

# 'Choosing Wisely': a growing international campaign

Wendy Levinson,<sup>1</sup> Marjon Kallewaard,<sup>2</sup> R Sacha Bhatia,<sup>1</sup> Daniel Wolfson,<sup>3</sup> Sam Shortt,<sup>4</sup> Eve A Kerr,<sup>5</sup> On behalf of the Choosing Wisely International Working Group

► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/bmjqs-2014-003821>).

<sup>1</sup>Department of Medicine, University of Toronto, Toronto, Ontario, Canada

<sup>2</sup>Dutch Association of Medical Specialists, Utrecht, The Netherlands

<sup>3</sup>ABIM Foundation, Philadelphia, USA

<sup>4</sup>Canadian Medical Association, Ottawa, Canada

<sup>5</sup>VA Center for Clinical Management Research, VA Ann Arbor Healthcare System, and Department of Internal Medicine and Institute for Healthcare Policy and Innovation, University of Michigan, Ann Arbor, USA

## Correspondence to

Dr Wendy Levinson, Professor of Medicine, University of Toronto, 30 Bond Street, Toronto, Ontario, Canada M5B 1X1; [wendy.levinson@utoronto.ca](mailto:wendy.levinson@utoronto.ca)

Received 26 November 2014

Revised 2 December 2014

Accepted 5 December 2014

**To cite:** Levinson W, Kallewaard M, Bhatia RS, et al. *BMJ Qual Saf* Published Online First: [please include Day Month Year] doi:10.1136/bmjqs-2014-003821

## ABSTRACT

Much attention has been paid to the inappropriate underuse of tests and treatments but until recently little attention has focused on the overuse that does not add value for patients and may even cause harm. Choosing Wisely is a campaign to engage physicians and patients in conversations about unnecessary tests, treatments and procedures. The campaign began in the United States in 2012, in Canada in 2014 and now many countries around the world are adapting the campaign and implementing it. This article describes the present status of Choosing Wisely programs in 12 countries. It articulates key elements, a set of five principles, and describes the challenges countries face in the early phases of Choosing Wisely. These countries plan to continue collaboration including developing metrics to measure overuse.

During the last decade, considerable attention has focused on addressing the underuse of evidence-based processes of care, improving patient safety and achieving more patient-centred care. Much less attention, however, has focused on the problems related to the overuse of medical tests and treatments—care that can lead to harm and consumes resources without adding value for patients.<sup>1 2</sup>

Clinicians know that most care can unintentionally harm their patients—adverse drug reactions, cumulative radiation exposure from diagnostic imaging, complications or errors during procedures—are all unfortunate potential outcomes of medical care. The patient safety movement has taken on the challenge of reducing such adverse outcomes of care through checklists, bundles, teamwork training, improved communication, well-designed informatics systems and a variety of other strategies.<sup>3 4</sup> But when the interventions leading to patient injuries are not

even clinically indicated, the fundamental quality improvement target becomes unnecessary care itself.

Eliminating unnecessary medical care and optimising value has received increasing attention from health systems in the past decade. Critical evidence shows that in some countries, particularly the USA, an estimated 30% of all medical spending is unnecessary and does not add value in care.<sup>5 6</sup> Some countries have appointed task forces to identify ways to eliminate waste in healthcare, seeking to deliver quality care at lower cost, optimising the value derived from investments in healthcare.

Choosing Wisely, a campaign that started in the USA, has garnered attention worldwide as a potentially promising approach to the vexing problem of unnecessary care by focusing on value of care and potential risks to patients rather than using cost as the motivating factor.<sup>7</sup> Choosing Wisely was launched in April 2012 by the American Board of Internal Medicine (ABIM) Foundation to encourage physicians and patients to talk about medical tests and procedures that may be unnecessary, and in some instances, can cause harm.<sup>8–11</sup> One of the key elements of Choosing Wisely in the USA is that it is a physician-led campaign, with medical specialty societies creating lists of tests, treatments and procedures in their discipline for which there is strong scientific evidence of overuse and significant potential harm or cost. Based on the early success of Choosing Wisely, many countries sought to learn more about the creation and implementation of the campaign, and some have begun to develop their own versions of Choosing Wisely. Leaders from 12 countries met in June 2014 to learn from one another about each country's campaigns and to consider potential collaborative efforts.

