CHOOSING WISELY AOTEAROA NEW ZEALAND

BEHAVIOUR CHANGE TOOLKIT: INITIATIVES TO CHANGE HEALTH PROFESSIONAL BEHAVIOUR

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Behaviour change toolkit: initiatives to change health professional behaviour

1 Choosing Wisely

Choosing Wisely is an international campaign that promotes a culture where low value and inappropriate clinical interventions are avoided, and patients and health professionals have well-informed conversations about treatment options, leading to better decisions and outcomes. Just because tests and treatments are available does not mean we should use them all the time. Some tests, treatments and procedures have side effects – some cause harm. Choosing Wisely Aotearoa New Zealand supports reducing unnecessary tests, treatment and procedures in healthcare.

2 Purpose of this guide

Choosing Wisely initiatives to reduce low value (or harmful) care frequently aim to modify the behaviour of health professionals – for example, by encouraging health professionals to think twice before ordering a particular test or recommending certain treatments. There is a wide range of tools available to influence health professional behaviour, and it can be difficult to know where to start or which approach may be most effective.

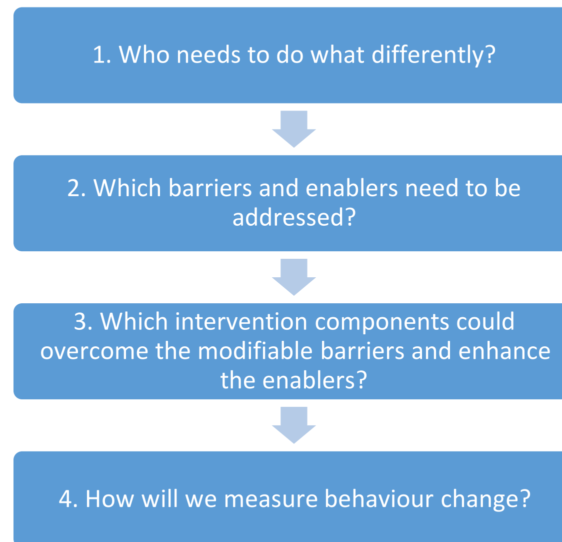
The purpose of this guide is to describe briefly the range of behaviour change strategies that hospitals, District Health Boards, Primary Health Organisations and others may wish to consider, when developing a Choosing Wisely initiative to reduce unnecessary care in their service. This guide also provides a list of resources offering more detailed guidance and examples.

3 Key messages

- Behaviour change initiatives need to be based on an understanding of the problem you wish to change, and reasons for the current behaviour.
- Drivers for behaviour generally fit into the categories of: capability, opportunity or motivation.
- There are many different types of interventions to change behaviour, many more than just education, awareness-raising or “nudge” techniques.
- Successful behaviour change interventions need to be matched to the specific drivers of the behaviour in the particular setting you are trying to change.
- Multifaceted interventions might be more effective than single strategies, especially if tailored to the barriers you have identified.

A stepwise approach to designing successful behaviour change initiatives for your Choosing Wisely campaign (Figure 1) involves thinking about who needs to do what differently, what barriers and enablers need to be addressed and which interventions will best address those barriers and enablers.

Figure 1 - A stepwise approach to designing health professional behaviour change interventions



Source: Adapted from French et al (2012)[1]

4 Understanding the current behaviour

For a given clinical practice you wish to change, understanding the reasons for the current practitioner behaviour is an essential first step. Assumptions about why health professionals act the way they do may be wrong. Interventions that are based on an incorrect or incomplete understanding of why health professionals behave the way they do, will not work well. For example, often education or awareness campaigns are used to change behaviour, which are based on the assumption that a lack of knowledge is the main driver for the current behaviour. This is not always the case.

It is important to not confuse the clinical problem (what outcome are we trying to achieve?) with the behavioural problem (why is the behaviour that causes the evidence-practice gap happening?). Answering the latter question requires understanding the roles the various people (including their perspectives, beliefs, skills and assumptions) and structures involved have in reinforcing the status quo.

There are many reasons why health professionals behave in a particular way. Michie and colleagues have drawn upon multiple psychological theories of human behaviour to list the potential categories of barriers to adopting evidence-based practice (Figure 1 & Table 1).

Figure 2 - Drivers/barriers for health professional behaviour

Source: Michie (2005), adapted by French et al[2]

You will see from Table 1 that these drivers are somewhat more complex than just a "lack of knowledge". There has also been a surge in interest recently in behavioural economics, and specifically the concept of 'nudging'. Nudging aims to change behaviour by making "the right choice the easy choice", through manipulating small environmental cues or harnessing social norms. But nudge approaches only focus on some of the factors that drive behaviour, and may not adequately harness the potential impact of, for example, legislative or economic drivers, or the role of conscious and reflective aspects of decision making. Understanding the most important drivers in your setting for the behaviour you wish to change as part of your Choosing Wisely initiative will help you select the most effective behaviour change tools.

