

## Engaging physicians and patients in conversations about unnecessary tests and procedures: Choosing Wisely Canada

Wendy Levinson MD, Tai Huynh MBA

Every industrialized country in the world is concerned about the rising costs of health care. Canada spends almost \$200 billion each year — about 12% of its gross domestic product — on health care.<sup>1</sup> Despite the enormous cost, evidence shows that substantial gaps exist in the quality of care provided in Canada, and that compared with other countries, Canada does not perform well on many key indicators of health outcomes.<sup>2,3</sup> Physicians determine the use of health care resources through daily decisions about when to see patients, whether to admit them to hospital, and which tests and procedures to order. Yet, often physicians order tests, treatments and procedures despite strong evidence that they may not help, and may even harm, patients. Almost every medication, medical test and procedure carries, to varying degrees, risks and benefits. Currently, no evidence directly links unwarranted medical procedures and harm. However, evidence exists of inappropriate imaging being performed in Canada,<sup>4</sup> and a study involving patients in Quebec shows that lifetime exposure to low-dose ionizing radiation from medical procedures is associated with an increased risk of cancer.<sup>5</sup>

Currently, Canada is preparing to follow in the footsteps of the popular US campaign Choosing Wisely. Choosing Wisely Canada ([www.choosingwiselycanada.org/](http://www.choosingwiselycanada.org/)) is designed to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures, and supports physician efforts to help patients make smart and effective choices to ensure high-quality care. The Canadian Medical Association (CMA) is working with the campaign to engage Canadian medical societies. In addition, the Canadian campaign focuses on educating medical students, residents and faculty members of academic medical centres. The underlying premise is that physicians must lead the conversation, because they determine the appropriate or inappropriate use of resources.<sup>6,7</sup>

The American Board of Internal Medicine Foundation launched Choosing Wisely in the United States in February 2012. Partnerships

with specialty medical societies led to the creation of lists of “Five Things Physicians and Patients Should Question” based on evidence of overuse, waste and potential harm to patients. Each of the “five things” is written as a declarative statement beginning with the word “Don’t” or “Avoid.” For example, the American Academy of Family Physicians’ first point states, “Don’t do imaging for low back pain within the first six weeks, unless red flags are present.”

In February 2012, nine specialty societies in the US released their lists. Now, 60 societies are participating, and many have released lists that are publicly available. These societies are disseminating their lists through publications, national and regional continuing education meetings, and their websites.

Choosing Wisely Canada is presently working with 24 Canadian specialist societies, 8 of which (Box 1) will release their lists of “things physicians and patients should question” in April 2014. Other societies will release their lists in subsequent waves. Physician leaders have strongly supported the campaign, which has officially been endorsed by specialty societies, the CMA, the provincial and territorial medical associations, the Royal College of Physicians and Surgeons of Canada, the College of Family Physicians Canada and the Canadian Association of Professors of Medicine. The Canadian campaign will also emphasize patient and public education to help individuals and their physicians make informed choices, and to support a broader dialogue on the issue of unnecessary tests and treatments.

Engaging patients in the conversation is important, because they have expectations about

### Competing interests:

Wendy Levinson is a member of the American Board of Internal Medicine Foundation Board of Trustees, which created the Choosing Wisely campaign in the United States.

This article has been peer reviewed.

### Correspondence to:

Wendy Levinson,  
[wendy.levinson@utoronto.ca](mailto:wendy.levinson@utoronto.ca)

CMAJ 2014, DOI:10.1503/  
/cmaj.131674

### KEY POINTS

- Reducing unnecessary tests and procedures has important implications for the quality of patient care and for the sustainability of the health care system.
- Physicians are ideally positioned to play a leadership role.
- Choosing Wisely Canada is a campaign designed to help physicians and patients engage in conversations about unnecessary tests, treatments and procedures, and supports physician efforts to help patients make smart and effective choices to ensure high-quality care.

what tests and procedures physicians should order on their behalf. As part of the campaign, patient education materials are being developed that will describe why a test or procedure might not be needed. Given that the health care system in Canada is publicly funded, patient engagement is imperative to avoid the potential perception that this is purely a cost-cutting initiative. In fact, given the nature of how the health care system is funded in Canada, Choosing Wisely Canada may not necessarily reduce overall health care cost. However, the campaign has the potential to improve the value of available resources by ensuring that they are used more effectively.