The goals of this article are to share the present experiences from these countries in planning or implementing Choosing Wisely and to articulate common principles for reducing unnecessary care.

### WHAT ARE DIFFERENT COUNTRIES DOING?

Leaders from Australia, Canada, Denmark, England, Germany, Italy, Japan, the Netherlands, New Zealand, Switzerland, Wales and the USA shared their early experiences with Choosing Wisely programmes. [Table 1](#) summarises the present status in these countries and describes the specific goals, lead organisation, role of physicians and other healthcare providers, role of patients, funding source and additional special issue.

Choosing Wisely has been most fully developed in the USA where over 60 medical societies have created lists of five common tests, treatments or procedures where there is strong scientific evidence that they do not benefit patients or may even cause harm.<sup>12 13</sup> Typically list items are worded in this fashion—'Don't order imaging tests for patients with low back pain, unless red flags are present' (see online supplementary appendix A for a sample list). Modelled on the US initiative, Choosing Wisely Canada was launched in April 2014 and 21 societies have released lists to date.<sup>14</sup> Italy adopted the principles of Choosing Wisely, incorporating them into a campaign called 'Doing more does not mean doing better', launched by 'Slow Medicine' (an independent organisation linked to the Slow Food movement), and the Netherlands recently launched the 'Choosing Wisely Netherlands Campaign'. In both Italy and the Netherlands, the Choosing Wisely programme is part of a larger campaign directed at reducing low-value care. Other countries have well-established organisations that assess the quality of evidence and make recommendations to physicians, like the National Institute for Clinical Evidence in England. These countries are considering how to incorporate Choosing Wisely into their existing quality improvement efforts.

Choosing Wisely depends on changing physician attitudes and practices and patients'/public knowledge and attitudes. There was a broad agreement that the central goal of a Choosing Wisely campaign is to change the culture of medical care that has historically supported overuse of unnecessary tests, treatments and procedures.<sup>15–17</sup> Despite the differences between the countries, all recognised that common factors have contributed to the physician practice of ordering unnecessary services, including patient expectations, fears of missing a possible diagnosis or malpractice concerns, reimbursement incentives, the way physicians are taught and avoiding the challenging conversation of telling patients they do not need specific tests or treatment.<sup>2</sup> While the relative weight of these factors differs in each country, they are remarkably similar overall. Hence, we agreed that our goals could

only be achieved by a fundamental shift in the attitudes, knowledge and behaviours of physicians related to diagnosis and treatment. A change from 'more is better' to 'more is NOT always better' in physician attitudes and behaviours seems critical. There was agreement that the key mechanism for change lies in the communication between physicians and patients during routine clinical encounters.

But physicians cannot do it alone. Fundamentally patients, and the public, also hold the view that 'more is better' in medical care and a Choosing Wisely campaign can only be effective with significant patient and public engagement. There was consensus that educational efforts targeted to patients and public are required to engage them in a real dialogue about the use of unnecessary tests and treatments and ultimately to change their attitudes. Emphasising the centrality of the physician–patient relationship to help patients make the right decisions for their situation is important to a campaign's success. Terms like 'right care', 'avoiding harm' and 'wise choices' seem to resonate with patients in multiple countries. Other terms like 'value', 'waste', 'sustainability' and 'use of finite resources' were considered problematic in some countries as they may appear to focus on the needs of the population rather than what might be best for the individual person. Most countries found that bringing cost into the discussion diminishes both physician and patient engagement. However, the financing of healthcare in different countries may influence how the messaging is received; for example, in some countries, the concept of value or waste reduction may be acceptable or desirable to the public.

While ultimately each country does seek to manage their healthcare expenditures, we felt that both physician and public support will more likely be garnered with an articulated goal of quality of care. In reality, simply saving money is not the goal of Choosing Wisely—rather the goal is to provide high-quality care, prevent harm and decrease the use of unnecessary care. In some cases, cost savings may result from those choices and, in other cases, care may be more appropriate, more timely or less inconvenient for patients.

