COMMENTARY

What Do We Get From Participating in Practice-based Research Networks?

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The request to write an editorial came via email during an impossibly busy week, and although still reading the subject line I was wondering whether I could gracefully decline. But I instantly changed my mind when I scrolled down to read the titles of the 4 articles appearing in this issue of the *Journal of the American Board of Family Medicine*, on which I was asked to comment. Reading the abstracts clinched my decision. Here were 4 articles aimed squarely at issues I am currently facing in my work at the University of Washington, written by some of the "names" in the field. What a gift!

Three papers explore motivations for physicians to participate in practice-based research networks (PBRNs), and the fourth paper systematically reviews tools proposed to evaluate networks. For me these articles pull together 2 threads in my work: developing a PBRN for the University of Washington and participating in evidence-based consensus panels.

Much of my current scholarly work is in the domain of "evidence-based medicine"—a field that I had a hand in creating through my work chairing the US Preventive Services Task Force and other panels for the National Institutes of Health (NIH), the Centers for Disease Control and Prevention, and Institute of Medicine. Working at the evidence synthesis end of the research continuum relentlessly reminds me that we have too little research from typical practices that tells us what does and does not work in the real world. The adage that if we want more evidence-based practice, we need more practice-based evidence, is a constant reality. Another way to express this problem is that, sadly, during many years of working on panels and reviewing tens of thousands of articles about a wide range of clinical topics, I can count on one hand the number of articles generated from a PBRN that have met inclusion criteria for one of the systematic reviews. Thus, I clearly see the need for more practice-based research, but am uncomfortably reminded that PBRNs have now been around for at least 3 decades in the United States while making what to me seems to be an extremely modest contribution to the evidence base.

I now have an opportunity to develop a new PBRN in a geographic region long overdue for its own network, and that's where the 4 articles in this issue of *Journal of the American Board of Family Medicine* come in. The Institute for Translational Health Sciences at the University of Washington (one of the NIH Clinical Translational Science Awards) has been funded to begin building a PBRN in the 5 states with which we already have strong educational partnerships: Washington, Wyoming, Alaska, Montana, and Idaho. Although we have conducted quite a bit of practice-based research in the past, we have never been successful in assembling a network of practices in a stable configuration that had its own identity. Not that we haven't tried. One of the first Title VII grants I wrote early in my career briefly supported the development of a PBRN within our residency network, but it failed when research funding proved insufficient in itself to support the infrastructure, a fate common to other networks during the same interval.

Three of these articles provide information about motivations for physicians to participate in a PBRN, a topic of critical importance if we are to be successful at the University of Washington. What

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can I learn? Fagnan et al[1] present a qualitative study of 37 physicians in 12 PBRNs, finding themes of personal satisfaction, improved clinical care, and system-level improvements and linking the findings to an established theory of self-determination addressing competence, autonomy, and relatedness. The article is inspirational; it shows that these physicians are motivated at quite a high level. As someone who is just starting a network, however, talking with physicians who are skeptical about the potential time and resource requirements of participating, I cannot predict how such inspiring testimonials from colleagues might overcome their skepticism.

Gibson et al[2] present a survey of Rochester-area physicians (also linked to one of the NIH Clinical Translational Science Awards) finding that quality improvement, contribution to clinical knowledge, and intellectual stimulation were the top 3 incentives. These findings add support to the current plan at the University of Washington to develop our PBRN around linked electronic health records, with rapid-cycle quality-improvement projects engaged at the same level of priority as research.

Yawn et al[3] embedded an interview of physicians into a national clinical trial of postpartum depression, finding benefits to the practice in better teamwork and communication, benefits to clinicians and staff in self-worth and learning new roles, and system spin-offs to other parts of the practice. These findings are strikingly relevant to current discussions about the patient-centered medical home, where team development, communication, systems, and new roles are prominent. This, too, will be useful to me as I work with practices that are potentially interested in participating in our new network because everyone is interested in the patient-centered medical home.

Finally, Bleeker et al[4] present a systematic review of tools that are available to evaluate research networks. Only 4 tools met their inclusion criteria and they were limited to structure and process characteristics. The authors conclude that there is no validated tool that enables meaningful comparisons. The individual items included in the 4 tools will be useful as we establish our structures and processes, but it looks like we are on our own in developing an evaluation strategy for our new network.

Collectively, how do these 4 articles help us? First, we should note a caveat that the 3 articles that surveyed physicians tell us only about the believers. One of the criticisms of PBRNs (and perhaps one of the reasons so few of the resulting studies ended up in evidence reviews) is that the networks are often composed of volunteer and motivated physicians whose practices may not be representative of the populations of interest. Nonetheless, the findings cover a range of potential benefits to the practice, to the clinicians and staff, and to their communities that are worth pursuing. The review of evaluation tools is a timely reminder that we need to figure out how to evaluate PBRNs so we can design them appropriately. We clearly need to move beyond views of structure and process to embrace outcomes: are the products of PBRNs (entities that are hard to set up, complicated to run, and expensive to maintain) worth it?

I am an optimist. PBRNs are a fundamentally good idea that should be a good fit in a health care environment with new interest in translational research at one end and health care reform at the other. Participating in one should fit well into practices that are focused on improving processes and outcomes and becoming more patient centered. It certainly is an interesting time to be building a PBRN at the University of Washington; we have a lot of catch-up to do and will be informed by the successes and failures of other networks around the country. These 4 articles should help us and others to get it right.

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