

## Practice-Based Research Network

“Practice based research networks (PBRNs) are research laboratories as essential to advancing the scientific understanding of medical care as bench laboratories are to advancing knowledge in the basic sciences.”<sup>1</sup> At the same time that basic science research is focusing on molecular biology and unraveling the secrets of the human genome, the daily issues surrounding the effective delivery of primary care continue to be a challenge. Common minor clinical events (such as viral upper respiratory infections) are treated indiscriminately (adding to the epidemic of antibiotic resistance) while common chronic clinical problems, such as asthma, are more poorly controlled than ever, despite the availability of technologically superior drugs and delivery systems. Best clinical practice has not yet been delineated for many common problems and even when guidelines are developed they are infrequently implemented in the practice setting.

Several key elements have been identified as essential to the successful creation of a PBRN.<sup>2,3</sup> The composition of the network is important in determining its success. It appears that a network that combines a university department (which has an understanding of research methods and design, statistical analysis and grant writing) with an active group of practitioners (with diverse practices, values, and clinical intuition) is the most successful.<sup>4</sup> Allowing participants to have input into the selection of research topics, design of the research, and collection of the data are the most effective means of recruiting and retaining practice sites. Selection of research topics should reflect the global concerns of the participants and should also be carefully thought out to insure the success of early projects.<sup>5</sup> To keep the members engaged, it is essential to develop a mechanism for frequent and meaningful communication. This can be accomplished through regularly scheduled meetings and electronic communications (newsletters and access to a common website) – updating the progress of studies, asking for new ideas and sharing information. This two-way communication system allows for participation in the decision-making process that is key to the long-term involvement of practitioners.<sup>6</sup> Having a personal relationship with the researchers is a very powerful way to both enhance recruitment as well as retention.

The Ohio State University Primary Care Practice-Based Research Network (OSU-PCPBRN) consists of seven family medicine sites of The Ohio State University Primary Care Network, three general internal medicine sites of The Ohio State University Specialty Care Network, ten pediatric primary care centers of Nationwide Children’s Hospital, and five sites of Columbus Neighborhood Health Center, Inc. These 25 practices with over 125 primary care physicians represent a diverse patient population that provides care to over a one hundred thousand patients a year.

---

<sup>1</sup> Green LA, Dovey SM. Practice based primary care research networks. *BMJ* 2001;322:567-8.

<sup>2</sup> Green LA, Hames CG, Nutting PA. Potential of practice-based research networks: *Experiences from ASPN* 1994;38:400-06.

<sup>3</sup> Nutting PA, Beasley JW, Werner JJ. Practice-based research networks answers to primary care questions *JAMA* 1999;281:686-88.

<sup>4</sup> Croughan M. Factors influencing physician participation in practice based research networks studies. *J Fam Pract* 2001;50:978-9.

<sup>5</sup> Kelleher KJ, Moore CD, Childs GE, Angelilli MY, Comer DM: Patient race and ethnicity in primary care management of child behavior problems: A report from PROS and ASPN. *Medical Care* 1999; 37: 1092-1104.

<sup>6</sup> Kelleher KJ, Scholle SH: Children with chronic medical conditions: II. Managed care opportunities and threats. *Ambulatory Child Health* 1995; 1:139-46.