ABOUT PRACTICE-BASED RESEARCH NETWORKS

Practice-based Research Networks (PBRNs) Bridging the Gaps between Communities, Funders, and Policymakers

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In this commentary, we propose that practice-based research networks (PBRNs) engage with funders and policymakers by applying the same engagement strategies they have successfully used to build relationships with community stakeholders. A community engagement approach to achieve new funding streams for PBRNs should include a strategy to engage key stakeholders from the communities of funders, thought leaders, and policymakers using collaborative principles and methods. PBRNs that implement this strategy would build a robust network of engaged partners at the community level, across networks, and would reach state and federal policymakers, academic family medicine departments, funding bodies, and national thought leaders in the redesign of health care delivery. (J Am Board Fam Med 2016;29:630-635.)

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(http://www.collaborativeohioinquirynetwork-.com/pbrn-certificate-program.html). In this commentary, we propose that practice-based research networks (PBRNs) can engage with funders and policymakers by applying the same engagement strategies they have successfully used to build relationships with community stakeholders. This process has the potential to enable PBRNs to bridge a diverse network of stakeholders, produce knowledge that is valued more broadly, and increase levels of infrastructure funding for PBRNs. The research fellowship program that fostered the ideas put forth in this article is designed to support a new generation of independent investigators within the PBRN community, and was developed by the 8 Centers for Primary Care Practice Based Research and Learning supported by the Agency for Healthcare Research and Quality (AHRQ) (http:// www.ahrq.gov/professionals/systems/primarycare/rescenters/index.html).

Perennial Funding Challenges

A key issue faced by PBRNs that has spurred discussion in the fellowship program is the ongoing challenge of maintaining funding streams that simultaneously support both PBRN infrastructure

and research projects. As Hickner and Green¹ concluded in their commentary in this publication's 2015 practice-based research theme issue, "Once again we see the stunning complexity of primary care and the meagerness of the infrastructures to discover and support it." Particularly vexing is the incongruence between the limited research and infrastructure resources available to PBRNs and their proven value to translational research, value-based care, and population health management.

Many PBRNs are closely allied with departments of Family Medicine due to their focus on primary care research, and limitations in Family Medicine research resources often directly affect PBRNs.² In 2014, National Institutes of Health (NIH) funding Family Medicine investigators represented 0.5% of total NIH funding, which has been attributed to low numbers of investigators in Family Medicine, limited research infrastructure, and an under-resourced research pipeline.^{3,4} According to the NIH Office of Extramural research, in 2015 there were 150 family medicine department grant applications among the 24,466 reviewed. Similarly, Family Medicine is under-represented on NIH review committees, with 75% of NIH institutes and centers lacking Family Medicine representation on review committees; in 2008 family physicians comprised <1% (0.38%) of NIH advisory subcommittee members.⁵ Mazur et al⁶ recently found that projects involving primary care accounted for only 19% of Patient-Centered Outcomes Research Institute funding awards. The AHRQ has emerged as a stalwart of PBRNs and primary care research. However, in 2015, as in many previous years, AHRQ faced the possibility of dissolution. Fortunately, the AHRQ remains funded in fiscal year 2016, but with a budget cut that further limits resources available to PBRNs.7

Applying Community Engagement Strategies

An excellent Practice-based Research Methods Certificate Program session on community engagement (led by Lyndee Knox, PhD, and Don Nease, MD, on December 17, 2015; available from https://youtu.be/Dwxj9l1WVBA) resulted in a stimulating discussion on how PBRNs have cultivated an intentional, mission-driven approach to building community partnerships. The group considered how we could be equally intentional around our process of building relationships with stakeholders in the current and potential

future funding environments to support the infrastructure of PBRNs. One way to build such relationships is to engage funders, policymakers, and thought leaders with the same intention that PBRNs have used to successfully engage providers and communities over the past 4 decades. Green and Hickner⁸ relay the exemplary story of Dr. Curtis Hames, a member of the Ambulatory Sentinel Practice Network PBRN board of directors, who demonstrated this type of relational engagement with funders by meeting regularly with Claude Lenfant, Director of the NIH National Heart, Lung, and Blood Institute, in the 1980s. The Ambulatory Sentinel Practice Network was one of the country's first PBRNs, founded in 1981, and included private and academic practices across the United States and Canada. In these meetings, Dr. Hames shared his cardiovascular research findings, which demonstrated the great potential of PBRNs to conduct translational research. 9-11

A community engagement approach to achieve new funding streams for PBRNs should include a strategy to engage key stakeholders from the communities of funders, thought leaders, and policymakers using collaborative principles and methods. PBRNs that implement this strategy would build a robust network of engaged partners at the community level, across networks (such as the collaborative efforts between the AHRQ-funded P30 Centers of Excellence), and would reach state and federal policymakers, academic family medicine departments, funding bodies, and national thought leaders involved in the redesign of health care delivery. De Gruy et al¹² advocated for a similar approach in a recent article recommending that primary care research leaders "... should organize discussions with research funders and others who might become interested in funding certain kinds of research—along with the stakeholders themselves. This . . . should inform a robust primary care research agenda, guide emerging research infrastructure, and inspire the workforce. . . . "

