# A good fit

Integrating physical activity counselors into family practice

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ecent primary care reform in Canada has centred on creating multidisciplinary primary care teams so that the most appropriate care is provided by the most appropriate provider.1 These teams have the potential to improve quality of care for patients; several studies show that integration of nurses or pharmacists into primary care teams results in improved patient outcomes.<sup>2,3</sup>

To date, most of the attention paid to multidisciplinary teams has focused on treatment. We are presenting an idea for a multidisciplinary primary care team—physical activity counselors and family physicians—that is focused on disease prevention.

## Importance of prevention

National reports have identified the need to focus on disease prevention, health promotion, and management of chronic illness,4 and recommendations for reform of primary care service delivery include improved access to health promotion, disease prevention, and chronic disease management services.1 Moreover, recent position statements encourage physical activity counseling for adults in primary care.5

Increasing physical activity and reducing obesity are crucial to help patients stay healthy and to prevent many chronic illnesses. Indeed, there is strong evidence of physical and mental health benefits of regular physical activity for healthy and chronically ill populations.<sup>6,7,8</sup> Inactivity is now recognized as one of the leading risk factors for morbidity and mortality.9 Recently, Mokdad et al10 found that physical inactivity and poor diet were close behind tobacco (16.6% versus 18.1% of total deaths in the United States) for increasing actual causes of death. The economic burden of physical inactivity in Canada in 2001 was estimated at \$5.3 billion.11

Despite the obvious health benefits and potential cost savings of regular physical activity, only 21% of Canadians aged 12 or older are sufficiently active to achieve optimal health benefits.12 This rate is even lower for clinical populations. 13 Clearly, a new approach is needed to help people adopt and, more importantly, maintain adequate physical activity levels.

Integrating physical activity counselors into primary care seems a sensible solution. Family physicians are credible sources of information about healthy lifestyle decisions<sup>14</sup> and can reach a large population.<sup>15</sup> Family physicians have substantial time constraints,16 however, and often lack physical activity counseling skills,

training, or knowledge.17 These factors likely explain why physicians' physical activity interventions have mostly small or moderate short-term effects. 18,19

### New approach

Patients need substantial help to make, and especially to maintain, physical activity behaviour changes. Glasgow et al<sup>20</sup> stated, "progress will most likely follow system changes and practice redesign....In particular, ongoing attention and follow-up from health professionals may be especially helpful for [physical activity]."

Physical activity counselors integrated into family physicians' offices can offer longer-term intensive counseling, which facilitates increases in patients' physical activity.<sup>21</sup> Physical activity counselors are practitioners who have been university trained in the field of exercise sciences and who have knowledge and experience in applied exercise psychology, behaviour-change counseling, and clinical exercise physiology. They are also knowledgeable about local physical activity resources and can act as liaisons between medical practices and communities. Linking patients to these resources is strongly recommended by the United States Preventive Services Task Force.<sup>22</sup> Physical activity counselors could decrease time burdens on family physicians by taking on responsibility for physical activity counseling. As physical activity counselors have specialized knowledge and skills that family physicians feel they lack,23 patients would gain improved access to, and higher quality of, preventive care associated with physical activity. Increasing physical activity would lead to improved overall patient health, which could help decrease financial burdens on the health care system and help alleviate physicians' overload.

#### The 7-As model

The As approach<sup>24</sup> is a key clinical approach that has been recommended for physical activity counseling.25 We propose an interdisciplinary model employing a 7-As framework where we allot different tasks to family physicians and physical activity counselors so that the most appropriate care is given by the most appropriate provider. We recommend a patient-centred approach and specifically suggest empowering patients by acknowledging their perspectives and feelings, minimizing pressure, and maximizing choices to foster long-term self-regulation of behaviour.26 Family physicians initiate

the behaviour-change process; physical activity counselors bring about longer-term changes.

Physicians briefly address the topic of physical activity with patients; ask them about their levels of physical activity; advise them to increase these levels (relating increases to their particular health and life situations); agree on short-term physical activity goals; and provide tailored, written prescriptions to increase physical activity. This should take 2 to 4 minutes and is designed to motivate patients to change. Interested patients are then referred to physical activity counselors, who are responsible for assessing patients' current physical activity behaviours and beliefs, assisting patients in making behavioural changes, and arranging for followup and evaluating progress. Their main role is assisting, which consists of enhancing patients' readiness to change, helping them set appropriate, safe physical activity goals, and working with them to develop effective action plans. Physical activity counselors also teach tailored, evidence-based, behaviour-change strategies, address relapse prevention, and suggest specific activities based on patients' needs and interests. The key to maintenance is helping patients find safe, accessible physical activities that they enjoy.

