assistance. In research work and writing I have also found their thoughts and opinions very helpful. However, that in no way justifies specialist-dominated primary care guidelines for common conditions and screening. I am not suggesting we abandon our relationship with our specialist colleagues, just that we abandon specialist-dominated guidelines and begin to generate our own guidelines that primary care clinicians lead and for which they make up most of the contributors.[24] Compared with our specialist colleagues, primary care doctors can review evidence at least as well, have fewer conflicts of interest, and understand application to primary care far better.

So, armed with this information, what is a rational primary care clinician to do? I believe it is our obligation to reverse the present state of affairs for our guidelines. Our leadership, the College of Family Physicians of Canada and the provincial chapters, should begin by stating that they will not endorse guidelines targeting primary care unless they are *led* by primary care physicians and have reasonable and proportional representation from primary care physicians. Other essential aspects of the guidelines will be a limit (of say <25%) on the number of guideline members with conflicts of interest as well as performing a thorough and detailed evidence review. Family physicians in administrative roles should challenge all attempts by administrators and bureaucrats to massage specialist-driven guideline recommendations into performance measures by which we (and our patients) are judged and rewarded. Last, we on the front lines need to recognize the many weaknesses of our present guidelines, put patients first (ahead of absurd, unattainable targets with burdensome care), and advocate at every turn for our own guidelines and measures.

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Competing interests
None declared

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References
1. Stewart M, Ryan B. Ecology of health care in Canada. *Can Fam Physician* 2015;61:449-53 (Eng), e249-54 (Fr).
2. Allan GM, Kraut R, Crawshay A, Korownyk C, Vandermeer B, Kolber MR. Contributors to primary care guidelines. What are their professions and how many of them have conflicts of interest? *Can Fam Physician* 2015;61:52-8, e50-7 (Fr).
3. Oxman AD, Guyatt GH. The science of reviewing research. *Ann N Y Acad Sci* 1993;703:125-33.
4. Moynihan R. Key opinion leaders: independent experts or drug representatives in disguise? *BMJ* 2008;336(7658):1402-3.
5. Neuman J, Korenstein D, Ross JS, Keyhani S. Prevalence of financial conflicts of interest among panel members producing clinical practice guidelines in Canada and United States: cross sectional study. *BMJ* 2011;343:d5621. Erratum in: *BMJ* 2011;343:d7063.
6. Chren MM, Landefeld CS. Physicians' behavior and their interactions with drug companies. A controlled study of physicians who requested additions to a hospital drug formulary. *JAMA* 1994;271(9):684-9.
7. Wang AT, McCoy CP, Murad MH, Montori VM. Association between industry affiliation and position on cardiovascular risk with rosiglitazone: cross sectional systematic review. *BMJ* 2010;340:c1344.
8. Norris SL, Burda BU, Holmer HK, Ogden LA, Fu R, Bero L, et al. Author's specialty and conflicts of interest contribute to conflicting guidelines for screening mammography. *J Clin Epidemiol* 2012;65(7):725-33.
9. Chang CH, Stukel TA, Flood AB, Goodman DC. Primary care physician workforce and Medicare beneficiaries' health outcomes. *JAMA* 2011;305(20):2096-105.
10. Shi L, Macinko J, Starfield B, Wulu J, Regan J, Politzer R. The relationship between primary care, income inequality, and mortality in US states, 1980-1995. *J Am Board Fam Pract* 2003;16(5):412-22.
11. Fisher KJ, Lee JH, Ferrante JM, McCarthy EP, Gonzalez EC, Chen R, et al. The effects of primary care on breast cancer mortality and incidence among Medicare beneficiaries. *Cancer* 2013;119:2964-72.
12. McAlister FA, Youngson E, Bakal JA, Kaul P, Ezekowitz J, van Walraven C. Impact of physician continuity on death or urgent readmission after discharge among patients with heart failure. *CMAJ* 2013;185(14):E681-9.
13. Wiebe N, Klarenbach SW, Allan GM, Manns BJ, Pelletier R, James MT, et al. Potentially preventable hospitalization as a complication of CKD: a cohort study. *Am J Kidney Dis* 2014;64(2):230-8.
14. Starfield B, Lemke KW, Bernhardt T, Foldes SS, Forrest CB, Weiner JP. Comorbidity: implications for the importance of primary care in 'case' management. *Ann Fam Med* 2003;1(1):8-14.
15. Jelinek M. Spectrum bias: why generalists and specialists do not connect. *Evid Based Med* 2008;13(5):132-3.
16. Tricoci P, Allen JM, Kramer JM, Califf RM, Smith SC Jr. Scientific evidence underlying the ACC/AHA clinical practice guidelines. *JAMA* 2009;301(8):831-41.
17. Lee DH, Vielemeyer O. Analysis of overall level of evidence behind Infectious Diseases Society of America practice guidelines. *Arch Intern Med* 2011;171(1):18-22.
18. Østbye T, Yarnall KS, Krause KM, Pollak KI, Gradison M, Michener JL. Is there time for management of patients with chronic diseases in primary care? *Ann Fam Med* 2005;3:209-14.
19. Yarnall KS, Pollak KI, Østbye T, Krause KM, Michener JL. Primary care: is there enough time for prevention? *Am J Public Health* 2003;93(4):635-41.
20. Yudkin JS, Lipska KJ, Montori VM. The idolatry of the surrogate. *BMJ* 2011;343:d7995.
21. Lindblad AJ, Makowsky M, Allan GM. Treating to target: ready, fire, aim. *Can Fam Physician* 2014;60:541.
22. Boyd CM, Darer J, Boult C, Fried LP, Boult L, Wu AW. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. *JAMA* 2005;294(6):716-24.
23. Huang ES, Brown SE, Ewigman BG, Foley EC, Meltzer DO. Patient perceptions of quality of life with diabetes-related complications and treatments. *Diabetes Care* 2007;30(10):2478-83.
24. Allan GM, Lindblad AJ, Comeau A, Coppola J, Hudson B, Mannarino M, et al. Simplified lipid guidelines. Prevention and management of cardiovascular disease in primary care. *Can Fam Physician* 2015;61:857-67 (Eng), e439-50 (Fr).