Identify Stakeholders

By intentionally building such a stakeholder network, PBRNs might create a more sustainable infrastructure for funding, broadcast opportunities for partners to synergize around shared values and goals, and eventually serve as a bridge connecting those working on issues from the towers of policy or academia to those with "boots on the ground"

experience. This would be a natural role for PBRNs to play in the research landscape, as they already serve as a bridge between these 2 worlds. This commentary lays out a model by which to intentionally structure this strategy based on existing approaches used in PBRN community engagement.¹³

Cultivating a stakeholder network that reaches diverse local communities, across networks, and into the spaces of government and public health, policymakers, thought leaders, and funders requires assessing the existing state of the stakeholder network and identifying potential members. This process could be undertaken at all levels of our current PBRN structures: the individual networks, consortia of networks, and potentially the primary care governing bodies and boards on a national level. The AHRQ-funded P30 consortium of networks is well positioned to initially lead this effort and could conduct a PBRN member survey that details existing relationships with stakeholders in the government/public health, policymaking, and funding arenas across the consortium. This assessment could be shared across the P30 consortium and evaluated for strengths and weaknesses. This would enable shared networking with stakeholders among P30 members.

The process to identify potential stakeholders should build on current relationships and common values around priority focus areas. Existing PBRN partners who might help identify potential key stakeholders at the local and national levels include state academies of family medicine plus the American Academy of Family Physicians, the Robert Graham Center for Policy Studies in Family Medicine, state and local health departments, and academic departments of family medicine. Following assessment of the current network and identification of potential key stakeholders, P30s or individual PBRNs could convene these stakeholders, virtually or in person, to define shared goals and values. Potential areas of mutual interest include transforming primary care delivery systems, reducing health disparities, evolving value-based reimbursement strategies, and translating research advances to improve individual and population health.

Engagement via a Network Facilitator

Once key existing and potential stakeholders are identified, they could be further engaged using the

PBRN practice facilitation model, which is traditionally built on practices' relational and communication infrastructure to promote successful practice-based research.14 Practice facilitators engage with practices as health extension agents. Facilitators provide an "at-the-elbow" presence as practices face competing demands in a payment environment that is moving from a fee-for-service model to value-based payment. They function in a manner analogous to the land grant college agricultural extension model deployed in the early 1900s, contributing to an environment where practices make room for research among competing priorities. Practice facilitators understand the values and preferences of their practices and support their decisions regarding how they choose to participate in initiatives.

Network facilitators might, like Curtis Hames, be members of PBRN boards of directors, but they may also be leaders of academic health centers or medical schools, members of disciplinary leadership at the board or academy level, successfully funded senior PBRN researchers, representatives from PBRN consortia, or well-positioned community, government, or public health officials. These network facilitators could build on their existing relationships and networks to engage identified potential stakeholders into the PBRN or P30 community of stakeholders. Their purpose would be to emphasize shared values, promote the potential of PBRNs in meeting stakeholder-identified goals, and determine how PBRNs might serve the needs of these partners in converging on common goals. In addition, they would represent and promote PBRNs as valuable partners in the conduct of translational research. These network facilitators would use characteristics and/or roles of practice facilitators, including change agent, information giver, advisor, and "cross-pollinator of good ideas."15 The goal of a network facilitator would be to build long-term relationships with funder, leader, and policymaker stakeholders that would then enable improved visibility and understanding of the purpose and potential of PBRNs to fulfill the need for research with complex patients in community-based settings. They would also help networks and collaborative consortia to select the funding and collaborative opportunities that best align with their strengths and needs. Building on the agricultural extension model, an individual network or a consortium of networks would develop a team of network facilitators who would have existing and potential connections with particular groups of stakeholders; for example, while one network facilitator might have strong ties to state policymakers, another might have a network of contacts at private foundations, whereas yet another might be connected to federal funding agencies.

Common Ground

Operationalizing a multidimensional partnership that spans from community members to the leadership of funding organizations would be no easy task. However, this might be accomplished by engaging all members of the partnership simultaneously around common goals and interests. For example, when choosing a focus area for a partnership, community stakeholders, funders, and policymakers might engage around the same set of spatial and/or epidemiologic data. Partnerships may focus on cultivating "communities of solution" to address complex health issues for which solutions cut across geographic and bureaucratic boundaries and are likely to include PBRN practices, community groups, public health departments, funders, and policymakers.¹⁶ In an active facilitation role, the PBRN leadership could identify and negotiate common threads of engagement around these topics that could then lead to the development of projects or proposals related to these themes.¹⁷ Intervention and outcome measures would be formulated in ways that are meaningful for partners across the network and, ideally, results would be interpreted and disseminated in concert.

