



ANALYSIS

Reducing overuse in healthcare: advancing Choosing Wisely

New approaches are needed to advance the aims of Choosing Wisely and reduce overuse in practice, argue **Karen Born and colleagues**

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The threats of overuse in healthcare are increasingly well characterised, affecting patients, providers, and health systems.¹ Estimates from Canada and the United States show that up to 30% of all medical care adds no value and might cause harm.² From the global threat of antimicrobial resistance to side effects from unnecessary tests or treatments, harms associated with overuse take many forms. The complexity of the problem, combined with heterogeneity and fragmentation in the body of research underpinning our understanding, has meant that solutions to overuse in healthcare have so far been elusive.³

Launched in 2012 in the US, Choosing Wisely was intended to galvanise doctors to lead on this issue by establishing specialty specific recommendations on overused tests, treatments, and procedures. In the seven years since, the movement has expanded to more than 20 countries. As the campaign matures, questions are beginning to arise about the value of developing and disseminating such lists, whether these efforts are sufficient to make progress in tackling overuse, and what else can be done.

In many countries the initial goal of Choosing Wisely was to raise awareness about overuse and to draw attention to the rationale for tackling it. Awareness is the first step, but influencing the established practice of doctors requires much more than a voluntary effort of specialty societies. Overuse is a multifactorial problem situated at the intersection of doctor habits, behaviours, and training, compounded by public and patient expectations and demands. A considered and evidence based approach is needed.⁴

Supporting doctors to reduce overuse

A key part of Choosing Wisely has been specialty societies putting together lists of recommendations to disseminate among their peers.⁵ Societies have autonomy to do this independently, resulting in considerable heterogeneity in scope. Some lists have been criticised for lacking ambition, omitting tests or procedures that make money, and deliberately including recommendations that target overuse beyond their own specialty.⁶ Nevertheless,

leveraging societies' credibility has helped to raise doctors' awareness of overuse. But evidence indicates that releasing recommendations and stimulating awareness are, by themselves, insufficient to drive practice change, necessitating robust implementation strategies sensitive to the complexities of different practice environments.⁷

Doctors are not the only clinicians who contribute to overuse. Most countries' Choosing Wisely campaigns have partnered with other clinicians, such as nurses, dentists, and pharmacists, to make the lists of recommendations. Ways to engage multiple health professionals in interventions to reduce overuse are emerging from the literature; for example, a medical directive at a Canadian hospital to empower nurses to remove unnecessary urinary catheters on an inpatient medical unit led to a sustained decrease in catheter use per patient day (8.5% versus 14.8%) as well as reduced catheter associated urinary tract infections (0.2 versus 1.5 per patient day).⁸ Successfully reducing overuse necessitates collaboration between clinicians.

Changing practice

The term "de-implementation" is increasingly being used to describe a move away from ineffective or harmful medical practices.⁹ Alongside the growth of Choosing Wisely, there has been a groundswell of innovative de-implementation efforts across a wide range of settings associated with different campaigns (see supplementary table 1). Effective approaches have multiple components targeting both doctor and patient drivers of overuse including physician education, audit and feedback, patient education, and redesign of routine systems.¹⁰

Most studies describing robust interventions to reduce overuse have been set in hospitals, enabling clinicians to leverage existing support for quality improvement and patient safety efforts, alongside clinical decision support. Simply asking doctors to order tests parsimoniously will have limited effect given administrative barriers to change.¹¹ Drivers outside of

doctors' control can embed overuse in routine care; for example, daily standing orders or bundled laboratory panels can drive unnecessary blood tests. De-implementation research shows that we need top-down changes alongside grassroots efforts targeting different groups and organisational levels, with medical practice culture playing a vital role.^{12 13} Data are a powerful tool among these interventions, facilitating audit of practice patterns and providing feedback to motivate doctors and systems to change, but access to timely and meaningful measures of individual, organisational, and system performance remains a stubborn challenge.¹⁴

Implementing Choosing Wisely in the community offers additional challenges, as primary care doctors tend to lack the technical and data support available in hospital settings. Audit and feedback combined with “academic detailing”—a form of outreach education for healthcare professionals—have been successful in primary care, particularly in Australia. These programmes can be hard to introduce because of resource intensive components, such as one-to-one peer coaching. We need more innovative and cost effective approaches to changing primary care.

