Cross-Jurisdictional Shared Services Agreements: A Strategy for Increasing Capacity for Local Public Health Services

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• UW-Madison School of Nursing Donors

• Professor Roger Brown, Statistician, UW-Madison School of Nursing
Public health in Wisconsin

• Decentralized system
  – Local property tax funding
  – Pass-through federal
  – Fees
• 88 Local health dept.
  – 80% county
• 11 Tribal health dept.
• Wisconsin Department of Health Services
  – 5 state regional offices
Linking public health practitioners and researchers to answer questions and disseminate discoveries that can be applied to improve practice and population health.

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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)
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.
Survey Methods

• Minor revisions to 2012 instrument
• 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>Currently share services</th>
<th>2012 N=91 (92% response)</th>
<th>2014 N=63 (69% response)</th>
</tr>
</thead>
<tbody>
<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 region:

<table>
<thead>
<tr>
<th>Region</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

- **Northern**: 84% (2012) vs 83% (2014)
- **Northeastern**: 73% (2012) vs 85% (2014)
- **Southern**: 69% (2012) vs 70% (2014)
- **Southeastern**: 67% (2012) vs 61% (2014)
- **Western**: 63% (2012) vs 87% (2014)

### Primary focus:

<table>
<thead>
<tr>
<th>Focus</th>
<th>2012</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<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>

- **Emergency preparedness**: 59% (2012) vs 43% (2014)
- **Environmental health**: 37% (2012) vs 37% (2014)
- **Inspection & licensing**: 20% (2012) vs 14% (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>
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
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

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

Submitted: 126 SSA

- 26 duplicates
- 17 did not meet criteria

Included: 83 SSA
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
Primary program area

N = 83 SSA

Environmental health: n = 28

Emergency preparedness: n = 18

Communicable disease: n = 12

Health promotion/chronic disease: n = 9

Maternal/child health: n = 8

Other: n = 8
Type of sharing

N=83 SSA

- Sharing services: n=64
- Sharing staffing: n=37
- Sharing administrative functions: n=16
- Sharing technical assistance: n=24
- Equipment: n=13

Percent
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)
Number of LTHD partners

- Mean = 3.46 partners/SSA
  - Min/max: 2-15
  - 74% with 2 partners
- 77/88 LHD (87.6%)
- 5/11 Tribal (45%)
- 7 other organizations
Number of partners in SSA

Mean partners by program

Mean partners by nature of sharing
## LHD characteristics

<table>
<thead>
<tr>
<th>LHD with SSA (n=77)</th>
<th>LHD with no SSA (n=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population range</strong></td>
<td><strong>Population</strong></td>
</tr>
<tr>
<td>– M=57,652</td>
<td>– M=116,174</td>
</tr>
<tr>
<td><strong>Total FTE</strong></td>
<td><strong>Total FTE</strong></td>
</tr>
<tr>
<td>– R=2.4 to 274</td>
<td>– R=4/5 - 163</td>
</tr>
<tr>
<td>– M=19.08</td>
<td>– M=31.24</td>
</tr>
<tr>
<td><strong>Total expenditure</strong></td>
<td><strong>Total expenditure</strong></td>
</tr>
<tr>
<td>– Mean = $1.6 million</td>
<td>– Mean = $2.8 million</td>
</tr>
</tbody>
</table>
**Begin date** (n=76)

- **Length of term**
  - Min/max = 4 months to open-ended
  - 40% = 12 months
  - 33% = not specified
### “Completeness” (legal)

