



Justin Marlowe
jmarlowe@uw.edu
206-221-4161
University of Washington
Box 353055, Parrington 229
Seattle, WA 98195-3055

Betty Bekemeier
bettybek@uw.edu

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FINAL REPORT PRODUCT

Poster Presentation

Justin Marlowe, Betty Bekemeier, Linda Sharee Squires, “Cross-Jurisdictional Sharing and Unit Costs of Public Health Services,” presented at the Academy Health (ARM) Annual Conference, June 2016.

Justin Marlowe, Betty Bekemeier, Linda Sharee Squires, “Exploring Cross-Jurisdictional Sharing among Local Health Departments in Four States,” presented at the National Association of County and City Health Officials (NACCHO) Annual Conference, July 2016.

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This study examines the following question: **Does cross-jurisdictional sharing (CJS) influence the volume, intensity, and unit costs of services delivered by local health departments (LHDs)?**

Exploring Cross-Jurisdictional Sharing Among Local Health Departments in Four States

Justin Marlowe, Ph.D., CGFM
Endowed Professor of Public Finance
Principal Investigator
jmarlowe@uw.edu

Betty Bekemeier, Ph.D.
Associate Professor
Co-Investigator
bettybek@uw.edu

Linda Sharee Squires, RN, BSN
Ph.D. Candidate
Research Assistant
shareesq@uw.edu

W
EVANS SCHOOL
OF PUBLIC POLICY & GOVERNANCE
UNIVERSITY of WASHINGTON

PHAST
Public Health Activities & Services Tracking

SCHOOL OF NURSING
UNIVERSITY of WASHINGTON

Background

The question: Does “cross-jurisdictional sharing” (CJS) affect the cost and efficiency of local public health services?

Cross-jurisdictional sharing (CJS) defined: Sharing of financial, human, and other resources between local health jurisdictions (LHJs) on an ongoing basis.

Hypothesis: More formal, intensive CJS associates with: 1) lower service delivery costs and 2) more efficient service delivery.

Key policy issue in many states today. Is CJS a viable policy alternative to consolidation, regionalization, and other structural changes in local public health service delivery?

Methods

Comprehensive survey on CJS activity sent to all LHJs in four states: New York, Oregon, Washington, Wisconsin; Response rate 65% (N=145)

Combined survey results with data on: 1) Public Health Activities & Services Tracking (PHAST) “MPROVE” measures; and 2) administrative data on annual LHJ spending

Empirical analysis of a sub-sample of Washington LHJs:

- Propensity score matching to compare per capita spending for CJS vs. non-CJS WA LHJs
- Data envelopment analysis (DEA) to compare technical efficiency for CJS vs. non-CJS LHJs

Ten case studies of service delivery - five CJS and five non-CJS jurisdictions across all four states

