4-8-2014

Public Health Services & Systems Research: Taking the Pulse of the Field

Glen P. Mays
University of Kentucky, glen.mays@uky.edu

Click here to let us know how access to this document benefits you.

Follow this and additional works at: https://uknowledge.uky.edu/hsm_present

Part of the Health and Medical Administration Commons, and the Health Services Research Commons

Repository Citation
https://uknowledge.uky.edu/hsm_present/91
Public Health Services & Systems Research: Taking the Pulse of the Field

Glen Mays, PhD, MPH
University of Kentucky

glen.mays@uky.edu

Keeneland Conference on PHSSR • Lexington KY • 8 April 2014
Vicious cycles to learning systems

Limited public understanding & political support

Incoherence in missions, Complex, fragmented, variable responsibilities & expectations financing & delivery systems

Large inequities in resources & capabilities Variable productivity and efficiency

Resources incongruent with preventable disease burden

Gaps in reach & implementation of efficacious strategies Difficulties demonstrating impact, value & ROI

Translate evidence for policy and administrative decisions & advocacy

Discover causes & consequences of variation in public health delivery
Standardization vs. Customization in Public Health Delivery Systems

**Standardization**
- ▼ Harmful variation
- ▼ Wasteful variation
- ▼ Inequitable variation
- ▼ Race to the bottom
- ▲ Network externalities: interoperability/coordination

**Customization**
- ▲ Target resources to greatest needs/risks
- ▲ Tailor approaches to values & preferences of stakeholders
- ▲ Deploy unique resources & skills to their best purposes

Effectiveness  Efficiency  Equity
Taking stock
RWJF-funded PHSSR Studies: 2009-13

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Health Workforce Studies</strong></td>
<td>8</td>
</tr>
<tr>
<td>Enumeration</td>
<td>1</td>
</tr>
<tr>
<td>Diversity and Disparities</td>
<td>2</td>
</tr>
<tr>
<td>Recruitment and Retention</td>
<td>2</td>
</tr>
<tr>
<td>Workforce Competencies</td>
<td>3</td>
</tr>
<tr>
<td><strong>Public Health System Structure and Performance Studies</strong></td>
<td>56</td>
</tr>
<tr>
<td>System Boundaries and Size</td>
<td>1</td>
</tr>
<tr>
<td>Public Health Organization and Governance</td>
<td>8</td>
</tr>
<tr>
<td>Interorganizational Relationships and Partnerships</td>
<td>12</td>
</tr>
<tr>
<td>Performance Measurement, QI and Accreditation</td>
<td>27</td>
</tr>
<tr>
<td>Social Determinants of Health and Health Disparities</td>
<td>8</td>
</tr>
<tr>
<td><strong>Financing and Economics</strong></td>
<td>34</td>
</tr>
<tr>
<td>Funding levels and effects</td>
<td>4</td>
</tr>
<tr>
<td>Financing Mechanisms</td>
<td>10</td>
</tr>
<tr>
<td>Costs, Efficiency, and Performance,</td>
<td>20</td>
</tr>
<tr>
<td><strong>Information and Technology</strong></td>
<td>18</td>
</tr>
<tr>
<td>Assessing &amp; Monitoring Health Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>Translation &amp; Dissemination of Evidence-based Strategies</td>
<td>1</td>
</tr>
<tr>
<td>Information and Communications Technologies</td>
<td>14</td>
</tr>
</tbody>
</table>
Research Currently Underway

- 29 studies (3 rounds) PHSSR annual solicitation
- 7 natural experiment studies
- 8 mentored research awards
- 9 predoctoral/postdoctoral research awards
- 11 PBRN Delivery and Cost studies
- 4 Quick Strike PBRN studies

See the PHSSR Research Inventory at: http://works.bepress.com/glen_mays/145/
Diffusion of Public Health PBRNs

- First cohort (December 2008 start-up)
- Second cohort (January 2010 start-up)
- Affiliate/Emerging PBRNs (2011-14)
PBRNs as Research Engines

- 31 networks
- 1593 local public health agencies
- 35 state agencies
- 52 academic research units
- 58 professional & community organizations
- 60 competitively awarded research projects
- 68 articles in peer-reviewed journals
- 221 presentations and conferences & meetings
- 51 reports & tools in the grey literature
Upcoming research opportunities

- PBRN Dissemination and Implementation Research to Improve Value (DIRECTIVE) awards
- Predoctoral/postdoctoral research awards
- Quick Strike research studies
- 2014 PHSSR Annual Solicitation
- AJPH Call for Papers for Supplement Issue
Advancing Methods and Measures

- Measuring volume, intensity & quality
- Measuring costs
- Measuring complexity in delivery systems and strategies
- Estimating value: health & economic effects
- Accounting for heterogeneity in effects
Data & Measurement Development
- Periodic census surveys of local and state agencies
- National Longitudinal Survey of Public Health Systems
- Public Health Activities and Services Tracking (PHAST): compiling existing administrative data across states
- Monitoring health reform implementation & effects

Dissemination & Translation
- Weekly Work in Progress Webinars
- Open-access journal: Frontiers in PHSSR
- Newsletters, Podcasts, Blogs
- Briefings with policy stakeholders
Where to from here? Advancing a Culture of Health

How best to use public health delivery systems to improve population health?

- Engaging communities
- Mobilizing and steering multi-sector action
- Aligning public health and medical care
- Facilitating policy adoption & implementation
- Targeting & tailoring for equity
- Addressing social determinants
Public health’s role in population health

Health System
- Scale of operations
- Compatibility of missions
- Participation incentives
- Resources & expertise

Population & Environment
- Needs
- Preferences
- Risks
- Threats
- Resources
- Perceptions

Public Health Agency
- Legal authority
- Funding levels
- Leadership
- Governing structure
- Intergovernmental relationships
- Scope of services
- Staffing levels & mix
- Division of responsibility
- Distribution of effort
- Nature & intensity of relationships

Strategic Decisions
- Decision Support
  - Accreditation
  - Performance measures
  - Practice guidelines

Outputs and Outcomes
- Reach
- Effectiveness
- Timeliness
- Adherence to EBPs
- Efficiency
- Equity

Mays et al 2009
<table>
<thead>
<tr>
<th>Medical Care Delivery</th>
<th>Public Health Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fragmentation</td>
<td>• Fragmentation</td>
</tr>
<tr>
<td>• Duplication</td>
<td>• Variability in practice</td>
</tr>
<tr>
<td>• Variability in practice</td>
<td>• Resource constrained</td>
</tr>
<tr>
<td>• Limited accessibility</td>
<td>• Limited reach</td>
</tr>
<tr>
<td>• Episodic and reactive care</td>
<td>• Insufficient scale</td>
</tr>
<tr>
<td>• Insensitivity to consumer values &amp; preferences</td>
<td>• Limited public visibility</td>
</tr>
<tr>
<td>• Limited targeting of resources to community needs</td>
<td>• Limited evidence base</td>
</tr>
<tr>
<td></td>
<td>• Adaptation constraints</td>
</tr>
</tbody>
</table>

Inefficient delivery

Inequitable outcomes

Limited population health impact
Toward a “rapid-learning system” in public health

In a learning health care system, research influences practice and practice influences research.

Evaluate
- Collect data and analyze results to show what does and does not work

Implement
- Apply the plan in pilot and control settings

Design
- Design care and evaluation based on evidence generated here and elsewhere

Adjust
- Use evidence to influence continual improvement

Disseminate
- Share results to improve care for everyone

Internal and External Scan
- Identify problems and potentially innovative solutions
