

Choosing Wisely summary evaluation report as at 10 February 2020

In 2018/19 a simplified business and evaluation plan was agreed to by the Choosing Wisely Advisory Committee, see appendix 1. The emphasis of the evaluation plan was to examine and identify areas where Choosing Wisely could improve its operation.

Choosing Wisely has now evaluated several aspects of the programme.

This paper summarises the results. Full reports are available on request.

1. Evaluate, the usefulness of quarterly Choosing Wisely Community of Practice (CoP) meeting (a “community of champions”) to improve functioning.

The objective was to evaluate, via a survey, the usefulness of quarterly CoP meetings, plan and to improve its functioning as a forum and in particular, assess how meetings could be improved and whether to extend the meetings to other groups.

The questionnaire was sent to 61 people on our list: response rate on this number was 10% (6). If considering only people who had been to the last two meetings or gave an apology (36 people) the response rate was 16.6%. This does indicate we should try again to “clean” the CoP mailing list.

Potential learnings

The DHBs that are able to have a steering group and/or a local Choosing Wisely organiser are more likely to make progress on Choosing Wisely work.

The Community of Practice meetings were seen as useful, allowing Choosing Wisely champions to relate to each other on Choosing Wisely projects but no real improvements were suggested.

2. Assess changes in practice related to the Choosing Wisely Forum¹

As part of the evaluation of the Forum, a three-month post-Forum questionnaire survey was conducted. The Choosing Wisely team studied the report to assess follow up and impact on the 2020 Forum programme.

The findings do provide several opportunities for consideration:

- Providing a step by step guide to establishing *Choosing Wisely* in the workplace. (Comment: there are resources that do this on the website)
- Continuing to promote web-based Choosing Wisely initiatives/toolkits and shared decision-making tools.
- Increasing public support and improving awareness.
- Establishing other health professional interest groups (e.g. physiotherapy and laboratory health professionals) sharing expertise about Choosing Wisely.

All respondents continue to be keen to

- be involved with/hear about the Community of Practice interest groups
- receive the *Choosing Wisely* Newsletter.

Potential learnings

¹ Unfortunately due to COVID 19 the 2020 Forum has been postponed indefinitely.

Specific comments have been used in the development of the 2020 Choosing Wisely Forum, including a workshop for those new to Choosing Wisely, a panel of legal “experts” with the HDC commenting on medico legal aspects of following Choosing Wisely. Reinvigorate the consumer commentary session and ensure time for comment from consumers. (This year we have asked Rae Lamb of HQSC and formerly a Radio NZ health reporter to facilitate).

The report also identified several challenges to changing practice: time and local context, clinical buy-in, a need for more local education and engagement to ‘get started’, educating clinicians about inappropriate test requests, and a need for visible national and even ministerial leadership.

Choosing Wisely secretariat has noted that the guides/ resources on the website are not well known. These are currently being update to address equity matters and then will be promoted again. More intra professional groups are needed to motivate those at the grass roots. Over the last few months, work with Allied Health Professionals and Pharmacists has increased.

More promotion to the public is needed and we will have another public campaign in March/April.

3. Assess qualitative information from the 2018 survey of doctors and nurses to inform and improve the campaign

A full collation of the qualitative information has been completed by Dr Graeme Lindsay.

Several learnings have been noted.

- This information shows, what is already known to Choosing Wisely champions, **the decision on whether to do the test, treatment or procedure is a nuanced one and shared decision making with the consumer is vital.**
- There is a **concern about medico-legal matters, defensive practices and the Health and Disability Commissioner rulings.** There will be a Forum topic on this.
- **Over-use in palliative care,** some comments from respondents noted that they thought there were excessive tests at the end of life. Choosing Wisely will continue to work with HQSC and others on appropriate care in terms of advance care planning and the serious illness guide.
- Some comments suggested that **over-investigation and over-treatment were more common in the private sector.** Also, of note, several comments say that if patient requests a test that is not indicated, they may be offered private care so they pay for the test themselves.
- **Informing patients** about Choosing Wisely is an issue that needs to be continually addressed as well as **advising health professionals on strategies for shared decision-making.** A resource to identify such strategies’ is being planned.
- Concern was expressed about **over poly-pharmacy, sedatives and over-use of antibiotics** – Choosing Wisely has highlighted these concerns in its recommendations, the media and in CW’s contacts with Aged Concern.
- **Choosing Wisely implementation can be achieved by system changes.** System changes as well as educational approaches are often needed to change practices. For example, changing test forms, restricting access to tests. Choosing Wisely NZ could consider identifying and promoting existing case studies of Choosing Wisely system change initiatives in NZ and internationally that have led to a reduction in over-testing and over-treatment.
- There were concerns **over repeated testing.** For example, some respondents commented that there were repeated tests by multiple practitioners, repeated tests in different settings, too frequent blood tests on the ward, frequent repeating of normal tests, no access to results from private settings leading to repeat testing in public health settings.

