



U. S. Department of Health and Human Services &

The Robert Wood Johnson Foundation

Expert Panel on

Public Health Systems Research

February 8, 2007 - Washington, DC

Summary of the Initial Meeting

Garth Graham, Deputy Assistant Secretary for Minority Health, U. S. Department of Health and Human Services (HHS), opened the meeting and welcomed the participants. Dr. Graham noted that as the nation's principal agency for protecting the health of all Americans and the largest insurer of health care, HHS is always striving to build a more effective, cost efficient system of health care. He noted that Public Health Systems Research (PHSR) is extremely relevant, given the evolution of public health in response to concerns of quality, cost, safety, and emergency preparedness. Dr. Graham also emphasized that the field of PHSR is not the domain of one HHS agency, but rather all of HHS will benefit from its development.

Dr. Graham introduced the meeting Co-chair, **James S. Marks, Sr**, Sr. Vice President of the Health Group at the Robert Wood Johnson Foundation (RWJF), who shared the purpose of the meeting, his professional experiences with PHSR, and how and why PHSR remains a priority for RWJF. Dr. Marks stated that from state-to-state, and community-to-community, there are significant variations in public health infrastructure, resources and services, and little evidence-base has been developed to determine which public health practices and organizations are the most effective. He indicated that the purpose of the meeting was to begin to identify key components of a cohesive strategy to develop and move forward a national public health systems and services research agenda. Dr. Marks elaborated that PHSR is timely, given that the federal government, states, and communities struggle with how to best allocate limited resources and make the case for additional funding. This is reinforced by the fact that when Health Services Research (HSR) is applied, it has been a driver in raising quality and provides answers to important questions such as how to best organize, structure, and finance clinical health services to ensure maximum impact and performance.

RWJF and others have used that platform as a springboard for current efforts and continues to increase awareness among potential researchers and funders for this important area of quality research. However, PHSR is much newer and less developed. To date, RWJF has provided

approximately \$22 million to support PHSR initiatives. However, RWJF cannot advance the field alone; public/private partnerships at local, state and national levels will be critical.

RADM Penelope Royall, Deputy Assistant Secretary for Disease Prevention and Health Promotion, U. S. Department of Health and Human Services, highlighted the issue of overweight and obesity in the nation, with particular emphasis on the epidemic among children and adolescents. This public health crisis calls attention to the need for an updated, cohesive, cost-effective, and prevention-focused public health system given the burden of the staggering cost on the system. The estimated annual cost of obesity is approximately \$117 billion. Approximately 32% of adults are obese and the percentage of young people who are overweight has nearly tripled in the last 30 years. Among children and adolescents aged 2-19 years, 17% are overweight. The Office of Disease Prevention and Health Promotion directs the development and monitoring of the Healthy People 2010 Initiative. Healthy People 2010 serves as a framework for the public health and healthcare systems to improve health and lessen the economic burden of these conditions on the nation. It is a statement of national health objectives designed to identify the most significant, preventable threats to health and to establish national goals to reduce these threats.

Paul Halverson, Director of the Arkansas Department of Health, discussed the relevance of PHSR to the practice community. Key questions posed for consideration by the panel included:

- *What is the right amount of funding for public health?*
- *Should states have a fundamental obligation to properly fund public health, much like they do for the public education system?*
- *What is the right mix of funding (federal, state, local) for public?*
- *What is the return on investment for public health dollars? What does each new dollar get us?*
- *What is the right level of interoperability for public health systems? What IT systems are necessary?*
- *What are optimum governing and organizational structures for the public health system? What are the dimensions of that control?*
- *Who owns the data generated by public health systems?*
- *What are the pros and cons of a centralized versus a decentralized structure?*
- *How much autonomy is needed or is too much in the public health system?*
- *Why do we need Accreditation? What should be set as minimum requirements?*
- *Is there a disconnect between good science and good practice?*

