COMMENTARY

Practice-Based Research Today: A Changing Primary Care Landscape Requires Changes in Practice-Based Research Network (PBRN) Research

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Primary care has changed in the past 40 years, and research performed within and by practice-based research networks (PBRN) needs to change to keep up with the current practice landscape. A key task for PBRNs is to connect with today's stakeholders, not only the traditional physicians, providers, office staff, and patients, but health systems, insurance companies, and government agencies. In addition to one-time externally funded engagement efforts, PBRNs must develop and report on sustainable, long-term strategies. PBRNs are also demonstrating how they use classic practice-based research techniques of practice facilitation and electronic health record (EHR) data extraction and reporting in new and important research areas, such as studying the opioid epidemic. PBRNs are adapting and transforming along with primary care. (J Am Board Fam Med 2019;32:647–650.)

Practice-based research networks (PBRNs) continue to be a vital resource for producing important, high-quality research for family medicine and primary care. But is there really anything new in what they are doing? PBRNs began in the 1970s as a response from family medicine that traditional research was not answering the important questions of practicing physicians in a manner that could be easily translated into practice.[1,2] Physicians wanted then—and still want today—research that will improve their patient outcomes, their practice workflow, and the health of their communities.[3,4] Today's primary care physicians, though, are not the same as in the 1970s. In addition to EHRs and other technological advances of the past 40 years, today's family physicians are more likely to be employed (https://www.aafp.org/events/fmx/exhibitors/why-fmx/attendees.html) and to be female.(https://www.aafp.org/about/the-aafp/family-medicine-specialty/facts/table-2.html). These are important considerations for contemporary PBRN researchers, and this issue of *JABFM* shows that yes, there are new things to report from PBRN research.

The Role of Women Primary Care Researchers

When I began working in practice-based research 20 years ago, the vast majority doing this work were male, as were my mentors and guides. While I can find no statistics about the number or percentage of women involved in primary care research or leading PBRNs, one only has to attend a recent North American Primary Care Research Group PBRN meeting to see that the majority of attendees and presenters are women. Ten years ago, about a third of the annual issue of the *JABFM* highlighting PBRN research was first-authored by women, in this issue it is closer to two thirds, demonstrating that women are not just at the table in PBRN research, they are assuming leadership as well.

The Need to Connect with Today's PBRN Stakeholders

This issue of *JABFM* contains 5 articles describing processes and outcomes of connecting with stakeholders.[5–9] The importance of building, maintaining, and, when needed, re-establishing relationships with those for who we exist—physicians, providers, office staff, patients, and in today's

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health care landscape, health systems, insurance companies, and government agencies, cannot be overemphasized. Luckily, this is something many PBRNs do well—As Rhyne and Fagnan[10] noted last year, "PBRNs are experts in long-term engagement strategies, relationships, and collaboration." However, there are still a lot of people out there who have never heard of practice-based research, and the changing landscape of those impacted by PBRN research requires that PBRNs continue to expand stakeholder input and collaborations.

Two pediatric PBRNs, Colorado Children's Outcomes Network (CocoNet) in Colorado and PittNet in Pennsylvania both report on obtaining direct patient and parent input.[7,8] Using focus groups, interviews, and/or surveys, these PBRNs developed a better understanding of research topics and reasons for participating in research from a patient and parent perspective. The Southeast Regional Clinicians Network (SERCN) describes re-energizing a PBRN after a period of inactivity and a change in leadership.[9] Using listening sessions and stakeholder conferences, SERCN identified and prioritized research priorities with their stakeholders. Colorado's statewide State Networks of Colorado Ambulatory Practices and Partners (SNOCAP) Consortium describes processes for setting research priorities via regular conferences and meetings, as well as how they developed and maintain patient and stakeholder advisory boards.[5,6]

PBRN Funding and Infrastructure Support

However, just as practicing physicians need research that can be readily implemented in their practices, PBRN leaders need sufficient details about how they can implement reports of engagement strategies, including how to pay for it. Patient-Centered Outcomes Research Institute Engagement Awards funded 2 of these projects,[7,9] and 1 received funding through a Clinical and Translational Science Award.[8] These awards allowed significant one-time engagement efforts, but cannot sustain "long-term engagement strategies." SNOCAP describes 2 impressive ongoing, multi-year processes for long-term partnerships, but they do not describe how they funded the advisory boards, conferences, and meetings.[5,6] This is important information, as a number of publications in recent years have described the dire situation for PBRN infrastructure support.[10–12] Practical details about funding can assist other PBRNs as they seek out infrastructure support, such as applying community engagement strategies to funders,[10,12] or trying to find financial stability by supporting quality improvement and practice transformation initiatives.[10,11]

Continuing Importance of EHR Data and Practice Facilitation in PBRN Research

Three research studies in this issue provide an excellent example of how basic PBRN research skills are useful even as research foci change. The Virginia EvidenceNow journey reflects on their participation in a large multi-year, multi-site Agency for Healthcare Research and Quality (AHRQ)-funded project to improve cardiovascular disease prevention.[13] Key among their findings were the importance of practice facilitation (or coaching) throughout (and even after) the active intervention, and the difficulty in extracting, albeit the importance, of using EHR data for reporting and feedback.

The current opioid epidemic is fast becoming one of the most urgent areas for PBRN research. Researchers in Washington applied these same tools of practice facilitation and quality improvement to a vexing problem for primary care physicians, prescribing opioids for chronic pain, and successfully improved clinical work-life for these physicians.[14] Cantone et al[15] used EHR data to study medication assisted treatment uptake for opioid addiction in 2 practices, revealing important predictors to assist further research and clinical care.

Not All Practice-Based Research Takes Place in PBRNs

The other original research articles in this issue remind us that not all practice-based research takes place in PBRNs. Using EHR data from 5 practices, Dilger et al[16] posit that visit entropy is a better measure of care organization and is associated with better diabetic quality scores. And reporting on just a single practice, Morcos[17] presents compelling evidence for the importance of taking the blood pressure the right way in daily office practice, an often-overlooked component of quality care.

Rounding out this issue of *JABFM* are 3 compelling research letters. Many PBRN researchers

began their careers carrying out small, unfunded studies, or working within a larger research institute on a smaller project of their own. Research letters are an excellent way to present important but smaller research findings. In this issue, The Graham Center[18] reports that newer allopathic medical schools are actually graduating smaller numbers of family medicine-bound trainees, a disturbing trend. Twarog[19] shares findings about what type of people are more likely to make blood donations, and Lampman[20] notes the differences between how rural and nonrural veterans with long wait times for appointments view a telephone visit.

The vision that has helped PBRNs thrive for over 40 years—to improve the health of primary care patients and their communities—is still guiding PBRN research today. But as primary care has changed in the last decades, so, too must PBRN research. I am pleased to see women demonstrating their leadership in PBRN research, authoring much of this issue of *JABFM*. Moreover, PBRNs are actively engaging with practice, patient and community partners—partners that have changed in recent years as physicians are now employees of health systems, and insurers and government agencies are key stakeholders in research, quality improvement and transformation. Luckily, PBRNs are also demonstrating their facility to use key practice based research tools like practice facilitation in new research areas, including opioid prescribing and treatment. This issue of *JABFM* should give us all hope that PBRN research is adapting and transforming along with primary care.

To see this article online, please go to: http://jabfm.org/content/32/5/647.full.

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