### KEY ELEMENTS OF CHANGE

In an effort to create clarity on the ways a Choosing Wisely campaign could influence physician attitudes and behaviours and patient/public attitudes, the participants created a model ([table 2](#)). In this model, the highest level goal is to reduce unnecessary care, avoid harm and decrease waste. The actual objectives are to influence the system at multiple levels: change physician attitudes, increase patient acceptance that more is not always better, change actual clinical practice and align the broader healthcare system with these goals. Each of these leverage points will require specific types of activities, leading to outputs and anticipated outcomes. Each suggests a type of measurement to

**Table 1** Choosing Wisely programme summaries

Country	Name and goal	Current status	Organising group	Role of physician/ healthcare provider Role of patient	Funder	Special issues
Australia	Choosing Wisely Australia facilitate dialogue between health professionals and patients about improving quality of care through reduction in unnecessary tests, treatments and procedures	Planning and implementation stages: First wave of lists currently in development in anticipation of 2015 launch Stakeholder engagement ongoing Advisory group to inform on longer term strategy for implementation and evaluation	NPS MedicineWise ( <a href="http://www.nps.org.au">http://www.nps.org.au</a> )	Plan to have physicians and patients lead with NPS MedicineWise playing facilitator role (akin to American Board of Internal Medicine (ABIM) Foundation)	Government grant to NPS MedicineWise to support quality use of diagnostics	Federated government structure means hospital funding is via the states and primary care funding via the federal government Emphasis on evaluating impacts of the programme to measure effectiveness of the campaign Strong emphasis on demonstrating evidence to support recommendations
Canada	Choosing Wisely Canada help physicians and patients engage in conversations about unnecessary tests, treatments and procedures, and to help physicians and patients make smart and effective choices to ensure high-quality care	Launched nine national specialty societies in April 2014 Additional 25 plus societies in progress with release of second wave recommendations in October 2014	Choosing Wisely Canada (based at University of Toronto) is partnering with the Canadian Medical Association	General practitioners (GPs)/ family physicians and specialty societies creating and disseminating lists Engaging large patient groups (ie, Patients Canada) to endorse and disseminate Advertising to public	Mixed funding (Government of Ontario, Canadian Medical Association, University of Toronto)	Healthcare is delivered provincially; choosing Wisely Canada is national
Denmark	N/A	Not planned presently. recent survey of specialties showed quite limited interest in Choosing Wisely process	N/A	N/A	N/A	Danish Health and Medicines Authority, Danish Medical Societies and five Danish regions are continuously developing national guidelines and measuring on clinical indicators
England	Probably Choosing Wisely	Planning stage with launch early 2015	The Academy of Medical Royal Colleges (AoMRC) A Steering Group is to be established involving key stakeholders to guide the programme This will comprise colleges, clinicians, patient groups, <i>BMJ</i> , commissioners, providers	Medical Royal Colleges and Specialist Societies will develop lists with an expectation of patient involvement at all stages National Voices, the coordinating body for patient groups, will be a co-partner NHS England wish to engage in the process but would not lead it	AoMRC Potentially NHS England	The National Institute for Clinical Effectiveness has extensive history of guideline products including 1000 recommendations on a 'do not do' database AoMRC has published a report about waste in clinical care The intention would be for all lists to collate together into a single database or document Despite large databases and high-quality evidence recommendation, practice does not align
Germany	Facilitate dialogue about value-based healthcare, inform the public and facilitate transfer	Planning stages Working group on Choosing Wisely established based on the Initiative	AWMF ( <a href="http://www.awmf.org">http://www.awmf.org</a> ) AWMF has a 20-year history of	Guideline developing Scientific Medical Societies to take leadership key	At the beginning self-funding of the AWMF and its member societies on a small	Building on existing efforts of multidisciplinary guideline groups (including representatives of

