Consolidation of Local Health Departments in Ohio: Impacts on Public Health Expenditures, Workforce, and Services

Preliminary Results of a “Quick Strike” Public Health Practice-based Research Study

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Key Points of Context

No Disclosures

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Collaborators

The Logic of PBRNs

Translation & application

Identify Common questions of interest

Apply Rigorous research methods

Research partner

Engaged practice settings

Analysis & interpretation

Data exchange
Consolidations
Ohio Local Health Departments

Figure 10. Number of local health departments operating in Ohio, 1993 and 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>City</th>
<th>General/Combined/County</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>62</td>
<td>88</td>
</tr>
<tr>
<td>2012</td>
<td>37</td>
<td>88</td>
</tr>
</tbody>
</table>

9 city LHDs merged with county LHDs, plus net reduction of 16 LHDs via contract.


Source for 2012 data: Ohio Local Health Department Census 2010, Ohio Department of Health, 2011.
Research Objective

develop evidence regarding the effect of consolidation on expenditures, workforce and services of local health departments (LHD) in Ohio and to deliver actionable and timely findings to inform consolidation policy decisions.
Purposes for Today

- Overview study aims and overall structure of the project.
- Summarize the “large n”, quantitative, research strategy.
- Present methods and initial findings for the “small n”, interview-based, portion of the study.
- Discuss this research and its potential implications for PH practice & policy in Ohio.
Study Aims

Aim 1: Assess pre and post consolidation differences in staffing and overall/administrative expenditures for Ohio LHDs that have undergone mergers since 2002.

Aim 2: Qualitatively assess the motivations for, experiences during and perceived results from LHDs that have undergone consolidation.

Aim 3: Formulate key findings and responses to frequently asked questions about consolidation to inform public health policy decisions.
Structure of the Project

The study is structured around two parallel research efforts:

- Analysis of AFR data from 2000 to 2012 to assess variations in revenue, expenditures and staffing for “consolidated” vs. “non-consolidated” local health departments.
  - The analysis will include variables to control for the impacts of factors other than consolidation on revenue, expenditure, and staffing outcomes.
  - Two-stage quantitative model to address “endogeneity” issues – issues relating to the fact that factors affecting the choice of health departments to consolidate may also be related to unobserved/unaccounted influences on our outcome variables (revenues, expenditures, and staffing).

- Interviews with senior Ohio County Health Department Officials in counties that have experienced consolidations since 2001.
  - Assess the motivations and perceived impacts of city-county health department consolidations.
“Large N” Quantitative Analysis: Answering the Methodological Challenge -- an Analytical Approach

First Stage Model
Predicting Consolidation

City / non-city LHD
Multiple LHDs in County
Population
Deficit spending by city
Deficit spending by LHD
City deficit X % LHD Revenue from city

LHD Consolidation Status

Second Stage Model
Estimating Consolidation Effects

OUTCOMES
Total Expenditures per capita
Administrative cost per capita
Staffing per capita
Local revenue per capita
Non-local revenue per capita

Trend Effect
Trend for LHD Expenditures

Jurisdiction Characteristics
urban/rural
LHD % non-local revenue
Overall city govt. spending

Demographics
Total Population
Population Density
% poverty
% unemployed
% minority

Using a Two Stage Selection Bias with Endogeneity modeling approach developed by Terza 1998
Interviews: Methods for the “Small N Analysis”

- Inventoried local health department consolidations in Ohio, in cooperation with Ohio Department of Health and experienced health officials in Ohio.
  - Identified 20 consolidations between 2001 and 2012.

- Interviewed senior health department officials for 17 of these 20 consolidations (85%).

- Looked at both full health district mergers and contractual consolidations.

- 13/17 (76%) senior local health officials were involved in the consolidation when it occurred while 4/17 were not involved.

- Interviews took place by telephone between January and April, 2013, and were followed by an opportunity for interviewee review of the coded written responses.
Who Initiated the Conversation About Consolidation?

Officials representing the city initiated the conversation about consolidation in 59% (10/17) of the cases.

- County initiated conversation in 18% (3/17) of the cases.

- Two cases where “both sides” were reported to have started the conversation (2/17, or 12%).

- One case where:
  - The Ohio Department of Health started the conversation (6%)
  - External organizations initiated the conversation (6%).
Motivations: Stated Goals of the Consolidations

We asked the senior county health officials to identify the stated goal(s) of their consolidations:

- 82% (14/17) indicated that saving money was an original stated goal
  - 25% (4/16) indicated that increasing efficiency was a stated goal (all four also said saving money was a goal)
- 65% (11/17) indicated that improving services was a stated goal
- 35% (6/17) indicated that building long term capacity was a stated goal

Most (14/17) of the officials indicated that these goals did not change over time.

Notably, there was some form of cross jurisdictional sharing of services and/or resources between the city and county health departments prior to the consolidation in most (14/17) cases.
In almost all cases, the senior officials we interviewed believed that their stated goals were achieved.

