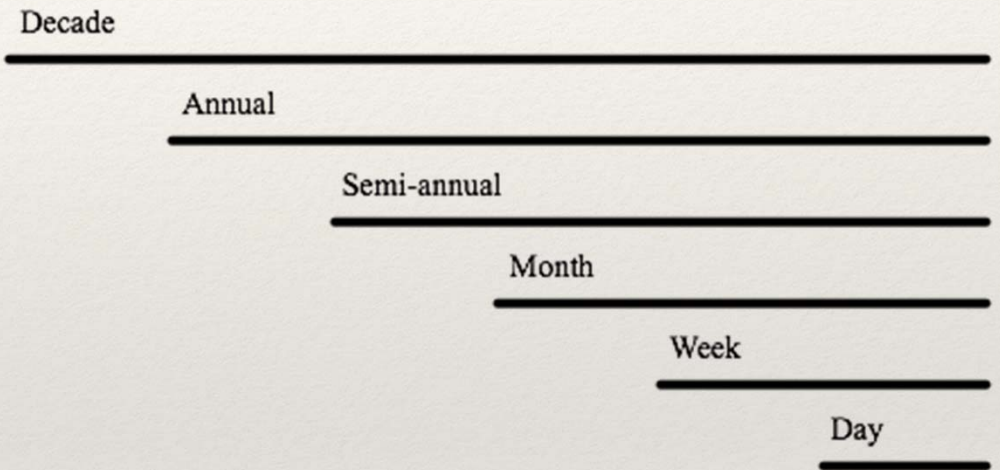
Person, Place, and Time as Scientific Narrative

