



# Research Insights

## ■ Addressing Disparities Through Public Health Systems & Services Research and Adaptations to Public Health Practice

### Summary

Healthy People 2010 prescribed a set of health objectives for the nation to achieve over the first decade of the new century. As the decade concludes, public health professionals are reflecting on whether the national health goals, and their associated objectives, have been met.

Eliminating health disparities is one of two overarching goals set forth in Healthy People 2010. State and local public health departments are key stakeholders in achieving this goal. Currently, there is a move to develop a national accreditation system for governmental public health agencies in order to promote quality and performance. It is anticipated that this standards-setting program will support priority public health initiatives, such as disparity elimination. The challenge lies in the complex nature of disparities and in the wide array of social determinants that influence them. Thus, public health agencies must collaborate

with important public health system partners to get at the root of disparities and make lasting impact.<sup>1</sup>

An emerging science, public health systems and services research (PHSSR), has the potential to inform our understanding of the public health system's contribution to disparity elimination. As this area of inquiry develops, there is hope that best organizational practices for impacting disparities will be identified and that the relationship between health disparities and various public health system characteristics will be better understood.

Changing public health priorities and emerging public health issues are currently being considered in the development of a framework for Healthy People 2020. At the same time, health disparities remain. To ultimately reach the goal set forth in Healthy People 2010, the elimination of health disparities will continue to require broad-based public engagement and a nationwide commitment.

### Genesis of This Brief: AcademyHealth's Annual Research Meeting 2009

As part of its efforts to support the burgeoning field of public health systems and services research (PHSSR), the Robert Wood Johnson Foundation sponsored an invited panel at the 2009 AcademyHealth Annual Research Meeting to discuss the ways in which PHSSR can contribute to efforts to measure, assess, and reduce disparities in health and health care. The panel, Addressing Disparities Through Public Health Systems & Services Research, featured presentations from Harold Cox, M.S.S.W., associate dean of public health practice at Boston University, Claudia Schur, Ph.D., vice president and director of the Center for Health Research and Policy at Social & Scientific Systems, Inc., and Marsha Gold, Sc.D., M.P.H, senior fellow, Mathematica Policy Research. It was moderated by Debra J. Pérez, Ph.D., M.P.A., M.A., senior program officer, Robert Wood Johnson Foundation. This brief summarizes that discussion.

## Introduction

In 2000, the Department of Health and Human Services laid out its vision for Healthy People 2010 with two primary goals, “increase quality and years of healthy life” and “eliminate health disparities.” Although notable progress has been made, significant disparities persist and the goal of eliminating health disparities remains largely unmet.

Disadvantaged communities have greater exposure to toxins, limited access to healthful choices, and limited access to preventative and clinical services. Public health departments are one vehicle for addressing disparities, yet their resources for and commitment to disparities reduction can vary widely. Accreditation and public health systems and services research (PHSSR)\* hold promise as a means to address these disparities.<sup>3</sup>

According to Debra J. Pérez, Ph.D., M.P.A., M.A., senior program officer at the Robert Wood Johnson Foundation, accreditation of public health agencies, if properly implemented to define a core set of minimum standards that even the smallest health department could attain, is seen as a means of “leveling the playing field” for disadvantaged communities. Beyond that, PHSSR, provides research-based understanding of the scope of disparities, the resources and systems required to provide services to disadvantaged communities, the most efficient organization and delivery of those services, and insight into which interventions are most effective in reducing disparities and improving public health. States Perez, “disadvantaged populations stand to gain the most from improvements in effectiveness and efficiencies” in public health, yet the realities and challenges facing public health departments are great.

On June 29, 2009, the Robert Wood Johnson Foundation sponsored a panel discussion at the 2009 AcademyHealth Annual Research Meeting to discuss the potential for PHSSR to address disparities in public health practice. This brief provides a summary of that discussion and provides recommendations on data needs and collaborative strategies for researchers and policymakers.

## Background

PHSSR is a relatively new field. Much of the early research has been descriptive in nature, measuring the availability of services and the organization and financing of public health systems. Though that work is ongoing, it has established an important foundation for the next phase of inquiry, which has begun to examine the degree of variation in public health practice across communities and variation’s influence on health outcomes.

