

Implementing preventive health care recommendations in family medicine

Introducing a series from the Canadian Task Force on Preventive Health Care

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The Canadian Task Force on the Periodic Health Examination, the precursor to today's Canadian Task Force on Preventive Health Care, was established in 1976 by the Conference of Deputy Ministers of Health of the 10 Canadian provinces. When it was formed, the task force was charged with determining how the periodic health examination could be transformed into a more effective tool for the enhancement and protection of the health of Canadians.¹ As the original task force described, periodic health examinations were understood to have 2 main goals: the prevention of disease and the promotion of health. They traditionally included 2 main strategies: a routine nonspecific annual checkup and immunization. The members of the original task force had little doubt about the value of immunization, but they questioned whether a routine annual checkup was an effective approach to health promotion and prevention. Instead, they sought to identify packages of specific age-related health protection or prevention activities that could be carried out in primary care settings.^{1,2}

From 1976 to 1979, the group developed a method for weighing scientific evidence that could be used to make recommendations for or against including specific preventive health care maneuvers in the periodic health examination. In 1979, the task force published its first report, in which it reviewed the evidence on the preventability of 78 conditions and arrived at an important central recommendation—that the nonspecific annual checkup should be abandoned and replaced by age-specific health prevention interventions that could be implemented during medical visits for other purposes.¹ From 1979 to 1994, the task force published 9 updates, and in 1994 it published a landmark compilation, the *Canadian Guide to Clinical Preventive Health Care*, also known to Canadian primary care clinicians and their colleagues internationally as “The Red Brick.”³

Challenges in integrating evidence into practice

Considerable challenges faced by the original members of the task force included the lack of evidence for

or against many preventive health care services and the lack of a defined method to evaluate which services should be recommended. The original task force more than met these challenges and left Canadian primary care practitioners and others around the world with 2 principal legacies: a clear rationale for moving away from comprehensive annual health examinations and toward age-specific preventive packages, and a rich methodologic framework for evaluating preventive health care services. Reflecting the influence of the original task force, the US Preventive Services Task Force was founded in the 1980s and it adopted, with minimal modification, the methodologic framework of the Canadian Task Force.^{4,5}

Even today, the Canadian Task Force continues to use many aspects of the general framework laid out in those early days. There have, however, been important changes in preventive care evidence itself and in our understanding of how evidence is best incorporated into clinical recommendations. One of the most important changes has been the adoption of the GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach to evaluating the quality of available evidence and translating that evidence into recommendations.⁶ The GRADE system is used not only to assess the benefit of putative preventive interventions, but also harms created by those interventions. Based on this system, the task force makes either strong or weak recommendations for or against a preventive care intervention or service. It makes strong recommendations when members have confidence, based on their assessment of the available evidence, that the desirable effects of an intervention outweigh the undesirable effects (strong recommendation for) or that the undesirable effects clearly outweigh the desirable effects (strong recommendation against). A strong recommendation implies that most individuals would be best served by the recommended course of action.

Weak recommendations, on the other hand, are made if desirable effects probably outweigh undesirable effects, or vice versa, but there is considerable uncertainty about the balance. Weak recommendations might also be made when there is a high level of certainty about the probable benefits and harms of a preventive service, but when determining a course of action is a matter of personal preferences and values. An example

La traduction en français de cet article se trouve à www.cfp.ca dans la table des matières du numéro de juillet 2017 à la page e328.

of this is the task force's weak recommendation to screen women aged 50 to 69 for breast cancer with mammography every 2 to 3 years. The recommendation was weak because screening would save 1 life for every 721 women screened, but it would also lead to undesirable outcomes: 1 in every 3 to 4 women screened would have a false-positive mammogram finding, 1 in every 27 screened would have an unnecessary biopsy, and 1 in every 200 screened would have part or all of a breast removed unnecessarily.⁷

Most task force recommendations are weak recommendations, and this poses a new challenge, both for the task force and for primary care practitioners and their patients who must decide on the right course of action. The original task force recognized that evidence did not always lead to an easy binary "do it" or "don't do it" decision and that sometimes there was not enough evidence to recommend for or against a preventive health care service. But in all cases, they targeted recommendations to health care providers and indicated whether there was evidence to recommend providing the service.³ Today, in the case of weak recommendations, primary care practitioners are asked to help their patients understand the likelihood and nature of possible benefits versus harms so that patients can make their own decisions. That is, they are asked to engage in shared, informed decision making.

