Public Health Performance

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History of Public Health Performance Measurement

- 1914 AMA State Health Department Performance
- 1925 APHA LPHD Appraisal
- 1945 Emerson’s Basic Six
- Early 1990s Miller and Turnock 20, APEX/PH, 10 EPHS
- 1997 National Public Health Performance Standards Program
10 Essential PH Services

- System Management
  - Research
- Policy Development
  - Inform, Educate, Empower
- Assist, Empower
  - Mobilize Community Partnerships
- Develop Policies
  - Link to / Provide Care
- Enforce Laws
  - Develop Community Partnerships
- Enforce Competent Workforce
  - Monitor Health
- Evaluate
  - Diagnose & Investigate

Assurance
<table>
<thead>
<tr>
<th>Assessment</th>
<th>Policy making</th>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Systematic description of community’s health</td>
<td>7. Support and communication network of</td>
<td>13. Resources necessary for health priorities</td>
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<tr>
<td>status and health needs?</td>
<td>organizations, media, and general public?</td>
<td>deployed?</td>
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<td></td>
<td>impact of their deliberations?</td>
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<td>3. Timely investigation of adverse health events,</td>
<td>9. Community health needs prioritized?</td>
<td>15. Linkage to appropriate services?</td>
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<td>outbreaks, and hazards?</td>
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<td>4. Laboratory services available?</td>
<td>10. Programs consistent with priority needs?</td>
<td>16. Failure to implement mandated program?</td>
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<tr>
<td>5. Analysis of priority health needs, health</td>
<td>11. Action plan developed?</td>
<td>17. Evaluation of public health services outcomes?</td>
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<td>resources, and populations at risk?</td>
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<td></td>
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<td>19. Feedback to community about its health?</td>
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<td>20. Reporting about community’s health to media?</td>
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</tbody>
</table>
NPHPSP

Assessment Instruments

- State public health system
- Local public health system
- Local governance

Partners

- CDC
- APHA
- ASTHO

- NACCHO
- NALBOH
- NNPHI
- PHF
NPHPSP Mission and Goals

To improve the quality of public health practice and performance of public health systems by:

1. Providing **performance standards** for public health systems and encouraging their widespread use;
2. Engaging and leveraging national, state, and local **partnerships** to build a stronger foundation for public health preparedness;
3. Promoting continuous **quality improvement** of public health systems; and
4. Strengthening the **science base** for public health practice improvement.
Essential Service # 2: Diagnose and Investigate Health Problems and Health Hazards in the Community

This service includes:

- Epidemiological investigations of disease outbreaks and patterns of infectious and chronic diseases and injuries, environmental hazards, and other health threats.
- Active infectious disease epidemiology programs.
- Access to a public health laboratory capable of conducting rapid screening and high volume testing.

LPHS Model Standard 2.1: Identification and Surveillance of Health Threats

Surveillance systems are designed and maintained to monitor health events, to identify changes or patterns, and to investigate underlying causes or factors. Epidemiological and behavioral science techniques are used to collect data to identify risk factors for health threats. Local public health surveillance systems are integrated with national and state surveillance systems to provide comprehensive monitoring of health events using consistent collection and reporting procedures. Surveillance data are used to assess and analyze health problems and hazards. Surveillance data are also used to examine the impact of health hazards, behaviors, and risk factors on disease and mortality. Surveillance efforts also alert the LPHS to community and health indicators that may signal public health emergencies (e.g., biological or chemical incidents).

In order to accomplish this, the LPHS:

- Collects timely reportable disease information from community health professionals who submit information on possible disease outbreaks.
- Uses state-of-the-art information technology and communication systems to support surveillance and investigation activities.
- Has access to Masters and/or Doctoral level statistical and epidemiological expertise to assess, investigate, and analyze health threats and health hazards.
- Has a procedure to alert communities to possible health threats and disease outbreaks.
NPHPSNP and MAPP

NPHPSNP is a tool for community health assessment and improvement within MAPP
MACRO-CONTEXT
Social, political, economic forces operating in the overall society (e.g. national economy)
Extent of demand and need for PH services within the population
Social Values and preferences for products of PH system (e.g. clean water)
External forces such as medical delivery system, technological advances, natures of federal, state and local relationships

LOCAL PUBLIC HEALTH SYSTEM

PHS MISSION AND PURPOSE
Goals and how they are implemented
Performance of the core functions of assessment, policy development, and assurance

CAPACITY
System Inputs:
- Workforce
- Organization/Relationships
- Facilities
- Funding

