

FEATURE

SHARED DECISION MAKING

Can doctors reduce harmful medical overuse worldwide?

A US campaign to help doctors decide which interventions are often unnecessary and wasteful is catching on worldwide, reports **Richard Hurley**

Richard Hurley *deputy magazine editor*

The BMJ, London, UK

The Choosing Wisely campaign began in the United States in 2012, founded by the American Board of Internal Medicine (ABIM) Foundation. It helps specialists to agree lists of interventions that should be used with more caution because they are often unnecessary and therefore wasteful and potentially harmful (see box 1 for examples). More than 60 US specialist societies will have created lists by the end of 2014.

One of many interventions flagged as a source of potentially harmful overdiagnosis and overtreatment is medical imaging soon after the onset of low back pain in the absence of other red flag signs or symptoms.¹ Doctors reached this conclusion because evidence shows that most people get better within about a month.² Patients who have radiography, computed tomography, or magnetic resonance imaging are likely, however, to end up having more surgery at more cost while recovering in about the same time on average as patients who have no imaging.

Hence the first statement on the American Academy of Family Physicians' Choosing Wisely list is, "Don't do imaging for low back pain within the first six weeks, unless red flags are present."³

Others cautions on the academy's list include, "Don't routinely prescribe antibiotics for acute mild-to-moderate sinusitis unless symptoms last for seven or more days, or symptoms worsen after initial clinical improvement"; "Don't schedule elective, non-medically indicated inductions of labor or Cesarean deliveries before 39 weeks, 0 days gestational age"; and "Don't screen adolescents for scoliosis."

As well as engaging doctors, Choosing Wisely runs public relations campaigns to communicate to patients that more and costlier medicine is not always better. In the US the campaign partners with the consumer advocate organisation Consumer Reports (<http://consumerhealthchoices.org>).

This two pronged approach aims to promote a culture change by facilitating "dialogue between specialists, GPs, and the public about tests, drugs, and procedures," according to Wendy

Levinson, professor at the University of Toronto's school of medicine and the chair of newly launched Choosing Wisely Canada.

Levinson was speaking at a Choosing Wisely meeting in Amsterdam this month that sought to capitalise on the international interest in the campaign. Twelve countries were represented, including Australia, the Netherlands, Japan, Germany, Italy, and the UK, each developing, or contemplating developing, campaigns of their own.

A key message was that new campaigns should focus on encouraging better care rather than cutting costs, even though savings may also result. "Quality, safety, waste, harm" was the mantra—and avoid mentioning cost.

Winning over doctors

A survey this year of 600 doctors for the ABIM Foundation found that a staggering 53% would order a hypothetical test that they knew to be unnecessary if a patient insisted.⁴ Doctors order unnecessary interventions for a multitude of other reasons, including fear of malpractice suits, to appear to be doing something rather than nothing, to try to demonstrate thoroughness, and because of how they were taught. Encouragingly, 66% of the 600 thought that they had a "great deal of responsibility" to ensure that their patients avoid unnecessary tests and procedures.

Compare this with the results of a survey of 2500 physicians published in 2013 in *JAMA*: only 36% responded that practising physicians have "major responsibility" for reducing healthcare costs.⁵

Sam Shortt, vice-chair of Choosing Wisely Canada, agreed that to get doctors' support Choosing Wisely must focus on reducing harm to patients rather than on cost cutting: "The most intimate thing is caring for individual patients. There's no physician who does not relate to that."

Box 1: Examples of commonly overused interventions discussed at the meeting

- Imaging for low back pain
- Imaging for headaches
- Antibiotics for upper respiratory tract infections
- Dual energy x ray absorptiometry
- Preoperative testing in low risk patients (electrocardiography, stress electrocardiography, chest radiography)
- Antipsychotics in older patients
- Artificial nutrition in patients with advanced dementia or advanced cancer
- Proton pump inhibitors in gastro-oesophageal reflux disease
- Urinary catheter placement
- Cardiac imaging in low risk patients
- Induction of labour
- Cancer screening (cervical smear test, CA-125 antigen for ovarian cancer, prostate specific antigen screening)

Tapping into notions of professionalism is crucial. “We want to advance the notion of professionalism to improve healthcare. We have regulation and the market, but they can’t take care when no one’s looking,” explained Daniel Wolfson, executive vice president and chief operating officer at the ABIM Foundation. Choosing Wisely aligns with several aspects of a US physician charter agreed by several specialist societies in the US that seeks to set out a vision of modern medical professionalism.⁶

Doctors’ “ownership” of the campaign—that is, a bottom-up approach, with doctors deciding what should be included—means that they are less likely to see the lists as diktat. And doctors don’t want to have to implement, or be thought to be implementing, governments’ cost saving measures.

