

# MEASURING THE IMPACT OF CHOOSING WISELY INTERVENTIONS

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#### THIS GUIDE COVERS

This guide is intended to provide basic information and tools to help you develop and measure your Choosing Wisely interventions.

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- 2. Developing a Choosing Wisely intervention
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# 1 INTRODUCTION

The effectiveness and sustainability of a campaign like Choosing Wisely will depend in a large part on the ability to demonstrate impact in the short term and long term.

In the short term, the goal of a Choosing Wisely campaign is to produce clear changes in awareness of health professionals and trainees about use of health system resources. However, to be effective in the longer term these campaigns must:

- · change provider behaviour
- increase patient knowledge of overuse
- ultimately reduce unnecessary investigations and treatments.

There is also potential for unintended consequences. Some examples of unintended consequences include the underuse of necessary services, dissatisfied patients and negative provider experiences, inadvertently worsening the situation of undertreatment for Māori and other disadvantaged groups who do not receive enough of the care that they need.

Therefore, it is important to have a process from the start of implementation, to measure the impact of Choosing Wisely and look for unintended consequences<sup>1</sup>.

In healthcare, Quality improvement (QI) is a systematic approach to making changes that lead to better patient outcomes and stronger health system performance. In this scenario, proposed changes will need to be underpinned by the collection of information/evidence about the inputs, activities and potential outcomes of a proposed initiative.

The key purpose of measurement is to determine the impact of what was done and if it is worth continuing to do.

<sup>&</sup>lt;sup>1</sup> Measuring the effect of Choosing Wisely: an integrated framework to assess campaign impact on low-value care. Bhatia R. BMJ Vol24 Issue8

# DEVELOPING A CHOOSING WISELY INTERVENTION

Many New Zealand Medical Colleges, specialty societies and health professional groups have developed lists of Choosing Wisely recommendations and several more are in various stages of recommendation development.

These recommendations are about things which:

- are within the specialty's scope of practice
- · are frequently used
- may expose patients to harm and stress
- are supported by evidence
- have potential to reduce, and will not increase, health inequity.<sup>1</sup>

The recommendations have been developed with health professional input and consultation after review of the evidence. See choosingwisely.org.nz.

In services it may also be possible to use data to identify areas of unwarranted variation in the use of tests, treatments and procedures. Such areas of overuse may be a good place to start.

<sup>&</sup>lt;sup>1</sup> Research shows Māori currently experience large inequities in accessing necessary care in New Zealand. Pacific people, and groups of low socioeconomic status are also less likely to receive the health care that they need. Not enough is known about inequities in unnecessary care in New Zealand, but international evidence suggests that many disadvantaged groups experience a double-burden of inappropriate overtreatment and undertreatment



#### **GETTING THE BASICS RIGHT**

In New Zealand, several DHBs have set up Choosing Wisely steering groups and appointed Choosing Wisely 'champions' to drive change within their hospitals.

#### It is important to:

- make sure you have chosen the right area to focus on
- do a baseline audit to confirm unwarranted variation
- · identify action required
- identify metrics that can measure performance at baseline and after the intervention
- get health professional consensus
- engage with all those who will be affected by the intervention
- develop measures to ensure the sustainability of the change
- · maintain success.

# START THE PROCESS OF MEASURING CHANGE

- 1. Decide upon the desired change starting with simple, easily definable, clinical interventions and set process-oriented goals and benchmarks early on.
- 2. Collect data for analysis<sup>1</sup> and synthesis<sup>2</sup>. It is important to start measurement of the chosen health related outcome prior to commencing the intervention for two reasons;
  - to determine where to focus efforts
  - to obtain baseline data for comparison with post intervention data.
- 3. For discrete Choosing Wisely initiatives, for example efforts to reduce inappropriate tests or treatments at individual DHBs or hospitals, evaluations should be large enough to include disaggregated analysis by ethnicity and sex.
- 4. Collecting, compiling and analysing measures should not require months of timeintensive activity. It should be an exercise completed in real time yielding just enough data to begin an improvement process. The framework below outlines sources of potential data.
- 5. Determine how well an intervention attains the desired effect, along with the presence and frequency of any unintended outcomes/side effects.