Physical activity counselors can also be involved in other activities, such as creating walking groups for patients and staff, organizing contests, creating support groups, delivering sessions tailored to specific groups (eg, obese patients), contributing to practice newsletters, keeping other members of practices up-to-date on physical activity knowledge, building partnerships with other physical activity services, linking with public health, and acting as community activists.

The 7-As model for physical activity counseling in primary care optimizes the strengths of both providers. Because of their relationships with patients, family physicians can identify those who are likely to benefit, and can act as catalysts for change. Having physical activity counselors in-house indicates substantial endorsement from physicians and fosters interdisciplinary collaboration. Physical activity counselors offer thorough individual assessments and tailored intensive interventions to optimize sustainable changes. Physical activity needs of patients can be determined and met quickly in this collaborative approach.

We envision that physical activity counselors' salaries would be paid by provincial governments and each counselor would be attached to a large group practice comprising 5 to 6 family physicians or would divide time between 2 smaller practices. This would allow people of all socioeconomic backgrounds to benefit from this service and would permit primary and secondary prevention. Compared with physicians, physical activity counselors would be a minimal financial expense, partly because they do not order laboratory investigations or prescribe medications.<sup>27</sup> The Physical Activity Counseling project, a randomized controlled trial currently under way, is in the process of determining the effectiveness of integrating physical activity counselors into community-based group practices.

Adding physical activity counselors to primary health care teams could increase treatment effectiveness and health care system efficiency by creating alliances between clinical interventions and the broader community.24 It could also better support the healthy living approach recommended by the pan-Canadian healthy living strategy.<sup>28</sup> Already a few exercise professionals work as physical activity counselors in primary care in Canada as salaried health care providers; however, evidence is insufficient to convince Canadian funding agencies to pay for such a system on a large scale. Analyses of the cost-effectiveness of this model are warranted, including short- and long-term estimates of health care spending. While no information on cost is currently available, the Physical Activity Counseling project will provide some data.

There is a need to show that physical activity counselors and family physicians can produce better results together than family physicians can alone, and that the model is cost-effective. A potential \$15 million annual savings in direct health care expenses with every 1% increase in physical activity,29 makes a compelling case for trying this model.

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#### References

- 1. Health Canada. Objectives of the PHCTF. Ottawa, Ont: Health Canada; 2004. Available  $from: \ http://www.hc-sc.gc.ca/hcs-sss/prim/phctf-fassp/object\_e.html.$ Accessed 2005 November 6
- 2. Bero LA, Mays NB, Barjesteh K, Bond C. Expanding outpatient pharmacists' roles and health services utilisation, costs, and patient outcomes. In: The Cochrane Library [database on disk and CD-ROM]. The Cochrane Collaboration. Oxford, Engl. Update Software; 2000. Issue 1.

## **Editorials**

- 3. Norris SL, Nichols PJ, Caspersen CJ, Glasgow RE, Engelgau MM, Jack L, et al. The effectiveness of disease and case management for people with diabetes. A systematic review. *Am J Prev Med* 2002;22:15-38. 4. Commission on the Future of Health Care in Canada
- Building on values. The future of health care in Canada. Commission on the Future of Health Care in Canada final report, November 2002. Ottawa, Ont: Health Canada; 2003. Available from: http://www.hc-sc.gc.ca/english/care/romanow/hcc0086.html. 2005 November 6
- 5. Jacobson DM, Strohecker L, Compton MT, Katz DL. Physical activity counseling in the adult primary care setting: position statement of the American College of
- Preventive Medicine. *Am J Prev Med* 2005;29:158-62. 6. Bauman AE. Updating the evidence that physical activ-Bothillari R.: Optaming the evidence that physical activities good for health: an epidemiological review 2000-2003. *J Sci Med Sport* 2004;7(Suppl 1):6-19.
   Roberts CK, Barnard RJ. Effects of exercise and diet on chronic disease. *J Appl Physiol* 2005;98(1):3-30.
   Bolabetes Prevention Program Research Group.
   Reduction in the incidence of type 2 diabetes with
- lifestyle intervention or metformin. N Engl J Med 2002;346(2):393-403.
- 2002;346(2):395-405.

  9. World Health Organization. The world health report 2002. Reducing risks, promoting healthy life. Geneva, Switzerland: World Health Organization; 2002.

