Should primary care guidelines be written by family physicians?

YES - G. Michael Allan MD CCFP

NO - Jean Bourbeau MD MSc FRCPC

YES Family doctors make up approximately half of the physicians in Canada and represent 68% of the health care contacts in the country.1 The standards by which family doctors provide most of Canada's care are, at least in part, derived from guidelines. So, how many family doctors are involved in creating those guidelines? Overall, family doctors account for 17% of the contributors to primary care guidelines.² By contrast, our specialist colleagues account for 54% of contributors.2

Beliefs that justify the status quo

Perhaps you are wondering how a group that provides 68% of the care accounts for 17% of those defining how health care should be delivered. Let's review some of the potential justifications for this contradiction.

Specialists know the evidence. Perhaps, but research indicates that their interpretation of the evidence might be biased by their previous opinions and, as a result, their evidence reviews are of inferior quality.3 In fact, the greater their expertise in an area, the more likely it is that their analysis is faulty.3

Specialists know the latest products and innovations. Specialists on guideline committees are frequently key opinion leaders and, sadly, many of them have strong associations with industry.4 Research finds that about two-thirds of guideline authors have conflicts of interest.5 In Canada, only 31% of guidelines actually report conflicts of interest, but when they do, conflicts are more common among specialists than family physicians (49% vs 28%).² We know that industry affiliations influence recommendations for drugs to appear on formularies⁶ and support of products.7 Furthermore, sometimes conflicts of interest are more direct. For example, increased radiologist involvement in mammography guidelines led to recommendations to start screening earlier (age 40) compared with when primary care clinicians were involved.8

Family doctors do an inferior job of care. It is a common belief that family physicians somehow provide inferior care—a misconception that family doctors themselves frequently subscribe to. However, populations with a higher primary care work force have improved health outcomes.9 Some researchers have even derived a formula:

for a population of 10000, mortality goes down by 3.5 for every family doctor added versus going up by 1.5 for every specialist added. 10 More recent evidence shows family physicians are the most important health practitioners for outcomes in breast cancer, 11 heart failure, 12 and renal impairment.¹³ These impressive results occur despite family doctors having more visits with higher morbidity than their specialist colleagues do.14

Experts in primary care

Faced with these faulty arguments, what is left? We must confront the reality that family physicians and other specialists have different practices. This manifests as spectrum bias. 15 What we see, who we see, how we see them, our relationships with patients, and so many other things are profoundly different. So, when 50% of all guideline recommendations are based on nothing more than expert opinion,16,17 should we not be relying on the true experts in primary care? How can our colleagues of limited practice hope to provide guidance to the entirety of our practice? It is through this madness that guidelines have journeyed from practical suggestions to irrational dogma.

First, we are overwhelmed with recommendations. If we were to follow guidelines, it would take 18 hours a day for a family physician to manage chronic disease and provide preventive care. 18,19 Moreover, the number of recommendations within these guidelines continues to grow. 16 By focusing on screening and chronic disease, which have relatively poor numbers needed to treat, our patients pay the cost of our lost opportunity to provide care for acute conditions and symptomatic disease, where we have the most effect.

Second, guidelines have grown to revere surrogate markers and value their pursuit over patient-centred care.20 These targets, which we chase and, in turn, admonish our patients for failing to attain, often cannot be achieved with even the most aggressive management available.21 This then has contributed to care that is burdensome.22 For some conditions our care might reduce quality of life similar to angina or mild stroke.23

Undoubtedly, some will read this and surmise that I am not a team player and fail to appreciate the skills and knowledge of our specialist colleagues. In fact, I value their assistance greatly. In the care of patients, particularly with unusual conditions or presentations, I have been exceptionally grateful for their advice and

Cet article se trouve aussi en français à la page 708.

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.

Dr Allan is Professor and Director of Evidence-Based Medicine in the Department of Family Medicine at the University of Alberta in Edmonton

Competing interests

None declared

Correspondence

Dr G. Michael Allan; e-mail mgallan@ualberta.ca

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 NY 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.
- Wang AT, McCoy CP, Murad MH, Montori VM. Association between industry affilia-tion 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
- 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 1 Kidney. Dis 2014;64(2):230-8.
- 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

- 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. 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.
- Lindblad AJ, Makowsky M, Allan GM. Treating to target: ready, fire, aim. Can Fam Physician 2014;60:541.
- 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 quidelings. Prevention and management of cardiovascular disease in
- 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

G. Michael Allan MD CCFP

- 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.

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