Continued

Table 1 Continued

Country	Name and goal	Current status	Organising group	Role of physician/ healthcare provider Role of patient	Funder	Special issues
	of priority recommendations of high-quality guidelines into practice	of the German Network for Evidence Based Medicine Annual guideline conference of the Association of the Scientific Medical Societies (AWMF) to discuss potential benefits, risks and implementability of a campaign as a complementary tool to transfer guidelines into practice in November 2014	coordinating and supporting the guideline activities of its 168 member societies and runs a quality managed guideline register AWMF-Institute for Medical Knowledge Management (AWMF-IMWi) takes on responsibility for these tasks on the operational level	Plan to engage multidisciplinary guideline development groups including representatives of healthcare providers as well as patient representatives	scale— later to be determined, additional funding will need to be sought for	patients and other health professions) to give shape to a German Choosing Wisely initiative Topic-related approach, based on existing evidence-based, multidisciplinary guidelines Plan to address 'don't do' as well as 'do' recommendations based on a systematic process of criteria-driven priority setting The development of a manual /generic method report is in progress
Italy	'Doing more does not mean doing better' launched by Italy's Slow Medicine Primary goal is culture change —'doing more does not mean doing better' Improve quality and appropriateness of care and ensure patient safety through reduction of tests and treatments; decrease harm; promote partnership	Campaign launched December 2012 25 specialty physician and nurse societies engaged 10 Italian lists done Now in implementation stage	Board of Italy's Slow Medicine, with the collaboration of: National Federation of Medical Doctors and Dentists; National Federation of Nurses' Colleges; Society for Quality in Healthcare; Altroconsumo and other patients and public organisations	Medical and nurse societies creating and disseminating lists Altroconsumo and other patients and public organisations developing patient materials and disseminating lists and culture	Italy's Slow Medicine, an independent organisation, is funded partly by medical societies Seeking funding	Part of the broader goal of Italy's Slow Medicine has three components including measured (doing more does not mean doing better), respectful (patient values) and equitable care (appropriate and good quality of care for all) Early implementation with Italian Society of General Practitioners in Piedmont region
Japan	Choosing Wisely—Japan Top have Japanese medical professionals and public be aware of current overuse of expensive diagnostic and therapeutic measures and to encourage change	Planning stages Using recommendations from Choosing Wisely and <i>BMJ</i> 'Too Much Medicine Series' Dissemination through publication and conferences A booklet in Japanese language entitled, 'Choosing Wisely in Japan—Less is More' which includes 26 'Lists of Five' from US specialty societies has been published The contributors of the publication have proposed their list of five applicable to Japanese setting Creating working groups in primary care and specialty care societies	Establishment of a subcommittee in Japan Primary Care Association (JPCA) Collaboration of JPCA and Japanese Chapter of American College of Physicians, and eventually with Japanese Society of Internal Medicine	Medical specialty plus primary care group leading Patient engagement in planning stages	Volunteering	Conflict of interest of university clinical researchers with pharmaceutical industry has recently been publicised by media
Netherlands	Choosing Wisely—The Netherlands	Launched October 2012 14 medical societies actively	Dutch Association of Medical Specialists and Netherlands	Physician led	Funds dedicated to quality for medical specialist care in	Organisation covers four pillars of campaign include Wise Choices;

Continued

**Table 1** Continued

Country	Name and goal	Current status	Organising group	Role of physician/ healthcare provider Role of patient	Funder	Special issues
	Improve quality of care by geographical measuring of unnecessary treatments; eliminating unproven treatments; searching for knowledge gaps in effectiveness; creating value by helping physicians and patients make wise(r) choices	involved (29 endorsed) Creating Dutch lists based on Choosing Wisely 6 scientific societies created lists of wise choices, most of them did already base that on evidence maps of practice variation	Organization for Health Research and Development Dutch Patient and Consumer Organization is partner		the Netherlands Netherlands Organization for Health Research and Development (a non-governmental organisation)	measuring clinical practice variation; knowledge gaps by effectiveness research; shared decision making Drawback: Although Medical Specialist Societies did successfully create this campaign, covered by insurance companies and patient organisations GPs are not involved yet
New Zealand	To deliver better value for money in health services	Planning stages Adopting Choosing Wisely to engage physicians in two conditions (chronic obstructive pulmonary disease and ischaemic heart disease) Clinical working groups on these topics	National Health Committee (NHC) Government Health Technology Assessment organisation. Makes recommendations to Minister of Health	Physicians input solicited by NHC Work open for public comment	Government	
Switzerland	Smarter Medicine To reduce care that brings no or little benefit, causes side effects, or increasing cost	Launched May 2014 Top 5 list for ambulatory care general internal medicine complete	Swiss Society of Internal Medicine Contact with consumer organisation for partnership	Medical society led. Patients not engaged yet	Swiss Society of Internal Medicine	Swiss Society of Internal Medicine funded two research projects on overuse
USA	Choosing Wisely To foster conversation between physicians and patients about unnecessary care Campaign focuses on physician professionalism and leadership	Launched in 2012 60 medical societies created lists Major distribution to patients and public through patient material Implementation in a variety of healthcare settings	ABIM Foundation and Consumer Reports	Physician led Patient/public education	ABIM Foundation Consumer Reports Robert Wood Johnson Foundation	Implementation is distributed across many types of organisations (network to learn from one another) Some societies have not chosen robust recommendations Regarded as highly successful but not measuring use (20% of all US physicians know about Choosing Wisely)
Wales	Prudent Healthcare To ensure patients receive the best care from available resources	Planning phase based on Bevan Commission 'Prudent Healthcare Report' (2013) and Provisional Principles 2014 Early stakeholder engagement re: Choosing Wisely. Workshop on four topics to test principles	Bevan Commission is independent Prudent Healthcare has Ministerial support	Being developed	Government	Early stages Have to align with existing organisations and recommendations (National Institute of Health and Care Excellence (NICE) recommendations, etc)