  10. Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. JAMA 2004;291(10):1238-45.
- Katzmarzyk PT, Janssen I. The economic costs associated with physical inactivity and obesity in Canada: an update. Can J Appl Physiol 2004;29(1):90-115.
- 12. Centre for Chronic Disease Prevention and Control. National Population Health Survey highlights. Physical rationar Population retains Salvey Ingingins. Physical activity of Canadians. Description of the survey and reports. Ottawa, Ont: Health Canada; 1999.

  13. Statistics Canada. Canadian community health survey: a first look. In: Statistics Canada. The Daily. Ottawa, Ont:
- Statistics Canada; 2002. Available from: http://www.statcan.ca/Daily/English/020508/d020508a.htm.
- Accessed 2006 June 20.

  14. Blair S, Applegate W, Dunn A, Ettinger W, Haskell W, King A, et al. Activity Counseling Trial (ACT): rationale, design, and methods. *Med Sci Sports Exerc* 1998;30:1097-106.

  15. Canadian Institute for Health Information. *Health care in Canada*. Ottawa, Ont: Statistics Canada; 2003.

- In Canada. Ostawa, Offic Satistics Canada; 2005.
  16. Kennedy MF, Meeuwisse WH. Exercise counselling by family physicians in Canada. Prev Med 2003;37:226-32.
  17. Ritchie C, Stetson B, Bass P, Adams K. Physical activity counseling: an educational exercise for medical students. Nutr Clin Care 2002;5:103-14.
  18. Petral B, Lattargic CN. Deer counseling help.
- 18. Petrella RJ, Lattanzio CN. Does counseling help patients get active? Systematic review of the literature. *Can Fam Physician* 2002;48:72-80.
- 19. Smith BJ, Merom D, Harris P, Bauman AE. Do primary care interventions to promote physical activity work? A systematic review of the literature. Melbourne, Australia: National Institute of Clinical Studies; 2003. Available from: http://www.cpah.unsw.edu.au/NICS.pdf.
- Accessed 2006 June 21. 20. Glasgow R, Eakin E, Fisher E, Bacak S, Brownson R. Physician advice and support for physical activity. Am J Prev Med 2001;21:189-96.
- Prev Med 2001;21:189-96.
  21. Tulloch H, Fortier M, Hogg W. Physical activity counseling in primary care: who has and who should counsel. Patient Educ Couns 2006 [e-publication ahead of print]. Available from: http://www.sciencedirect.com/science?\_ob=ArticleURL&udi=B6TBC-4]7H44P-1&\_coverDate=02%2F10%2F200 6&\_alid=416067932&\_rdoc=1&\_fmt=&\_orig=search&\_d=1&\_cdi=5139&\_sort=d&view=c&\_acct=C000050221&\_version=1&\_urlversion=0&\_userid=10&md5=b72d16 8f360b5170926bf8dd8caa1403. Accessed 2006 June 21.
- 22. United States Preventive Services Task Force Behavioral counseling in primary care to promote physical activity: recommendation and rationale. *Ann Intern Med* 2002;137(3):205-7.

  23. Nupponen R. What is counseling all about—basics in
- Auppointer N. What is counseling an adouter-bastes in the counseling of health-related physical activity. *Patient Educ Couns* 1998;33(1 Suppl):S61-7.
   Whitlock E., Orleans T., Pender N., Allan J. Evaluating primary care behavioral counselling interventions: an evidence-based approach. *Am J Prev Med* 2002;22:267-84.
   Eastabrooks P., Glasgow R., Dzewaltowski D. Physical activity promotion through primary care. *IAMA*
- activity promotion through primary care. JAMA 2003;289(22):2913-6.
- 26. Williams G. Improving patients' health through supporting the autonomy of patients and providers. In: Deci E, Ryan R, editors. *Handbook of self-determination research*. Rochester, NY: University of Rochester Press;
- 2002. p. 233-54. 27. Kirk A, Mutrie N, MacIntyre P, Fisher M. Increasing physical activity in people with type 2 diabetes. *Diabetes Care* 2003;26(4):1186-92.
- 28. Secretariat for the Intersectoral Healthy Living Network. The integrated pan-Canadian healthy living strategy. Ottawa, Ont: Public Health Agency of Canada;
- 2005. Available from: http://www.phac-aspc.gc.ca/ hl-vs-strat/pdf/hls\_e.pdf. Accessed 2005 November 6. 29. Katzmarzyk PT, Gledhill N, Shephard RJ. The eco-nomic burden of physical inactivity in Canada. *CMAJ* 2000;163(11):1435-40.