Ultimately, this process will allow PBRNs to link the wisdom and experience possessed by each stakeholder group, which would increase the likelihood of producing outcomes that are meaningful for all partners. Again, deGruy et al12 advocate for a similar strategy to bolster the family medicine research infrastructure: "There is . . . a need to create new and deeper relationships with funders as partners in the research enterprise. . . . We should survey stakeholders' needs, identify clusters of questions, match them to relevant funders and invite a conversation to create new funding initiatives . . . to most effectively disseminate relevant findings. . . ." The findings of such projects are more likely to be effectively translated into practice because they involved community members, practices

and providers, academic investigators, funders, and policymakers. This effort could highlight PBRN successes in moving communities toward the "triple aim" of improved care, improved population health, and reduction of health care costs, ¹⁸ and would bolster our ability to compete for funding.

Obstacles to Overcome

Barriers to an intentional cultivation of relationships between primary care PBRNs and those in traditional positions of power and influence may include the history of limited support for the primary care research infrastructure, marginalization as generalists in a research environment that values specialism, the limited pipeline in place to produce primary care researchers, and longstanding resource limitations faced by PBRNs. However, some of these obstacles can be leveraged into potential strengths given the recognized need for "real-world" (pragmatic) research to define evidence-based practice. 19,20 We have an opportunity to declare our value on the team working toward the triple aim. One example of this shift in the discipline of Family Medicine is the current "Health is Primary" campaign. This disciplinewide campaign engages patients, payers, and policymakers, and it advocates for an alignment of efforts in clinical practice, education, and research arenas to support the triple aim.²¹

As pragmatic organizations, PBRNs adapt to changes in federal and national funding priorities. AHRQ's special emphasis notice, Innovative Research in Primary Care (http://grants.nih.gov/grants/guide/notice-files/NOT-HS-16-011.html), calls for research that addresses the primary care delivery model, including the development of new tools, methods, and training that support primary care improvement. This notice emphasizes that outcomes limited to a specific disease or condition are not of interest to AHRQ. The new focus of AHRQ represents an opportunity for PBRNs to link their work with practice transformation, population health, and community research.

Building a Pipeline of Practice-Based Researchers

A key obstacle to overcome for sustaining PBRNs and building a broad network of engaged stakeholders is the inadequate pipeline of primary care researchers. The Certificate Program in Practice-Based Research Methods aims to bolster the num-

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ber and quality of investigators prepared to conduct practice-based research and to build on the work of the founders and subsequent generations of practice-based researchers. Interest in developing the PBRN research workforce is rapidly growing. Canada is supporting family medicine research with the robust development of PBRNs across the nation, with support from the Canadian Institute of Health Research. A recent editorial in Canadian Family Physician calls on all family physicians to include research in their practices.²² Six highly developed Canadian PBRNs are actively promoting engagement in research. In addition, this year represents the North American Primary Care Research Group's third PBRN conference (http://www.napcrg.org/Conferences/PracticebasedResearchNetworkConference). Funding from an AHRQ small conference grant has facilitated the continuation of PBRN networking and scientific inquiry in the United States and Canada. The 2015 to 2016 inaugural cohort of fellows involved 17 participants, and more than 50 individuals have been accepted into the 2016 to 2017 program, including 11 from Canada.

The PBRN Methods Certificate Program builds on an important foundation of work that articulated research methods sensitive to the context of practice-based research. These resources include the PBRN Research Good Practices (http://www.napcrg.org/PBRNResearchGood Practice), developed with the participation of dozens of primary care researchers. 23,24 The Research Toolkit (http://researchtoolkit.org) project compiled and annotated existing resources recommended by researchers from the PBRN and Clinical and Translational Science Award communities.^{25,26} These resources, specific to the PBRN context, detail proven methods and tools supporting research integrity, building the evidence base of primary care and enhancing successful collaborations among research networks. These resources may also be useful in supporting the effective cross-boundary partnerships and multistakeholder alliances proposed here.

Those who complete the PBRN Methods Certificate Program will in turn be able to teach and mentor future practice-based researchers. Given the wide reach and fast growth of the program, this network of trained investigators will bolster the visibility of PBRNs and will serve as a social network for PBRNs across the country. In addition, the program increases the number of linkages between stakeholders and provides opportunities for more senior PBRN researchers to serve as network facilitators.

Conclusion

PBRNs should increase the strategic focus of and advocate for building the evidence-base of primary care to those at the high levels in our health care system by cultivating partnerships with networks of stakeholders that are woven into the fabric of our projects. Working in the same collaborative spirit with which PBRNs build relationships with community stakeholders is also a powerful way to connect community members, practices, and health care systems to funding priorities and policy decisions. PBRNs are a natural bridge between community and policy, but this bridge needs strengthening largely because of the disproportionate focus of the academic research enterprise on the medical subspecialties, and perhaps also because of primary care physicians' sense of independence and the field's imperatives that emphasize an unwavering focus on patients and communities. To fortify the bridge, we can form new partnerships that are connected by the common goals, needs, and values of our local communities, funding agencies, academics, and policymakers. Through these partnerships, primary care PBRNs can play a central role in advancing the triple aim, stabilizing and sustaining our research infrastructures, and leading the way to a more equitable and effective health care system.

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