- Thirteen of the 14 (93%) senior officials who indicated saving money was a goal indicated that this goal was achieved (one did not know).

- All 11 (100%) of the senior officials who indicated that improving services was a goal indicated that they believed they had achieved this goal.

- Five out of the 6 (83%) senior officials who indicated building long term capacities was a goal felt that goal had been achieved (one “I don’t know”).
Perceived Impacts on Revenues

While all of the reporting officials (16/16, or 100%) said that the participating county health departments experienced increased revenues from tax based sources (state aids, local levies, contracts with the cities), local tax burdens do not appear to have increased:

- 94% (15/16) of directly responding health department officials (1 IDK) suggested that the tax burdens related to public health services on residents of the cities’ original jurisdictions did not increase;
- 73% (11/15) of directly responding health department officials (2 IDK’s) indicated that tax burdens for public health services were actually reduced for residents living in the cities’ jurisdiction;
- No (0%) of the senior officials indicated that tax burdens increased for residents of their jurisdictions.

The majority of those we interviewed indicated that grant revenue and program revenue did not increase during the time period of one year prior to one year after a consolidation.

- Of the 3 senior officials who indicated that grant revenue increased post-consolidation, all three felt that the increases were at least partially due to the consolidation.
- Of the 10 senior officials who indicated that grant revenue did not increase post-consolidation, none felt that the lack of increase was at least partially due to the consolidation.
Perceived Impacts on Expenditures

73% (11/15) of directly reporting officials (2 IDK’s) said public health expenditures (for the local public health system) did not increase post-consolidation.

53% (8/15) of directly reported officials (2 IDK’s) said PH expenditures (for the local public health system) were actually reduced, while 47% (7/15) said they were not reduced.

- Of those who indicated expenditures were reduced, 100% said this was at least partially due to the consolidation.
Perceived Impacts on Services

- Senior officials for all eleven departments which sought service improvement believed that they had achieved service improvements (11/11, or 100%).

- 59% (10/17) of senior officials indicated that the mix of services their department provided did not change after consolidating.
  - 41% (7/17) indicated that there was a change to the mix of services provided.
    - Of those who said there was a change, 4/7 said this was a positive change.

- A plurality (8/17) of respondents felt that environmental services benefited the most.

- Almost half (8/17) said there was a service “loss” in at least one of the jurisdictions affected by the consolidation.
  - The vast majority (7/8) who indicated there was a service loss felt that this was not a negative change.
Impacts on Services - continued

16/17 (94%) of responding officials either strongly agreed or agreed that services were at least maintained within the first year following implementation of the consolidation.

- 17/17 after two years.
- 9/9 after five years.

12/16 (75%) of responding officials (1 IDK) either strongly agreed or agreed that services had improved within one year of the consolidations taking place.

- 14/16 after two years
- 8/9 after five years
Perceived Impacts on Capacity

- 53% (9/17) felt that their department’s capacity to provide quality public health services increased post-consolidation.

- Two (2/17, or almost 12%) felt that their department’s capacity had actually decreased.

- About 35% (6/17) felt that their department’s capacity stayed about the same.
Seventy-six percent (13/17) of the senior officials indicated that there were no layoffs as a result of the consolidation, but consolidation was followed by reduced staffing in at least some cases.

- 3/17 (18%) said that there were layoffs.

- Others mentioned that staffing levels decreased voluntarily – due to attrition.
Rating the “Experience” of Consolidation

We presented a series of statements to the senior officials and asked them which statement best described their experience with transitioning from two departments to a single department:

- Smooth and without problems: 4/17 (23.5%)
- Orderly, given the magnitude of the changes: 7/17 (41%)
- An ongoing process, with expected ups and downs: 4/17 (23.5%)
- Very difficult and problematic: 2/17 (12%)
- A major problem with very negative consequences: 0
- I don’t know: 0

88% (15/17) indicated that consolidating health departments was a good idea.

- 1/17 said it was not a good idea.
- 1/17 indicated they were not sure.
Preliminary Findings

- Financial incentives have been present in many cases for city governments to merge their departments into county health departments.

- Improving services has also been seen as important, and all eleven leaders of the departments which were motivated by service improvements thought that they had achieved service improvement goal(s).

- There are perceived savings/reductions of tax burdens for public health services reported by 73% (11/15) of the city jurisdictions.
  - Tax burdens for PH services in other jurisdictions do not appear to have increased.

- Most senior county officials believed that it was a good idea to consolidate (county perspective).
Next Steps

- Finalize small ‘n’ interview assessment:
  - Finalize more detailed analysis
  - Merge with large ‘n’ assessment

- Complete large ‘n’ quantitative assessment:
  - Finalize data set
  - Run quantitative models
  - Merge with small ‘n’ assessment

- Complete and finalize report.

- Disseminate results in Ohio and elsewhere.
Thank You!

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