Overview of the Public Health PBRN Program

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OVERVIEW

The Public Health Practice-Based Research Networks Program is a national program of the Robert Wood Johnson Foundation that supports the development of research networks for studying the comparative effectiveness, efficiency and equity of public health strategies deployed in real-world practice settings. A practice-based research network (PBRN) brings multiple public health agencies together with research partners to design and implement studies of population-based strategies that prevent disease and injury and promote health. Participating practitioners and researchers collaborate to identify pressing research questions of interest, design rigorous and relevant studies, execute research effectively, and translate findings rapidly into practice. As such, PBRNs represent vehicles for expanding the volume and quality of practice-based research needed for evidence-based decision-making in public health. The Public Health PBRN Program is based at the University of Kentucky College of Public Health, under the direction of Dr. Glen Mays.

BACKGROUND AND RATIONALE

PBRNs have been used successfully in the field of health services research to study clinical innovations and test quality improvement strategies in community-based medical practice settings. Building on this model, the Public Health PBRN Program is the first national initiative in the U.S. to develop PBRNs for research in public health practice settings. Like their counterparts in clinical research, public health PBRNs are particularly well positioned to test and evaluate strategies for accelerating the diffusion of evidence-based practices and policies across a variety of practice settings. The range of public health studies that can be conducted through PBRNs is wide, including:

- Comparative case studies designed to identify problems and/or innovations in how public health activities are currently implemented in different practice settings.
- Large-scale observational studies designed to evaluate practice variation across local and/or state public health settings in order to identify opportunities for reducing unnecessary, inefficient, or harmful variation.
- Intervention studies and community trials designed to test the effectiveness and cost-effectiveness of new public health programs. Such studies may also test the effectiveness of quality improvement initiatives directed at existing programs.
Policy evaluations and natural experiments designed to monitor the effects of key policy and administrative changes made at local and/or state levels, such as changes in laws and regulations, shifts in funding or staffing levels, and organizational restructuring such as service consolidation, regionalization or decentralization strategies.

These types of studies require the ability to measure public health activities and outcomes in real-world practice settings, and to make valid comparisons across such settings and over time.

**The Research Networks**

The Public Health PBRN Program currently supports 12 primary research networks comprised of local and state governmental public health agencies, community partners, and collaborating academic research institutions. These networks are located in Colorado, Connecticut, Florida, Kentucky, Massachusetts, Minnesota, Nebraska, New York, North Carolina, Ohio, Washington, and Wisconsin. In addition to the 12 supported research networks, other public health PBRNs participate in the program as affiliate members and emerging networks under development.

The National Coordinating Center for the Public Health PBRN Program, based at the University of Kentucky College of Public Health, provides resources and technical assistance to the networks for developing, operating, translating and disseminating research projects. The Coordinating Center also organizes cross-cutting and multi-network research studies designed to evaluate and compare public health strategies implemented across diverse practice settings.
**RESEARCH ACTIVITIES AND SUPPORT**

Public health PBRNs begin their operations with a small-scale, descriptive research study – the Preliminary Investigation Project (PIP) – that allows participants to test their mechanisms of collaborative inquiry and gain proof of concept for their network. After the first year or two of participation in the program, networks progress to larger-scale research projects supported by Research Implementation Awards (RIAs) and Research Acceleration and Capacity Enhancement (RACE) supplements. Additionally, networks can pursue short-term, time-sensitive research opportunities supported by Quick Strike Research Funds (QSRFs). Alongside these Foundation-supported research projects, networks and their partners pursue research funding from myriad federal, state, and nongovernmental sources for health services research and public health research support. More than 40 research projects have been launched within the PBRNs to date. Current research topics include:

- Variation in staffing levels across local public health agencies and their influence on delivery of essential public health services
- Variation in the implementation and impact of regionalized public health delivery models
- Variation in local health department approaches to communicable disease reporting, and its impact on surveillance and disease control efforts
- Impact of a comprehensive state public health reform law on the organization and delivery of local public health services
- Causes and consequences of local variation in the public health response to H1N1 influenza
- Impact of funding reductions on the delivery of evidence-based public health programs and services
- Effectiveness of quality improvement strategies for diabetes prevention delivered through local public health agencies
- Influence of public health agencies on the adoption of evidence-based obesity prevention strategies by local community coalitions.

**FOR MORE INFORMATION**

More information about the Public Health PBRN Program is available on the program website [www.publichealthsystems.org/pbrn](http://www.publichealthsystems.org/pbrn). You may contact the Coordinating Center at:

- Public Health PBRN National Coordinating Center
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You may contact the program director at: Glen P. Mays, PhD, MPH, F. Douglas Scutchfield Endowed Professor of Health Services and Systems Research, University of Kentucky College of Public Health. Telephone: 859-218-2029. Email: glen.mays@uky.edu

A National Advisory Committee provides strategic guidance and support to the Public Health PBRN Program. Current committee members are:

- Alice Ammerman, Dr.P.H., R.D., University of North Carolina-Chapel Hill
- Ross Brownson, Ph.D., Washington University
- Michael Caldwell, M.D., M.P.H., Dutchess County Health Department, New York (Chair)
- Wayne Giles, M.D., M.S., U.S. Centers for Disease Control and Prevention
- Paul Halverson, Dr.P.H., M.H.S.A., Arkansas Department of Health
- Judith Monroe, M.D., U.S. Centers for Disease Control and Prevention
- Robert Pestronk, M.P.H., National Association for County and City Health Officials
- Donna Peterson, Sc.D., M.H.S., University of South Florida
- Patrick Remington, M.D., M.P.H., University of Wisconsin
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