Dr. Halverson discussed the importance of having a clear goal or defined vision of success for the public health system. The findings of the 1988 IOM report, *The Future of Public Health*, are still largely ignored. Specifically, the report called for: Adopting a population health approach that considers the multiple determinants of health, strengthening the governmental public health infrastructure (the backbone of the public health system), building a new generation of intersectoral partnerships, requiring accountability from and among all sectors of the public health system, making evidence the foundation of decision making, and enhancing and facilitating communication within the public health system. In closing, Dr. Halverson pointed out the progression must continue in public health for moving from a field of doing for the poor or doing God's work to a field of providing the best services to all clients.

After more than two decades of work with the Centers for Disease Control and Prevention (CDC), **James Curran** is currently the Dean of the Rollins School of Public Health at Emory University. Before joining the University, he was acting director of CDC's Center of HIV/AIDS and STD Prevention and assistant surgeon general of the United States. Dr. Curran drew upon his expertise and experience to present issues related to evaluating community services. The discussion began with comparisons of healthcare service delivery and financing to those of public health. The panel was reminded that healthcare financing is driven by a desire to contain exploding costs while ensuring optimal health outcomes (e.g., reduction of medical errors). Dr Curran mentioned that it is important to note that quality of services is not directly related to cost of services. In fact, the two are often on competing tracks. In many instances, cost reduction takes priority over quality, especially when working with the provider community.

Dr. Curran offered the following reasons why PHSR can and should be more effective than HSR:

- *Many of the services that we provide in public health have a stronger evidence base than those in medicine;*
- *Public health training involves epidemiology, economics, policy, etc., all things required to carry out PHSR effectively; and*
- *Within the public health community, the role of government is more readily accepted than it was in the medical and private sectors.*

PHSR is not without its challenges, though. Dr Curran discussed some of the problems facing the field of PHSR. For one, PHSR is not a widespread practice in public health and it currently does not receive sufficient funding. Secondly, government representatives that understand the need for PHSR do not “live” in the influential departments of CDC and cannot drive dollars toward PHSR. Therefore, they look to for support through program justification.

As the expert panel moves forward in its mission, Dr. Curran proposes that the panel:

- *Be strategic in its effort;*
- *Avoid impossible topics or taking on too much;*
- *Choose topics carefully and then carefully fund them;*
- *Make a clear distinction between system managerial challenges and system research issues*
- *Support funding for different/innovative studies (e.g., nursing homes and immunization delivery);*
- *Don't do program justification; and*
- *Involve the schools of public health.*

Glen Mays, Associate Professor and Chair, Department of Health Policy and Management, College of Public Health, University of Arkansas for Medical Sciences, presented on the evolution of the field of public health services research. Dr. Mays defined public health systems research as *a field of inquiry to examine the organization, financing, and delivery of public health services at local, state and national levels, and the impact of these activities on population health*. The reasons for advancing the field of PHSR are numerous and include:

- Concerns about preparedness for emerging threats;
- Wide variation in public health resources;
- Large disparities in population health outcomes;
- Difficulties demonstrating accountability/value for investments in public health;
- Desire for evidence-based decision making.

Dr. Mays elaborated that currently, as in the past, there has been a focus on intervention research. Intervention research identifies specific tactics that work, and utilizes controlled trials and tools such as the Guide to Community Preventive Services. As we move forward, Systems and Services Research must focus on implementing interventions in real-world settings, and take into account issues such as access, quality, efficiency, disparities, and sustainability. We need to study impacts on population health, not just individual health. Dr. Mays provided numerous examples of factors affecting the public health systems' performance, including institutional and economic determinants of performance. Challenges for the future include:

- ***Better measures of quality that are linked to health outcomes;***
- ***Adoption of evidence-based programs and system-wide interventions that improve quality, reduce costs, address disparities; and***
- ***Better measures of cost, economic impact, and return on investment.***

To move the PHSR field forward we must improve data and information infrastructure, become less reliant on survey systems, develop more routine data collection systems, invest in National Centers of Excellence for Public Health Systems Research, build practice-based research networks, and increase the number of sustainable, competitive sources of funding.