## Narrative Review

**Table 2** Key elements of a choosing Wisely campaign

High-level goal	Concrete objectives	Associated activities	Planned outputs	Anticipated outcomes	Measurement approaches
To reduce unnecessary care, harm and waste	Change physician attitudes to clinical practice	Raise physician awareness of the issue of unnecessary care	Medical journal article, news stories, interviews	Receptivity to learning how to approach unnecessary care in daily practice	Physician baseline attitude survey
		Engage physicians in list development and implementation	Increased number of specialties sign on	Members of specialties buy-into the initiative	Physician survey and interviews of attitudes
	Foster patient engagement and acceptance	Educate by inclusion in undergraduate and postgraduate teaching and in continuing professional development	Educational materials for use in medical schools and for continuing professional development	Informed trainees and practitioners confident in discussing unnecessary care with patients	Documented curriculum inclusion in medical school, residency programmes, and continuing education
		'More is not better' public messaging	Public service messages, posters, social media campaign	Public awareness of the issue of unnecessary care	Patient survey of awareness and acceptability of messaging
	Change key clinical practices	Develop partnerships with patient and public organisations	Features in partner newsletters and on web sites	Patient and public gain confidence in the campaign	Patient surveys and interviews of attitudes
Promote increased shared decision making		Increased frequency of discussions about necessity	Incorporation of shared decision making in practice	Patient surveys of care experiences	
Promote alignment with the healthcare system	Follow Choosing Wisely lists in practice	Better fit between need and care	Reduced unnecessary care	Measurement of rates of necessary and unnecessary care for select services	
		Recruit partners among clinics, hospitals, regions and others	Incorporation into standard orders and clinical support systems	Enhanced adherence to Choosing Wisely guidance	Audit of clinical performance in a healthcare setting or region
		Advocate for fit with payment system	Adjusted fee codes	Reduced incentives for overuse	Measurement of rates of necessary and unnecessary care for select

assess the impact. For example, a required first step in changing physicians' attitudes and practice is to make physicians aware that decreasing the use of unnecessary tests and treatments is critically important—in other words, that there is a 'burning platform for change'. In order to create that sense of urgency, medical journal articles, news stories, presentations at medical meetings, and so on, are needed to reach physicians and get their attention. Information from respected physician sources will lead to them becoming more receptive or curious about how to change their daily practice. To assess the starting point, physician attitudes can be measured with questions like 'Do you think the frequency of unnecessary tests, treatments and procedures in the healthcare system is a problem?' and 'Does the primary responsibility for decreasing the use of unnecessary tests and treatments rest with physicians?'

The model includes efforts to align the other stakeholders in the healthcare system, like hospital or regional health units, with the campaign. The reason for engaging stakeholders is the recognition that these partners are essential for implementation of the campaign. This model illustrates that a multipronged approach to implementation and measurement is required to capture change in a variety of dimensions. We think this is particularly important because stakeholders of Choosing Wisely may lead to the erroneous

conclusion that the only important metric of change is the reduction in ordering unnecessary tests and treatments.

### PRINCIPLES OF THE CAMPAIGN

Based in part on this model, the authors articulated a set of five principles (physician led, patient focused, evidence based, multiprofessional, transparent) that should be incorporated into a Choosing Wisely campaign in any country (table 3). It was our view that each of these was essential to a successful programme, though the method to achieve it could be individualised to the circumstances of each country.