Existing research has made headway in defining public health system organization and agency structure, yet our knowledge of financing is relatively limited and the systems for tracking public health

expenditures require substantially more work. In addition, the measures for assessing performance and quality in public health practice are still relatively rudimentary (based largely on self assessment) and more research is needed to identify the most appropriate methodological approaches and instrumentation for the field.

Research conducted to date tends to focus on readily observable inputs, outputs and outcomes. But what happens in the middle<sup>4</sup> remains largely unexplored. Determining what it is about the practice of public health that has an impact on service delivery and health outcomes is a useful line of inquiry. As PHSSR evolves, and its ability to get at more complex issues, such as disparities, improves, it may provide valuable insights into what particular structures, processes, and practices could lead to improvements in quality and outcomes.

## The Potential of PHSSR to Address Disparities

Healthy People 2010 set eliminating health disparities as one of two overarching national goals, along with increasing quality and years of healthy life. Yet, because of the complexity of health disparities, eliminating them is not a goal that the federal government can address on its own. It requires a multidisciplinary approach from the national, state, and local level. And because public health authority and activity rests heavily at the state and local levels, and public and private sectors are also involved, public health is a key stakeholder.

PHSSR is uniquely suited to advancing this goal because it investigates the programs, direct services, policies, laws, and regulations designed to protect and promote the public’s health and prevent disease and disability at the population level.<sup>5</sup> As a growing and relatively young field, PHSSR also has the promise of attracting a new and diverse workforce of researchers who can contribute to the reduction of disparities by asking unique questions about population health.

Despite this promise and the progress made to date, challenges exist. The potential for the current public health system to eliminate disparities is understudied and the workforce is underfunded and overtaxed.

## Challenges and Realities

As stated previously, addressing disparities is heavily weighted to state and local effort. Yet states and communities have widely disparate levels of response in addressing disparities and equally variable resources available to do this work.

According to Harold Cox, M.S.S.W., associate dean of public health practice at Boston University, who offered a provider’s perspective to the panel, efforts to reduce disparities at the state and local levels are impeded by the limitations of financial and workforce resources, an already expansive list of responsibilities competing for those resources,

and the knowledge that a department might have to shift priorities to new, pressing needs (such as emergency preparedness or H1N1 virus) as they emerge.

### **Resources and competing needs**

Many health departments struggle amid limited financial and workforce resources to deliver the basic services under their purview, let alone supporting additional initiatives to reduce disparities. According to preliminary research presented by Claudia Schur, Ph.D., vice president and director of the Center for Health Research and Policy at Social & Scientific Systems, Inc., up to 71 percent of local health departments report inadequate funding as a barrier to addressing health disparities. According to Schur, most local health departments are quite small, serving communities of less than 50,000 persons, and one-third having annual expenditures of less than \$500,000.<sup>6</sup> Many have fewer than 10 full-time employees. The research was supported by the experience of Cox who cited Massachusetts data indicating that local health departments in that state had budgets as low as \$1,000 to address populations of up to 40,000 persons.

Human resources are also limiting. According to Cox, 80 percent of health departments in Massachusetts have inadequate staffing. In addition, a lack of consistency in training and preparation for professionals in the public health workforce and the retirement of staffers from the baby boomer generation leave many departments with less experienced and prepared teams through which to provide services.

Despite funding and staffing constraints, local health departments often have a long list of commitments and responsibilities, including everything from restaurant inspections to vaccination programs. The list is not static. At any time, the department may have to shift priorities to address an emergent issue, such as the recent H1N1 outbreak.

### **Data and Measurement**

According to Marsha Gold, Sc.D., M.P.H, senior fellow, Mathematica Policy Research, one key determinant of effective policy is the ability to use data to identify priorities and develop solutions. To determine what data were available to measure disparities at the state level, Gold and colleagues undertook a two-part study that included a national inventory of the capacity to measure disparities in Leading Health Indicators (LHIs) at the state and local levels<sup>7</sup> and a pair of state level case studies of relevant disparity reduction initiatives.<sup>8</sup>

Gold found that data on LHIs is collected as part of the Behavioral Risk Factor Surveillance System, Youth Risk Behavioral Surveillance System, and National Vital and Health Statistics System, for which the federal government has provided support. These data provide

some useful information, but are limited in their ability to deliver information on subgroups and jurisdictions. For example, these surveys may allow a certain level of analysis on African American and, to a lesser degree, Hispanic communities, yet gaps exist and researchers and policymakers have very little ability to establish estimates for many other relevant subgroups or jurisdictions. Measurement is also challenged by the timeliness and sample sizes of surveys – which can vary widely from state to state – as well as by differences in the state’s abilities to use the data effectively.

