Creating a Regional Public Health System in New Hampshire

Results of Assessments to Inform the Planning Process

Executive Summary

December 2011

New Hampshire Division of Public Health Services
New Hampshire Department of Health and Human Services

Community Health Institute/JSI
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Introduction and Background

This report presents the findings of three assessments conducted by the New Hampshire Department of Health and Human Services, Division of Public Health Services (DPHS) and the Community Health Institute, between November 2008 and December 2010 to inform planning for a coordinated, regionalized public health system in New Hampshire. Most states around the nation have a government-based public health system with a mix of local, county, or regional health departments. When many states talk about regionalizing public health, they generally are referring to consolidating or formalizing a relationship among existing governmental health departments. In New Hampshire when we consider regionalizing public health, we are talking about building and strengthening a regional infrastructure that is currently a mix of a few large local health departments and a system of 15 regional public health networks.

New Hampshire has been working to strengthen its public health infrastructure since 1997, when it received a planning grant entitled Turning Point: Collaborating for a New Century in Public Health from the Robert Wood Johnson (RWJF) and W.K. Kellogg Foundations. Through various funding sources, the number of networks grew to 14 then to 19 All Health Hazard Regions (AHHRs) with an emphasis primarily focused on public health emergency preparedness.

In 2007, there was recognition that maintaining 19 AHHRs focused almost exclusively on emergency preparedness would be challenging and other important public health capabilities were not being adequately addressed. A task force entitled, the Public Health Regionalization Initiative was convened and set forth the goal to: Develop a performance-based public health delivery system, which provides all 10 essential services throughout New Hampshire. The task force envisioned a public health system based on national accreditation standards and linked to government. There was consensus that the state would retain certain functions such as infectious disease investigation and laboratory services and that core staffing and infrastructure was needed regionally to deliver essential public health services through public health networks. This summary presents the findings from assessments conducted to inform this process and subsequent recommendations to strengthen the public health systems.

Capacity Assessment

The public health network partners in each region participated in a capacity assessment process to identify regional public health assets and gaps that may lend themselves to being regionalized. The assessment employed a revised version of the National County and City Health Officials’ Local Health Department Self-Assessment Tool (NACCHO – Rev.1), which allowed for assessment of the lead public health entity for the network and its’ partners’ contributions. The tool assisted regions to complete a self-assessment to determine if capacity exists to meet proposed national standards based on the ten essential public health services. Participants ranked their capacity on measures related to each essential service using scores from 0-4 (0=no capacity, 1=minimal capacity, 2=moderate capacity, 3=significant capacity, 4=optimal capacity).

Findings

Assessments were completed for twelve of the fifteen regions. A different assessment was conducted with municipal health departments and is presented in a separate section of this report. In the aggregate, the networks’ capacity to deliver the various essential services (ES) can be grouped as those for which they have greater than moderate capacity, moderate capacity and minimal to moderate capacity as shown below.

1 Throughout this report the term public health region will be used to denote a geographic service area and the term public health network refers to the partnership of local agencies, government entities, and other stakeholders.
Greater than moderate (2.2-2.7):
- ES 7: Linking People to Services
- ES 3 Informing and Educating
- ES 2 Diagnosing and Investigating
- ES 4 Mobilizing Partnerships

Moderate (2.0-2.1):
- ES 1 Monitoring Health Status
- ES 9 Evaluation and Improvement
- ES 8 Assuring a Competent Workforce

Minimal to moderate (1.6-1.8):
- ES 5 Developing Policies and Plans
- ES 10 Research
- ES 6 Enforcing Laws

There was variability in scoring across the regions on the essential services. Participants in most regions recognized rich capacity in several areas; however a lack of region-wide coordination was a consistent theme. Across regions, the siloed nature of public health funding and program development at both state and local levels was raised as a barrier to the development of regional capacity.

State Contribution to Regional Capacity
After assessing the contributions of the lead public health entity and the regional network partners to the local public health system for each standard, participants considered how the New Hampshire DPHS, Department of Environmental Services (or other state agency) contributes to public health capacity at the local level. For half of the essential services, the majority of regions scored the state’s contributions as insufficient to the regions’ efforts. However, for diagnosing and investigating health problems, the majority of regions scored state contributions as sufficient. Regions noted insufficient support from state agencies in areas of need where the regions scored only moderate capacity to monitor health status (ES1) and minimal to moderate capacity to develop policy and plans (ES5). For other essential services participants did not have sufficient information to score the state contribution.

