Uncloaking Family Medicine Research: So Much To Know, So Little Time . . .

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In their article "A Small Percentage of Family Physicians Report Time Devoted to Research," Voorhees et al¹ estimate that only 4.9% of the 28,505 boardcertified family physicians in the United States who completed a census before taking the maintenance of certification examination in 2007 to 2009 reported spending any time on research. Of the 4.9% who reported doing research, 3.9% said they spent <10% of their time in research, and only 0.3% reported conducting research during >50% of their time. The authors concluded that most research by family physicians was done in urban areas and by medical school/residency faculty.

Research Is Not the Norm

Despite multiple calls to increase the capacity of family medicine research,^{2–4} family physicians in the United States traditionally have avoided participating in clinical research, and medical students planning a research career have been less likely to select family medicine as a specialty.⁵

Family Medicine Research Is Relevant

How is research tied to the basic function of "taking care of folks"? How are research and quality of care connected? Do family physicians need to do research? Is there a research agenda that requires a

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Corresponding author: Carlos Roberto Jaén, MD, PhD, Department of Family and Community Medicine, University of Texas Health Science Center, Mail Code 7794, 7703 Floyd Curl Drive, San Antonio, TX 78229-3900 (E-mail: jaen@uthscsa.edu). deep understanding of the structure, process, and outcomes of patients seen in primary care settings?

In a seminal article in The Lancet, De Maeseneer et al⁶ gave a well-substantiated rationale for the need for and content of a primary care research agenda. This international group of family medicine research leaders argue that the notion of quality of care is complex and that quality improvement requires medical, contextual, and policy evidence. They list 6 characteristics that trials in family medicine need to include: (1) the research question must focus on frequently encountered problems in family medicine; (2) the problem definition must be closely related to how it presents during clinical encounters (ie, compared with a diagnosis basis); (3) the diagnostic and therapeutic options studied must be relevant to family medicine and incorporate the patient perspective with respect to acceptability and feasibility; (4) comorbidity must be taken into account; (5) context variables such as sex, socioeconomic status, and ethnic characteristics must be measured and reported, contributing to the extrapolation into daily practice; and (6) the costutility, including patients' preferences and values, must be taken into account, with special emphasis on equity as part of the analysis. It is easy to agree that this list of characteristics is reasonable and needed. But who is going to do the work? Who can design and execute these types of meaningful trials? The current majority of clinical research is conducted by pharmaceutical companies and others with commercial interests that have a clear focus on sales of specific products.⁷ If we relinquish our responsibility to conduct clinical research, we miss the opportunity to provide optimal care because the available evidence is not applicable to our context and practice.

Research Is Not Mysterious

Why do many family physicians see clinical research as an activity removed from their daily practice? Why do people in some family medicine cir-

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cles view research as an elitist endeavor that is only for academicians? Is this an anti-intellectual legacy of family medicine's early days? How can family physicians who struggle with closing electronic heath records at the end of the day even think of formulating a research question? Can family physicians realistically originate, participate, and direct clinical research? Can family physicians afford to not do research? Who will define our research? Who will define our value?

The Institute of Medicine defines quality of care as "...the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."⁸ As family physicians we are no longer a new specialty on the fringes of American medicine, but the second largest specialty with growing public recognition of our value. We must embrace our professional responsibility to generate new knowledge that will improve the quality of care of the patients and populations we serve. In short, family physicians must remove the cloak of mystery from research and embrace the reality that research is something we do every day.

Most family physicians possess the core values and attitudes required for clinical research: humility, inquisitiveness, comfort with complexity, reflection, commitment, excellence, and persistence. Research is about creating new knowledge and, as Stange⁹ reminds us, there are different ways of knowing, learning, and developing. More specifically, this knowledge base includes (1) practicing self-reflective medicine, (2) including the patient's voice when generating research questions and interpreting data, 3) understanding how systems affect health care, and (4) investigating disease phenomena and treatment effects in patients over time.¹⁰ Thus, there is a wide spectrum of integrating research in family medicine. We must reach a point when most, if not all, board-certified family physicians report some involvement in research.