Table 1 - Categories of drivers/barriers for health professional behaviour & questions to ask

Category of barrier/driver	Questions to ask
Knowledge *Do I know what I should do?*	Do they know about the evidence/ recommendation? What do they think the evidence/ recommendation says? Do they know why they should be doing x?
Skills *Can I perform the task?*	Do they know how to do x? How easy/difficult is performing x to the required standard in the required context?

Social/Professional Role and Identity *Do I think it is my job to do it?*	Do they think guidelines should determine their behaviour? Is doing x compatible or in conflict with professional standards/identity? (prompts: moral issues, limits to autonomy) Would this be true for all professional groups involved?
Beliefs about Capabilities *Do I think it is important?*	How difficult or easy is it for them to do (and maintain) x? What problems have they encountered? How confident are they that they can do x despite difficulties? How well equipped/comfortable do they feel to do x?
Optimism *When I do this, do I think the outcome will be positive?*	
Beliefs about consequences *Do I believe this is a good/meaningful thing to do?*	What do they think will happen if they do x? (for self, patients, colleagues, organisation; positive/negative, short and long term) What do they think will happen if they do not do x? Do benefits of doing x outweigh the costs? Does the evidence suggest that doing x is a good thing?
Reinforcement *Am I encouraged to do it?*	
Intentions *Do I intend to do it?*	
Goals *Do I have an idea of what success looks like?*	How much do they want to/ feel they need to do x? Are there other things they want to do/achieve that might interfere with x? Does the guideline conflict with others? Are there incentives to do x?
Memory, Attention and Decision Processes *Can I remember to do the task at the right time?*	Is x something they usually do? How much attention will they have to pay to do x? Will they remember to do x? How? Might they decide not to do x? Why? (eg competing tasks, time constraints)
Environmental Context and Resources *Does my environment support me doing it?*	To what extent do physical or resource factors facilitate or hinder x? Are there competing tasks and time constraints? Are the necessary resources available to those expected to undertake x?

Social influences *Am I socially influenced to (not) do it?*	To what extent do social influences facilitate or hinder x? (peers, managers, other professional groups, patients, relatives) Will they observe others doing x (i.e. have role models)?
Emotion *Do I have an emotional response to it?*	Does doing x evoke an emotional response? If so, what? To what extent do emotional factors facilitate or hinder x? How does emotion affect x?
Behavioural regulation *Do I plan to do it?*	

Source: Michie et al (2005)[3]

All of the drivers for behaviour listed in Table 1 can be summarised into three categories[4]:

1. *Capability:* psychological or physical ability to enact behaviour
2. *Opportunity:* physical and social environment that enables behaviour
3. *Motivation:* reflective and automatic mechanisms that activate or inhibit behaviour

All three of these aspects need to be considered when seeking to change behaviour. The physical and mental ability to do something is insufficient without both the motivation to act and an environment that supports (or at least does not inhibit) the behaviour in question.

5 What types of behaviour change tools are there?

There are many techniques to consider when thinking about ways to change health professional behaviour. Table 3 lists the range of behaviour change strategies that could be useful. All of these strategies can be effective if well matched to the driver of the behaviour in your setting, and all of these strategies can be ineffective if they do not match the barriers/drivers for the behaviour in your setting. **The most important thing is to select a strategy based on a clear rationale and understanding of the key drivers of the behaviour in your setting.**

Table 2 - Types of behaviour change interventions

Interventions	Definition	Examples
Education	Increasing knowledge or understanding	Audit and feedback to doctors of antibiotic prescribing rates
Persuasion	Using communication to induce positive or negative feelings or stimulate action	Using imagery to motivate responsible use of scarce health resources

