

Do you have a secret researcher inside?

High-quality family medicine research at Family Medicine Forum

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Welcome to the inaugural publication of the Family Medicine Forum (FMF) Research Proceedings. This landmark issue of *Canadian Family Physician* profiles the best of family medicine research in Canada, as presented at the 2013 FMF, in an electronic supplement. For the first time authors presenting their research at FMF have their abstracts published and indexed for the National Library of Medicine.

Brilliant world-class research is undertaken by Canadian family physicians and primary health care researchers. In this supplement you will find examples such as Manca and colleagues' exploration of "Finding a BETTER way. A chronic disease prevention and screening program in primary care"¹ or Halas and colleagues' analysis, "A newly implemented EMR. Effects on work flow and communication in family practice training."²

Ideally positioned

Family physicians are best placed to ask and answer the key questions important to the practice of family medicine. Every day we practise using the latest and best evidence available to guide the care we deliver. We teach evidence-based medicine to our residents and students. We are ideally positioned to identify clinical and health system delivery questions for which there is no current evidence—and to create that evidence. Family physicians ask important, as yet unanswered, questions about how to best care for our patients. Asking these questions, and understanding how to use the answers to improve the way we deliver health care, highlights our function as scientists and not merely technicians. In this way, every family physician has the potential to contribute to, and for their patients to benefit from, family medicine research.

This important year marks the diamond anniversary of our College of Family Physicians of Canada, representing 60 years of supporting our specialized ability to deliver family practice care. As a profession we have a well developed curriculum to train family physicians. We have excellent continuing professional development and assessment programs to ensure we constantly deliver the best care. With the emergence of practice-based research networks, enhanced-skills clinician scholar training programs, and family medicine department research infrastructure across the country, support to develop the researcher in each of us has never been better.

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Now is the ideal time to grow the potential family physician researcher who exists in each member of our College!

As the 4 principles of family medicine state, "The family physician is a skilled clinician Their approach to health care is based on the best scientific evidence available."³ The CanMEDs–Family Medicine competencies for both undergraduate and postgraduate training include the family medicine scholar.^{4,5} "As Scholars, family physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of knowledge."⁴ Canadian family medicine as a specialty is young with respect to developing research skills in our members. For many reasons we have developed our research capacity to a lesser extent than our Canadian specialty colleagues (for whom 4- and 5-year training programs typically devote up to a full year to research training) and our international family medicine colleagues (for whom programs such as the 3-year family medicine residency required in the United States enhance the capacity for family medicine research training).

Nonetheless, we have begun to conduct high-quality family medicine research. We have begun to ask and answer our own questions.

One support for family physician researchers across the country is the College of Family Physicians of Canada's Section of Researchers. Free to join and teaming with great ideas, mentors, and networking events, the Section of Researchers exists to support members in their journeys as researchers.

Research at FMF

The presentation of research at FMF has a surprisingly short history. The first FMF Research Day was in 1995 in a single room where a handful of family physician researchers presented their latest work to one another. Over the years this has grown into an event now attracting more than 200 primary health care researchers from an array of disciplines. Presentation formats range from full papers and abstracts delivered from 7 podiums, to dozens of posters and a variety of workshops. Think-tank sessions and hallway conversations generate new ideas, coalesce vibrant collaborations, and fuel future research planning. Presenting at FMF is by no means guaranteed for those who submit ideas. This prestigious forum has become a premier Canadian opportunity for presenting family medicine and primary health care

research. A competitive selection process ensures that only the best quality research will make it to the podium.

