Cross-Jurisdictional Shared Service Arrangements in Local Public Health

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Institute for Wisconsin Health
Webinar Presentation
November 13, 2015

Archived webinar and presentation slides are available at:
http://www.wphrn.org/research-in-progress.html
Cross-Jurisdictional Shared Service Arrangements in Local Public Health

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• Professor Roger Brown, Statistician, UW-Madison School of Nursing
Partners

Organizations

- Institute for Wisconsin’s Health, Inc.
- Network for Public Health Law
- Center for Sharing Public Health Services
- WI Association of Local Health Departments and Boards
- Wisconsin Division of Public Health

Study Advisory Team

- Linda Conlon, Oneida County Health Department
- Darren Rausch, Greenfield Health Department
- Bob Leischow, Wisconsin Association of Local Health Departments and Boards and Clark County Health Department
- Angela Nimsgern, Wisconsin DPH
- Kim Whitmore, WPHRN member
- Gianfranco Pezzino, Center for Sharing Public Health Services
- Nancy Young, Institute for Wisconsin’s Health, Inc.
Specific Aims

1. Describe SSA and LHD characteristics, motivations, and expected outcomes
2. Measure extent of implementation
3. Measure performance in achieving expected outcomes
4. Analyze effects of SSA features on implementation and performance
5. Document change in SSA use compared to baseline (2012 to 2014)
Methods

- IRB approval UW-Madison
- Invited LTHD to participate
- Incentive drawing for registration at state WPHA/WALHDAB conference
- Collected SSA documents
- Extracted information from SSA
- Interview LTHD directors
- Content coding of open-ended (NVivo10)
- Local Public Health Department Survey
- Analysis
Shared services agreement definition

• “A written document that describes, defines, or governs sharing of resources across jurisdictions on an ongoing or as needed basis. Shared resources may include, but are not limited to, organizational functions, staffing, programs, services, capacity, data, information, and technical assistance”

• At least 2 local-level health departments
• In place on or after January 1, 2011
Shared services agreements

Invited: 91 LTHD

Submitted: 128 SSA

Included: 80 SSA
n=254 partner dyads

- Declined = 3
- No SSA = 13
- No response = 12

- 27 duplicates
- 21 excluded
Interviews

Invited (n=91):
- 88 LHD
- 3 THD
  - 3 declined
  - 13 no SSA
  - 12 did not respond

Consented (n=63)
- 62 LHD
- 1 THD
  - 18 did not respond
  - 2 LHD w/ shared LHO

Interviewed: n=44
Aim 1

• Describe SSA and LHD characteristics, motivations, and expected outcomes
What is an SSA called?

<table>
<thead>
<tr>
<th>SSA Title Frequency</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memorandum of Understanding (MOU)</td>
<td>46</td>
<td>57.50</td>
</tr>
<tr>
<td>Agreement</td>
<td>7</td>
<td>8.75</td>
</tr>
<tr>
<td>Memorandum of Agreement (MOA)</td>
<td>6</td>
<td>7.50</td>
</tr>
<tr>
<td>Interagency service contract</td>
<td>4</td>
<td>5.00</td>
</tr>
<tr>
<td>Mutual aid agreement</td>
<td>3</td>
<td>3.75</td>
</tr>
<tr>
<td>Contract</td>
<td>3</td>
<td>3.75</td>
</tr>
<tr>
<td>Inter-governmental agreement</td>
<td>2</td>
<td>2.50</td>
</tr>
<tr>
<td>Purchase contract</td>
<td>2</td>
<td>2.50</td>
</tr>
<tr>
<td>Agreement to form a consortium</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Data use agreement</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Cooperative agreement</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Interagency agreement</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Business associate agreement</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Cooperative inspection agreement</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Counties for “ACTIVITY”</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>80</td>
<td>100%</td>
</tr>
</tbody>
</table>
Primary program area

- Environmental health: n=27
- Emergency preparedness: n=16
- Maternal/child health: n=13
- Prevention/chronic disease: n=12
- Communicable disease: n=11
- Administrative/other: n=1

N=80 SSA
Nature of sharing (all types)  