Governance Assessment
The landmark publication, *The Future of the Public’s Health in the 21st Century*, describes the critical role that government holds in assuring the conditions in which people can be healthy. The regionalization task force agreed that public health is a governmental responsibility, which in many states is delivered by local or county health departments. Lacking this structure in most of New Hampshire, many public health services are delivered through a large number of private, non-profit entities. It has been proposed that regional public health councils, comprised of local governmental representatives and public health stakeholders, be developed to serve in a governance role to monitor and assure the delivery of public health services to the extent resources allow. A governance assessment process was undertaken to determine the level of readiness in each region to take on this function.

The public health network partners in each region participated in the governance assessment process comprised of two parts. Part I utilized a tool adapted from the CDC’s National Public Health Performance Standards Program Governance Instrument, intended to assess the capacity of boards of health to oversee the ten essential services. For each service, participants considered a series of questions and rated them on a scale from minimal or not

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2 The Future of the Public’s Health in the 21st Century, Institute of Medicine of the National Academies, National Academies Press, Washington, DC 2003

ready to optimal or ready. Scoring for the governance self-assessment, while quantifiable, is subjective based on the contributions of the region’s partners. It was emphasized during the assessments that the purpose of scoring was to identify a region’s strengths and weaknesses to oversee the delivery of public health services and opportunities for improvement.

Part II examined the opportunities and challenges associated with having a certain type of entity (county or municipal government, existing nonprofit, new nonprofit, or another model) serve as the lead public health organization to deliver or coordinate services within the region. The work of these entities would be guided by, and reported to, the regional public health council. This component of the assessment assisted the DPHS to evaluate what model might work best around the state.

**Findings**

**Part I Capacity for Oversight of Essential Services**

In the aggregate regional partners were more likely to state that they had moderate to optimal capacity for oversight of the following services:

- Linking people to needed services
- Developing policies and plans
- Diagnosing and investigating health problems
- Mobilizing community partnerships
- Monitoring health status

Overall, regional partners were more likely to say they had minimal capacity to oversee:

- Informing and educating the public
- Enforcing laws and regulations
- Evaluating the effectiveness of services
- Assuring a competent workforce

Regional partners seldom considered that they had optimal oversight of the essential services.

**Part II: Considering the Optimal Lead Public Health Entity**

This assessment was comprised of a series of questions focused on four models that could serve in the role of lead public health entity including: county government, municipal government, existing non-profit organization, and new non-profit organization. Following their discussions, partners from some regions also asked DPHS to consider another model that would keep oversight and assurance for the delivery of quality public health services at the state level.

Overall, no clear preference for one model over another emerged that was consistent across the regions. The idea of instituting a consistent model of lead public health entity in every region did not find support. In addition, partners in very few regions came to a conclusive decision about one model standing out as the final choice for the region. However, many partners reached agreement on certain aspects or opportunities highlighted in each of the categories of lead public health entities to assist them in future planning and decision-making.

Broad support for regionalization was voiced and seen as a potential benefit to towns. Participants asked that any system going forward build on the current capacity, strengths and unique characteristics of each region. Questions were raised on several key areas including: the oversight role of the state, funding, and governance across county lines.
Assessment of Municipal Health Department Capacity and Governance Issues Relative to Regional Expansion

When examining the capacity and governance issues relative to the few municipal health departments in the state, DPHS staff determined that an alternate approach was necessary. The intent of this assessment was to better understand the programmatic, jurisdictional and governance issues specific to municipal government entities expanding their current role by serving as the lead public health entity beyond city limits into their respective regions.

Berlin, Manchester, Nashua and Portsmouth Health departments (LHD) are all situated in government as municipal health departments. Manchester and Nashua are comprehensive health departments with extensive staffing. They provide many of the ten essential public health services and serve as the lead entity for emergency preparedness in the surrounding towns within their respective regions. Portsmouth Health Department also serves as the lead entity for emergency preparedness in their region but their municipal services are focused on environmental health. Berlin Health Department provides environmental health services and home health services.

The process conducted in these regions included two components. LHD directors first completed an abbreviated adaptation of the National Association of County and City Health Officials Local Health Department Self-Assessment Tool used in the capacity assessment previously summarized. Secondly, a focused discussion was held with senior LHD staff to ascertain the capacity of, and issues related to, the LHD providing essential public health services outside their city.

Findings

The larger local health departments possess broad and diverse expertise, particularly in the areas of disease investigation, environmental inspection and enforcement, emergency preparedness and community health assessment and planning. LHDs frequently provide technical assistance to surrounding towns and local health officers relative to environmental and food investigations, mitigation and other regulatory issues, but actually conducting these activities exceeds their current legal authority.