Peggy Honoré, Chief Science Officer, Mississippi Department of Health, continued the dialogue with a presentation on the *Evolution of Public Health Finance within the System*. Dr. Honoré framed the discussion by providing a definition of public health finance as *a field of study that examines the acquisition, utilization, and management of resources for the delivery of public health functions and the impact of those resources on population health and the public health system*. The lack of financial analysis in the public health system was offered as a contributing factor why some features, such as the development of innovative public health revenue streams and related marketing strategies, have not been mainstreamed in public health. Dr. Honoré emphasized the importance of understanding the interrelationship of essential components in a health system as critical to achieving quality improvements. Finances are critical system inputs. Therefore, it is a fundamental quality performance indicator that must be examined in order for any analysis of system performance to be complete, especially since quality improvements and containment of costs were key drivers to the outcomes movement. The definition of PHSR acknowledges the relevance of finance, but the tools, particularly data, for financial research and analysis are scarce, creating a major barrier to PHSR efforts. The ability to collect, analyze, and use data is a vital component of any performance improvement effort. Not only does data provide knowledge, but it is critical to measuring quality improvement, gauging resource utilization, identifying gaps in mission fulfillment, and supporting research overall. Dr. Honoré suggested that existing financial data collection efforts of system partners that could be emulated by public health include: standardized financial reports; on-line data collection systems modeled after the Integrated Post-Secondary Education Data System (IPEDS) or the Health Resources and Services

Administration (HRSA) Uniform Data System (UDS) of Community Health Centers; or expansion of the U. S. Census Bureau's Survey of States and Local Governments. Dr. Honoré also highlighted RWJF funded PHSR efforts ongoing in the Mississippi Delta Region. In closing, Dr. Honoré offered the following next steps for advancing PHSR taken from participant survey responses at the first PHSR conference in February 2006:

- *Strengthen/clarify the definition of PHSR*
- *Advance public health finance*
- *Promote more linkages/collaborations with the healthcare delivery system and public health*
- *Increase funding for PHSR*
- *Resolve data issues (e.g. financial, community health, disparity, etc)*
- *Increase national communication and outreach to policy-makers, funders, practitioners, researchers, etc.*
- *Centralize PHSR efforts in HHS*
- *Develop core competencies for PHSR in Schools of Public Health*
- *Develop a PHSR professional organization.*

A panel of HHS representatives presented their respective divisions/offices role with developing the field of PHSR and applying its findings to federal policies and programs.

Sally Phillips, the Director of the Bioterrorism Preparedness Research Program at the Agency for Healthcare Research and Quality (AHRQ), shared that strengthening the public health system to ensure bioterrorism readiness is a priority funding area for AHRQ. AHRQ-supported research focuses on the following:

- *Emergency preparedness of hospitals and health care systems for bioterrorism and other rare public health events;*
- *Technologies and methods to improve the linkages between the personal health care system, emergency response networks, and public health agencies; and*
- *Training and information to help community clinicians recognize the manifestations of bioterrorist agents and manage patients appropriately.*

AHRQ's portfolio of bioterrorism research is a key component of the agency's efforts to develop evidence-based information aimed at improving the quality of the U.S. health care system.

Bruce Gellin, the Director of the National Vaccine Program Office, highlighted potential crises should a bioterrorism, mass casualty, or pandemic event occur. As immunization and vaccination plans are being developed, it is essential that the nation's public health system be organized to enable efficient, consistent, and timely responses when called upon. Additional research to build such an optimal system will be critical to protecting the health of the nation.