- Shared service provision: n=63
- Shared staffing: n=32
- Shared TA/Consultation: n=23
- Shared administrative functions: n=13
- Shared equipment: n=9
- Other: n=5

N=80 SSA
Primary nature of sharing

N=80 SSA

- Shared service provision: n=56
- Shared administrative functions: n=10
- Shared staffing: n=12
- Shared TA/Consultation: n=2
- Shared equipment

Percent
<table>
<thead>
<tr>
<th>Spectrum of integration</th>
<th>SSA</th>
<th></th>
<th>Partner dyad</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Informal and customary arrangements</td>
<td>4</td>
<td>5</td>
<td>16</td>
<td>6.3</td>
</tr>
<tr>
<td>Service related arrangements</td>
<td>56</td>
<td>70</td>
<td>131</td>
<td>52</td>
</tr>
<tr>
<td>Shared functions with joint oversight</td>
<td>20</td>
<td>25</td>
<td>107</td>
<td>42</td>
</tr>
<tr>
<td>Regionalization/merger/new entity</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>100</td>
<td>254</td>
<td>100</td>
</tr>
</tbody>
</table>
• 73 (91%) had begin dates noted
• 69 (86%) had end dates noted
Length of term

- Min/max = 4 months to open-ended
- Average term = 12.01 months (SD=7.61)
- Most frequent term = 12 months (58%)
- 24% = term not specified
Number of LTHD partners

• Mean = 5.91 (SD=4.74) partners/SSA
• Min/max: 2-15 LTHD/SSA
• 49% have 2 partners
• 72/88 LHD (82%)
• 5/11 Tribal (45%)

n=80 SSA
n=254 partner dyads
Mean number of partner dyads

Mean partners by primary focus area

- Emergency
- MCH
- CD
- EH
- PB-Prev
- Admin

Mean partners by primary nature of sharing

- Training
- Services
- Staffing
- Administrative

N=254
<table>
<thead>
<tr>
<th>SSA “legal” items</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Legal obligation is created by agreement</td>
<td>79</td>
<td>99</td>
</tr>
<tr>
<td>2. SSA intention is binding</td>
<td>78</td>
<td>98</td>
</tr>
<tr>
<td>3. Decision-making process is clear*</td>
<td>76</td>
<td>95</td>
</tr>
<tr>
<td>4. Financial payment/reimbursement required**</td>
<td>64</td>
<td>80</td>
</tr>
<tr>
<td>5. Expected outcomes are clear*</td>
<td>68</td>
<td>85</td>
</tr>
<tr>
<td>6. All parties involved in decision-making*</td>
<td>63</td>
<td>79</td>
</tr>
<tr>
<td>7. Communication processes are clear*</td>
<td>49</td>
<td>61</td>
</tr>
<tr>
<td>8. Renewal process is identified*</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>9. Dispute resolution process is identified*</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>

Jill Krueger, Attorney, Network for Public Health Law
## LHD characteristics

### LHD with SSA (n=72)
- **Population range**
  - $R=4,381$ - $596,500$
  - $M=56,623$
- **Total FTE**
  - $R=2.4$ to $273.75$
  - $M=19.14$
- **Total expenditure**
  - Mean = $1.6$ million

### LHD with no SSA (n=16)
- **Population**
  - $R=20,604$ – $497,021$
  - $M=110,879$
- **Total FTE**
  - $R=4.5$ – $163.25$
  - $M=28.98$
- **Total expenditure**
  - Mean = $2.6$ million

*From DPH LPHS Survey, 2013*
Motivations for SSA by partner dyad

- Meet requirements
- Cost savings
- Increase revenue
- Enhance quality
- Expand capacity
- Increase efficiency
- Improve outcomes

N=254 partner dyads
Motivations by primary focus

- **PHEP**
- **MCH**
- **CD**
- **EH**
- **PBPrev**

Legend:
- **Mandate**
- **Financial**
- **Quality**
Expected outcomes

• “Provide mutual assistance in the event of a communicable disease outbreak or epidemic” (*communicable disease*)

• “Facilitate mutual assistance between parties...in the event of bioterrorism, infectious disease outbreaks, and other public health threats” (*emergency preparedness*)