In 2013 an inaugural research track was developed within the main meeting at FMF, where the best Research Day presentations were highlighted for clinicians from across Canada. In the supplement to this issue of *Canadian Family Physician* we present abstracts on the best research from FMF 2013.⁶

Selection process

Now is the time to share this excellent Canadian family medicine and primary health care research with the world. In support of this initiative, and in the spirit of transparency, the scientific review process used to adjudicate the abstracts submitted to FMF is outlined here. How is the best research selected? For the first time in 2013, a new, rigorous peer-review system was applied to all submissions for free-standing oral research presentations. Several features were key:

- Highly qualified researchers were nominated to be peer reviewers by the chair or research directors of family medicine departments among Canada's medical schools.
- Every abstract submission was assigned to 3 highly qualified peer reviewers.
- Research-relevant criteria (outlined below) have now been finalized as a basis for the peer-review evaluation, replacing the former general-interest criteria.
- The raw peer-review scores were combined and averaged within each criterion, to give a final overall score for each abstract.
- Only abstracts rated as 3.5 out of 5 or higher were accepted for presentation on Research Day.
- The 4 most highly ranked abstracts of clinical relevance were selected for presentation at the main meeting of FMF.

A total of 138 abstracts were submitted to FMF 2013 in the spring competition for consideration as oral free-standing papers or as posters. Among these, 90 were related to research, 21 were related to education initiatives, and 27 described nonresearch clinical initiatives. In addition, in the summer competition for medical students and family medicine residents, 76 research or clinical poster submissions were received.

From the 90 research submissions, 34 free-standing research papers and 12 research posters scored 3.5 or higher out of 5 and were accepted for presentation at FMF, and these are published in the inaugural electronic supplement accompanying this issue. Additionally, all 21 education posters were accepted for presentation, as well as 26 clinical posters and 50 of the student or resident posters on various clinical, education, or research topics.

We now use the following 4 criteria to assess all research-related submissions.

- Is the submission relevant to family medicine?
- Are the aims of the research and the research question clear?
- Are the results trustworthy? The following features increase the likelihood of results being trustworthy.
 - For cohort or observational studies: inclusion criteria are clear; sample size is probably sufficient; validated measures are used; response rate is greater than 80%; follow-up rate is greater than 80% (if the study is longitudinal); statistical analysis is appropriate; and the conclusions are justified by the findings.
 - Trials: inclusion criteria are clear; allocation is randomized; randomization is concealed; blindness is considered; sample size is probably sufficient; validated measures are used; follow-up rate is greater than 80%; statistical analysis is appropriate; and the conclusions justified by the findings.
 - Qualitative studies: the approach is informed by theory; sampling is justified (purposive, theoretical, snowball, opportunistic, etc); data are transcribed; type of analysis is described (framework, thematic, grounded theory, etc); and the conclusions are justified by the findings.
- What are the potential effects of the findings or conclusions?

To create the peer-reviewed score for each research submission using these criteria, each feature is assessed a score on a 5-point scale. The sum of the 4 feature scores is divided by 4 to give a reviewer-assigned score out of 5. The average of the 3 reviewer scores is then assigned as the final score out of 5. All research submissions in the spring competition for oral or poster presentations that receive a final score of 3.5 or greater are accepted for presentation at FMF, and for publication as research abstracts in the electronic supplement to *Canadian Family Physician*.

Blueprint for success

Introducing rigorous academic review and publication of the FMF Research Proceedings are 2 steps on our road to enhancing our specialty of family medicine—and the value we bring to improving the health of Canadians. The Section of Researchers has a bold, detailed plan to help family medicine reach its potential as a discipline through practice-relevant research that generates clinical evidence specific to our needs. This is outlined in our *Blueprint for Family Medicine Research Success*.⁷

Family physicians are in the ideal position to ask and answer the important emerging questions in primary health care delivery for Canadians. As a research discipline we have come a long way in nearly 20 years of FMF research meetings. I hope you enjoy this selection of top-ranked Canadian family medicine research, as presented at FMF 2013!



Dr Norman was Chair of the Family Medicine Forum 2013 Research Committee, is Chair-elect of the Section of Researchers of the College of Family Physicians of Canada, and is Assistant Professor and Director of Family Practice Research Training in the Department of Family Practice at the University of British Columbia in Vancouver.

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Competing interests

None declared

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