Kay Felix-Aaron, Chief of the Clinical Quality Data Branch at the Health Resources and Services Administration (HRSA) highlighted HRSA's commitment to being a learning organization that strives for constant quality improvement. HRSA utilizes its findings from program evaluations to revise and update program expectations to facilitate programs operating at maximal effectiveness

and efficiency. HRSA supported community health centers, which serve approximately 14 million persons per year, are a vital component of the nation's public health system and are often underestimated with regard to their abilities to improve health outcomes and reduce racial and ethnic health disparities. Many community health centers have long-standing, established partnerships with local health departments to support the communities' public health system.

Stephanie Bailey, Chief of Public Health Practice for the CDC, serves as the promoter and conscience of public health practice throughout the agency and in the larger public health community, and ensures coordination and synergy of CDC scientific and practice activities. Dr. Bailey announced that a new Public Health Practice Council has been established to provide a forum for exploring public health practice issues critical to achievement of CDC's Health Protection Goals, promote the translation of CDC science into effective public health action and better health outcomes at the front line, and shape and guide implementation of a CDC strategy for improving public health practice throughout the nation. Dr. Bailey encouraged panel members to explore the wealth of tools and data available through the National Public Health Performance Standards Program (<http://www.cdc.gov/od/ocphp/nphpsp/index.htm>).

Wanda Jones, Deputy Assistant Secretary for Women's Health, highlighted the importance and benefits of developing population-focused interventions and systems. Dr. Jones emphasized that history has shown public health that a *one size fits all* model is often ineffective. For example, nationally, women's life expectancy is beginning to level off, thus presenting an opportunity gap. In response, the Office on Women's Health funds several programs focused on dramatic systems change, while using the framework for addressing women's health. The goal is to develop and implement a model for comprehensive, multidisciplinary, integrated women's health care.

As discussion progressed into identification of next steps, several common themes emerged. Advancing research in public health systems is critical to building an effective and efficient system. We must agree upon a uniform definition of PHSR and develop a shared understanding for the framework of public health practice at all three levels: federal, state, and local. Consensus should be built around what we already know and from there, knowledge gaps must be identified and used to formulate a well-informed and comprehensive PHSR agenda. The nation's public health system is not a singular construct; all other related sectors should be involved and it **MUST** be integrated with the practice community. Suggestions were to develop an agenda and to actively seek funding for a *few* high priority areas.

Building a PHSR research agenda will also require the development of a strong business case. Business and policy schools, among other partners, should be included in the process. Currently, there is minimal use of existing data and utilizing sources such as claims data will help build the business case.

A PHSR research agenda should explore and include:

- ***Qualitative as well as quantitative measurement studies to assess impact on individual and population health;***
- ***Identification of the role business, humanity, social sciences, and anthropology training programs can play in strengthening public health systems;***

- *Community-based participatory research programs to enhance credibility and trust;*
- *Critical elements of structure and process for a public health system;*
- *Analysis of interventions that have failed and why;*
- *Determinants of a public health system;*
- *Examinations of how comparative investment research might be applied to the field;*
- *Integration of research and practice to better address population health versus a disease-specific model;*
- *Financial transparency and a better understanding for how the government spends its money including investigations on the role of funding guidelines (e.g. reporting mandates, etc) on increasing transparency.*

To support agenda development efforts, the group expressed a desire to educate stakeholders, such as legislators and other funders, who traditionally have not been engaged in PHSR efforts. Tools suggested as being helpful were talking points and branding initiatives. Remarks were given by several panel members about their efforts to educate policymakers on PHSR during requested Senate Sub-Committee testimonies regarding the 2007 Pandemic and All Hazards Preparedness reauthorization and the response to Hurricane Katrina. The panelist indicated that lawmakers became very engaged once they were educated on the benefits of PHSR to the nation's health and security. Consensus of the panel was to identify potential champions on the Hill and to begin a formal process of engagement, branding and education.

One final theme that was interwoven throughout all the discussion is that when a PHSR agenda is built, attention must follow for the translation of evidence into practice for these efforts to ever result in positive change.