

Ohio Research Association for Public Health Improvement (RAPHI) Quick Strike Project Proposal

Project Title: Consolidation in Ohio Local Public Health: Differences in Expenditures

Lead Investigators: Matt Stefanak-Practitioner PI
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Ohio Research Association for Public Health Improvement (RAPHI)

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Arkansas Affiliate PBRN

Organization: Lead Agency: Kent State University (KSU)

Subcontracts: University of Arkansas for Medical Science (UAMS)
RAPHI (Case Western Reserve University)

Issue & Context:

In January of 2012, the mayor of Youngstown Ohio and members of the appointing authority for the Mahoning County District Board of Health requested the Mahoning County Health Commissioner to prepare an exploratory review of the proposed merger of the city and county health departments. A key area of concern for decision makers was the potential for cost savings obtained through consolidation. A preliminary report was submitted in February 2012, but due to the extremely short turnaround time of the request, significant limitations exist in the analyses that were performed. On the basis of this preliminary review and other evidence, community leaders are proceeding with discussions around consolidation. In an effort to strengthen the financial evidence regarding the impact of consolidation of the Mahoning County District Board of Health and Youngstown City Health District and more generally to inform merger decisions of local public health agencies that are currently being considered throughout Ohio, a more robust examination of the issue is required.

Research Objectives & Specific Aims:

The central objectives of this study are to develop evidence regarding the effect of consolidation on expenditures, workforce and services of local public health departments (LHD) in Ohio and to deliver actionable and timely findings to inform consolidation policy decisions.

- Aim 1:** Assess pre and post consolidation differences in staffing and overall/administrative expenditures for Ohio LHDs that have previously undergone mergers.
- Aim 2:** Assess longitudinal differences in staffing and overall/administrative expenditures for all consolidated and nonconsolidated LHDs in Ohio.
- Aim 3:** Qualitatively assess the motivations for, experiences during and perceived results from LHDs that have undergone consolidation.
- Aim 4:** Formulate key findings and lessons learned and disseminate them to inform policy decisions on consolidation.

Methods & Analysis:

This study will utilize a mixed methods approach, combining quantitative analysis of existing administrative data and primary collection of qualitative data from local health agencies. Data for the

quantitative component will be drawn from the Annual Financial Report (AFR) system, which is a collection of administrative reports that details LHD workforce and expenditures by categorical areas and is submitted annually by all LHDs in the state to the Ohio Department of Health. AFR financial data and covariates related to organizational and community characteristics will be incorporated from the Public Health Activities and Tracking Study (PHAST) database, which in collaboration with state PBRN partners has merged multiple state and national level data sources such as the National Association of County and City Health Officials' (NACCHO) National Profile Study and the Area Resource File that is maintained by the Health Resources and Services Administration (HRSA).

The study will incorporate three separate groups of analyses that utilize different study designs and methods. To investigate the research question presented in Aim 1, a pretest/posttest with control group design will be utilized. Analyses will be carried out using generalized estimating equation models for both staffing and overall/administrative expenditures controlling for community and organizational factors. Aim 2 will utilize the Deb, Munkin and Trivedi (2006) extended two part model to estimate differences in staffing and expenditures for independent LHDs and consolidated county level organizations. The combination of study designs described for Aim 1 and 2 is proposed in order to strengthen the robustness of the findings. The approach presented in Aim 1 is most directly representative of the question being asked by policy makers but it has methodological threats to its' external validity due to the potential for selection bias. The approach presented in Aim 2 addresses the issue of endogenous determination of consolidation decisions. Qualitative analyses included in Aim 3 will utilize semi structured phone interviews with health commissioners and other staff who have participated in the 12 LHD consolidations that have occurred in recent years. The qualitative study will enrich our quantitative findings, and provide a better understanding of factors that facilitate and act as barriers to LHD consolidation. Questions on specific LHD consolidation strategies and experiences as they relate to cost savings, workforce and service delivery would be asked. Once data are collected from all 12 LHDs, they will be analyzed using a thematic coding technique in an effort to identify specific themes which may be of use to other LHDs considering consolidation.