<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>82</td>
<td>99</td>
</tr>
<tr>
<td>2. SSA intention is binding</td>
<td>81</td>
<td>98</td>
</tr>
<tr>
<td>3. Decision-making process is clear</td>
<td>78</td>
<td>94</td>
</tr>
<tr>
<td>4. Financial payment/reimbursement required</td>
<td>67</td>
<td>81</td>
</tr>
<tr>
<td>5. Expected outcomes are clear</td>
<td>70</td>
<td>84</td>
</tr>
<tr>
<td>6. All parties involved in decision-making</td>
<td>65</td>
<td>78</td>
</tr>
<tr>
<td>7. Communication processes are clear</td>
<td>53</td>
<td>64</td>
</tr>
<tr>
<td>8. Renewal process is identified</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>9. Dispute resolution process is identified</td>
<td>15</td>
<td>18</td>
</tr>
</tbody>
</table>

Jill Krueger, Attorney, Network for Public Health Law
Motivations for SSA

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

N= 44 interviews regarding 83 SSA
## Motivations by program focus

<table>
<thead>
<tr>
<th>Motivations</th>
<th>Emergency prepared %</th>
<th>MCH %</th>
<th>Comm. Disease %</th>
<th>Env. Health %</th>
<th>HP-Chronic %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mandate</strong></td>
<td>52</td>
<td>42</td>
<td>38</td>
<td>24</td>
<td>58</td>
</tr>
<tr>
<td>(Meet requirement)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td>41</td>
<td>29</td>
<td>36</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>(Cost savings, increase revenue)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service quality</strong></td>
<td>98</td>
<td>100</td>
<td>96</td>
<td>93</td>
<td>95</td>
</tr>
<tr>
<td>(Enhance quality, capacity, outcomes, efficiency)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Experience with prior collaboration (n=44)

• 98% (n=43) identified at least one type of prior collaboration

• Most common:
  – Collaborate on program areas
    • Emergency preparedness
    • Maternal and child health
    • Environmental health
  – Peer support
    • Mentoring, support network, professional sharing
Extent of implementation

• Scale:
  – 0 = No components implemented
  – 5 = Full implementation
• Mean = 4.63 (SD = 1.01)
• Min/Max = 0 to 5
• 71% reported full implementation
Perceived performance

• Extent to which the SSA succeeded in achieving expected outcomes
  – Scale:
    0 = No expected outcomes achieved
    5 = All expected outcomes achieved
  – Mean = 4.38 (SD=1.04)
  – Min/Max = 0 to 5
  – 58% reported all outcomes achieved
Preliminary analysis

• Correlation of SSA features with performance
• Bi-serial and Phi correlations
  – Implementation
  – Focus type
  – Nature of sharing
  – Months since started
  – Prior collaboration
  – Motivations
  – Legal completeness composite
Factors associated with higher performance:

- Higher extent of implementation
- SSA types:
  - Environmental health
  - Communicable disease
  - Maternal-child health
- **All types of sharing**, with variation among SSA focus areas
- SSA in place for longer time
Factors associated with higher performance:

- Prior collaboration
- Motivations:
  - financial
  - quality
- Legal completeness
  - Health promotion/chronic disease
  - Emergency preparedness
Positive results of collaboration  
(n=44 interviews)

• 95% identified at least one positive result from collaboration
• Most common:
  – Expand capacity & improve services
  – Building relationships
  – Increased efficiency
  – Increased staff skills
Challenges of collaboration
(n=44 interviews)

• 97% identified at least one challenging aspect of collaboration

• Most common:
  – Financial constraints
  – Complexity
Recommendations
(n=44 interviews)

• 97% identified at least one recommendation
• Most common:
  – Reasons to partner
  – Qualities of a good agreement
  – Getting to agreement
  – Just do it!
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
Discussion

Increasing

• Sharing services across jurisdictions is common & increasing

Flexible

• Used in a variety of program areas
• Used in large and small LHD
• All types of structures/governance

Positive

• LHD directors are positive about strategy
Partners
• Number of partners varies; fit to purpose
• Prior collaboration

Complete
• More [legally] complete agreements are associated with higher performance (for some types of SSA)
• Longer time in place

Quality
• Most frequent motivations are related to quality
• Financial and quality motivations are related to better performance
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
    http://phsharing.org/
We invite your comments!

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