### IMPLEMENTATION OF CHOOSING WISELY

In order to implement these principles, the participants offered suggestions for 'best practices' based on the early experience in some countries. First, it is critical to get the message about the campaign right—a compelling need to improve quality, prevent harm and engage physicians and patients in conversations about the right care. In the USA, the words 'Choosing Wisely' were selected with careful consideration and seem effective in North America, but Switzerland is using the words 'Smarter Medicine' and Italy calls their campaign 'Doing more does not mean doing better'... Second, recommendations made by physician groups should be focused on tests, treatments and procedures that are frequent, feasible to change



**Table 3** Principles of a choosing Wisely campaign

Principle	Description
Physician led	<ul style="list-style-type: none"> <li>▶ As opposed to payor/government/health system led</li> <li>▶ Important for trust of physicians and patients</li> </ul>
Patient focused	<ul style="list-style-type: none"> <li>▶ Communication between the clinician and patient is key</li> <li>▶ Process of shared decision making to tailor best care and prevent harm for individual patient</li> </ul>
Evidence based	<ul style="list-style-type: none"> <li>▶ Up-to-date evidence demonstrates lack of benefit or net harm</li> <li>▶ Important for physician and patient trust</li> </ul>
Multiprofessional	<ul style="list-style-type: none"> <li>▶ Nurses, pharmacists also key to campaign</li> </ul>
Transparent	<ul style="list-style-type: none"> <li>▶ Processes used to create list is public</li> <li>▶ Conflicts of interest declared</li> </ul>

and in the domain of that specialty. In the USA and Canada, the Choosing Wisely campaign encouraged each specialty group to choose items in their own control rather than suggesting that other physicians, like primary care, should change. All specialties and primary care physicians are needed to make the campaign successful. Third, implementation support is needed to put the recommendations into practice at the point of care; one health system has embedded over 180 recommendations into the electronic physician order entry system (Weingarten S, personal communication, 2014). Also, physicians and other health professionals need education and tools to help them have conversations about these services with patients. Specific communication skills are needed to discuss ‘harm’ and ‘what tests are not needed’. Instructional videotapes of exemplary conversations are available on the US Choosing Wisely website (<http://www.choosingwisely.org/resource>). Fourth, it is important to engage multiple stakeholders in the healthcare system. Healthcare providers can implement some of these recommendations, but hospitals, large specialty clinics and others must align with the Choosing Wisely programme. Supportive health systems can enable the implementation in multiple ways (electronic decision support, feedback to providers on their ordering practices, academic detailing, recognition, etc). Conversely, health systems can undermine the programme if financial pressures encourage overuse by health professionals. Fifth, all countries agreed that inculcating the principles of Choosing Wisely into medical education (undergraduate, postgraduate and continuing medical education) was key. Training the next generation of health professionals will ultimately change physician attitudes and behaviours by shaping the views of physicians’ right from the beginning of their training. Evidence supports the enduring nature of formative education on the use of tests and treatments.<sup>18</sup>

We recognise that creating the lists is only a first step. Translating these simple ‘Don’t lists’ into action is a much bigger challenge. Multiple experiments are springing up in the USA, particularly through a grant that funded local implementation (<http://www.choosingwisely.org/grantees/>) and in Canada through an early adopters collaborative (<http://www.choosingwiselycanada.org/>). Since these

initiatives are in early stages, the results of these experiments are not yet published.

## CHALLENGES

There are also some specific approaches that were seen as a threat that could undermine Choosing Wisely efforts. While it is possible that reducing the ordering of some unnecessary tests and treatments may reduce healthcare costs, portraying the programme as cost cutting can undermine both physician engagement and patient/public trust. Consistent with that message, Choosing Wisely should not be a government or payor-run programme that could be seen as a ‘rationing’ exercise. Furthermore, the Choosing Wisely recommendations should not be used to determine payment for individual services. While this approach may seem appealing to payors, it would be difficult to implement as the items on the list are not ‘never’ events but require clinical information usually not available to payors (like whether ‘red flags’ are present in low back pain). Additionally, such a ‘delisting’ approach would undermine physician support.

