

Primary Care Practice-based Research Networks

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AHRQ is the lead agency charged with supporting research designed to improve the quality of health care, reduce its cost, address patient safety and medical errors, and broaden access to essential services. AHRQ sponsors and conducts research that provides evidence-based information on health care outcomes; quality; and cost, use, and access. The information helps health care decisionmakers—patients and clinicians, health system leaders, and policymakers—make more informed decisions and improve the quality of health care services.



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Over the past decade, primary care practice-based research networks (PBRNs) have emerged as a promising approach to the scientific study of primary care. A PBRN is a group of ambulatory practices devoted principally to the primary care of patients, affiliated with each other (and often with an academic or professional organization) in order to investigate questions related to community-based practice. Typically, PBRNs draw on the experience and insight of practicing clinicians to identify and frame research questions whose answers can improve the practice of primary care. By linking these questions with rigorous research methods, the PBRN can produce research findings that are immediately relevant to the clinician and, in theory, more easily assimilated into everyday practice.

AHRQ Support of PBRN Research

Although primary care research networks began to develop in Europe in the 1960s—the first PBRNs were initiated in the U.S. in the late 1970s. Only in the past 10–15 years, however, have PBRNs become successful in competing for Federal grant funding. The Agency for Healthcare Research and Quality (AHRQ) was among the early Federal supporters of PBRN research. The following are examples of individual projects supported by AHRQ since 1993:

- A study of the role of antibiotics in improving outcomes for children with acute otitis media, conducted by the Ambulatory Sentinel Practice Network (ASPEN) in collaboration with other primary care networks in the Netherlands and the United Kingdom.^{1,2} [HS09315]
- A controlled clinical trial of the use of telephone care in managing Medicare patients, conducted by the Cooperative Research Network (COOP) of Dartmouth College. [HS07350]
- A descriptive study of the referral process in pediatric care, conducted in the Pediatric Research in Office Settings (PROS) network of the American Academy of Pediatrics.^{3–5} [HS0840]
- A study of primary and secondary prevention of coronary artery disease and stroke in primary care settings, conducted by the Practice Partner Research Network (PPRNet) of the University of South Carolina. [HS11132]
- Research to characterize medical errors in primary care settings, conducted by the Virginia Ambulatory Care Outcomes Research Network (ACORN) of Virginia Commonwealth University. [HS11117]



AHRQ's PBRN Planning Grants

To further assist PBRNs in carrying out activities that will enhance their capacities to conduct research in primary care settings, AHRQ awarded planning grants to 19 networks across the United States in September, 2000. AHRQ's Center for Primary Care Research took the lead in developing and implementing this initiative. Each grant supports the development of a PBRN-specific plan to (1) establish or improve electronic collection and aggregation by the network of data derived from the individual practices; (2) increase the network's capacity to study the health care of racial and ethnic minority and/or underserved populations; (3) develop methods to assist network clinicians in translating research findings into practice; and (4) identify potential sources of ongoing support for the network.

Together, the 19 PBRNs who received awards provide access to over 5,000 primary care providers and almost seven million patients who are being followed in a variety of primary care practice settings in 49 States. Representatives of each funded network will attend three organizational meetings supported by AHRQ over the 1-year planning process. After successful completion of the planning phase, the 19 recipient PBRNs will compete for continuation grants to (1) expand their capacity to collect data needed to define their networks and (2) study issues related to electronic data collection and data privacy/ or confidentiality.

The PBRN directors and organizations who received AHRQ planning grants are:

American Academy of Family Physicians, Leawood, KS: The AAFP National Network for Family Practice and Primary Care Research (National Research Network) is an emerging network that includes 110 clinicians from practices in 34 States and four Canadian provinces. Principal Investigator: Herb Young, M.D., M.A. Grant No. P20 HS11182.

American Academy of Pediatrics, Elk Grove Village, IL and the University of Vermont, Burlington, VT: Pediatric Research in Office Settings (PROS) is a national network that includes practitioners from 540 pediatric practices in 49 States, Puerto Rico and Canada. Principal Investigator: Richard C. Wasserman, M.D., M.P.H. Grant No. P20 HS11192.

Baylor College of Medicine, Houston, TX: The Baylor Practice-based Research Network (Baylor PBRN) is an urban-based network whose purpose is to evaluate the effectiveness of primary care services delivered to ethnically and socioeconomically diverse populations in Houston. Principal Investigator: Robert J. Volk, Ph.D. Grant No. P20 HS11187.

Case Western Reserve University, Cleveland, OH: The Research Association of Practicing Physicians (RAPP) is a network of 116 practices in northeast Ohio which has focused its research efforts on the structures, processes, and outcomes of primary care practice. Principal Investigator: Kurt C. Stange, M.D., Ph.D. Grant No. P20 HS11176.

Children's Memorial Hospital, Chicago, IL: The Pediatric Practice Research Group (PBRN) is a 16-year-old Chicago-area network which conducts studies on the primary care of children. Principal Investigator: Katherine Christoffel, M.D., M.P.H. Grant No. P20 HS11248.