Choosing Wisely Canada is engaging medical schools as well. Because medical schools shape the practice of future physicians, embedding the understanding of overuse of resources is critical in undergraduate and postgraduate education. Evidence shows that practice patterns learned in training can endure.<sup>8</sup> Many learners lean toward ordering unnecessary tests because they wish to show thoroughness in making a differential diagnosis. Furthermore, trainees may be rewarded in academic centres for ordering extra tests, either to rule out disease or for academic learning. The academic environment rarely discourages ordering tests or procedures. This culture needs to change<sup>9</sup> and is changing.<sup>10</sup> An informal network of students is evolving through social media, and programs are emerging at the Open School Institute for Healthcare Improvement in Cambridge, Massachusetts, and through websites such as teachingvalue.org.

Questioning the impact of Choosing Wisely is logical, especially when considering rolling it out in Canada. We do not yet know the impact of the campaign in the US, although we do know that it has been widely and enthusiastically embraced by societies — including those whose physician members might stand to gain financially by ordering tests or performing procedures. Choosing

Wisely Canada plans to evaluate the success of the campaign (initially in Ontario) to understand its impact on clinical practice. However, accrual of data takes time, and appropriate measures of the impact of the campaign on physician and patient attitudes and on physician ordering practices are yet to be defined.

The Institute of Medicine in the US reports that 30% of health care spending is wasteful and does not add value to the care of patients.<sup>11</sup> Physicians must lead the effort to ensure that precious health care resources are used wisely. Every test, treatment and procedure physicians order must be evidence-based, have potential to add value and minimize potential harm to patients. For many years, both physicians and patients have had a “more is better” attitude. It is time to adopt a “think twice” attitude and to avoid unnecessary and potentially harmful tests, procedures and treatments.

## References

1. *National health expenditure trends, 1975 to 2012*. Ottawa (ON): Canadian Institute for Health Information; 2012. Available: <https://secure.cihi.ca/estore/productFamily.htm?locale=en&pf=PFC1952> (accessed 2013 Oct. 20)
2. *Total expenditure on health, % gross domestic product*. Paris: Organisation for Economic Co-operation and Development (OECD); 2013. Available: [www.oecd-ilibrary.org/social-issues-migration-health/total-expenditure-on-health\\_20758480-table1](http://www.oecd-ilibrary.org/social-issues-migration-health/total-expenditure-on-health_20758480-table1) (accessed 2013 Oct. 20).
3. Nolte E, McKee CM. Measuring the health of nations: updating an earlier analysis [published erratum in *Health Aff (Millwood)* 2008;27:593]. *Health Aff (Millwood)* 2008;27:58-71.
4. Fraser J, Reed M. Appropriateness of imaging in Canada. *Can Assoc Radiol J* 2013;64:82-4.
5. Eisenberg MJ, Afilalo J, Lawler PR, et al. Cancer risk related to low-dose ionizing radiation from cardiac imaging in patients after acute myocardial infarction. *CMAJ* 2011;183:430-6.
6. Emanuel EJ, Steinmetz A. Will physicians lead on controlling health care costs? *JAMA* 2013;310:374-5.
7. Brody H. Medicine's ethical responsibility for health care reform — the Top Five list. *N Engl J Med* 2010;362:283-5.
8. Asch DA, Nicholson S, Srinivas S, et al. Evaluating obstetrical residency programs using patient outcomes. *JAMA* 2009;302:1277-83.
9. Korenstein D, Falk R, Howell EA, et al. Overuse of health care services in the United States: an understudied problem. *Arch Intern Med* 2012;172:171-8.
10. Mateen FJ, Rubenstein LS. Government policies in violation of human rights as a barrier to professionalism. *JAMA* 2011;306:541-2.
11. Institute of Medicine (US) Roundtable on Evidence-Based Medicine. In: Yong PL, Saunders RS, Olsen LA, editors. *The health-care imperative: lowering costs and improving outcomes: workshop series summary*. Washington (DC): National Academies Press (US); 2010.

**Affiliations:** Choosing Wisely Canada (Levinson, Huynh); Department of Medicine (Levinson), University of Toronto, Toronto, Ont.; Centre for Innovation in Complex Care (Huynh), University Health Network, Toronto, Ont.

**Contributors:** Both authors contributed substantially to the creation and revision of the manuscript, approved the final version submitted for publication and agreed to act as guarantor of the work.

### Box 1: Choosing Wisely Canada wave 1 specialty societies

- Canadian Association of General Surgeons
- Canadian Association of Radiologists
- Canadian Cardiovascular Society
- Canadian Geriatrics Society
- Canadian Medical Association Forum on General and Family Practice Issues
- Canadian Orthopaedic Association
- Canadian Rheumatology Association
- Canadian Society of Internal Medicine