Choosing Wisely can highlight this issue more. In many cases though, it is likely system changes are needed to improve access to information and improve decision-making.

- **Focus on investigation rather than identifying underlying cause of presentation.** Choosing Wisely needs to cover this concept in presentations that is over-investigation may be easier than looking for underlying causes.
- **Areas of underservice were raised** – this not only refers to Māori health and equity, but underservicing due to a geographic area, or an area of medicine such as psychiatry.
- Comments were made about **junior staff decision-making** – this illustrates Choosing Wisely work with students and medical educators is important – there will be a session on this before the next Forum.

These results will be used to inform Choosing Wisely presentations to external groups, media releases and newsletter items. In addition, it is noted that in relation to future surveys the low number of responses in 2018 for NZMA and in 2019 for NZNO (though NZNO only covered nurses who were able to prescribe or do tests and procedures) means that these are unlikely to be representative of the overall membership of these organisations.

The number of ASMS respondents in 2018 were down on 2016 (726 versus 989 (27%)). Therefore, if repeat surveys are to be undertaken in late 2020, measures to increase the response rate need to be considered, particularly for the NZMA, in order to increase the validity of the responses.

4. Evaluating Choosing Wisely via summer studentship,

Choosing Wisely has led 11 Summer studentships and solicited another, to give some evaluation of Choosing Wisely work. These summer studentships also:

- Enable Choosing Wisely to work with students
- Give new contacts in the medical schools and services
- Lead to articles for the Choosing Wisely and other newsletters
- May develop into presentations for the Choosing Wisely national Choosing Wisely Forum
- Produce interesting results which can be used in the media and in health professionals' journals, for example the project on UTI testing at Hutt in 2017 lead to an article in NZMJ.

4.1 Year 2017

There were two summer studentships in 2017:

4.1.1 Aidan Wilson evaluated Hutt Valley DHB's initiative to reduce clinically inappropriate urine culture requests through removal of urine dipsticks from wards and education of staff using Choosing Wisely principles. He found the removal of urine dipsticks from wards and the education of staff significantly reduced the number of urine culture requests and is a useful strategy to reduce the overuse of antibiotics for asymptomatic bacteriuria without an increase in the number of UTIs.

These simple interventions could be used at other hospitals as part of measures to reduce unnecessary care and overdiagnosis. This project was published in the New Zealand Medical Journal in 2018.

4.1.2 Adam Sangster evaluated knowledge and attitudes amongst nurses regarding urine testing, and evaluated the impact of removing urine testing dipsticks from Kenepuru hospital. Results found that many nurses believe urine tests cannot cause harm, interpret a positive

dipstick result as a sign of UTI rather than of asymptomatic bacteriuria. These results suggested areas of education needed to change nurse practice to reduce testing and treatment. This evaluation also found that fewer urine cultures were requested once dipsticks were removed from wards associated with elderly care, suggesting that removal of dipsticks from the wards could potentially save money and time, as well as exposing patients to fewer tests.

4.2 Year 2018

In 2018 Choosing Wisely funded 6 summer studentships to give some evaluation of Choosing Wisely work.