Incentivisation	Creating expectation of reward	Prizes for wards/departments which achieve targets for reduction in unnecessary care
Coercion	Creating expectation of punishment or cost	Departments charged higher rates for tests if ordered outside of recommendations.
Training	Imparting skills	Upskilling doctors in counselling patients about why tests are not needed
Restriction	Using rules to reduce the opportunity to engage in the target behaviour (or to increase the target behaviour by reducing the opportunity to engage in competing behaviours)	Restricting which types of clinicians can order certain tests.
Environmental restructuring	Changing the physical or social context	Providing on-screen prompts for GPs to verify patient meets criteria, changing laboratory request forms.
Modelling	Providing an example for people to aspire to or imitate	Using senior clinicians/College presidents to model behaviour
Enablement	Increasing means/reducing barriers to increase capability or opportunity[5]	Addressing time constraints, frequency of team staff turnover etc
Policies		
Communication/ marketing	Using print, electronic, telephonic or broadcast media	Posters or staff email campaigns to promote CW recommendations
Guidelines	Creating documents that recommend or mandate practice. This includes all changes to service provision	Producing and disseminating treatment protocols
Fiscal	Using the tax system to reduce or increase the financial cost	Using capitation funding to reimburse GPs instead of fee for service.
Regulation	Establishing rules or principles of behaviour or practice	Rules around which providers can prescribe certain medications

Legislation	Making or changing laws	Restricting the provision of certain treatments
Environmental/ social planning	Designing and/or controlling the physical or social environment	Initiatives to change culture around overtreatment and "just in case" care
Service provision	Delivering a service	Implementing a CW service in your hospital to promote, support and monitor initiatives.

Source: Adapted from Michie S et al (2011) [6], with examples tailored to Choosing Wisely

6 Selecting the right behaviour change tools

Once you have identified why a problem exists, including the behaviours and attitudes that drive it, your health service will be in a good position to choose meaningful interventions to address the issue.

Table 3 below outlines an example of how you might match behaviour change tools to the key drivers/barriers for behaviour that you have identified in your health service. For example, if the issue was a belief that an individual's performance was already of a high standard (e.g. "I don't do that many blood tests"), then further education about the need to reduce blood tests taken would be of little impact. However, an audit and feedback to show that performance was not at the required level would be more likely to create change.

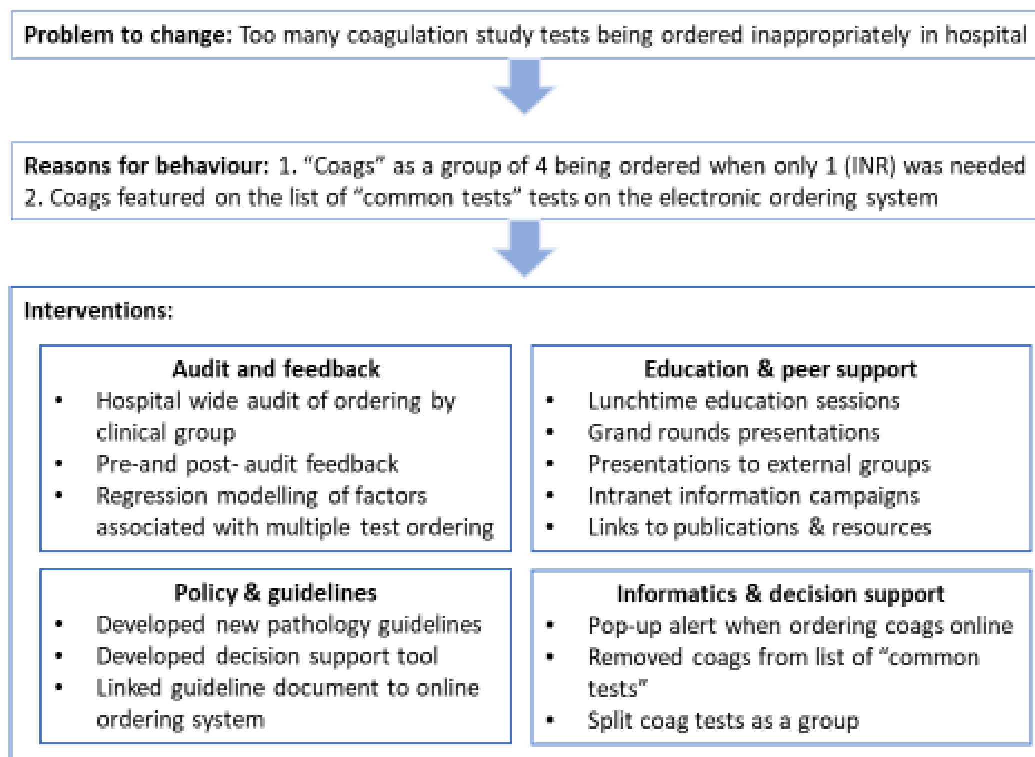
Table 3 - Example of how to match barriers with interventions

Barrier is…	Consider using….
Lack of knowledge	Education sessions Decision aids
Perception/reality mismatch	Audit and feedback Reminders
Lack of motivation	Incentives/sanctions
Beliefs/attitudes	Peer influence Opinion leaders
Systems of care	Process redesign

Source: Adapted from French[7]

You may find that there are multiple drivers of the behaviour that you want to influence, so you may wish to include multiple components in your behaviour change interventions. Figure 2 describes an example of a Choosing Wisely initiative from Austin Health in Australia, where multiple components were used to change practitioner behaviour around the ordering of coagulation blood tests.