## EXAMPLES OF CHOOSING WISELY INTERVENTIONS ALREADY UNDERTAKEN IN NZ INCLUDE:

- Reduction in the taking of unnecessary blood for tests and reduction of insertion of unnecessary intravenous cannulae at Waikato Hospital's Emergency Department.
- Hutt Valley DHB has reduced the rate of unnecessary urine tests and associated antibiotic prescribing through staff education sessions.

In other countries Choosing Wisely interventions have included avoidance of transfusion of red blood cells for arbitrary haemoglobin or haematocrit thresholds in the absence of symptoms, and reducing unnecessary bladder

<sup>&</sup>lt;sup>1</sup>. Analysis – is where you analyse, compile, assemble and order the evidence.

<sup>&</sup>lt;sup>2</sup> Synthesis – Is where the analysed evidence. is combined with the evaluative criteria and the performance framework to reach judgements about quality, value and importance, and answer the evaluation questions.

catheterization. For further details of these Canadian initiatives go to choosingwiselycanada.org.



You may be able to incorporate a Choosing Wisely recommendation into an already existing database or guidelines; for example, creating an alert if an ordered investigation does not align with a Choosing Wisely recommendation.

#### WHAT TYPE OF MEASUREMENT IS MOST USEFUL?

The framework below outlines a number of measurement tools that may be used for assessing Choosing Wisely initiatives. The most appropriate choice will depend on the initiative you choose. The tools vary in the perspective taken (health professional or patient), timeframe, and inherent advantages and disadvantages.

A mix of methods will result in a stronger, more complete view than only using one method. Factors to consider are time, budget, accessibility, and the expertise of the team to design, collect and analyse the data.

### A FRAMEWORK FOR ASSESSMENT OF



## **CHOOSING WISELY INITIATIVES 1**

MEASUREMENT TOOLS	TIMEFRAME FOR IMPACT	ADVANTAGES OF APPROACH	DISADVANTAGES OF APPROACH
PROVIDER ATTITUDI	ES AND AWAREN	ESS	
Health professional surveys	Short Term	May be less costly     Can reach large number of health professionals     Can re-sample over time to assess change     May compare health professionals across various health systems	Potentially low response rates     May lack detailed responses     Requires database and analytical skills
Structured Interview	Short Term	More detailed information about attitudes     May expose factors that can be used to improve campaign	May be resource expensive and time consuming
PROVIDER ORDERING	BEHAVIOUR: OV	ERUSE OF LOW-VALUE SERVICE	ES
Administrative databases	Medium to long term	Direct measurement of overuse at the individual patient level  Population-level data on utilisation  As well as measuring the "index" low-value care event, enables measurement of downstream effects (eg harms and side effects).  Can provide regional variation on overuse.  Can reassess over time to assess change. Can monitor for unintended consequences such as underuse	Lack of clinical details in record (eg treatment indications) may limit specificity of measures and preclude measuring more complex recommendations  Measures not always tailored for evaluation  Extracting data for evaluation can sometimes require special analytics expertise
Electronic health record/ chart data	Medium to long term	More clinical details (past medical history, previous testing) to assess appropriateness     Can assess a greater variety of recommendations than with administrative data, as well as measuring the "index" low-value care event.     Enables measurement of downstream effects (eg harms and side effects). Can reassess over time to assess change. Can monitor unintended consequences such	Some information gaps     Currently can be time-consum and resource-intensive; often limited to single centres becau of lack of interoperability

<sup>&</sup>lt;sup>1</sup> Bhatia R. Measuring the effect of Choosing Wisely; an integrated framework to assess campaign impact on low-value care. Vol 28 issue 8

#### PROVIDER ORDERING BEHAVIOUR: OVERUSE OF LOW-VALUE SERVICES Administrative databases Medium to · Direct measurement of overuse · Lack of clinical details in records at the individual patient level (eg treatment indications) may long term limit specificity of measures Population-level data on utilisation and preclude measuring more As well as measuring the "index" complex recommendations low-value care event, enables Measures not always tailored measurement of downstream for evaluation effects (eg harms and side effects). Extracting data for evaluation Can provide regional variation can sometimes require specialist on overuse. analytics expertise Can reassess over time to assess change. Can monitor for unintended consequences such as underuse Electronic health record/ Medium to More clinical details (past medical Some information gaps chart data history, previous testing) to assess • Currently can be time-consuming long term appropriateness and resource-intensive; often Can assess a greater variety of limited to single centres because recommendations than with of lack of interoperability administrative data, as well as measuring the "index" low-value care event. · Enables measurement of downstream effects (eg harms and side effects). Can reassess over time to assess change. Can monitor unintended consequences such as underuse.