• “Provide all services for the WI Well Woman’s Program” (*MCH*)

• “Partner county to conduct lead risk assessments and provide consultation” (*Environmental health*)

• “Provide WI Tobacco Prevention and Control Program Service” (*Health promotion/chronic disease prevention*)
Aim 2
Extent of implementation

• Scale:
  – 0 = No components implemented
  – 5 = Full implementation

• Mean = 4.40 (SD = 1.29)

• Min/Max = 0 to 5

• 71% reported full implementation
Aim 3
Perceived performance in achieving expected outcomes

• Scale:
  • 0 = No expected outcomes achieved
  • 5 = All expected outcomes achieved
• Mean = 4.30 (SD=.98)
• Min/Max = 0 to 5
• 44% reported all outcomes achieved
Aim 4
SSA features associated with implementation and performance

• Time since SSA began
• Number of partners
• Primary focus area
• Primary nature of sharing
• Motivations
• Legal “completeness” composite
• Financial exchange/commitment
• Prior collaboration
• Population size of jurisdictions served
• Implementation

Analytic strategy:
• Mixed effects logistic regression
• Control:
  • Time, # partners
• Outcomes:
  • Implementation/performance
Aim 4
What SSA features are associated with higher implementation?

• Fewer partners
  - OR=.68 (se=.12, z=-2.16, p=.031)

• Prior collaboration
  - OR=8.40 (se=9.39, z=1.90, p=.057)

• Shared service provision
  - OR=54.67 (se=78.71, z=2.78, p=.005)

• Motivation is not “required”
  - OR=.28 (se .18, z=-2.02, p=.043)

OR=Odds ratio
Se = standard error
Aim 4
What SSA features are associated with higher performance?

• Implementation
  – OR=2.34 (se=1.14, z=1.76, p=.079)

• Fewer partners
  – OR=.81 (se=.06, z=-2.93, p=.003)

• Financial commitment
  – OR=4.42 (se=2.82, z=2.32, p=.02)

OR=Odds ratio
Se = standard error
Aim 4
What SSA features are associated with higher performance?

• **Primary focus area**
  – MCH: OR=.22 (se=.16, z=-2.08, p=.037)
  – CD: OR=.21 (se=.16, z=-1.96, p=.05)
  – PB-Prevention: OR=3.81 (se=3.03, z=1.69, p=.092)

• **Shared service provision**
  – OR=3.47 (se=2.43, z=1.78, p=.076)

**OR**=Odds ratio
**Se** = standard error
Summary

• Variation in focus and nature of sharing
• Quality most common motivation
• Legal completeness could be improved
• Smaller jurisdiction more common
• Experience helps
• Fewer partners
• Financial commitment
• Voluntary
• Shared service provision
Aim 5

Document change in SSA use compared to baseline (2012 to 2014)
Survey Methods

• Minor revisions to 2012 instrument
• IRB University of Wisconsin - Madison
• Online survey (Survey Monkey) launched 10/7/14
  – N=91 LHDs (88 local, 3 tribal)
• Participation incentive - random drawing of a handheld GPS unit
• Reminders
  – Two email reminders and phone follow-up
  – Third email reminder on Jan. 8
• Survey closed 1/23/15
Definition of shared services (2012 & 2014):

“Sharing resources (such as staffing or equipment or funds) on an ongoing basis. The resources could be shared to support programs (like a joint WIC or environmental health program) or organizational functions (such as human resources or information technology). The basis for resource sharing as defined here can be formal (a contract or other written agreement) or informal (a mutual understanding or “handshake” agreement).”
# Survey results comparing 2012-2014

<table>
<thead>
<tr>
<th></th>
<th>2012 N=91 (92% response)</th>
<th>2014 N=63 (69% response)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently share services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>71%</td>
<td>78%</td>
</tr>
<tr>
<td>Change in past 12 months:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sharing to same extent</td>
<td>46</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>51%</td>
<td>52%</td>
</tr>
<tr>
<td>Sharing to greater extent</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>24%</td>
<td>30%</td>
</tr>
<tr>
<td>No change</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>21%</td>
<td>12%</td>
</tr>
<tr>
<td>Sharing to lesser extent</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>
## Survey results comparing 2012-2014

