

Cross-Jurisdictional Sharing in Local Public Health Systems: Implications for Costs, Impact, and Management Capacity

Does cross-jurisdictional sharing (CJS) among local health departments (LHDs) affect the volume, intensity, and unit costs of public health services? We proposed that more intense and more formalized sharing would increase service intensity and volume and drive down unit costs. Previous case study research and survey findings had shown that CJS allows LHDs to develop new service delivery capacity and preserve existing capacity,¹ but to date, that trend has not been shown in broad-based, empirical research.

The Study

To answer these questions, we conducted a survey to measure the extent of CJS among LHDs on all foundational public health services (N=227 in 4 states). We combined these results with data from the University of Washington's Public Health Activities & Services Tracking (PHAST) project's Multi-network Practice and Outcome Variation Examination (MPROVE) measures, comparing public health outcomes across jurisdictions that did and did not have CJS arrangements. We focused on outcomes in two main areas – communicable disease and environmental public health. LHD spending data from the Washington State Auditor's Budgeting and Accounting Reporting System (BARS) allowed us to compare spending on public health services across jurisdictions that did and did not have CJS arrangements. Finally, we conducted seven case studies with LHDs to illustrate how CJS affects service delivery.

KEY FINDINGS

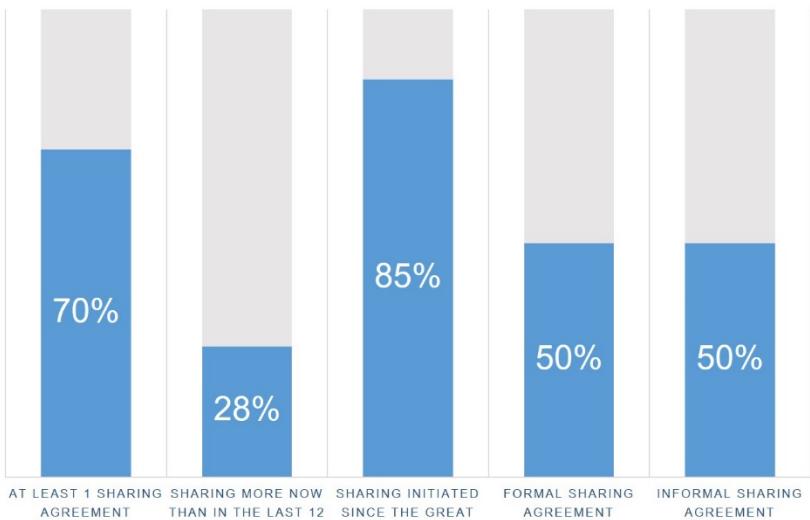
- Sharing is concentrated in a few service areas, and among smaller, more rural LHDs
- Most sharing was initiated after the Great Recession
- About half of sharing arrangements are informal
- LHDs employ CJS mostly to improve services and make better use of resources
- Sharing is not associated with per capita spending on key communicable disease services
- Smaller LHDs that share resources related to communicable disease services are more efficient
- Sharing in relation to communicable disease appears to be associated with better health-related outcomes

¹ Madamala, K., Young N., Young, D., Giese, L., Brandenberg, T., Zahner, S. (2014). Current and planned shared service arrangements in Wisconsin local and tribal health departments. *Journal of Public Health Management and Practice* 20(6), 640-646; Shah, G., Badana, A., Robb, C., Livingood, W.C. (2016). Cross-jurisdictional resource sharing in changing public health landscape: Contributory factors and theoretical explanations. *Journal of Public Health Management and Practice*, 22(2), 110-119; Madamala K, Zahner S, Brown R. (2016). Sharing local public health services across jurisdictions: comparing practice in 2012 and 2014. *Front Public Health Serv Sys Res* 5(2), 19–25; Vest, J. Shah, G. (2012). The extent of inter-organizational resource sharing among local health departments: The association with organizational characteristics and institutional factors. *Journal of Public Health Management and Practice* 18(6), 551-560.

Motivations for Cross-Jurisdictional Sharing

Our research revealed that:

- 70% have at least one sharing arrangement
- 28% are sharing more now than in the past 12 months
- About 85% of sharing initiated since the Great Recession
- About 50% of sharing agreements are formal and 50% are informal
- Sharing most common among emergency preparedness, environmental health, and 35 “other” areas
- “Other” areas include emerging service areas like opioid dependence or intergovernmental lobbying



Among the respondents who reported various motivations for their CJS, by far the most common motivations were to “provide better services,” “make better use of resources,” and “respond to program requirements.” Consistent with other studies, 60 to 80% of respondents across all services and capabilities identified one or all of these motivations. Less than half of respondents identified “save money” as a motivation, making clear that cost savings is one of, but not the main motivation for CJS.

Cross-Jurisdictional Sharing and Service Outcomes

We performed a variety of tests to determine whether and how CJS affected service delivery outcomes such as unit costs, volume of services delivered, and service delivery reach. We combined the survey results from Washington State with Washington State administrative data on LHD spending and the PHAST/MPROVE measures on five service delivery outcomes: childhood immunization, sexually-transmitted infections, tuberculosis control, food service inspection reach, and water system inspection reach. Tests revealed that LHDs with CJS do not appear to spend any more or less per capita on these services than those without CJS. However, some LHDs appear to be more efficient. We examined the “technical efficiency” of these same LHDs and found that small LHDs with CJS were consistently among the top 5 most efficient LHDs across all five service areas examined. Furthermore, while sharing was not associated with per capita spending on communicable disease services, it did appear to be associated with higher rates of immunization completeness for toddlers.

Next Steps

- **SHARE** findings across local health jurisdictions to be a catalyst for a broader conversation about public health efficiencies within your state, especially around critical communicable disease concerns like immunization and enteric disease.
- **IDENTIFY** further research opportunities to examine the impact of cross-jurisdictional sharing on population health outcomes and improved service delivery.