Winning over the public

“In Canada we have a single payer system and so we are more at risk of being seen as a government cost cutting scheme. We’re funded by the Ontario government, but they have to be in the background—they can’t take the credit,” said Levinson. “It’s not what you say so much as who says it,” agreed Wolfson.

The concept of healthcare rationing is anathema to the US public. “A Top Five list also has the advantage that if we restrict ourselves to the most egregious causes of waste, we can demonstrate to a skeptical public that we are genuinely protecting patients’ interests and not simply ‘rationing’ health care, regardless of the benefit, for cost-cutting purposes,” wrote Howard Brody, professor of family medicine and director of the Institute for the Medical Humanities at the University of Texas, in 2010, when he suggested the idea of creating lists of overused interventions.⁷

“Consumers are suspicious of cost savings but they don’t like waste. Government doesn’t like anything associated with waste,” John Santa, director of the Health Ratings Center at Consumer Reports, said.

And when the issue is framed that 30 000 Medicare users die each year from harm associated with overly aggressive procedures, and that the medical profession is itself identifying the implicated interventions, patients are interested too.⁸

A communications company helps get widespread newspaper and television coverage for the campaign, which was even featured in the fashion magazine *Vogue*.⁹ “The media are incredibly interested that doctors are ‘switching to the other side,’” said Santa.

The campaign also engages the public through media partnerships. The independent and non-profit making Consumer Reports reaches some 20 million people in the US. It has

invested \$2m (£1.2m; €1.5m) in publicising Choosing Wisely and has allowed its iconic brand to be used in materials available for free to the US public. Its audience tends to be the savvy, educated middle classes, however. “I worry that the people who understand this are those who consume the least care,” said Shortt, “In Canada, six in 10 people don’t have the literacy needed to take part in their own care.”

In the US, Consumer Reports partners with other groups to try to get the message to the most marginalised populations. Santa gave the example of reaching Hispanic workers by partnering with the Spanish language health information company *Hola Doctor*, part of the Univision media network.¹⁰ But he warned that the message of overuse is particularly unpopular among black Americans.

Media campaigns have their work cut out fighting a “culture war” that more and new medicine is always better. For example, industry spends more than \$100m a year advertising testosterone supplements, Santa said, while Choosing Wisely publicises the American Urological Association’s list, which includes “Don’t prescribe testosterone to men with erectile dysfunction who have normal testosterone levels.”

Counteracting the huge promotion by industry is a tall order. One defence might be the promotion of five questions that patients should ask their doctor before having any intervention as a prompt to start a conversation on appropriate care (box 2).¹¹ Some clinics already display this as a poster on their walls.

Canada has no equivalent to Consumer Reports, so Choosing Wisely Canada has partnered with organisations such as CARP, which campaigns for the interests of older people, and the Canadian Automobile Association, to disseminate the message of overuse.

Choosing Wisely Canada has developed television infomercials that have also been played at sports tournaments to publicise the campaign.¹² And it is currently doing the social media rounds with a video parodying the pop song “Happy” by Pharrell Williams.¹³

How it works

“One of the successes is the broad physician engagement because it feels organic,” said Sacha Bhatia, evaluation lead for the Canadian campaign. “If you create a framework you might lose that because it feels like it’s imposed on them.”

This organic, bottom-up nature depends on support from specialty societies, and that isn’t guaranteed. Some societies were less happy to talk about harms in general than others, the Amsterdam meeting heard. Sometimes societies’ recommendations were in conflict, for example, the urologists

Box 2: Choosing Wisely's five questions for patients to ask doctors¹

Do I really need this test or procedure? Medical tests help you and your healthcare provider decide how to treat a problem. And medical procedures help to actually treat it

What are the risks? Ask if there will be side effects, the chances of getting results that aren't accurate, and whether that leads to more testing or another procedure

Are there simpler, safer options? Sometimes all you need to do is make lifestyle changes, such as eating healthier foods or exercising more

What happens if I don't do anything? Ask if your condition might get worse — or better — if you don't have the test or procedure right away

How much does it cost? Ask if there are less expensive tests, treatments or procedures, what your insurance may cover, and about generic drugs instead of brand name drugs

and the family doctors had different views on prostate specific antigen testing that had to be resolved. And sometimes lists were “tepid”—for example, including interventions that were outside the specialty's direct control. Anecdotally, the meeting heard, it seems to be surgeons' societies that are least keen on Choosing Wisely, perhaps because of a dearth of evidence on which to base their lists.

