

Guest editorial

Primary care research: time for some new questions?

Arch G Mainous III PhD

Professor of Family Medicine, Department of Family Medicine, Medical University of South Carolina, Charleston, South Carolina, USA

Richard Baker MD

Professor of Quality in Health Care, Department of Health Sciences, University of Leicester, Leicester, UK

Building and improving upon the intellectual base for primary care requires the constant generation of new knowledge. Some authors have questioned the relevance of primary care research and whether this research makes an impact. The new initiatives in several countries encouraging translational research and collaboration between basic scientists and clinical scientists offer an opportunity for primary care research to pursue some new directions and ask a new set of questions. We present a challenge to researchers, research funders and policymakers, encouraging them to enable primary care to ask novel questions to better understand disease processes. This strategy will encourage the creation of new and relevant knowledge and make primary care less dependent on implementation of findings generated by other specialties.

The majority of care for the majority of patients takes place in primary care. This is where patients have their first (and often their last) contact with the health-care system, as well as where most new illnesses are identified and chronic diseases are detected and managed. We firmly believe that research has a vital role to play in showing how the quality of primary care can be improved, that is, how to ensure that effective interventions are applied consistently, efficiently and humanely. Research of this nature has driven important improvements in the way primary care is planned and delivered. But this is not enough. Clinical research evidence is also needed on how to make best use of the opportunity primary care presents to improve the health of individuals and populations. Unfortunately, indicators of investigator activity and studies suggest that in many countries research is not a priority in the primary care community.¹⁻⁵ In western countries in the past 30 years, the proportion of publications in medicine that were from primary care has remained virtually unchanged.⁶ Other evidence also suggests that primary care research has really not shown significant

growth over the past 25 years.^{7,8} Consequently, it was not particularly surprising that in 2003, *The Lancet* asked the question 'Is primary care research a lost cause?'⁹

Current paradigm for primary care research

In addition to volume, the focus of primary care research is also a problem. Although there are differences between countries, in the same way that there are differences in development and structure of primary care, generally past research agendas have been oriented to answering applied questions in the delivery of health care in the office.^{10,11} Although useful information has been gained through these studies, they provide little new knowledge about disease processes. It seems that for many in primary care the focus restricts the types of questions that can be asked, with only applied questions about 'what we do' being pursued. Yet questions about disease processes are as important to, and can be addressed in, primary care. Primary care research could provide new knowledge for novel strategies to address disease processes, but at present the primary care community is very dependent on new knowledge and discoveries from investigators in other areas. Rather than just asking questions about whether there is evidence to justify current practice, the opportunity exists to ask novel questions that are not dependent on current practice but that might radically change and improve the delivery of medicine. The time is ripe for primary care research to move to a role of collaboration in driving the creation of new knowledge and advances in medicine by being part of a new set of questions.

The potential of translational research for primary care research

The initiatives regarding translational research at the National Institutes of Health in the United States, and in the UK through the Medical Research Council and the National Institute of Health Research (NIHR), offer one of the greatest opportunities to invigorate primary care research. In the UK, the creation by the NIHR of biomedical research centres and units, the primary care research networks, and the Collaborations for Leadership in Applied Research and Care (CLAHRCs) provide a new structure for bringing laboratory scientists, specialists and general practitioners (GPs) together to address important questions. The new schemes for supporting primary care academic fellowships and lectureships, the school for primary care research, and developments to include initial exposure to research in some vocational training schemes, together represent a major opportunity to advance research in primary care. With a little ambition, and if funding can be sustained through difficult financial times, a new age of primary care research may be at hand.

Health care can and should incorporate a new paradigm and move from being curative to pre-emptive by utilising research conducted in collaboration between basic scientists and clinical scientists. Available animal models of human disease are often inadequate to address clinical questions, and thus co-operation between basic and clinical scientists regarding the important questions is particularly important and offers a great possibility for a key role of primary care researchers in driving new knowledge.¹² The opportunity now exists for primary care to take a lead in asking questions regarding new treatments and disease aetiology. Biomarker development and the understanding of the utility of specific genetic markers and even which genetic markers to target can be far more successful if the investigators in primary care can work with basic scientists. The primary care scientists can contribute not only their understanding of care characteristics such as continuity and comprehensiveness, but also their perspective that encompasses genotype, environment and phenotype as well as health and social care. Where, other than in primary care, can the modern problems of obesity, smoking, health inequality, and the prevention of early cardiovascular death be fully studied (and for that matter, addressed through health and social care interventions)?

Challenges to integrating primary care research into the new paradigm

There are key challenges to primary care researchers if they are to take this step to move into this integral role in translational research and new knowledge generation. First, they need to recognise the new opportunities and plan their research programmes to take advantage of them. This will require a new set of questions to be encouraged and asked by primary care investigators, particularly in concert with investigators outside of primary care. They should not allow the role of the primary care investigator to be restricted to recruiting patients to trials run by the new research networks and led by specialists and industry. Second, they need to take full advantage of the new electronic health record (EHR) systems and expand their vision of primary care to include the care of populations, a step that would lead to the generation of questions about the effective care of specific groups. Identification of biomarkers and risk factors for common diseases like cardiovascular disease and diabetes are ideal examples of opportunities for collaboration between basic scientists and primary care researchers, particularly with large extant cohorts in EHRs. Third, primary care is generally delivered by small units – practices – that have only limited financial and organisational resources. Primary care researchers, therefore, can sometimes find it difficult to look beyond parochial questions. Primary care and its researchers must play a full part in the laboratory-to-community-to-laboratory pathway that is fundamental to solving today's health problems. The role of research in primary care is not confined to translation of laboratory findings into clinical practice, but also involves epidemiological research to generate hypotheses for investigation in the laboratory.

Conclusion

Far from being irrelevant, primary care research has the opportunity to be at the centre of new discoveries that affect the health and health care of the vast majority of the population. Primary care research has tended to focus on issues primarily surrounding how health care is currently delivered. An opportunity exists to ask new types of questions. Asking new questions with the collaboration of basic scientists offers unprecedented

prospects for advancing knowledge about disease processes and treatments. Primary care research only truly comes of age when it shifts from the passive implementation of research evidence generated by others to the active generation of new knowledge that improves health.

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CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Arch G Mainous III, Department of Family Medicine, Medical University of South Carolina, 295 Calhoun Street, Charleston, SC 29425 USA. Tel: +1 843-792-6986; fax: +1 843-792-3598; email: mainouag@muscedu

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