MEASUREMENT TOOLS	FOR IMPACT	ADVANTAGES OF APPROACH	OF APPROACH
PATIENT PERCEPTION	ONS AND OUTCOME	s	
Patient reported experience measures (PREMs; survey tools)	medium term	Standardised data collection     Patient perceptions/ drivers could help design interventions to reduce low-value care     Impact of interventions on patient perceptions could monitor for unintended consequences     Comparable across jurisdictions	No questions specifically on low-value care  Not all recommendations directly influenced by patient preference experience  Mediating role of cognitive biased eg placebo and nocebo effects; cognitive dissonance
Patient reported outcome measures (PROMs; validated survey tools)		<ul> <li>Validated patient tools assist providers in developing care plans; including tests and treatments</li> <li>Results can monitor for unintended consequences of interventions</li> </ul>	No questions specifically on low-value care     Results may be inappropriately used to ration care



#### REPORTING ON PERFORMANCE

Measurement of the impact of a Choosing Wisely initiative should be summarised in a performance report. This may be a task of the steering group set up to implement Choosing Wisely<sup>1</sup>. It is important to celebrate and feedback positive outcomes that are a result of "Choosing Wisely." This helps to maintain momentum and the motivation of those people involved in its implementation.

Examples of successful Choosing Wisely interventions used elsewhere, with guidance for implementing similar projects in your service are available under the Toolkit tab at choosingwiselycanada.org/perspectives/how-tos/

The NZ "Choose Wisely" campaign has put peer reviewed papers on projects within a New Zealand context.

Do contact Choosing Wisely at enquiries@cmc.org.nz to share your successes with implementing a Choosing Wisely initiative. Sharing of these stories is powerful and may provide the motivation and knowledge for other health care providers to undertake similar projects.

 $<sup>^{\</sup>rm 1}$  . See Guide on Implementing Choosing Wisely recommendations

## 8 REFERENCES

- 1. Bhatia R. BMJ Measuring the effect of Choosing Wisely: an integrated framework to assess campaign impact on low-value care. BMJ Vol24 Issue8
- Choosing Wisely Action Manual. Integrating Choosing Wisely Recommendations in Practice. Developed by Washington State. Choosing Wisely Task Force, October 2015
- 3. Quality Improvement Science. Health Quality Ontario, 2013.
- 4. McKegg K. Principles to help you evaluate your work. Evaluation keynote presentation, Choosing Wisely Symposium, Wellington, March 2017. www.knowledgeinstitute.co.nz
- 5. www.improvementmethodology.govt.nz

#### **OTHER RESOURCES**

http://improvementmethodology.govt.nz/

Raleigh V, Foot C. Getting the Measure of Quality. Opportunities and Challenges. Published by The King's Fund 2010 (www.kingsfund.org.uk/publications).



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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 valueimprovement 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.

All these resources are on the New Zealand Choosing Wisely website <a href="https://choosingwisely.org.nz/resources/">https://choosingwisely.org.nz/resources/</a>

#### **FOR MORE INFORMATION:**

- New Zealand <a href="https://choosingwisely.org.nz/">https://choosingwisely.org.nz/</a>
- Australia <a href="https://www.choosingwisely.org.au/">https://www.choosingwisely.org.au/</a>
- Canada https://choosingwiselycanada.org/
- USA https://www.choosingwisely.org/
- UK -https://www.choosingwisely.co.uk/about-choosing-wisely-uk/

#### **CHOOSING WISELY ADVISORY COMMITTEE**

In New Zealand an Advisory Committee has been formed to monitor the development of the campaign and provide advice and link to other health professional groups. To find out more about the membership or to join this group – email <a href="mailto:enquiries@cmc.org.nz/">enquiries@cmc.org.nz/</a>

#### **SPEAKERS' GROUP**

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

#### **ACKNOWLEDGEMENTS**

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- ABIM and the USA Choosing Wisely http://www.choosingwisely.org/
- Choosing Wisely Canada http://www.choosingwiselycanada.org/
- Choosing Wisely Australia http://www.choosingwisely.org.au/home

#### Thanks to our partners









#### Sincere thanks to all our supporters









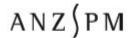


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