4.2.1 **Choosing medications wisely for older people with dementia and palliative care needs.**

This scoping review by Charlotte Aitken provided an insight into the prescribing patterns of aged care residents during the last year of life. It highlighted the changes required in clinical practice in order to improve medication use in this vulnerable population. Medication optimisation at the end of life has the ability to improve quality of remaining life, reduce the risk of adverse events and hospitalisation, and subsequently reduce pressure on health care resources. This scoping review was the first step in a proposal to investigate medication patterns for aged care residents during the last year life, with an ultimate goal to develop interventions to optimise medication use in these residents.

4.2.2 **Evaluating the impact of 4 questions on patient behaviour when they attend the outpatient clinics at Hutt Hospital.**

This project, undertaken by medical student Aidan Wilson, aimed to assess the knowledge and impact of the campaign for staff and outpatients at the hospital.

There was a low response rate, but the project did show ways to increase the promotion of the campaign and other ways to encourage patients to ask questions of their health professionals in the Hutt and may the concept may be able to be used in DHBs. The project found that, overall, there was poor awareness of the campaign from patients and staff. Several recommendations were made to Hutt Choosing Wisely steering group for making posters more attractive and memorable to patients.

4.2.3 **Evaluating the effectiveness of a Choosing Wisely initiative to reduce pre-operative testing at CDHB**

This project by Aditya Raina evaluated the effectiveness of awareness-raising by the Choosing Wisely campaign in Canterbury Public Hospital to assess what influences clinician behaviour around pre-op testing and to determine what can be done to bring about change in clinician behaviour.

The findings of this study were published in the New Zealand Medical Journal in 2019, and suggested that the campaign in CPH had not been very effective in spreading awareness of Choosing Wisely guidelines to minimise unnecessary pre-op testing. Key barriers for changing clinician behaviour included lack of communication, mental automation and habitual practices. Several strategies were identified to overcome these barriers including evidence based educational presentations, providing clear & specific protocols and auditing testing decisions.

4.2.4 Evaluating the effectiveness of the Choosing Wisely Programme at Capital and Coast DHB

A service appraisal of Choosing Wisely at CCDHB was conducted to evaluate the progress of the programme following its launch in 2016. An online staff survey and face-to-face interviews were conducted with the executive leadership team and the CCDHB steering group to evaluate the strengths and weaknesses of the current programme.

Results yielded mixed opinions on the progress of the current Choosing wisely programme. Areas that were commonly addressed include resourcing of the programme, communication approach, project auditing and steering group function. It is suggested that attention to these areas is required to improve the current limited awareness and engagement with the programme.

The nature of the study resulted in critical yet constructive feedback. The Choosing Wisely CCDHB steering group has assessed the recommendations provided to make improvements to ensure sustainability and success in the long term. It is recommended that other Choosing Wisely groups conduct a similar evaluation to guide future improvements.

4.2.5 To understand equity considerations for Choosing Wisely through interviews with medical students identifying as Māori.

To assess their knowledge of Choosing Wisely and their views via a Māori / equity lens.

This project could not be finished but has given Choosing Wisely some useful comment from Māori future health workers that went on to inform the Choosing Wisely 2019 research project on **Choosing Wisely Means Choosing Equity**

4.2.6 Optimising the use of lumbar puncture in patients with suspected sub-arachnoid haemorrhage (SAH) to establish the accuracy (sensitivity) of current generation CT-scanning to identify SAH.

This project, by Annabelle Vincent, evaluated the use of lumbar punctures and CT scans in detecting subarachnoid bleeding in the brain. If the sensitivity of modern CT scanners in detecting SAH is sufficiently high, this may lead to a reduction in unnecessary use of lumbar puncture.

The results noted that for patients that present within 24 hours of symptom onset, CT is highly sensitive in detecting subarachnoid haemorrhage. This research could lead the way for a discussion about whether lumbar punctures are necessary to diagnose subarachnoid bleeds, and is a useful piece of work to identify potential new CW recommendations.

4.3 Year 2019

In 2019, Choosing Wisely supported 3 traditional summer studentships, one through CCDHB, one via CDHB and one at Middlemore DHB. Choosing Wisely itself let a project to assess the use of recommendations in e Pulse, this was done with the help of Otago Medical School and RNZCGP.