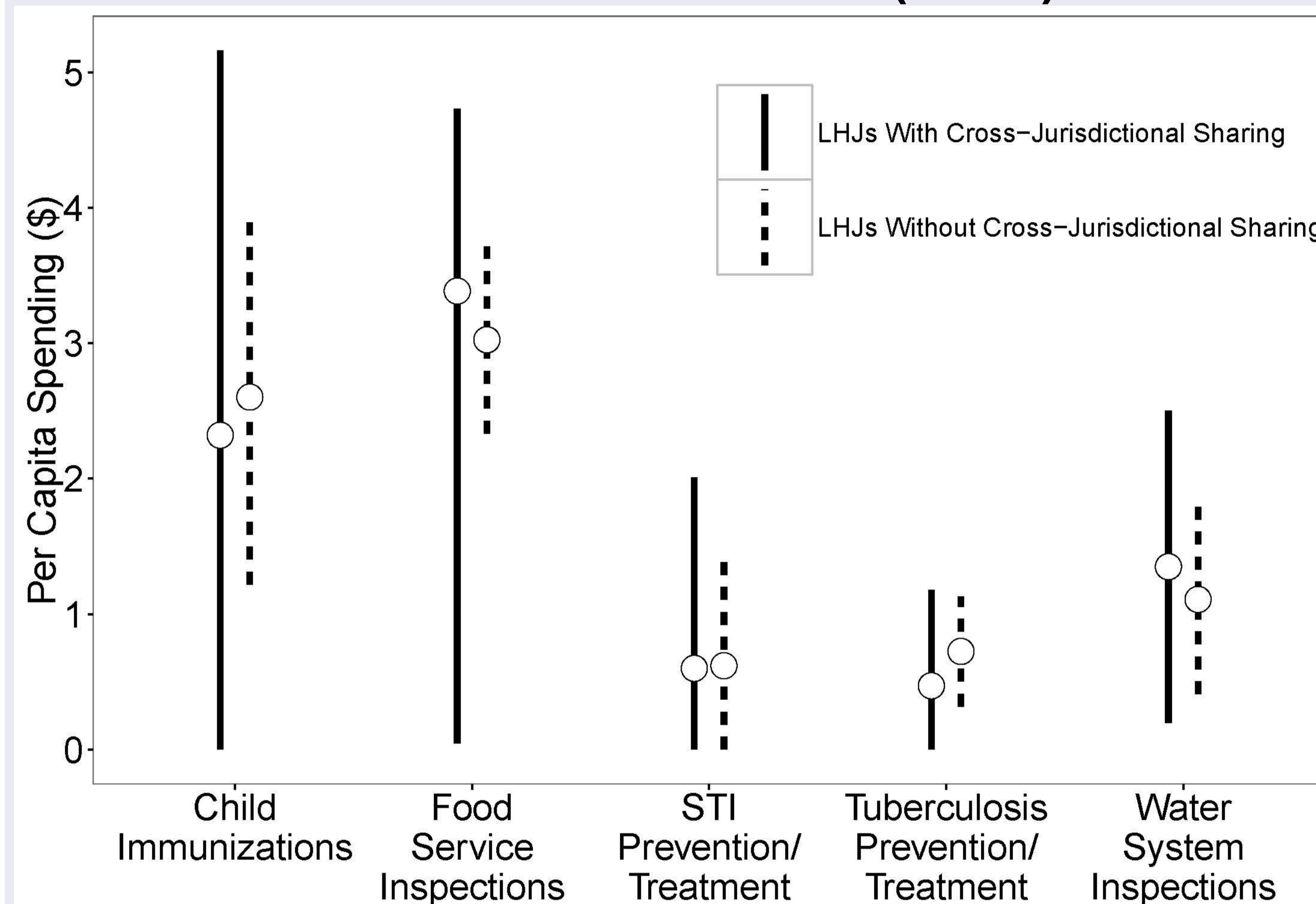
What Motivates CJS?

Motivation for Cross-Jurisdictional Sharing Among LHJs in Four States (N=145)



Effects of Cross-Jurisdictional Sharing

Per Capita Spending on Five Communicable Disease Service Areas for WA LHJs, CJS vs. non-CJS Jurisdictions (N=12)



Note: Lines denote a 95% confidence interval around the mean

Efficiency Rankings for WA LHJs, CJS vs. non-CJS Jurisdictions (N=25)

LHJ	LHJ Characteristics		Efficiency Score Rankings				
	Population	Poverty Rate	Child Vaccinations	TB Prevention/ Treatment	STI Prevention/ Treatment	Water System Inspection	Food Service Inspection
LHJ1	18,575	23%	1	1	1	6	6
LHJ2	254,104	16%	17	14	15	5	5
LHJ3	110,800	14%	1	10	9	7	10
LHJ4	4,001	13%	2	1	1	1	1
LHJ5	102,138	18%	2	18	7	15	17
LHJ6	2,246	10%	3	2	2	1	2
LHJ7	29,802	14%	21	16	16	2	3
LHJ8	40,954	22%	4	3	11	19	20
LHJ9	75,399	14%	5	4	3	4	9
LHJ10	10,536	17%	3	6	4	4	2
LHJ11	60,545	18%	6	8	5	14	14
LHJ12	64,058	18%	4	3	3	16	7