Spatial and Temporal Structure

Spatial Structure



Temporal Structure



Biographical Narrative and Service History

Family, Person, and Clinical Narrative

Mother/Father

Child 1

Clinical Narrative

Service History

Preschool/School

Health

Mental Health

Child Welfare Trajectories

Report

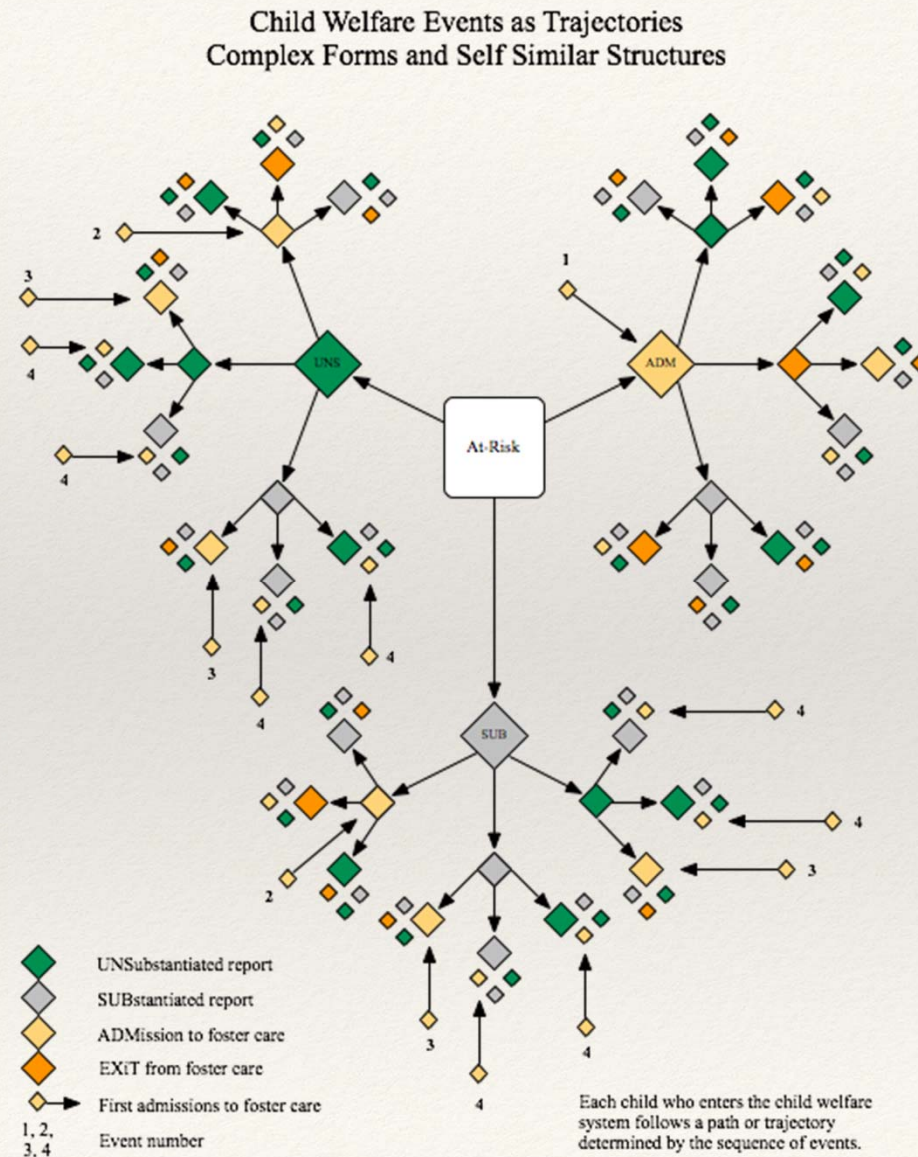
Investigation

Disposition

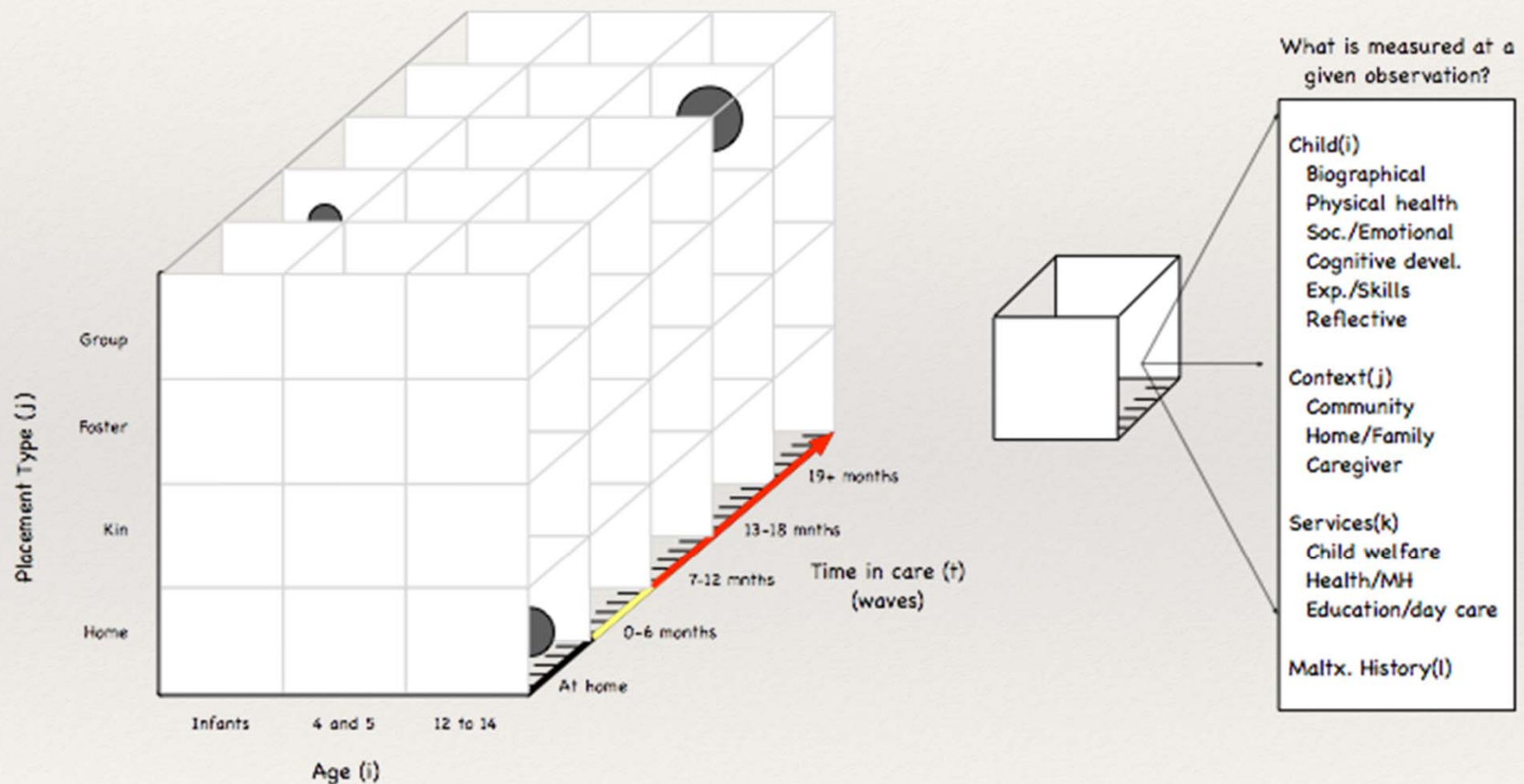
In Home Service

Placement

Trajectories and Narrative Structure



Trajectories as Narrative



Human Capital and Research Evidence Use