CLOSING ARGUMENTS — YES

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- Family physicians provide 68% of all care in Canada but account for only 17% of the contributors to their own primary care guidelines.
- Guidelines have become burdensome for patients and, if followed, could take a family physician 18 hours every workday.
- Family physicians have excellent health outcomes, are unlikely to have industry affiliations, and might be less biased when interpreting evidence.
- In defense of primary care, it is time family physicians take a leadership and dominant role in the generation of their own primary care guidelines.

The parties in these debates refute each other's arguments in rebuttals available at **www.cfp.ca.** Join the discussion by clicking on Rapid Responses at **www.cfp.ca.**

NO The principal aim of guidelines is to improve the quality and consistency of care. The premise is that guidelines, which promote interventions of proven benefit, will reduce morbidity or mortality. This is not necessarily achieved in daily practice, as guidelines are often not implemented. There is very little evidence that guidelines improve patient outcomes in primary medical care.[1]

Before even saying that guidelines have the potential to improve care and patient outcomes, it is crucial to ensure that they will be developed to a high quality

standard. Standards are well established on transparency, minimizing conflicts of interest, group composition, systematic review of evidence, evidence foundation, writing and rating recommendations, and updating.[2] A number of classification schemes have been developed to aid in this process in an attempt, most often, to give an indication of the "strength" of a recommendation. This is called *evidence-based medicine*. In practising evidence-based medicine, we are attempting to improve the general practice of the science of medicine.

Required expertise

As part of the standards of making guidelines, should we have a debate about group composition? One of the recent debates has been that methodologic experts should be the ones creating guidelines. As you might suspect, this is arising largely from the problem that many guidelines have been paid for by the pharmaceutical industry or have been created by groups with disproportionate representation from individuals with commercial conflicts of interest. Everyone recognizes the need for minimizing conflicts of interest and having methodologic experts participate in guideline creation. However, having guidelines done primarily by methodologic experts is like having a wine steward who does not drink wine. Let's not create a new problem trying to solve an old one!