PROCESSES
Essential Public Health Services
Outputs
Programs/Services consistent with mandates and community priorities

OUTCOMES
Improved organizational performance
Improved program performance
Improved Outcomes

Adapted with permission from Handler, A., Issel, M., and Turnock, B., AJPH, 2001, 91(8): 1235-1239
Some Illustrative Preliminary Work

- Community Size
- Local health department expenditures
  - Local funds vs. federal funds
  - Total dollars and per capita spending
- Type of jurisdiction
- Governance
- Leadership characteristics
- Partnerships
- Outcomes
Future Directions For Research

Data Availability and Use

- Movement from version 1.0 to 2.0 of the NPHPSP
  - Validity and Reliability
  - Shortened by nearly 1/3 and simplified vocabulary
  - Response category – added distinction between no and 0-25%
  - System Vs. Department

- The Local Governance Instrument
  - Only version 2 instrument approved by OMB

- The role of the accreditation standards in examining performance, link to NPHPSP

- Agreement on Performance Standards instruments; common rubrics, HEDIS-like measures and metrics
Data Availability and Use
(Continued)

- State health department data: ASTHO survey
- Lack of financial data for either state or local health departments
- Contemporaneous data collection
- Longitudinal data collection
- Lack of common definitions, questions, timing of data collection, need for data harmonization
- What are the right questions? Does it allow for researchers and practitioners to address needed answers; practice research dialogues
Areas from the Logic Model Requiring Answers

- Environmental impact on performance, Socio Ecologic determinants on model components
- Inputs and their influence on performance; money, people, technology and facilities
- Processes and how they are influenced by inputs and how they influence outcomes; Governance, administration and organization, partnerships, categorical programs and activities
THE BIG KAHUNA

How does all this influence outcomes?
Local Public Health Agency Performance and Community Health Status
Kanarek, Norma PhD, MPH; Stanley, Jennifer MA; Bialek, Ron MPP,
We should be able to develop a series of attributes to define a high performing public health system. With that we should be able to identify a series of measures that one would use in identifying areas where we need improvement and a set of standards. Do we eventually come to the place where we can submit a report?

*Aiming Higher: Results from a State Scorecard on Public Health System Performance: A report of the Commonwealth Fund Commission on a High Performing Health System.*
State Scorecard Summary of Health System Performance Across Dimensions

State Rank

- Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile

RANK | STATE | Access | Quality | Avoidable Hospital Use & Costs | Equity | Healthy Lives
--- | --- | --- | --- | --- | --- | ---
1 | Hawaii | | | | | |
2 | Iowa | | | | | |
3 | New Hampshire | | | | | |
4 | Vermont | | | | | |
5 | Maine | | | | | |
6 | Rhode Island | | | | | |
7 | Connecticut | | | | | |
8 | Massachusetts | | | | | |
9 | Wisconsin | | | | | |
10 | South Dakota | | | | | |
11 | Minnesota | | | | | |
12 | Nebraska | | | | | |
13 | North Dakota | | | | | |
14 | Delaware | | | | | |
15 | Pennsylvania | | | | | |
16 | Michigan | | | | | |
17 | Montana | | | | | |
18 | Washington | | | | | |
19 | Maryland | | | | | |
20 | Kansas | | | | | |
21 | Wyoming | | | | | |
22 | Colorado | | | | | |
23 | New York | | | | | |
24 | Ohio | | | | | |
25 | Utah | | | | | |
26 | Alaska | | | | | |
27 | Arizona | | | | | |
28 | New Jersey | | | | | |
29 | Virginia | | | | | |
30 | Idaho | | | | | |
31 | North Carolina | | | | | |
32 | District of Columbia | | | | | |
33 | South Carolina | | | | | |
34 | Oregon | | | | | |
35 | New Mexico | | | | | |
36 | Illinois | | | | | |
37 | Missouri | | | | | |
38 | Indiana | | | | | |
39 | California | | | | | |
40 | Tennessee | | | | | |
41 | Alabama | | | | | |
42 | Georgia | | | | | |
43 | Florida | | | | | |
44 | West Virginia | | | | | |
45 | Kentucky | | | | | |
46 | Louisiana | | | | | |
47 | Nevada | | | | | |
48 | Arkansas | | | | | |
49 | Texas | | | | | |
50 | Mississippi | | | | | |
51 | Oklahoma | | | | | |

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2007
NEED CASH FOR ALCOHOL RESEARCH
That’s All Folks