One of the challenges in the early efforts in the USA and Canada has been whether physician specialties are willing to put items on their lists that are specifically under their control. Some specialties tend to include items that tell primary care physicians what not to do rather than addressing overuse by their own specialty colleagues. Furthermore, some have criticised the early lists for failing to include procedures that generate revenue for the specialists.<sup>19</sup> Leaders in the specialty need to encourage their colleagues to focus on their own discipline and do the right thing by listing items that do not add value for patients.

Measuring the impact of Choosing Wisely efforts is complex and will require a variety of approaches (table 2). Clearly one assessment is whether physicians and health professionals are aware of Choosing Wisely and, more importantly, whether they are using the recommendations in their routine communication with patients. Since the campaign is still early in development with only 2 years of experience in the USA, measurement efforts are nascent. One recent survey of physicians in the USA demonstrated that >20% of them had heard of the CW campaign.<sup>20</sup>

Beyond attitudes, measures of change in ordering practices are being undertaken by a variety of healthcare systems in the USA and Canada. However, we acknowledge that there are multiple challenges in measuring progress on overuse of unnecessary care. First, it is more difficult in general to identify when a service was provided inappropriately because the definition of appropriateness often includes knowing about symptoms and physical exam findings often not included in electronic health records and administrative databases. Therefore, identification of clinically meaningful measures has been difficult and the measures that are routinely used are often those that can be conveniently derived from administrative sources rather than those that are the most important. Additionally, when we measure overuse, we tend to focus on specificity—choosing to err on the side of underestimating overuse. For both these reasons, we often do not have a good sense of the magnitude of overuse in clinical practice. Recognising the necessary complexity of evaluation efforts, an international collaborative working group on evaluation was created at this meeting. In addition, the Organisation for Economic Co-operation and Development, which provides measures of quality across multiple countries, is working with us to develop metrics that might be used to compare countries on specific measures of overuse and considering the development of potential cross-country metrics.

An additional major challenge is that of educating patients and the public. Launching a major public education campaign is a massive undertaking, yet educating patients must be part of this campaign. In North America, materials targeted to explaining common tests—“When you need them and when you don’t”—have been produced in English, French and Spanish and can be modified for use in other countries (<http://consumerhealthchoices.org/>).

## NEXT STEPS AND CONCLUSION

The elements and principles we have outlined can serve as a framework for other countries seeking to undertake similar efforts. Ultimately, this international collaboration will lead to studies of physician attitudes across countries and potential shared metrics of overuse. The challenges of both creating the campaign and, more importantly, implementing it are large but the campaign has gained support from physician groups in North America and now increasingly around the world. There are a burgeoning number of efforts to implement the campaign in clinical settings and to measure the impact. For an effort that only begun 2 years ago, this is encouraging uptake. A key goal of Choosing Wisely is to stimulate a conversation about overuse; it is clearly stimulating this conversation in many countries.

**Acknowledgements** This work has been funded by The Commonwealth Fund and the Canadian Institutes of Health Research.

**Collaborators** Additional members include Felicity Barclay; Dr Jako Burgers; Dr Cule Cucic; Dr Marcel Daniels; Ian Forde; Dr Suzanne Geerlings; Dr Manfred Gogol; Dr Margje Haverkamp; Alastair Henderson; Helen Howson; Tai Huynh; Dr Job Kievit; Dr David Klemperer; Dr Shunzo Koizumi; Dr Robyn Lindner; Dr Daniel Maughan; Karen McDonald; Dr Wilco Peul; Heleen Post; Dr Nicolas Rodondi; Dr John Santa; Rico Schoeler; Dr Henk Smid; Professor Terence Stephenson; Dr Hans Trier; Teus van Barneveld; Josine van der Kraan; Dr Sandra Ververo; Professor Cordula Wagner.

**Contributors** All authors participated in the conception and design of the article. WL led the drafting of the article, but all authors participated in critical revisions and granted final approval of the submitted version.