Children's Hospital Center, Cincinnati, OH: The Cincinnati Pediatric Research Group (CPRG) was established in 1996 and studies a geographically and socio-economically diverse pediatric population served by an array of health care facilities. Principal Investigator: Michele Kiely, Ph.D. Grant No. P20 HS11206.

Dartmouth Medical School, Hanover, NH: The Dartmouth/Northern New England Primary Care Cooperative Research Network (COOP) is the oldest primary care practice-based research network in the country,

composed chiefly of independent primary care clinicians who reside in New Hampshire, Maine, and Vermont. Principal Investigator: John H. Wasson, M.D. Grant No. P20 HS11172.

Indiana University, Indianapolis, IN: Wishard Health Services and the primary care practices of the Indianapolis University School of Medicine have created ResNet, a research network that conducts studies related to medical informatics and the translation of research into clinical practice. Principal Investigator: William M. Tierney, M.D. Grant No. P20 HS11226.

Michigan State University, East Lansing, MI: The Great Lakes Research Into Practice Network (GRIN) is a new, large network created through the merger of three established primary care PBRNs in the state of Michigan. Principal Investigator: Henry C. Barry, M.D. Grant No. P20 HS11215.

Morehouse School of Medicine, Atlanta, GA: The Southeast Regional Clinicians' Network (SERCN) is composed of health care professionals working in 142 federally-funded community health centers in eight southern States. Principal Investigator: George S. Rust, M.D., M.P.H. Grant No. P20 HS 11217.

Mount Sinai School of Medicine, New York, NY: The Mount Sinai Primary Care Practice-Based Research Network (MSPBRN) will combine the resources of academic department practices with community health centers serving the East Harlem and Central Harlem areas of New York City. Principal Investigator: Albert L. Siu, M.D., M.P.H. Grant No. P20 HS11198.

University of California, San Diego, CA: The San Diego Unified Family Medicine Research Network (SURF*NET) is an emerging network that focuses its research efforts on the primary care of underserved populations in southern California. Principal Investigator: Theodore G. Ganiats, M.D. Grant No. 11223.

University of California, San Francisco, CA: The Collaborative Research Network (CRN), established in 1984 by the UCSF Department of Family and Community Medicine, will merge with the Community Health Network and Community Clinic Consortium of San Francisco to improve its access to a large underserved urban patient population. Principal Investigator: Mary S. Croughan-Minihane, Ph.D. Grant No. P20 HS11204.

University of Colorado Health Sciences Center, Denver, CO: The Colorado Research Network (CaReNet) is focusing on health issues among underinsured and Hispanic people. Principal Investigator: Wilson D. Pace, M.D. Grant No. P20 HS11228.

University of Kansas, Wichita, KS: The Kansas Rural Practice Research Network (KRPRN) is a new collaboration of the University of Kansas School of Medicine, the Great Plains Health Alliance, the Kansas Academy of Family Physicians, and the Kansas chapter of the American College of Physicians. The network will include practices located in medically underserved communities of less than 3,000 people in rural Kansas. Principal Investigator: Ken Kallail, Ph.D. Grant No. P20 HS11201.

University of Oklahoma, Oklahoma City, OK: The Oklahoma Physicians Resource/Research Network (OKPRN) is a six-year old network of family physicians affiliated with the Oklahoma Academy of Family Physicians. The network intends to establish a collaborative relationship with the Oklahoma Native American Prevention Research Center. Principal Investigator: James W. Mold, M.D., M.P.H. Grant No. P20 HS11197.

University of New Mexico, Albuquerque, NM: The New Mexico Practice Based Resource and Research Network (NMPBRRN) is an emerging network consisting of clinicians in community health centers, Indian Health Service sites, tribal health care facilities, and academic primary care





sites, whose major purpose is to study the problem of racial and ethnic disparities in health. The planning grant for this project is being funded, in part, by the U.S. Indian Health Service. Principal Investigator: Robert L. Williams, M.D., M.P.H. Grant No. P20 HS11229.

Virginia Commonwealth University, Richmond, VA: The Virginia Ambulatory Care Outcomes Research Network (ACORN) is a developing network of primary care practices in Virginia that collects longitudinal data on the health status of primary care patients. Principal Investigator: Steven H. Woolf, M.D., M.P.H. Grant No. P20 HS11213.

Yale University School of Nursing, New Haven, CT: This network is composed of primary care Advanced Practice Nurses (APRNs) who care for underserved populations in southern New England. Principal Investigator: Margaret Grey, Ph.D., BSN. Grant No. P20 HS11196.

Future AHRQ Support of PBRNs

In the future, AHRQ hopes to be in a position to offer PBRNs multi-year funding of primary care studies related to key Agency priorities. The long-term goal of the overall initiative is to improve the capacity of PBRNs to expand the primary-care knowledge base and to establish mechanisms to assure that new knowledge is incorporated into actual practice.

References

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