Supporting guideline implementation

Trying to understand the balance between the potential benefits and harms of a service is a complex undertaking. For the busy primary care practitioner, who not only needs to understand the evidence but who must also effectively communicate information to patients so that they can make a decision that is concordant with their preferences and values, this can be a difficult and time-consuming task. Thus, another important change in how the task force operates reflects our understanding that publishing guidelines is not enough, and that guideline production should be accompanied by evidence-informed knowledge translation strategies that help primary care practitioners to use recommendations at the point of care. For this reason, the current task force places substantial emphasis on its knowledge translation and evaluation efforts.

In this context, present and former members of the task force have developed a series of articles that focuses on key elements necessary to effectively incorporate preventive health care recommendations into primary care practice. In the current issue of *Canadian Family Physician*, Bell et al (page 521) discuss benefits and harms that

might be experienced with screening, how they are evaluated by the task force, and how practitioners can assess the balance of benefits versus harms to inform decision making.⁸ Articles in subsequent issues will focus on shared decision making in preventive health care; how patient values and preferences can be incorporated into the shared decision-making process; knowledge translation tools that the task force produces to support shared decision making and implementation of recommendations; understanding outcome measures used in evidence evaluation; assessing the rigour of guidelines from the Canadian Task Force and other organizations; and organizational values and preferences.

We have come a long way since the 1970s when the original task force began its work. We believe that the foundations laid by that group and the advances that have come about since then have positioned us to provide increasingly well-informed preventive health care services in Canada. One thing that has not changed is the essential role that busy primary care practitioners play in our health care system and, specifically, in providing preventive health care. We hope that the task force's series of articles will support your work as you strive to engage patients in making decisions that fit their values and preferences.

Dr Thombs is Chair-elect, Dr Lewin is Vice-Chair, and Dr Tonelli is Chair of the Canadian Task Force on Preventive Health Care.

Competing interests

All authors have completed the International Committee of Medical Journal Editors' Unified Competing Interest form (available on request from the corresponding author) and declare that they have no competing interests.

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The opinions expressed in commentaries are those of the authors. Publication does not imply endorsement by the College of Family Physicians of Canada.

References

1. Canadian Task Force on the Periodic Health Examination. The periodic health examination. *CMAJ* 1979;121(9):1193-254.
2. Birtwhistle R, Bell N, Thombs B, Grad R, Dickinson J. Annual checkups. Let's do what the evidence tells us. *Can Fam Physician*. In press.
3. Canadian Task Force on the Periodic Health Examination. *The Canadian guide to clinical preventive health care*. Ottawa, ON: Minister of Supply and Services Canada; 1994.
4. US Preventive Services Task Force. *Guide to clinical preventive services: an assessment of the effectiveness of 169 interventions*. Baltimore, MD: Williams and Wilkins; 1989.
5. Solomon M. *Making medical knowledge*. New York, NY: Oxford University Press; 2015.
6. Schönemann H, Brožek J, Guyatt G, Oxman A, editors. *GRADE handbook*. The GRADE Working Group; 2013. Available from: <http://gdt.guideline-development.org/app/handbook/handbook.html>. Accessed 2017 Apr 18.
7. Fitzpatrick-Lewis D, Hodgson N, Ciliska D, Peirson L, Gauld M, Liu YY, et al. *Breast cancer screening*. Hamilton, ON: Canadian Task Force on Preventive Health Care; 2011. Available from: <http://canadiantaskforce.ca/wp-content/uploads/2011/11/2011-breast-cancer-systematic-review-en.pdf>. Accessed 2017 Apr 18.
8. Bell NR, Grad R, Dickinson JA, Singh H, Moore AE, Kasperavicius D, et al. Better decision making in preventive health screening. Balancing benefits and harms. *Can Fam Physician* 2017;63:521-4 (Eng), 525-8 (Fr).