In support of this notion, NACCHO’s 2008 Profile of Local Health Departments revealed that only 52 percent of LHDs “describe health disparities in jurisdiction using data.”<sup>9</sup> Lack of data, at the state and local level, and the absence of reliable centralized data sources is a constraint for policymakers and researchers.

### **Literacy and Language Barriers**

As part of their work to study the populations who LHDs serve and the ways in which LHDs meet population needs, Schur and colleagues are conducting an evaluation of the extent of diversity in LHD jurisdictions, the variations in structure and capacity to deal with disparities, and promising strategies to improve service.

The researchers began with the NACCHO *2005 National Profile of Local Health Departments*, which they linked with 2000 Census data by jurisdiction to create population profiles. In their preliminary data, they found considerable diversity in the populations residing in the LHD service areas— for example, 125 LHDs are located in areas where more than seven percent of households are linguistically isolated (no one over 14 speaks English well) and 290 LHDs serve communities where as many as 38 languages are spoken. While the diversity is greater in the largest jurisdictions and in certain Census divisions, Schur notes that it is present in most regions, including smaller LHD service areas. In addition, while these statistics describe the population of the jurisdictions as a whole, the client populations— those who actually obtain services from the LHDs—are likely to be more diverse. Building on this analysis, the researchers distributed surveys to a sample of the most diverse communities.

In preliminary results, two-thirds of the LHD survey respondents report serving client populations where more than 10 percent speak a primary language other than English. Approximately the same number have bilingual staff, and about half use telephone interpreter lines. Three-quarters have materials translated. However, that leaves another 23 percent with no formal interpretation services available.

As with the SHDs studied by Gold and colleagues, LHDs found some innovative ways to address needs within the constraints of their mission, financial resources and staffing. Approximately three quarters of respondents provided some services targeted to

diverse populations, most often through community outreach, translated or culturally appropriate materials and collaboration with minority partners.

## Lessons

PHSSR can learn lessons from the clinical services field and avoid research in isolation – focusing early in PHSR's development on the practice community and practice based research. In order to do so, Cox and the other panelists stressed the importance of communication, collaboration and flexibility in addressing the challenges of diversity and disparities in state and local health departments.

According to Gold, it is very difficult to determine what states and localities have done throughout the decade to meet the Healthy People 2010 goal of eliminating health disparities. There is limited centralized information to enable researchers to understand historic efforts or evaluate the activity and results of state-based initiatives. This lack of evidence-based best practices means that even when a state or locality identifies an area for intervention, it isn't always clear what the evidenced-based intervention would be. Yet, despite a troublesome lack of data and catalog of proven practices, Healthy People 2010 did serve as a catalyst for state and local champions to act on disparities.

Although state and local structures for addressing disparities will reflect unique features of the particular environment, Cox identified three primary opportunities for PHSSR researchers to work with LHDs to reinforce, assist, and improve their ability to address disparities. These include working collaboratively to enhance the work that is done in local health departments by:

1. Determining what programs and interventions are actually effective;
2. Evaluating how the built environment impacts health; and
3. Identifying the impact of health literacy on health status.

Throughout, the importance of collaboration was clear. Both Cox and Gold cited case studies in which collaboration was a significant determinate of success. Gold, in particular, advocated for the use of multiple stakeholders inside and outside of government as a means to create and solidify political support. Cox offered tips for successful collaboration:

1. Clarify the purpose – why are you working together?
2. Fully engage the stakeholders – practitioners resent academics who swoop in, get their research, and then go home without sharing data.

3. Maintain good and consistent communications – regular communication helps establish trust.
4. Acknowledge that there will be mistakes – no collaboration is perfect but acknowledgement allows each party to move on.
5. Compromise – working collaboratively requires that you must be able and willing to compromise.
6. Take the long view – Collaboration in PHSSR is not just a short term commitment.
7. Play nice - Don't burn your bridges.
8. Focus – If you keep your eye on the objective there can and will be ways to work together.

## Next Steps for PHSSR

Other than the obvious need for more resources at the state and local level for data, workforce, and public health programming, there is hope that PHSSR can also inform the elimination of health disparities.