The group composition should be balanced, comprising methodologic experts and clinicians. The most recent standards have emphasized the importance of having representatives of the population likely to be affected by the guidelines, such as family physicians (those mostly affected in their practices) and patients (those affected in their care). Family physicians are now elaborating their own guidelines. Is this the right answer to improve evidence-based medicine? To specialists, guidelines developed without their input will not contain all the required expertise. Furthermore, having guidelines developed separately by specialists and family physicians creates the potential risk of contradictory recommendations or debates that can do a disservice to clinical practice and patient care. Debates that sound healthy within the medical community could be potentially damaging on the public stage. Naïve consumers of guidelines, such as government bodies or the payers, might choose to accept the recommendations that suit them best and that primarily serve their economic interest. This can be done without proper consideration of the guidelines' limitations and potential hazards.

Improving care

Moreover, a more fundamental problem than the creation of guidelines is that guidelines might do little to change practice. Do we have the evidence that guidelines made by family physicians will be better implemented than those made by other specialists? Studies have been done on family physicians' needs for, attitudes toward, and use of guidelines.[3,4] These studies suggest that there is a need for family physician versions to be created and delivered. However, the development of guidelines does not ensure their use in practice. Publication in professional journals or mailing to targeted health care professionals such as family physicians will not lead to changes in professional behaviour (ie, best practice).[5,6] There is also need with respect to how information should be supported in its use (ie, implemented in practice).

The most important concern should not be who owns the right to make guidelines but rather improving the quality of care and increasing the likelihood that practice is going to be changed in the right direction. Ideally, guidelines should contain recommendations for implementation. This should be the real debate and it is the real challenge! The responsibility should go beyond making high-quality guidelines; it should be on quality improvement with a structured approach to promoting quality of care.[7] More than that, clinical guidelines are only one option for improving the quality of care.

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Competing interests
None declared

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References
1. Hayward RS, Guyatt GH, Moore KA, McKibbon KA, Carter AO. Canadian physicians' attitudes about and preferences regarding clinical practice guidelines. *CMAJ* 1997;156(12):1715-23.
2. Woolf SH, Grol R, Hutchinson A, Eccles M, Grimshaw J. Clinical guidelines: potential benefits, limitations, and harms of clinical guidelines. *BMJ* 1999;318(7182):527-30.
3. Feightner JW, Marshall JN, Sangster LM, Wathen CN, Quintana Y. Evidence-based preventive practice guidelines. Qualitative study of useful resources on the Internet. *Can Fam Physician* 2001;47:1577-83.
4. Zitzelsberger L, Grunfeld E, Graham ID. Family physicians' perspectives on practice guidelines related to cancer control. *BMC Fam Pract* 2004;5:25.
5. Freemantle N, Harvey E, Grimshaw JM, Wolf F, Bero L, Grilli R, et al. The effectiveness of printed educational materials in changing the behaviour of health care professionals. In: Cochrane Collaboration. *Cochrane library* [database on CD-ROM]. Issue 3. Oxford, UK: Update Software; 1996.
6. Bero L, Grilli R, Grimshaw JM, Harvey E, Oxman AD. Effective professional practice and organisation of care module, Cochrane Database of Systematic Reviews. In: Cochrane Collaboration. *Cochrane library* [database on CD-ROM]. Issue 4. Oxford, UK: Update Software; 1998.
7. Casparie AF. Guidelines to shape clinical practice. The role of medical societies: the Dutch experience in comparison with recent developments in the American approach. *Health Policy* 1991;18(3):251-59.

CLOSING ARGUMENTS — NO

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- It is crucial to ensure that guidelines will be developed to a high quality standard. Guidelines developed without specialist input will not contain all the required expertise.
- We do not have evidence that guidelines made by family physicians will be better implemented than those made by other specialists.
- The most important concern should not be who owns the right to make guidelines but rather that practice is going to be changed in the right direction.

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