



## Advancing Public Health Systems Research: Research Priorities and Gaps

### 2007 Building the Field: PHSR Stakeholder Meeting

To advance the field of public health systems research, Robert Wood Johnson Foundation (RWJF) sponsored a meeting, conducted by AcademyHealth, on June 29, 2007. The meeting convened stakeholders to evaluate the research base to date, assess the discipline's needs, and examine the PHSR research agenda. Participating stakeholders included representatives from national public health membership organizations, academic centers, private organizations that focus on public health, provider groups, and governmental public health agencies. Each of these stakeholders brought a unique focus and perspective to this effort.

Three white papers were commissioned for the meeting.

- "Understanding the Dimensions of Public Health Delivery Systems: Theory, Evidence, and Unanswered Questions." Glen P. Mays, Ph.D., M.P.H.
- "The Relationship Between Public Health System Performance and Social Determinants of Health, Public Policy, Governance Structure, and Preparedness." Leiyu Shi, Dr.P.H., M.B.A., M.P.A.
- "Public Health Performance." F. Douglas Scutchfield, M.D. and Michelyn W. Bhandari, Dr.P.H.

In addition to this document, important findings from this meeting can be found in *Advancing Public Health Systems Research: Strategies for Moving Forward* and *Advancing Public Health Systems Research: 2007 Stakeholder Meeting Summary*, and at <http://www.academyhealth.org/issues/phsr>.

Through paper presentations and the ensuing discussion, participants at the 2007 Building the Field: PHSR Stakeholder Meeting identified many gaps in and priorities for public health system research (PHSR). The following topics and research questions were identified by participants as areas of future research to inform practice and policy.<sup>1</sup>

### Structure and Organization

Investigation into public health system structure and organization could inform performance improvement and signify ideal circumstances for service delivery. Related questions include:

- What health agency structures are most effective? What are the effects of reorganization?
- How do state and local governing board composition, structure, and power vary across communities? How do they change over time?
- Which types of public health activities offer positive returns to scale and scope, which activities exhibit volume-outcome relationships, and which activities are not well suited for large-scale delivery?
- How can we better understand the public health system and measure its outputs? Does its logic model suggest investigation of different variables?

- How do changes in size and geographic boundaries affect system performance?

### Performance indicators

Efforts to develop and enhance performance indicators, to accredit public health agencies, and to understand interorganizational relationships have the potential to expand the capacity of public health systems. Research needed in this area includes:

- What are more refined indicators of organizational capacity and performance within state and local health agencies? What indicators can measure achievements in the improvement of population health and the reduction of health disparities? What essential services are needed to lead to intended performance? How is it assured that instruments measuring performance are accurate?
- What are the impacts of accreditation programs and performance standards? Are there lessons to be shared?
- What effects do density and strength of interorganizational relationship have on system performance and outcomes? Are there methods for tracking and comparing measures of interorganizational structure, system performance, and system outcomes over time?

### Data

Data needs are extensive—ranging from lack of availability of key data to reduced capacity to collect, analyze, and interpret that data.



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PHSR not only exposes the need for this data but has the potential to direct funding for and attention to these efforts. Furthermore, by prioritizing research and mining data that aligns with research priorities, researchers may make greater links to practice, thus moving the field of PHSR forward. Some of the urgent questions are:

- What sources of data exist, can be enhanced, or should be built? How can public health systems researchers and practitioners collaborate to define the scope and focus of research and perhaps identify possible natural experiments?
- Would uniform data collection enable researchers and practitioners to develop and implement improved performance indicators for vulnerable populations? Would it allow comparisons across state and local health agencies of agency performance?
- How can data collection be harmonized to increase its efficiency and reduce redundancies?
- How can a comprehensive electronic health intelligence and information system be developed?
- Should PHSR focus on governmental, delivery, or causal systems? Can causal research allow the development of long term projections and measure the effects of factors that have yet to be measured?

### Financing

Initiatives addressing public health financing could uncover clues to more efficient use of public health resources and help make the case for added investment. Gaps in our knowledge include:

- How can efficiency in public health practice be assessed? What factors influence resource use within public health systems?

- What is the effectiveness of alternative financing mechanisms?
- What are the effects of categorical funding on resource allocation? Is there a funding algorithm that can be used to generate budgets for becoming a high performing public health system?
- To what extent are cost-effective public health interventions adopted and implemented within local and/or state public health systems? What are the efficiency losses that result from under-use or over-use of cost effective interventions?

### Workforce

Several public health workforce expansion and improvement efforts have been adopted; however, research into best practices and effective strategies could inform expansion of these initiatives and identify remaining workforce needs, such as:

- What is the extent of changes in public health workforce size and mix? What factors have been elucidating these changes?
- What are the effects of alternative staffing levels and models employed within state and local public health agencies?
- What are the impacts of recent workforce training and competency development on individual level skills and productivity, workforce recruitment and retention, and performance and outcomes at the organizational and system levels? Are there unintended consequences associated with these public health workforce development initiatives, i.e. labor costs?

### Distal and social determinants

Population health is impacted by variety of distal and proximal determinants. Focusing on these interrelationships may give insight into targeting interventions and policies,

and ultimately improving health outcomes. Questions are vast and inter-disciplinary and include:

- What interactions exist between the public health system and public policy, governance, and preparedness? How can they be influenced?
- How do proximal and distal determinants affect public health systems' ability to improve population health? In turn, can systems influence—and perhaps reverse—these determinants?
- What information can be gleaned from cross-country comparisons about the facilitators and barriers shaping decisions to adopt broad public policy goals?
- How can public health be defined to incorporate outcomes and determine who governs public health [in order to educate politicians and others about the role of public health in care delivery]?
- What are the impacts of modernizing public health laws? What legal structures are currently used for distributing governmental public health powers among state and local agencies? How effective are these different structures?

### About the Author

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### Endnotes

- 1 *Advancing Public Health Systems Research: 2007 Stakeholder Meeting Summary* reviews the authors' presentations, papers, and meeting discussion. *Advancing Public Health Systems Research: Strategies for Moving Forward* examines the main themes of the meeting discussion as well as strategies for advancing the field of PHSR.