Project Implementation & Findings Dissemination:

The proposed study was conceived of by and will be led by Ohio public health practitioners who are members of the RAPHI research community. A multidisciplinary team of academic researchers from Kent State University and UAMS will provide technical support, as well as facilitate the data collection and statistical analyses, capitalizing on the knowledge and experience of the Ohio PBRN practitioner team to assess the validity and reliability of the data used in the analyses. The practitioner team, consisting of retired Mahoning County Commissioner Matthew Stefanak and an advisory committee of Ohio public health leaders chaired by Shaker Heights Health Director Dr. Scott Frank will oversee the study design and lead the interpretation and translation of study findings in order to enhance practice relevance. Dissemination of findings will be carried out through a multifaceted effort. Local and state level dissemination will be carried out under the leadership of the RAPHI PIs and the advisory committee and will consist of delivering written reports for policy leaders involved in consolidation discussions as well as preparing research briefs for the Association of Ohio Health Commissioners, Ohio Department of Health, and RAPHI. Dissemination to the broader public health community will be pursued through conference presentations at relevant professional meetings such as the Keeneland, NACCHO, and APHA conferences. A minimum of one manuscript for peer-reviewed publication will also be assembled on the study findings.

Implications:

Given the current climate in the Ohio public health system, with major city health departments such as Akron in 2011 and now Youngstown implementing or exploring consolidation with their county health departments, findings from this study hold direct value for high level policy decisions. The findings may

also serve to inform the corresponding national level debate on the issue of health department consolidation. The report of this study will inform public health practitioners and policy makers with information to guide successful strategies in local health department consolidations based on cost and performance.

Future Directions:

Consolidation, whether it is localized mergers or regionalization of local public health services, is a significant issue facing public health policy makers not only in Ohio but around the nation. Other PBRN and Affiliate states including Colorado, Connecticut, Georgia, Massachusetts, Nebraska, and North Carolina are currently confronting similar circumstances and present the opportunity for multi-PBRN studies on the influence of consolidation on the costs and performance of local public health. The findings and also the methodological lesson garnered from this study may serve to strengthen future research in this line of exploration.

The Study Team:

Matthew Stefanak (Practice PI) served as Mahoning County Health Commissioner for 24 years before retiring in May of 2012. He is the founding Co-PI of the Ohio public health practice- based research network (RAPHI), a past president of the Association of Ohio Health Commissioners, and a member of numerous state and national advisory committees including the NACCHO-led Public Health Uniform Data System (PHUDS) initiative in public health finance and the NACCHO Profile Workgroup.

Michael Morris (Academic PI) is an Assistant Professor in the Boozman College of Public Health at the UAMS specializing in public health systems finance research. Currently he is collaborating with the University of Washington on the Public Health Activities and Services Tracking (PHAST) project which is a collection of interrelated research studies examining the relationship of public health inputs and processes to population health. His previously funded works include studies of public health financial reporting systems, workforce development, the influence of variation in funding sources on systems performance and the cross subsidization of population services through individual level services revenue.

Scott Frank (Advisory Committee Chair) is the Health Director for Shaker Heights, Ohio and Associate Professor of Medicine at Case Western Reserve University. In his academic role, he is director of Case's Master of Public Health program. He is the founding PI of Ohio RAPHI. He is a nationally recognized expert in the fields of tobacco control and substance abuse and was the 2005 recipient of the Voices of Silence Award for his work with HIV/AIDS.

John Hoornbeek is an Associate Professor in the College of Public Health at Kent State University who specializes in health policy and public sector reform. He is currently leading an analysis of stakeholder perceptions of the merger of three local health departments in Summit County (Akron) Ohio in 2011.

Rohit Pradhan is an Assistant Professor in the Boozman College of Public Health at the UAMS who specializes in organizational theory and behavior. He has worked extensively in the area of consolidation and mergers in healthcare markets and currently serves as PI of an NIH grant examining the implications of consolidation on quality of care in the nursing home industry.

Ken Slenkovich is Assistant Dean in the College of Public Health at Kent State University. He has conducted feasibility studies of local health department consolidation in three Ohio counties, including the study which led to the consolidation of the three health departments in Summit County.

Project Time Line:

Activities	September	October	November	December
Assemble team	X			
Assemble data	X	X		
Data analysis		X	X	
Interpretation & translation of findings		X	X	
Report preparation		X	X	
Report presentations			X	X
Research briefs prepared			X	X
Manuscript preparation			X	X
Abstracts prepared for future conferences				X