The Future Can Be Bright

Translational research is needed to improve the health of the patients and populations we serve.¹¹ Asking questions that are relevant to our practice and our patients requires us to bring practice into research, not just research into practice. How can we do research if we lack the time? There is a

movement in large health care systems to employ more family physicians. These systems must recognize family medicine research in terms of clinical and health services research that can improve care and reduce costs in concrete ways. They also must provide family physicians with the time to generate new knowledge that will improve the health of the populations they serve. The reported growth of participation in practice-based research networks is encouraging, but it is only part of the solution.^{12,13} There is also a need to equip American Board of Family Medicine diplomates with the tools to evaluate the quality of health care they provide in ways that are unobtrusive and effective. Many of these activities fit well as part IV of the maintenance of certification process. There is also a need for more family physicians to participate in National Institutes of Health study sections so that family medicine research can be represented when judgment about scientific value is rendered.^{14,15}

We must build a future in which family physicians embrace research as a core value of our specialty. Family medicine residents and medical students in my institution are starting to understand and practice this value. Although not required, many of our residents present research posters, receive research awards, and generate meaningful new knowledge to improve our practices. Students at my university who are interested in family medicine complete formal public health training (ie, a master's in public health). Delivering on the expectation that advanced primary care and family medicine will improve patient experience, enhance population health, and bend the cost curve¹⁶ requires that we redefine how family medicine research is valued and measured. Family physicians who are fully engaged in family medicine research are ideally suited to lead the processes that will make this expectation a reality. We must make it happen!

References

- 1. Voorhees JR, Xierali IM, Bazemore AW, Phillips RL Jr, Jaén CR, Puffer JC. A small percentage of family physicians report time devoted to research. J Am Board Fam Med 2013;26:7–8.
- Dickinson WP, Stange KC, Ebell MH, Ewigman BG, Green LA. Involving all family physicians and family medicine faculty members in the use and generation of new knowledge. Fam Med 2000;32: 480–90.
- 3. Association of Departments of Family Medicine, Jaén CR, Borkan J, Newtown W. The next step in

building family research capacity: finding the way from fellowship. Ann Fam Med 2006;4:373-4.

- 4. North American Primary Care Research Group Committee on Building Research Capacity; Academic Family Medicine Organizations Research Subcommittee. What does it mean to build research capacity? Fam Med 2002;34:678–84.
- Senf JH, Campos-Outcalt D, Kutob R. Family medicine specialty choice and interest in research. Fam Med 2005;37:265–70.
- De Maeseneer JM, van Driel ML, Green LA, van Weel C. The need for research in primary care. Lancet 2003;362:1314–9.
- Bodenheimer T. Uneasy alliance–clinical investigators and the pharmaceutical industry. N Engl J Med 2000;342:1539–44.
- Committee to Design a Strategy for Quality Review and Assurance in Medicare, Institute of Medicine. Health, health care, and quality of care. In: *Medicare:* A Strategy for Quality Assurance. Vol. I. Washington, DC: National Academies Press; 1990:21.
- 9. Stange KC. Ways of knowing, learning and developing. Ann Fam Med 2010;8:4–10.

- Stange KC, Miller WL, McWhinney I. Developing the knowledge base of family practice. Fam Med 2001;33:286–97.
- Westfall JM, Mold J, Fagnan L. Practice-based research–"Blue Highways" on the NIH roadmap. JAMA 2007;297:403–6.
- Mold JW. Primary care research conducted in networks: getting down to business. J Am Board Fam Med 2012;25:553–6.
- Peterson KA, Lipman PD, Lange CJ, Cohen RA, Durako S. Supporting better science in primary care: a description of practice-based research networks (PBRNs) in 2011. J Am Board Fam Med 2012;25: 565–71.
- Jaén CR, James P. You have to be in to win: presenting family medicine's perspective in NIH scientific reviews. Ann Fam Med 2008;6:179–80.
- Lucan SC, Phillips RL Jr, Bazemore AW. Off the roadmap? Family medicine's grant funding and committee representation at NIH. Ann Fam Med 2008; 6:534–42.
- Berwick DM, Nolan TW, Whittington J. The triple aim: care, health and cost. Health Aff (Millwood) 2008;27:759–69.