To sign up to Choosing Wisely, societies must agree to follow operating principles. They are then free to draw up lists of common interventions within their control for which evidence indicates overuse. The process should be documented and publicly available. Lists are independently reviewed, and recommendations must be reassessed annually, or sooner if new evidence becomes available.

Should other professionals, such as pharmacists and nurses, be involved? Wolfson said, “If I had to do it again I'd tell the critical care society to involve critical care nurses in the development of its list. We want team based care and team based recommendations.”

“It's not just about evidence it's a judgment call. Without a transparent process the lists are jeopardised,” said Santa.

But does it work?

But can Choosing Wisely achieve its stated aims—that is, does it reduce harm, increase efficiency, and—but don't mention it—reduce healthcare costs? We don't know: formal evaluation of the campaign is very much in its infancy.

Various attitudinal measures can be investigated, such as physician and patient awareness and satisfaction. Ordering of interventions by physicians—for example, lower back imaging—is a measure that may reflect an effect of the Choosing Wisely campaign, but there are complications surrounding what clinical data are collected and proxy use of administrative data. Where available, prescribing data could also help. But for comparisons among countries, indicators would have to be agreed and robustly measured, and this may come with substantial cost.

Direct cost savings may be seen in the reduction of overused tests and treatments. Indirect savings from fewer false positive results and adverse events and less overtreatment are far harder to estimate.

Shortt summed it up, “We know it's the right thing to do. The grassroots may not care about evaluation at all.”

“Is the outcome the lists or the cultural shift? If the latter then it's the process that we need to focus on,” said Wolfson. “How do we ensure a cohesive methodological framework for the process to make sure doctors get it? Otherwise doctors are just left with these lists.”

Paul Hodgkin, a former UK general practitioner and a member of *The BMJ*'s patient panel, who was not in Amsterdam but told

The BMJ, “Patients being involved in this campaign is a good thing. It's always good to question when someone's going to do something to you or give you a drug.

“People have magical thinking around therapies and investigations. We all do, especially patients faced by death or the fear of death. That's why shared decision making is so important.”

Choosing Wisely seeks to make doctors and patients more aware of harmful and wasteful unnecessary care, and the simple yet powerful ideology of the campaign is spreading.

The meeting was keen to emphasise that the point of Choosing Wisely is shared decision making—that is, better conversations among doctors and patients. “The lists are not important—they're to make you think, ‘What will I learn from this test?’ If it isn't enough, don't do it.” said Wolfson.

Competing interests: I have read and understood BMJ policy on declaration of interests and have no relevant interests to declare.

Provenance and peer review: Commissioned; not externally peer reviewed.

- 1 Choosing Wisely. Imaging tests for lower-back pain. www.choosingwisely.org/doctor-patient-lists/imaging-tests-for-lower-back-pain/.
- 2 Allan MG, Spooner GR, Ivers N. X-ray scans for nonspecific low back pain: a nonspecific pain? *Can Fam Physician* 2012;58:275.
- 3 American Academy of Family Physicians. Fifteen things physicians and patients should question. www.choosingwisely.org/doctor-patient-lists/american-academy-of-family-physicians/
- 4 Choosing Wisely. Unnecessary tests and procedures in the health care system. 2014. www.choosingwisely.org/wp-content/uploads/2014/04/042814_Final-Choosing-Wisely-Survey-Report.pdf.
- 5 Tilburt JC, Wynia MK, Sheeler RD, Thorsteinsdottir B, James KM, Egginton JS, et al. Views of US physicians about controlling health care costs. *JAMA* 2013;310:380-9.
- 6 American Board of Internal Medicine, American College of Physicians-American Society of Internal Medicine, European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter *Ann Intern Med* 2002;136:243-6.
- 7 Brody H. Medicine's ethical responsibility for health care reform—the top five list. *N Engl J Med* 2010;362:283-5.
- 8 Lenzer J. Unnecessary care: are doctors in denial and is profit driven healthcare to blame? *BMJ* 2012;345:e6230.
- 9 Dunn J. Inside scan. *Vogue* 2012 Nov;204-5. www.vogue.com/magazine/article/inside-scan-are-common-medical-tests-and-procedures-always-necessary/
- 10 Choosing Wisely En Español. www.choosingwisely.org/updates-from-the-field/choosing-wisely-en-espanol/.
- 11 Choosing Wisely. Five questions to ask your doctor before you get any test, treatment, or procedure. <http://consumerhealthchoices.org/wp-content/uploads/2013/06/CWPPosterGeneralSmall.pdf>.
- 12 Choosing Wisely Canada. Campaign videos. www.choosingwiselycanada.org/resources/campaign-videos/.
- 13 Choosing Wisely. Parody of Pharrell Williams song Happy. <https://www.youtube.com/watch?v=FqQ-JuRDk8>
- 14 National Institute for Health and Care Excellence. Savings and productivity collection. <http://www.nice.org.uk/about/What-we-do/Our-Programmes/Savings-And-Productivity-Collection>
- 15 NHS Wales. Achieving prudent healthcare in NHS Wales. 2014. www.1000livesplus.wales.nhs.uk/prudent-healthcare.
- 16 Van 't Hooft J1, Opmeer BC, Teune M, Versluis L, Mol BW. Costs and health outcomes of effectiveness studies in obstetrics: a budget impact analysis of 8 obstetric effectiveness studies. [In Dutch]. *Ned Tijdschr Geneesk* 2013;157:A6287.
- 17 Smith R. The case for slow medicine, 17 December 2012. <http://blogs.bmj.com/bmj/2012/12/17/richard-smith-the-case-for-slow-medicine/>.