There is a willingness on the part of the larger LHDs to consider expanding services beyond their municipal borders. Expansion could occur with additional funding and within the confines of current statutes for non-regulatory functions such as community assessment and planning, and informing the public relative to health issues. The perceived risk associated with any expansion of regulatory or direct service work may be related to the type of insurance held by the municipality with self-insured cities likely being more conservative.

Financial Assessment

When the DPHS set out to assess New Hampshire’s public health capacity and governance issues it was determined that a thorough assessment of local and regional public health financial resources in the state was a key element.

DPHS enlisted the advice of academic researchers and public health partners to aid in the design of this study. To capture the full breadth of public health funding sources available at the local and regional level, New Hampshire public health officials documented funds contracted by the DPHS; state staff resources employed at the local level (such as disease investigation nurses and restaurant inspectors), and surveyed municipalities. Further, all DPHS contracted agencies were asked to complete a survey of all funds they received beyond those contracted by the DPHS or from municipalities, referred to here are non-municipal funds.
These included direct federal funds, private foundations, and funds from other state agencies. Data were collected using specific categories and activities such as direct services, preventing the spread of disease, promoting healthy behaviors, protecting against environmental hazards and others. Hospital spending on community health education or health promotion was also counted.

Findings
For the study time period (2007) over $46 million dollars was spent in New Hampshire for public health at the regional and local levels, which represents $36.46 per capita.

Sources of Funds
The sources of funds and patterns of spending are found in Figure 1.

- Most local public health funding comes from state contracts (41%) and non-municipal funds (42%).
- Municipalities contribute 13% of all local public health spending in the state. The two larger cities spending comprise 77% of all municipal spending.
- State resources or staff deployed at the local or regional level makes up 4% of local funding.
- Most local public health spending goes towards direct services (46%).
- Direct services are supported roughly equally from state contract funds ($10,035,454) and non-municipal funds ($11,354,489).
- Fourteen percent of funds are spent locally on promoting healthy behaviors ($1,210,923 or 18% from state contracts and $5,385,941 or 82% from non-municipal funds).
  - Over two-thirds of the $5,385,941 in local funds spent on promoting healthy behaviors is hospital community education spending (with just over half of hospitals reporting).
- Eight percent of public health funds spent locally is for emergency preparedness.

<table>
<thead>
<tr>
<th>Service</th>
<th>Source</th>
<th>State Contract</th>
<th>State Resources</th>
<th>Municipal</th>
<th>Non-municipal</th>
<th>Total</th>
<th>Service % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Services</td>
<td></td>
<td>10,035,454</td>
<td>0</td>
<td>0</td>
<td>11,354,489</td>
<td>21,389,943</td>
<td>46%</td>
</tr>
<tr>
<td>Emergency Preparedness</td>
<td></td>
<td>3,567,874</td>
<td>0</td>
<td>0</td>
<td>80,632</td>
<td>3,712,665</td>
<td>8%</td>
</tr>
<tr>
<td>Injury Prevention</td>
<td></td>
<td>286,128</td>
<td>0</td>
<td>0</td>
<td>363,696</td>
<td>649,824</td>
<td>1%</td>
</tr>
<tr>
<td>Tobacco Prevention</td>
<td></td>
<td>698,113</td>
<td>0</td>
<td>0</td>
<td>418,061</td>
<td>1,116,174</td>
<td>2%</td>
</tr>
<tr>
<td>Substance Abuse Prevention</td>
<td></td>
<td>2,624,972</td>
<td>0</td>
<td>0</td>
<td>799,941</td>
<td>3,424,913</td>
<td>7%</td>
</tr>
<tr>
<td>Preventing the Spread of Disease</td>
<td></td>
<td>234,452</td>
<td>1,573,752</td>
<td>1,031,705</td>
<td>19,997</td>
<td>2,859,050</td>
<td>6%</td>
</tr>
<tr>
<td>Promoting Healthy Behaviors</td>
<td></td>
<td>1,210,923</td>
<td>0</td>
<td>0</td>
<td>5,385,941</td>
<td>6,596,864</td>
<td>14%</td>
</tr>
<tr>
<td>Protecting Against Environmental Hazards</td>
<td></td>
<td>95,674</td>
<td>415,130</td>
<td>0</td>
<td>70,133</td>
<td>580,937</td>
<td>1%</td>
</tr>
<tr>
<td>Salaries / Administrations</td>
<td></td>
<td>0</td>
<td>0</td>
<td>4,301,286</td>
<td>0</td>
<td>4,301,286</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>0</td>
<td>0</td>
<td>657,349</td>
<td>997,062</td>
<td>1,654,411</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>18,753,591</td>
<td>1,988,882</td>
<td>6,054,499</td>
<td>19,489,952</td>
<td>46,286,924</td>
<td></td>
</tr>
<tr>
<td>Source % of total</td>
<td></td>
<td>41%</td>
<td>4%</td>
<td>13%</td>
<td>42%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Funds by source (total dollars).