Nationwide Choosing Wisely efforts are also emerging, in countries such as India and the Netherlands. Large scale use has developed as the campaign matures, offering a way to realise system level changes. But this does shift Choosing Wisely away from its grassroots origins. System level changes could lead to tensions between clinicians and society partners relating to professional autonomy. They might also raise questions about whether these efforts are motivated to cut costs rather than improve quality and safety.

Educating and engaging the public

Central to tackling overuse is understanding and incorporating patient and public views. A core principle of Choosing Wisely is encouraging conversations with patients about whether a test or treatment is necessary. Campaigns in many countries try to deliver a key public facing message that “more is not always better.” Several countries have made posters for clinical spaces with this message, aimed at influencing public attitudes and increasing knowledge and understanding (fig 1) Consumer organisations, such as Altroconsumo in Italy and Consumer Reports in the US, have partnered with campaigns to hone or co-create messaging through focus groups and other methods.

Choosing Wisely presents itself as an initiative to facilitate evidence informed conversation between doctors and patients. This requires a change to practice in some cases, and many doctors see this as unrealistic given that clinical encounters are so brief and perceive such conversations to be challenging, confrontational, and time consuming.^{2 15} Doctor surveys show that the perception of whether patients will accept evidence against unnecessary tests or treatments, rather than patient demand, drives overuse.¹⁶ Tackling this disconnect and avoiding overuse requires shared decision making.¹⁷

To encourage and stimulate these important discussions, campaigns around the world have developed a generic set of questions for patients or caregivers to ask doctors. This tool has not been evaluated to be generalisable across healthcare settings and countries. Patient experience of these questions has not been compared between countries but would generate valuable cross-national insights on tools to advance conversations about overuse (box 1).

Box 1: Choosing Wisely questions

Choosing Wisely campaigns in Canada, New Zealand, England, and Australia have adapted a set of questions developed by Consumer Reports, a non-profit organisation in the US. These questions are for patients to ask their doctors about unnecessary tests and treatments. Question 5 is for the US only.

- 1 Do I really need this test or procedure?
- 2 What are the risks?
- 3 Are there simpler, safer options?
- 4 What happens if I don't do anything?
- 5 How much does it cost?

De-implementation research priorities

The spread of Choosing Wisely campaigns across diverse health system and country contexts offers a unique natural experiment. Issuing recommendations alone is insufficient to change practice; the challenges of implementing evidence into practice are well known. A wealth of strategies exists to fill the knowledge-to-action gap, yet most of these strategies have been designed for implementation, rather than de-implementation.¹⁸ What's the difference? Psychological biases, such as confirmation bias and loss aversion, strongly influence healthcare professionals and patients, making the action of stopping a practice feel difficult compared with the relative ease of implementing new practices.¹⁹ Mitigating and managing psychology and emotions related to patient expectations and doctors' perceptions of such expectations make patient engagement a valuable tool in reducing overuse.

Although doctor led efforts to reduce overuse have the advantage of being credible to peers, doctors often lack experience to evaluate the barriers to change. Partnering with researchers offers an opportunity to study de-implementation with rigorous methods so that learning can be generalised. Many settings lack the data to measure baseline rates of a practice and to assess change. Many of the Choosing Wisely recommendations are clinically nuanced, and data systems lack the precision to measure accurately. Other research challenges include the lack of metrics of sustained reduction of overuse, as most intervention studies focus on a brief period after the change, and commonly providers revert to old habits and behaviours in the absence of support and resources for change. Medical practice culture is recognised as an important driver of change, but little is known about the most effective strategies to influence culture and change patient expectations.

Conclusions

The effectiveness and durability of Choosing Wisely is shown by its rapid spread and ability to inspire innovative, clinician led approaches to reduce overuse. The next challenge is to strike a delicate balance, showing that the campaign, and indeed global movement, can motivate and maintain changes at the levels of practice and health systems while sustaining doctor led efforts to influence medical and public culture that more is not always better.

Key messages

Choosing Wisely originated in the United States and is now a global movement to reduce overuse in healthcare

Campaigns raise doctor and public awareness about overuse by suggesting "things physicians and patients should question"

Complex cultural, system, and structural barriers prevent recommendations being put into practice

Implementation efforts exist at the health system, physician, and patient level

Research and evaluation are needed to assess impact and to define future strategies for campaigns to continue to advance their aims

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Figure



Fig 1 Posters for Choosing Wisely from Brazil, New Zealand, Switzerland, and Canada