

Putting Practice Into Research: A 20-year Perspective

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Since the 1982 article in *Family Medicine* focused on sentinel practices as an aspiration, practice-based research networks (PBRNs) have become a fixture in the world of primary care. Along the way, we learned a lot.¹⁻⁷ It is now confirmed that PBRNs are important because they provide access to relatively neglected phenomena of great importance to the care of our patients, special selection and observer biases that characterize primary care, efficiencies that permit multiple studies to be done simultaneously and sequentially, and synergism between communities and the research enterprise.

We learned that clinicians join PBRNs because of their desire for intellectual stimulation and affiliation with a research group. They usually leave because of changes within their practices, not network events, although a few do leave because of the additional burdens associated with research. Characterizing the network's patients and clinicians is important to guide research design and analyses. While research done in practice probably has greater generalizability into practice than research done elsewhere, the burden of proof is on the

network. Fortunately, replicating work from other settings, like the National Ambulatory Medical Care Survey, has proved to be helpful in making this case.⁸

We learned that the essential components of a PBRN include a common purpose and a pervasive sense of mission. They require governance that is fair and faithful to the purpose and mission. They need unifying symbols that make the network perceivable, often including an interesting acronym. Networks require multiple communication systems and at least one staff person who is strongly identified with the network. There must be a set of key processes that identify questions important to people and the network, refine ideas into researchable questions, design investigations, link the network's question to funding, implement projects throughout the network, conduct and monitor studies, and report results with appropriate credit to all participants.

We learned that publishing results usually depends not on the network, but on one author, and that peer review of network research may not be by peers. Consensus emerged that the primary challenge of management in a PBRN is matching the interests of the network (what comes up) with the interests of funding agents (what comes down). At the end of the day, a network is what it can do, and, as in other collaborative human enterprise, maintaining a healthy sense of humor is essential.

The Ambulatory Sentinel Practice Network (ASPN), through its practices and volunteer board of directors, consistently led the effort to establish PBRNs and for 20 years managed to survive the risks it took. However, in 1998–1999, ASPN moved beyond its lifeline of support and demonstrated that it is still not possible for a large network to survive financially without an institutional base that provides key infrastructure support. To the great credit of the entire family of family medicine organizations, the decades of effort were sustained by reorganizing ASPN under the auspices of the American Academy of Family Physicians, where the next edition of this post-adolescent explorer is just emerging.

The Agency for Health Care Research and Quality (the recently reauthorized, lead federal agency for primary care research, previously named the Agency for Health Care Policy and Research) is also on a journey of development, and it is stimulating networks by offering grants to develop infrastructures. It has announced its intention to support research in PBRNs for the foreseeable future. A current application cycle provoked more than 80 applications for network support, a far cry from the situation when sentinel practices were reported as a potential new development in *Family Medicine* in 1981.

With the feasibility and importance of PBRNs now established, the networks are seen not as a problem but as a solution. The challenge

(Fam Med 2000;32(6):396-7.)

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has shifted to aligning the networks with the information age and to asking better and more important questions. The most pressing financial step in the United States is establishing mechanisms to cover the costs, independent of any particular study, of sustaining these laboratories that put practice into research. Perhaps the most urgent need is using these laboratories to answer important questions about the origins of disease and illness, the origins of health sustained through a whole life, the best ways to help people in their communities get what they need from health care but not the things they don't need from a "system" struggling to find its purpose and its way.

The agenda for practice-based research networks has advanced in the United States from the struggle to exist, to expansion and improve-

ment. This transition occurred mostly within family practice, but it also was tenaciously advanced within pediatrics. It took 20 years of sustained effort. Great credit is due to hundreds of practicing clinicians who donated their ideas, observations, time, and local resources to transform a vision into reality.

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