In the conclusion of her presentation, Gold outlined next steps for public health systems and services researchers to undertake in support of eliminating health disparities. Specifically, she recommended more and better documentation of efforts and the development of syntheses that can analyze those efforts. Gold and colleagues also called for more research on what makes for effective interventions and which areas offer the greatest payoff for the effort.

In a commentary co-authored by Perez, *Tapping the Potential: Tackling Health Disparities Through Accreditation and Public Health Services and Systems Research*, it is suggested that PHSSR tools and datasets might provide a more effective evidence base to identify the best organizational practices that will have an impact on disparities and a means for understanding the relationship between health disparities and various public health system characteristics.<sup>10</sup>

Yet, as noted earlier, PHSSR's existing body of literature is primarily descriptive in nature. While it provides an important base for future studies, it offers little specific guidance to public health decision makers concerning how to improve practice. However, recent research that classifies agencies and systems into homogeneous groups for the purpose of analysis and comparison suggests that PHSSR is on its way to conducting rigorous, comparative studies.<sup>11</sup> Such studies may lead to the development of a catalog of efficacious public health practice interventions, including those that tackle disparities.

As we await new national health goals with the release of Healthy People 2020, there is great potential for PHSSR to contribute to the elimination of health disparities in this next decade.

## Endnotes

- 1 AcademyHealth's Public Health Systems Research Interest Group (IG) recently adopted an expanded definition of public health systems research that further defines the public health system. The definition states: "The public health system includes governmental public health agencies engaged in providing the ten essential public health services, along with other public and private sector entities with missions that affect public health." See <http://www.academyhealth.org/files/interestgroups/phsr/PHSR%20Definition%20for%20Web%20site.pdf>
- 2 Public Health Systems Research (PHSR) has been defined by Mays et al. as "the field of scientific inquiry that examines the organization, financing and delivery of public health services in communities, and the impact of those services on public health." Recently, it has been suggested that the name and nature of this sibling to Health Services Research be recast to include 'services.' Thus, this paper refers to this line of inquiry as Public Health Systems and Services Research (PHSSR).
- 3 Mays, G.P. et al. "Behind the Curve? What We Know and Need to Learn from Public Health Systems Research," *Journal of Public Health Management and Practice*, 2003, pp. 179-82 and Scutchfield, F.D. et al. "Public Health Services and Systems Research," *American Journal of Preventive Medicine*, 2007, pp. 169-71.
- 4 Mays, G.P. "A Call to Action for Public Health Systems Researchers." Presentation at the 2008 Public Health Systems Research Interest Group Meeting, Washington D.C.; June 7, 2008.
- 5 AcademyHealth's Public Health Systems Research Interest Group (IG) recently adopted an expanded definition of public health systems research that further defines public health services. The IG's statement states: "'services' broadly includes programs, direct services, policies, laws, and regulations designed to protect and promote the public's health and prevent disease and disability at the population level." See <http://www.academyhealth.org/files/interestgroups/phsr/PHSR%20Definition%20for%20Web%20site.pdf>
- 6 According to the *2008 National Profile of Local Health Departments*, released by the National Association of County and City Health Officials (NACCHO) after Schur's panel presentation, 64 percent of local health departments serve populations less than 50,000 persons and one quarter have annual expenditures of less than \$500,000.
- 7 Gold, M., A. Hedley-Dodd, and M. Neuman. "Availability of Data to Measure Disparities in Leading Health Indicators at the State and Local Levels." *Journal of Public Health Management and Practice*, 2008, pp. S36-44.
- 8 Conwell, L., M. Neuman, and M. Gold. "State Efforts to Address Healthy People 2010 Goal to Eliminate Health Disparities: Two Case Studies." September 2008. Available at [www.mathematica-mpr.com/publications/pdfs/healthypeople2010.pdf](http://www.mathematica-mpr.com/publications/pdfs/healthypeople2010.pdf).
- 9 *2008 National Profile of Local Health Departments*, National Association of County and City Health Officials, p. 69.
- 10 Henry, B. et al. "Tapping the Potential: Tackling Health Disparities Through Accreditation and Public Health Services and Systems Research." *Journal of Public Health Management and Practice*, 2008, pp. S85-87.
- 11 Scutchfield, F.D. et al. "Applying Health Services Research to Public Health Practice." *HSR*, 2009, 44, pp. 1775-87.