4 Some data caveats exist relative to this assessment. Estimates were made for towns not reporting based on findings for similar towns. Data was not received for all contractors and for all hospitals relative to community education funds, thus there is some underreporting. Some reporters used state fiscal year 2007; others calendar year 2007 and others, their most recent data available.
Figure 2 breaks down the non-municipal funds into additional categories.

- Of note is that substantial funding is leveraged for public health from sources outside of state public health contract funds (42% of all local funding). The majority of these funds (37%) are federal funds, which go directly to the agencies. Most of these funds are for the provision of direct services (87%), primarily for primary care and WIC services.

- Other funds comprise 31% of the non-municipal funds with the majority of these being hospital community education funds.

<table>
<thead>
<tr>
<th>Service</th>
<th>Federal</th>
<th>Donations</th>
<th>Non-DPHS</th>
<th>State</th>
<th>Other Funds</th>
<th>Total</th>
<th>Service % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Services</td>
<td>6,346,542</td>
<td>2,017,242</td>
<td>1,450,706</td>
<td>123,439</td>
<td>1,416,560</td>
<td>11,354,489</td>
<td>58%</td>
</tr>
<tr>
<td>Emergency Preparedness</td>
<td>5,000</td>
<td>0</td>
<td>55,420</td>
<td>1,060</td>
<td>19,152</td>
<td>80,632</td>
<td>0%</td>
</tr>
<tr>
<td>Injury Prevention</td>
<td>0</td>
<td>1,990</td>
<td>101,341</td>
<td>249,503</td>
<td>10,862</td>
<td>363,696</td>
<td>2%</td>
</tr>
<tr>
<td>Tobacco Prevention</td>
<td>63,000</td>
<td>0</td>
<td>315,062</td>
<td>0</td>
<td>39,999</td>
<td>418,061</td>
<td>2%</td>
</tr>
<tr>
<td>Substance Abuse Prevention</td>
<td>424,260</td>
<td>7,745</td>
<td>63,097</td>
<td>200,122</td>
<td>104,717</td>
<td>799,941</td>
<td>4%</td>
</tr>
<tr>
<td>Preventing the Spread of Disease</td>
<td>0</td>
<td>0</td>
<td>500</td>
<td>19,497</td>
<td>19,997</td>
<td>19,997</td>
<td>0%</td>
</tr>
<tr>
<td>Promoting Healthy Behaviors</td>
<td>168,270</td>
<td>155,894</td>
<td>356,070</td>
<td>265,926</td>
<td>4,439,781</td>
<td>5,385,941</td>
<td>28%</td>
</tr>
<tr>
<td>Protecting Against Environmental Hazards</td>
<td>60,133</td>
<td>0</td>
<td>10,000</td>
<td>0</td>
<td>0</td>
<td>70,133</td>
<td>0%</td>
</tr>
<tr>
<td>Salaries / Administrations</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>200,063</td>
<td>192,599</td>
<td>413,531</td>
<td>135,022</td>
<td>55,847</td>
<td>997,062</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>7,267,268</td>
<td>2,375,470</td>
<td>2,765,227</td>
<td>975,572</td>
<td>6,106,415</td>
<td>19,489,952</td>
<td></td>
</tr>
</tbody>
</table>

Funds from each funding source are spent in a different way.

- Direct services comprise 54% of state contract funds and 58% of non-municipal funds.
- State resources deployed at the local level are spent entirely on preventing the spread of disease (79%) and protecting against environmental hazards (21%).
- Municipal spending is reported mostly to cover salaries and administrative costs (71%) which is due to the larger health departments being unable to report their funds by service category, but rather reported most of their city funds as salaries and administration.

### Spending by Region

Direct services dominate the spending in most regions, but there is variability. When direct spending is eliminated from analyses, differences also emerge with some regions spending a large share of non-direct funds on promoting healthy behaviors. One region spends more on emergency preparedness, while another spends a large percent of their funding on substance abuse prevention.

Per capita spending varies in regions from $24 to $88. Per capita allocations are much higher in rural areas. Non-rural total spending is about $33 per capita but rural spending per capita is almost $45 (approximately one-third higher).