Cite this as: *BMJ* 2014;348:g4289

© BMJ Publishing Group Ltd 2014

What are other countries doing?

Choosing Wisely is inspiring interest beyond North America. At the International Forum on Quality and Safety in Healthcare in Paris in March 2014 Wolfson asked delegates attending his session whether any were interested in implementing Choosing Wisely, and he was overwhelmed with responses from Haiti, Spain, Singapore, India, Brazil, and elsewhere. "Why don't I know about you guys?" he asked. "It's happening because you want to speak to physicians and patients with a different kind of trust," referring to the culture change towards fully informed shared decision making.

Those attending the Amsterdam meeting spoke about their countries' work on Choosing Wisely. Terence Stephenson, chairman elect of the Academy of Medical Royal Colleges, the umbrella body for 21 specialist societies in the United Kingdom, pointed out that in England and Wales the rational delivery of healthcare is already guided by the state funded National Institute for Health and Care Excellence (NICE), which offers evidence based recommendations on tests and treatments. NICE also has a "do not do" list of interventions such as those identified by Choosing Wisely that cause harm and waste.¹⁴ (Recommendation 396 is "Do not offer X-ray of the lumbar spine for the management of non-specific low back pain.") But many medical royal colleges have tentatively expressed interest in Choosing Wisely, and NHS Wales prioritised moves towards "prudent healthcare" this year and is planning to incorporate the Choosing Wisely campaign within this work.¹⁵

The Netherlands already has an established campaign called Wise Choices. It was launched by the Dutch Association of Medical Specialists and the Netherlands Organization for Health Research and Development in October 2012, and 13 specialty societies are involved. Assessment of practice variation and evaluation of the effectiveness of the campaign are high on the agenda. A study estimated potential cost savings of €9.6m a year from a single investment of €3.1m in rationalising obstetric care.¹⁶

Germany is still at the planning stage. The Association of the Scientific Medical Societies, which includes 165 German medical societies and drafts evidence based guidelines, may be best placed to coordinate the campaign.

"Doing more does not mean doing better" is the name of Italy's campaign, launched at the end of 2012, which forms part of the country's "slow medicine" movement, advocating "measured, respectful, and equitable care." Former editor of *The BMJ* Richard Smith wrote of Italy's campaign that "like slow food and slow lovemaking [it] is the best kind of medicine for the 21st century."¹⁷ The campaign has already published several lists decided by specialist societies, and consumer organisations such as Altroconsumo are collaborating.

Japan, which has some fee for service payment, is at an early stage of planning a Choosing Wisely campaign, and it is hoped that the Japan chapter of the American College of Physicians will lead.

In Australia, NPS MedicineWise, a non-profit organisation funded by the government health department to promote quality in healthcare, is planning to implement Choosing Wisely. The National Health Committee does health technology assessments for New Zealand. It is focusing on applying the concept of Choosing Wisely to chronic obstructive pulmonary disease and ischaemic heart disease.

In Denmark, which has well implemented evidence based guidelines, medical societies have expressed little enthusiasm for Choosing Wisely. Switzerland has its first list of interventions to avoid in ambulatory care. Hospital care is the next target.