Figure 2: A Choosing Wisely initiative to reduce coagulation tests at Austin Health, Victoria, Australia



Source: Adapted from Jammali-Blasi (2017)[8]

7 Pros and cons for specific types of interventions

This section summarises some of the advantages and disadvantages of the most commonly used behaviour change interventions. This does not mean these are the only, or the most effective, options for you to use. Because these techniques have been used more frequently, there is an increased body of research evidence to guide their use.

Audit and feedback

- Audit and feedback can have small to moderate effects on changing clinician behaviour[10].
- There is little clear evidence on what form of audit and feedback should be used and when it should be delivered. However, key issues seem to include who provides the feedback, its timeliness, the data's quality, relevance of content, level of clinician buy-in, and the active or passive nature of the feedback[10].

- Good when the problem relates to clinicians overestimating their performance (or underestimating the problem).[10]
- Needs a clear standard or baseline that you would like to achieve. [10]
- People receiving the feedback need to be in the position to create change. [10]

Educational approaches

- Education is a necessary but not sufficient condition for behaviour change and is more effective if combined with other reinforcing strategies[9].
- Educational materials are generally viewed as ineffective in influencing clinician behaviour, despite being the most regularly used intervention[9].
- Large scale didactic meetings are generally seen as ineffective, especially if trying to change complex behaviours[9].
- Smaller-scale interactive meetings are seen as more effective, although the attributes that make them so are not known[9].
- Outreach visits to professionals in their practice can be effective, most notably in changing prescribing behaviour but also in the delivery of preventative services and the management of common problems in general practice[9].
- Good when the team lack knowledge on the topic or skills (eg procedural, communication), or when team members do not believe problem is important.[10]
- Good when the problem is common across members of the team, and they need to develop a shared understanding of how to address the problem.[10]

Reminders/clinical decision support

- Reminders can be moderately effective in changing behaviour, particularly when computer decision-support is used to influence prescribing and the delivery of preventative care services.[9]
- Reminders are more effective if designed to specifically address barriers to change.[9]
- There are concerns that computer decision support may not cope with the complexities of patient-doctor decision making.[9]
- Important that clinical decision support does not create ‘prompt fatigue’ within the health service.[10]

Policy/guidelines

- Useful when guidelines are actually used by clinical staff.
- Important to ensure consistency between multiple sources of protocols/policies.
- Can be used as an adjunct to other strategies.

8 Further resources that can help

The following resources provide more detailed guidance, evidence and examples of strategies to change health professional behaviour:

Toolkits and guides

1. Choosing Wisely Collaboration Implementation Workshop 1 Toolkit – this behaviour change toolkit developed for Choosing Wisely Australia provides a background on behaviour change, considering where problems arise and evidence-based interventions used to meaningfully influence behaviour. It describes a method for matching interventions to specific causes of the clinical problem.
2. Behaviour change theory – a presentation from Peninsula Health, for Choosing Wisely Australia on designing Choosing Wisely initiatives using behaviour change science. It describes drivers of behaviour and how to match interventions to them using the *COM-B ('capability', 'opportunity', 'motivation' and 'behaviour') model.* This slide set contains blank templates that can be used to select interventions based on categories of behaviour drivers.
3. Choosing Wisely Australia Hospital implementation toolkit – a toolkit to make sure all your governance, change management, communications, design, evaluation and intervention needs are covered. It provides best-practice information, tools and templates for your project.
4. Implementing Choosing Wisely Principles in a Service (updated March 2020) – this guide from Choosing Wisely Aotearoa New Zealand is aimed at service delivery organisations, wanting to implement a Choosing Wisely programme, including DHBs and primary care.
5. A presentation on matching behaviour change interventions to behaviour drivers by Simon French from the University of Melbourne.