4.3.1 Audit of post-operative analgesia prescribed following elective surgery at Capital and Coast District Health Board, and assessment of attitudes towards discharge prescription of opioid medication among doctors

This project evaluated the prescription rates of opioid analgesia after elective surgery at Capital and Coast District Health Board. It found that opioids are often prescribed after elective surgeries; however documented advice to restrict and stop opioid use is scarce.

Many patients receive subsequent opioid prescriptions after discharge. This project recommended a number of strategies to help avoid overuse of opioids at C&CDHB: opioid prescription guidelines, increasing the provision of written instruction to restrict and stop opioid use, and education to patients about risks and side effects of opioid use.

4.3.2 Review of Canterbury Community Infusion Service: A Mixed Methods Approach

This project evaluated patient outcomes from CDHB's community infusion service (CIS), which was set-up to reduce the need for inpatient care and deliver services closer to patient's homes. The current therapies available are infusions of red blood cells, immunoglobulins and Infliximab. A survey was carried out to determine patient experiences during the transition. Interviews with staff involved in the set-up and running of the service were performed to identify areas, to assess learning that can be applied to future services. This study found that patients preferred receiving infusions through the CIS rather than in hospital. Patients had a positive experience of the service and appreciated shorter travel times. Some recommendations are discussed which may be used by groups setting up a similar service in the future.

4.3.3 A qualitative study on clinicians' rationale for requesting urine cultures at Middlemore Hospital

This project interviewed staff at Middlemore Hospital to investigate the reasons behind the ordering of unnecessary/not indicated urine cultures. As expected, many of the influences were human/behavioural influences, such as hierarchical structures, practising defensive medicine out of fear, and inexperience/lack of confidence. An unexpected issue was that a urine culture often gets sent when a doctor requests urine toxicology, antigens or any other urine-related test. This could be a relatively simple place to intervene either by changing the form or education. The themes have provided plenty of ideas for further interventions to reduce unnecessary urine testing at Middlemore hospital.

5. Evaluation of Choosing Wisely Advice to GPs in e-Pulse

This project, supervised by Dr Sam Murton (President of RNZCGP and Otago University) and Associate Professor Lynn Mc Bain (Dept of Primary Care and General practice), evaluated the effectiveness of Choosing Wisely advice provided to general practitioners (GPs) via fortnightly tips published in e Pulse, the electronic newsletter produced by the Royal New Zealand College of General Practitioners.

Clicks from the ePulse electronic newsletter were analysed to determine the rate of GP engagement and which topics were most favoured. This was followed up with qualitative interviews with GPs. About 1 in 38 GPs that opened the e-Pulse newsletter then went on to click at least once on Choosing Wisely. The most favoured topics were glucocorticoid treatment of polymyalgia rheumatica, communicating risk with patients and prescribing of antibiotics for upper respiratory tract infections. Qualitative interviews with GPs showed they believed knowledge could be improved with integration of links into commonly used platforms such as HealthPathways

Key learnings were:

- There is no single Choosing Wisely topic in e-Pulse that is consistently most favoured
- Knowledge amongst GPs of Choosing Wisely is low
- Integration with Health Pathways may increase knowledge/awareness. (The Choosing Wisely medical adviser is working with HealthPathways to ensure links between Choosing Wisely and HealthPathways happens more widely).

It was noted that the electronic link in e-Pulse to a Choosing Wisely recommendation should be deleted as they are not always working (and doctors end up scrolling through large number of pages). The recommendations in e-Pulse should be short, sharp recommendation if possible, with link to a patient resource.

Although the qualitative information was from a small sample size there was no clear agreement to develop general practice specific Choosing Wisely recommendations.

Recently Dr Liza Lack, National Clinical Lead GPEP has agreed to include the Choosing Wisely website as a recommended resource for registrars.

6. Evaluate the tool on culture change and unnecessary practices and make any changes needed

Waikato DHB Choosing Wisely team has trialled a survey on high value care adapted from a tool used in the USA. This is now being used by other DHBs. The following is summarised from their report.

Background²

Choosing Wisely (CW) aims to reduce the number of unnecessary tests, treatments and procedures. However, it is well documented that the culture of an organisation greatly affects physician behaviour. We aimed to amend and test the High Value Care Culture Survey TM (HVCCS) that was developed by Gupta et al. (2017) for the New Zealand (NZ) context. The HVCCS is the first of its kind to address high value care culture in a healthcare organisation.