**Competing interests** None.

**Provenance and peer review** Not commissioned; internally peer reviewed.

## REFERENCES

- 1 Emanuel EJ, Fuchs VR. The perfect storm of overutilization. *JAMA* 2008;299:2789–91.
- 2 Institute of Medicine. *Crossing the quality chasm: a new health system for the 21st century*. Washington DC: National Academy Press, 2001.
- 3 Shekelle PG, Wachter RM, Pronovost PJ, *et al*. Making health care safer II: an updated critical analysis of the evidence for patient safety practices. *Evid Rep Technol Assess (Full Rep)* 2013;(211):1–945.
- 4 Shekelle PG, Pronovost PJ, Wachter RM, *et al*. The top patient safety strategies that can be encouraged for adoption now. *Ann Intern Med* 2013;158(5 Pt 2):365–8.
- 5 Institute of Medicine (US) Roundtable on Evidence-Based Medicine. In: Yong PL, Saunders RS, Olsen LA, eds. *The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary*. Washington (DC): National Academies Press (US); 2010. The National Academies.
- 6 Wennberg JE, Fisher ES, Skinner JS. Geography and the debate over Medicare reform. *Health Aff (Millwood)* 2002;Suppl Web Exclusives:W96–114.
- 7 Brody H. Medicine’s ethical responsibility for health care reform—the Top Five list. *N Engl J Med* 2010;362:283–5.
- 8 Cassel CK, Guest JA. Choosing wisely: helping physicians and patients make smart decisions about their care. *JAMA* 2012;307:1801–2.
- 9 Wolfson D, Santa J, Slass L. Engaging physicians and consumers in conversations about treatment overuse and waste: a short history of the choosing wisely campaign. *Acad Med* 2014;89:990–5.
- 10 Brody H. Talking with patients about cost containment. *J Gen Intern Med* 2014;29:5–6.
- 11 Fine B, Dhanoa D. Imaging appropriateness criteria: why Canadian family physicians should care. *Can Fam Physician* 2014;60:217–18.
- 12 Gliwa C, Pearson SD. Evidentiary rationales for the Choosing Wisely Top 5 lists. *JAMA* 2014;311:1443–4.
- 13 Grady D, Redberg RF, Mallon WK. How should top-five lists be developed?: what is the next step? *JAMA Intern Med* 2014;174:498–9.
- 14 Levinson W, Huynh T. Engaging physicians and patients in conversations about unnecessary tests and procedures: choosing Wisely Canada. *CMAJ* 2014;186:325–6.



- 15 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.
- 16 Berwick DM, Hackbarth AD. Eliminating waste in US health care. *JAMA* 2012;307:1513–16.
- 17 Keyhani S, Falk R, Howell EA, *et al.* Overuse and systems of care: a systematic review. *Med Care* 2013;51:503–8.
- 18 Sirovich BE, Lipner RS, Johnston M, *et al.* The association between residency training and internists' ability to practice conservatively. *JAMA Intern Med* 2014;174:1640–8.
- 19 Morden NE, Colla CH, Sequist TD, *et al.* Choosing wisely—the politics and economics of labeling low-value services. *N Engl J Med* 2014;370:589–92.
- 20 PerryUndem Research/Communication. Unnecessary Tests and Procedures In the Health Care System. What Physicians Say About The Problem, the Causes, and the Solutions: Results from a National Survey of Physicians. 2014. [http://www.choosingwisely.org/wp-content/uploads/2014/04/042814\\_Final-Choosing-Wisely-Survey-Report.pdf](http://www.choosingwisely.org/wp-content/uploads/2014/04/042814_Final-Choosing-Wisely-Survey-Report.pdf) (accessed 5 Sep 2014).

## 'Choosing Wisely': a growing international campaign

Wendy Levinson, Marjon Kallewaard, R Sacha Bhatia, Daniel Wolfson, Sam Shortt and Eve A Kerr

*BMJ Qual Saf* published online December 31, 2014

---

Updated information and services can be found at:

<http://qualitysafety.bmj.com/content/early/2014/12/31/bmjqs-2014-003821>

---

*These include:*

### **Supplementary Material**

Supplementary material can be found at:

<http://qualitysafety.bmj.com/content/suppl/2014/12/31/bmjqs-2014-003821.DC1.html>

### **References**

This article cites 15 articles, 2 of which you can access for free at:

<http://qualitysafety.bmj.com/content/early/2014/12/31/bmjqs-2014-003821#BIBL>

### **Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

---

## **Notes**

To request permissions go to:

<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:

<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:

<http://group.bmj.com/subscribe/>