Seminal journal papers

1. Grol R. Personal paper. Beliefs and evidence in changing clinical practice. BMJ. 1997 Aug 16;315(7105):418–21
2. Michie S, Johnston M, Abraham C, et al. Making psychological theory useful for implementing evidence based practice: a consensus approach. Qual Saf Health Care. 2005;14(1):26–33.
3. French et al. Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework. Implementation Science 2012 7:38

Videos

1. Choosing Wisely Canada has produced the following webinars which explore the issue of changing health professional behaviour:

    a. Behavioural Sciences 101: How Behavioural Insights Can Help Reduce Unnecessary Care (May 2017)

    b. Health Care Providers are People Too: Applying Behavioural Approaches to Target Choosing Wisely Canada Recommendations (January 2020)

    c. Audit and Feedback as a Tool for De-Implementation (January 2020)

    d. It Ain't (Just) What You Do, it's (Also) The Way That You Do It: An Introduction to Implementation Science (September 2019)

    e. Diving into Overuse in Hospitals: Organizational Leadership & Promoting Culture Change (April 2019)

    f. Diving into Overuse in Hospitals: Using Quality Improvement to Drive Change (March 2019)

    g. Using Data to Drive Change: Audit and Feedback Best Practices (January 2018)

    h. De-implementing Wisely: Using Implementation Science to improve uptake of Choosing Wisely Recommendations (April 2018)

    i. Overview of Implementation Approaches: Canadian & US Experience to Date (March 2015)

2. Choosing Wisely USA has these video presentations that address key themes of behaviour change:

    a. A video presentation from Dr Jason Riis discussing the ways in which behavioural economics can inform efforts to combat overuse in health care.

    b. This webinar on providing clinicians feedback and benchmarking on low value care by Dr. LouAnne Giangreco.

References

[1] French et al.: Developing theory-informed behaviour change interventions to implement evidence into practice: a systematic approach using the Theoretical Domains Framework. Implementation Science 2012 7:38

[2] https://ktcanada.ohri.ca/workshop_tdf/tdf_french.pdf

[3] Michie S et al (2005). Making Psychological Theory Useful for Implementing Evidence Based Practice: A Consensus Approach. Quality & safety in health care. 14. 26-33. 10.1136/qshc.2004.011155.

[4] Michie S, van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implement Sci*. 2011;6:42. Published 2011 Apr 23. doi:10.1186/1748-5908-6-42

[5] Capability beyond education and training; opportunity beyond environmental restructuring

[6] Michie S, van Stralen MM, West R. (2011)

[7] https://ktcanada.ohri.ca/workshop_tdf/tdf_french.pdf

[8] Jammali-Blasi, A. Reducing coagulation studies ordered at Austin Health. Choosing Wisely Australia 2017 National Meeting

[9] Robertson R, Jochelson K. (2006) Interventions that change clinician behaviour: mapping the literature. The King's Fund, UK.

[10] Choosing Wisely Australia. Choosing Wisely Collaboration Implementation Workshop 1 Toolkit

Contacts and resources

Choosing Wisely contacts

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New Zealand Choosing Wisely resources

- Starter kit for your Choosing Wisely campaign: an introduction to the Choosing Wisely concepts.
- **Developing Choosing Wisely Recommendations**: to assist Colleges, societies and other organisations to develop a list of recommendations for the Choosing Wisely campaign.
- Implementing Choosing Wisely principles in a service: this guide is aimed at service delivery organisations, wanting to implement a Choosing Wisely programme, including Departments in DHBs and services in primary care.
- **Measuring the impact of Choosing Wisely:** provides basic information and tools to help you develop and measure your Choosing Wisely interventions.
- **How to write up your Choosing Wisely project**: how to record your successful implementation of a Choosing Wisely recommendation.
- A Starter Kit for implementing Choosing Wisely in hospitals which has been prepared to assist smaller hospitals with the implementation of Choosing Wisely.
- Promoting shared decision making: for information and resources on shared decision making.
- Communicating risk, a guide for health professionals: for information on risk and how to explain risk to consumers.
- Behaviour change toolkit: options for the range of tools available to implement Choosing Wisely initiatives to change health professional behaviour.
- The High-Value Care Culture Survey (HVCCS) captures specific areas for targeted value-improvement interventions and provides a pathway for health system managers to address the underlying culture within hospital divisions, practices, and training programmes.
- **A synopsis of Choosing Wisely literature:** this is a list of Choosing Wisely references arranged by year and alphabetically by author.
- A combined list of all choosing wisely recommendations: this is a list of all New Zealand Choosing Wisely recommendations on tests, treatments, and procedures health professionals should question, in one list for easy reference.

For more information:

- New Zealand https://choosingwisely.org.nz/
- Australia - https://www.choosingwisely.org.au/
- Canada - https://choosingwiselycanada.org/
- USA - https://www.choosingwisely.org/
- UK -https://www.choosingwisely.co.uk/about-choosing-wisely-uk/

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Speakers' Group

Choosing Wisely has a list leading professional who can talk to groups about the campaign – contact the Choosing Wisely team if you need a speaker for your meeting or if you are willing to join our speakers' group.

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Sincere thanks to all our supporters

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