Methods

The survey was modified to the New Zealand context and trialled at Waikato District Health Board. The survey had 27 questions in total; three questions were locally-added demographic questions. This was made available online using Survey Monkey and in hard copy. The survey was conducted over a one-month period. Data was analysed by health professional discipline and by leadership/seniority status.

Results

211 health professionals completed all questions in the survey. 91% of completed responses were based at Waikato Hospital. Of the responders 63% were nurses, 29% Medical and 8% Allied Health clinicians.

The overall High Value Care Culture Score for Waikato DHB is 56.3. The overall score is made up of four different domains that contribute to a culture of high value care. Comfort with harms Conversations was the highest domain with a score of 65.3, followed by leadership and health system messaging 59.4, Data transparency and access 51.5 and lastly blame free environment

The Medical profession had the highest High value care culture score 58.8, followed by Nursing & Midwifery 55.8 and allied health 53.8. The highest scoring question overall, Q22 "Health professionals in my group feel that it is the role of health professionals to discuss the harms of tests or treatments with patients" (70.9), while the lowest score differed by discipline.

Conclusions

Waikato DHB has a comparable culture towards High value care in some factors when compared with the original survey. Adapting the survey for the New Zealand context has had some impact on the results;

² Reference High Value Care Culture Survey – Analysis Sarah Keelan: Sarah.Keelan@waikatodhb.health.nz and Veronique Gibbons: Veronique.Gibbons@waikatodhb.health.nz

therefore, as improvements are made and other organisation in NZ and Australia use the HVCCS the validity will increase.

Focussing on those areas where the high value care culture is lowest will inform the next step. Waikato DHB will use this survey as a way to improve the culture of high value care along with an evaluation tool to determine if Choosing Wisely has impacted culture towards high value care.

Other DHBs are now going to use the adapted survey. The full report is available on request.

7. Evaluate the impact of College Choosing Wisely recommendations on change in practice

A comparison was made matching Choosing Wisely project work being done in DHBs against the College Choosing Wisely recommendations. Few DHB projects aligned directly with Choosing Wisely College recommendations, as shown in the last two columns of the analysis below using the Community of Practice Stocktake which compares Choosing Wisely projects in DHBs to College recommendations (available [here](#)).

Originally the Choosing Wisely concept was that Colleges and associations would identify 5-6 recommendations that they would promote to their Fellows about tests, treatments, and procedures health professionals and patients and consumers should question. This has two purposes:

- To alert health professionals to potential areas of over use so in their workplace they could reduce overuse and highlight the Choosing Wisely campaign.
- And as a guide to start a conversation with patients about what is appropriate and necessary.

As has been noted the campaign has not developed this way in NZ. As in the DHBs by far the greatest number of projects have been implemented by Choosing Wisely champions who have identified areas Choosing Wisely concepts can be implemented within their work area which may not directly link to a College or associations recommendation.

The reasons for this include:

- Many Choosing Wisely recommendations on the Choosing Wisely website were developed by Australasian Colleges and therefore Fellows in NZ have less buy in.
- Some Australasian recommendations were not relevant in NZ (and only some Colleges have reworked NZ specific recommendations).
- The New Zealand part of the Colleges (except RACP and the Evolve work) have not promoted Choosing Wisely as much as expected.
- Choosing Wisely implementation in NZ has relied on champions in the services like DHBs and they have selected particular areas of concern to them to apply Choosing Wisely. That said these people are SMOs who are College Fellows.

Potential risks are that the Choosing Wisely work being implement in the DHBs does not reflect Choosing Wisely principles – i.e. evidence based, patient centred, health professional led, transparent processes and multi professional.

Potential learning is that is areas where there are no current recommendations – Choosing Wisely could just promote the implementation of projects. Currently following a meeting with CMOs Choosing Wisely is exploring a project similar to the Canadian Diving into over use programme

https://choosingwiselycanada.org/wp-content/uploads/2019/01/CWC_Diving-into-Overuse-in-Hospitals.pdf but in NZ emphasising College links.

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March 2020