Editorial

Practice-Based Research Networks: Reuniting Practice and Research Around the Problems Most of the People Have Most of the Time

Paul A. Nutting, MD, MSPH, and Larry A. Green, MD, *Guest Editors*
Denver, Colorado

Publication of this theme issue of *The Journal of Family Practice,* which focuses on practice-based research, represents an important milestone for family practice and primary care. Much of this work comes from research "networks," which are groups of practices organized to collect data about problems found in clinical practice. Over 1000 family practices in the United States now participate in such networks. The ability to assemble this many peer-reviewed original articles from practice-based research networks emphasizes the vitality of the nearly 30 networks actively conducting research in North America in 1994.

The maturation of practice-based research comes at a most opportune time. Our health care system is broken, and after decades of neglect, attention is now being directed toward the centrality of family practice and primary care in effective health care systems. Change is in the wind as it has not been perhaps since the turn of the century and undeniably since the mid-1960s. Critics, complaining that medicine's golden age is over, fail to recognize that medicine is an ageless part of the human condition that will endure as long as people experience illness. Society's healers have always adapted to the evolving understanding of what comprises health and disease, and their methods have always embraced a variety of tools and technologies. Revision of medicine has been the rule, not the exception, and in every instance, revision has occurred to provide what people need and expect from medicine.

We have entered another period of revision during which our powerful biomedical model is destined to yield to a more encompassing paradigm, the outlines of which are yet emerging. For now, there may be more confusion than clarity, but we do seem to have reached the conclusion that our overcommitment to reductionism and specialism requires a balancing dose of integrated knowledge and generalism. General practice is a frontier of medicine representing one of the most fertile areas for medical research.

To forcefully advance research needed in general medical practice, we must confront two widely accepted but erroneous assumptions: our failure to recognize and dispel these imposters will continue to distract us from the work at hand. They are the *unfortunate misunderstanding* and the *persistent contradiction* about family practice, and they are worth examining in detail.

The *unfortunate misunderstanding* has been lurking in our medical schools for quite some time. Although it generally goes unstated, it is one of the largely unexamined assumptions that paralyze us and keep us from moving forward.[1] This is the assumption that biomedical knowledge developed through subspecialty research is widely applicable to primary care practice. Although it is of use, it is generally overrated. This misunderstanding permits medical education programs to confuse education in primary care with lectures in which specialists tell students and practicing generalists what to do when they see *their* specialty's problems. It permits policymakers to assume that medical care can be made efficient and effective simply by summarizing the specialty knowledge base into "guidelines" and coercing practicing physicians into compliance. It is this misunderstanding that allows the practicing physician to be perceived as a target and a problem rather than a resource and a solution.[1,2]

Persistent contradiction, another imposter promulgated within many medical schools, dismisses primary care practice in some circumstances as being so easy that anyone can do it, while in other situations, often on the

Submitted, January 31, 1994.

From the Ambulatory Sentinel Practice Network (P.A.N.) and the Department of Family Medicine, University of Colorado School of Medicine (P.A.N., L.A.G.), Denver, Colorado. Requests for reprints should be addressed to Paul A. Nutting, MD, MSPH, ASPN, 1180 Clermont St, Denver, CO 80220.

ISSN 0094-3509

same campus during the same day, portrays it as so difficult that no one can do it. Thus, our medical students hear the message clearly: to become a generalist condemns one to a life of either insignificance or enduring mediocrity.

Taken together, *unfortunate misunderstanding* and *persistent contradiction*, and our collective tolerance for them, have immobilized and confused us. We must dispel them and accept responsibility for replacing them with tangible evidence that we can put more science in practice and more of practice into teaching and research. We need to reunite practice and research, the practitioner and the academician, and practice-based research networks provide a mechanism for accomplishing this.

The characteristics and special challenges of primary care are defined by the nature and variety of problems patients bring to it. Although these are often viewed as "soft" and not worthy of good science, it is patients' ill-defined concerns that draw them into a health care system that then responds largely with "hard science"—often inappropriately intensive, technologically sophisticated, and extremely expensive.

It is becoming clear that health care reform will require an expanded foundation of primary care to undergird the health care system and meet patients' needs with appropriate services without subjecting them to unnecessarily expensive and sometimes dangerous interventions. Research is needed to establish an adequate knowledge base with which family physicians and other primary care providers can match patients' needs with appropriate services and achieve acceptable outcomes at an affordable cost.

To actively unite practice and academic pursuit is to embody one of the great traditions of medicine in which clinician scientists are driven by innate curiosity about the problems that patients present to them. The works of Sir James McKenzie, Will Pickles, John Fry, Jack Medalie, and Curtis Hames link this tradition across the last century. The organized curiosity of these family physicians, working in their offices and their patients' homes, was almost forgotten in the headlong rush into specialization and the development of modern health sciences centers. Fortunately, we have not lost the capacity to organize and pursue our curiosity in practice; it has merely evolved and matured. Building on this tradition, practice-based primary care research networks have emerged as an important approach to the challenges of primary care research.

During the past 20 years, practice-based research networks have been created in many countries, including Argentina, Australia, Brazil, Canada, Israel, New Zealand, South Africa, Switzerland, the United States, and the nations of the European Economic Community. The Sentinel Stations of the Netherlands stand as a pioneering network that conducted over 70 investigations during the first 20 years and inspired networks elsewhere.

In the United States, practice-based research networks were launched initially in the late 1970s in family practice. Although no consistent record of the development of practice-based research networks has been maintained over the last decade, it is clear that rapid growth has occured in the number of networks, the scope and sophistication of research conducted, and the number of participating clinicians. A current inventory of primary care practice-based research networks active in North America is reported elsewhere in this issue.[3] At the beginning of 1994, there were 27 active practice-based research networks, of which most (81%) were composed predominantly of family practices. With over 6000 clinicians participating in the networks, the aggregate power of this laboratory for primary care research is considerable.

The work reported in this issue of *The Journal of Family Practice* represents the leading edge of a resurgence of practice-based research that is destined to build the scientific base for primary care practice. We feel privileged to have had the opportunity to serve as guest editors and commend the vision and dedication of the hundreds of clinicians in practice and academia whose work made this issue possible.

References

1. Green LA, Hames CG, Nutting PA. Potential of practice-based research networks: experiences from ASPN. J Fam Pract 1994; 38:400-06.
2. Nutting PA, Green LA. From research to policy to practice: closing the loop in clinical policy development for primary care. In: Dunn EV, ed. Research methods in primary care: vol 5. Disseminating research findings and having an impact on practice. Newbury Park, Calif: Sage Publications. In press.
3. Niebauer L, Nutting P. Primary care practice-based research networks active in North America. J Fam Pract 1994; 38:425-26.