### Relationship between Spending and Income

Lower income levels are associated with higher per capita spending both at the town and regional levels. Since many public health issues are more associated with lower income, this inverse relationship seems to indicate that funders are directing resources towards need.
Recommendations

Recommendations for moving forward relative to public health regionalization in New Hampshire are presented below as Tier One and Tier Two priorities. Tier One priorities represent those that were selected by participants at a September 1, 2011 meeting of over 90 state, regional and local public health stakeholders. Additionally, the Public Health Improvement Services Council, comprised of a broad array of public health professionals and established to develop and monitor public health improvement plans, advised the DPHS in finalizing and prioritizing the recommendations. Tier One recommendations will receive priority attention for implementation. Tier Two priorities will be addressed once gains are made on Tier One priorities, recognizing that there may be some overlap.

The rationale for many of the recommendations is similar based on repeated themes that emerged from the assessments. Further rationale for each recommendation can be found in the full report.

- The public health networks throughout the state differ in their capacity to carry out essential public health services in their respective regions due to variation in factors such as funding, length of existence, areas of focus, and regional support. Resources and support for the existing public health infrastructure would enable network partners throughout the state to provide essential public health services.

- The relationship between the DPHS and local and regional public health partners is key. There is a need to clearly delineate the roles and responsibilities of each component of the public health system in delivering essential public health services. There are opportunities for the DPHS to provide technical assistance to regional partners to enhance their capacity to deliver essential services.

- During the assessments, several challenges related to the geographic composition (or alignment) of regions and the delivery of services across jurisdictions surfaced. The exploration of aligned geographic boundaries, potential statutory and ordinance changes, and other models of regional collaboration would be beneficial for more efficient delivery of services.

The Public Health Improvement Services Council should continue to serve in an advisory capacity to public health regionalization efforts and public health improvement planning as this group represents key facets of the public health system, possesses tremendous public health expertise, and understands the history, evolution, and importance of the public health regionalization initiative and a strong public health infrastructure.

Tier One Priorities

Recommendation #1

DPHS and public health partners across the state should continue to seek and direct funding and other resources towards the public health regions as appropriate to build local public health infrastructure to meet the identified health priorities in the state and the capacity needs identified through these assessments. DPHS should also advocate that other public and private funders utilize this regional alignment as appropriate when funding public health services.
Recommendation #2

A regional public health system in New Hampshire should be built upon existing public health networks and the infrastructure that has been established, recognizing the unique characteristics and structures of various regions.

- DPHS and the Bureau of Drug and Alcohol Services should continue to work to align their respective regional initiatives to create efficiencies, eliminate duplication, and build upon the strengths of the two systems.

- There should be clear delineations of roles and responsibilities of the DPHS, Public Health Networks, and health officers with respect to their relative contributions to providing the essential services of public health at the regional and municipal level.

Recommendation #3

DPHS should explore alternatives to the concept of regional public health councils as a link to government for regional public health networks and more fully explore the structure and attributes of existing, successful regional oversight collaboratives that mimic the public health council model.

- DPHS should consider pursuing enabling legislation for governmental link/public health authority

Recommendation #4

DPHS and public health partners across the state should facilitate the coordination of community health assessments and community health improvement plans among public health partners and support model practices within the public health regions in accordance with state and federal laws.

- DPHS and/or public health network partners should broker/engage in conversations with hospitals regarding the use of community education funds to target high priority community health needs.

Tier Two Priorities

Recommendation # 5

The Division of Public Health Services should work with other state level and regional level entities to assist regional partners to strengthen and diversify regional partnerships.

Recommendation # 6

The DPHS should build epidemiological capacity to provide support and technical assistance to regions.

Recommendation #7

The Public Health Improvement Services Council should explore how to maximize existing training resources available in the state to assure a competent public health workforce including

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5 An epidemiologist is “An investigator who studies the occurrence of disease or other health-related conditions or events in defined populations. The control of disease in populations is often also considered to be a task for the epidemiologist”. Last J, Spasoff R, Harris S. A dictionary of epidemiology. Oxford University Press, New York, 2000.
but not limited to the Masters in Public Health Programs at the University of New Hampshire and Dartmouth Medical School, the Institute for Local Public Health Practice, the New Hampshire Public Health Association, the two New Hampshire Area Health Education Centers, the Community Health Institute, DPHS, and the Public Health Training Centers at Dartmouth Medical School and Boston University.

- The DPHS should utilize resources available through the National Public Health Improvement Initiative to provide training to regional public health partners in quality improvement methods.

Recommendation #8

DPHS should continue to work with municipal health departments to expand their reach into their respective regions, especially in the areas of health assessment and planning, mobilizing partnerships, and educating the public.

Recommendation #9

DPHS should continue to explore mechanisms to develop professional and credentialed health officers who can carry out inspection and enforcement activities at the regional and local level.