<table>
<thead>
<tr>
<th>Currently share services</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=65</td>
<td></td>
<td>N=49</td>
</tr>
</tbody>
</table>

### By population served:

- **<25,000**
  - 2012: 23, 76%
  - 2014: 20, 80%
- **25,000-49,999**
  - 2012: 15, 65%
  - 2014: 13, 81%
- **50,000-99,999**
  - 2012: 13, 68%
  - 2014: 11, 79%
- **100,000+**
  - 2012: 6, 54%
  - 2014: 4, 57%
## Survey results comparing 2012-2014

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently share services</td>
<td>N=65</td>
<td>N=49</td>
</tr>
<tr>
<td>By region:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Northern</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>• Northeastern</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>• Southern</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>• Southeastern</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>• Western</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>By primary focus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Emergency preparedness</td>
<td>38</td>
<td>21</td>
</tr>
<tr>
<td>• Environmental health</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>• Inspection &amp; licensing</td>
<td>13</td>
<td>7</td>
</tr>
</tbody>
</table>

- Northern: 16/65 = 84% in 2012, 10/49 = 83% in 2014
- Northeastern: 16/65 = 73% in 2012, 11/49 = 85% in 2014
- Southern: 9/65 = 69% in 2012, 7/49 = 70% in 2014
- Southeastern: 12/65 = 67% in 2012, 8/49 = 61% in 2014
- Western: 12/65 = 63% in 2012, 13/49 = 87% in 2014
- Emergency preparedness: 38/65 = 59% in 2012, 21/49 = 43% in 2014
- Environmental health: 24/65 = 37% in 2012, 18/49 = 37% in 2014
- Inspection & licensing: 13/65 = 20% in 2012, 7/49 = 14% in 2014
## Survey results comparing 2012-2014

<table>
<thead>
<tr>
<th>% of governance type that currently shares services</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free standing LHD with Board of Health</td>
<td>(n=55)</td>
<td>(n=38)</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>73%</td>
<td>79%</td>
</tr>
<tr>
<td>Free standing LHD with HHS board</td>
<td>(n=8)</td>
<td>(n=5)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>63%</td>
<td>80%</td>
</tr>
<tr>
<td>Consolidated health and human services dept.</td>
<td>(n=20)</td>
<td>(n=19)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>60%</td>
<td>79%</td>
</tr>
</tbody>
</table>
# Survey results comparing 2012-2014

## Motivation to create SSA

<table>
<thead>
<tr>
<th>Environmental health shared service arrangement</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make better use of resources</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Respond to program requirements</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Provide better services</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Save money</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Aid in recruiting qualified staff</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Provide new services</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

N=24  
- 79%  
- 63%  
- 58%  
- 37%  
- 33%  

N=18  
- 83%  
- 50%  
- 61%  
- 39%  
- 28%  

- 22%
Summary: 2012-2014

• Cross-jurisdiction sharing is widespread & increasing in Wisconsin
• Sustained practice over 2 years
• All regions
  – More common in lower population areas
• All governance types
Limitations

• 50% of LHD directors participated in interviews
• Lower response rate in time 2 survey
• Limited tribal participation
• May have missed some SSAs meeting definition
• Low numbers limit type of analysis and power to detect relationships
• New/novel measures, perceptions
Best Practices for SSA’s

» Clearly state whether the parties intend for the contract to create legal obligations

» Engage in sufficient initial conversation to reach a shared understanding of goals—then document them in the SSA!

» Describe how communication related to the SSA will occur

» Establish how decisions will be made, and by whom (generally, all parties should have input)

» Follow a regular schedule to review and renew the SSA,

» Set forth the process to amend or terminate the SSA

» Agree on a process to resolve any disputes that may arise

Jill Krueger, Attorney
Policy implications

• Cross-jurisdiction sharing can be a legitimate and successful strategy
• Can maintain independence AND collaborate
• Experience in use is growing
  – Center for Sharing Public Health Services
We invite your comments!

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