Shaded cells = jurisdiction has CJS for communicable disease services

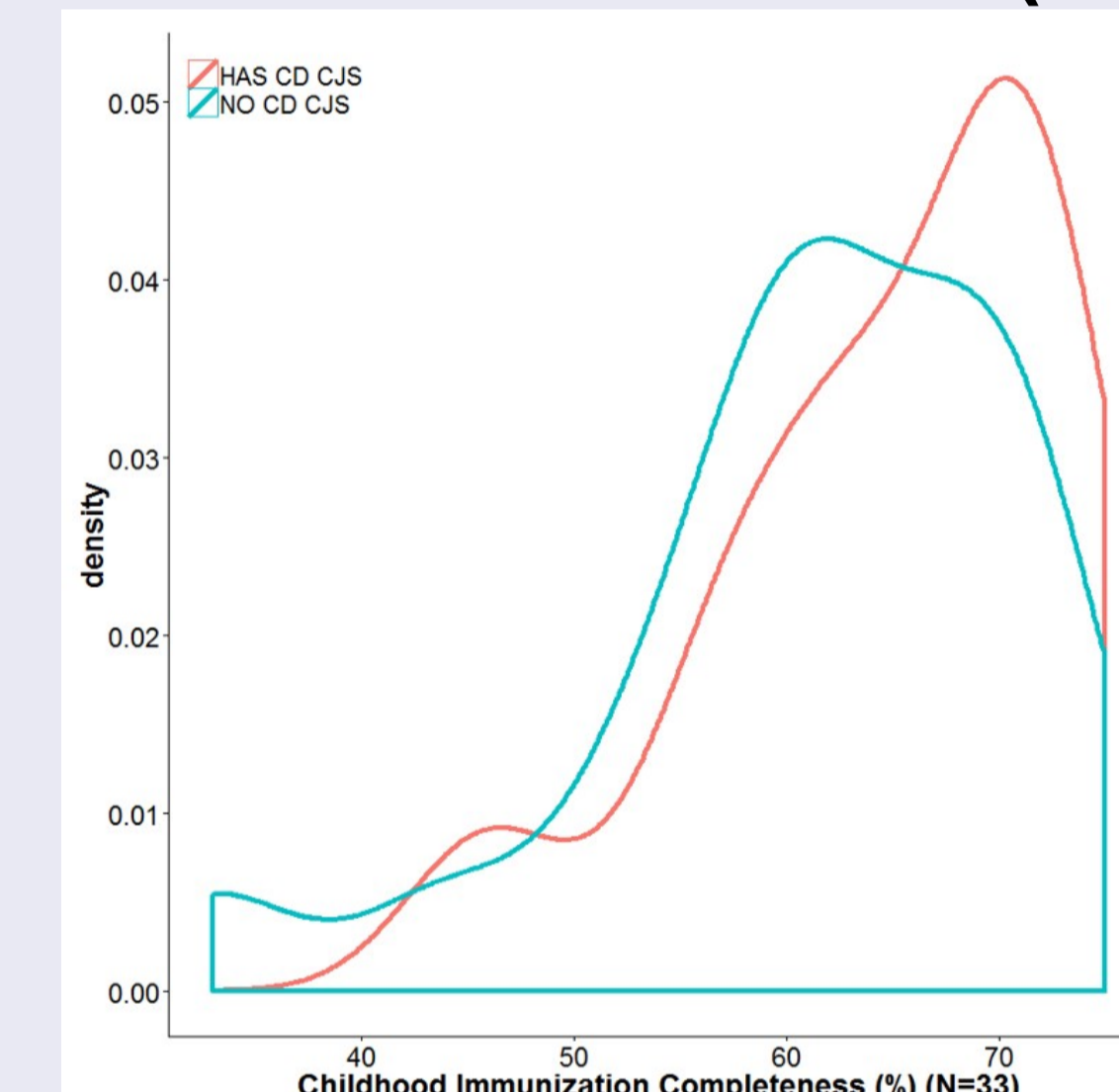
Qualitative Evidence

Interviews with LHJ leaders suggest CJS is most effective for:

- “Goldilocks” LHJ populations - not too small, not too large
- LHJs willing to trade informality and flexibility for formality and transparency
- LHJs with strong coordination among communicable disease, environmental health, and epidemiology
- Communities with strong relationships among public health, health care, public schools

Next Steps - CJS and Service Reach

Childhood Vaccination Completeness Rates, CJS vs. non-CJS LHJs (N=33)



Conclusions

Local health jurisdictions use CJS principally to improve services and make better use of resources

No evidence that cost savings is a distinct motivation or a clear effect of CJS

Jurisdictions that employ in cross-jurisdictional sharing tend to be more technically efficient and serve smaller populations

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