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MANATŪ HAUORA
MINISTRY OF HEALTH

Te Aka Whai Ora
Māori Health Authority

Health New Zealand
Te Whatu Ora

Briefing

Advice on scope of the Budget 2022 bowel screening tagged contingency

Date due to MO:	1 March 2024	**Action required by:**	N/A
Security level:	IN CONFIDENCE	**Health Report number:**	H2024035455
To:	Hon Dr Shane Reti, Minister of Health		
Consulted:	Health New Zealand: ☒ Māori Health Authority: ☒		

Contact for telephone discussion

Name	Position	Telephone
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Dr Nick Chamberlain	National Director, National Public Health Service, Te Whatu Ora – Health New Zealand	s 9(2)(a)
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Minister's office to complete:

☐ Approved	☐ Decline	☐ Noted
☐ Needs change	☐ Seen	☐ Overtaken by events
☐ See Minister's Notes	☐ Withdrawn	

Comment:

Advice on the scope of the Budget 2022 bowel screening tagged contingency

Security level:	IN CONFIDENCE	**Date:**	1 March 2024
To:	Hon Dr Shane Reti, Minister of Health		

Purpose of report

1. This briefing responds to your request for advice on changing the scope of the Budget 2022 bowel screening tagged contingency. The original purpose of the tagged contingency was to lower the age of eligibility for the National Bowel Screening Programme (NBSP) for Māori and Pacific peoples from 60 to 50 years of age.
   You have requested advice on:
   a. what the tagged contingency may achieve if distributed across all ethnicities
   b. what needs to be done to consider adjusting the contingency scope.

Summary

2. New Zealand's eligibility age for the NBSP is higher than equivalent bowel screening programmes internationally, including Australia which starts at 50 years.
3. A tagged contingency of $36.141 million over 4 years to 2025/26 (and $13.089 million per annum in outyears) was allocated in Budget 2022 to lower the NBSP eligibility age for Māori and Pacific peoples from 60 to 50 years. This was in response to data which indicated that Māori bowel cancer rates were increasing, and that a higher proportion of Māori and Pacific peoples develop bowel cancer at a younger age (before they are eligible for screening).
4. It is not currently feasible to lower the screening age for all ethnicities in New Zealand to 50, in particular due to constraints and pressures on colonoscopy services. However, there are other potential options for using the tagged contingency to improve and/or extend bowel screening for all ethnicities.
5. The NBSP within the National Public Health Service (NPHS) is working with Erasmus University Rotterdam in the Netherlands to model the benefits and resource demands of a range of scenarios for altering the delivery of the NBSP, including adjustment to the eligibility age. There is an opportunity for you to shape the scenarios to be modelled if you wish. Scenarios must be finalised by 31 March 2024.
6. We recommend waiting until the results of this modelling are provided, which is expected in June 2024, before making a decision to alter the scope of the tagged contingency. This will ensure a solid analytical base to assess and compare options.
7. Alternatively, we can provide you with options to alter the scope of the tagged contingency sooner, but the supporting analysis provided would be considerably less robust.

8. You will need to seek Cabinet approval if you wish to alter the scope of the tagged contingency. The expiry date for the tagged contingency is 1 February 2025.

Recommendations

We recommend you:

a) **Note** it is not currently feasible to lower the eligibility age for the NBSP for all ethnicities in New Zealand to 50. **Noted**

b) **Note** the National Public Health Service is working with Erasmus University Rotterdam in the Netherlands to model the expected benefits and resource demands of various scenarios for altering the delivery of the NBSP, including altering the age of eligibility, and expects to receive the results of this analysis in June 2024. **Noted**

c) **Indicate** your preferred approach in relation to the Budget 22 tagged contingency:

i. Option 1: continue with the current scope and process in relation to the tagged contingency (Cabinet consideration of the findings of a small-scale evaluative implementation in 3 districts and Joint Ministers' satisfaction on health system capacity and readiness for a national roll out of the age extension for Māori and Pacific peoples to 50 years). **Yes/No**

ii. Option 2: consider changing the scope of the tagged contingency:

a. Option 2A: commission a policy briefing setting out options for the scope of the tagged contingency in August 2024, which would be informed by the Erasmus microsimulation analysis. **Yes/No**

b. Option 2B: commission a policy briefing setting out options for changing the scope of the tagged contingency in April 2024, prior to results from the Erasmus microsimulation analysis. **Yes/No**

d) **Indicate** if you wish to:

i. discuss potential scenarios to be included in the microsimulation analysis with officials. **Yes/No**

ii. be presented with the initial findings of the microsimulation analysis by the Erasmus team in April/early May 2024. **Yes/No**

e) **Note** that Cabinet agreement is required to change the scope of the tagged contingency. **Noted**

f) **Note** the tagged contingency expires on 1 February 2025. **Noted**

Dr Andrew Old
Deputy Director-General
Public Health Agency – Ministry of Health
Date: 28 February 2024

Hon Dr Shane Reti
Minister of Health
Date: 8/3/2024

Dr Nick Chamberlain
National Director
National Public Health Service – Te Whatu Ora
Date: 26 February 2024

Selah Hart
Maiaka Hāpori | Deputy Chief Executive Public and Population Health
Te Aka Whai Ora
Date: 26 February 2024

Advice on the scope of the Budget 2022 bowel screening tagged contingency

Bowel cancer and screening in New Zealand

New Zealand has relatively high bowel cancer rates

1. New Zealand has one of the highest rates of bowel cancer in the world, and bowel cancer is the second highest cause of cancer death in the country. The age-standardised colorectal cancer rate per 100,000 has decreased (by 16% between 2000-2020) as has the age-standardised mortality rate (by 33% between 2000-2018). The overall number of colorectal cancers and death is however increasing, due to population growth in the at-risk age groups.

2. Incidence and mortality rates vary considerably by demographic group. Specifically:

    a. bowel cancer incidence increases with age – with 2020 data indicating 90% of cases occur in those aged 50 or over and 78% in those aged 60 and over. The net 5-year survival rates are generally similar for people aged 45-74 years (between 63-65%) but are lower for people aged 75 and over (57%)

    b. compared to other ethnicities, Māori and Pacific peoples are more likely to develop bowel cancer before the age of 60 – approximately 21% of bowel cancers occur in Māori and 22% in Pacific peoples aged 50-59 compared to 10% amongst non-Māori and non-Pacific peoples in that age group

    c. outcomes are poorer for Māori and Pacific peoples – whilst age-standardised colorectal cancer registration per 100,000 during 2016-2020 were lower for Māori (36.2), Pacific peoples (29.8), and Asians (23.3) compared to European/Other (43.3). The net 5-year survival rate for Māori and Pacific peoples is lower compared to other ethnic groups. Māori survival rates continue to lag 8% behind non-Māori.

Bowel cancer screening aims to detect cancer at an early or pre-cancerous stage, when it can be more easily and effectively treated

3. New Zealand's National Bowel Screening Programme (NBSP) provides free access to bowel screening every 2 years to about 835,000 asymptomatic people aged 60 to 74 years. The programme was rolled out between July 2017 and May 2022.

4. Since its inception, the NBSP has detected 2,345 cancers (data to 19 February 2024). At least one third of these have been at the earliest stage, where there is a greater than 90% chance of 5-year survival. In addition, at least a fifth of the 31,566 people who have proceeded to a colonoscopy after a positive bowel screening test are found to have advanced bowel polyps that are associated with an increased likelihood of progressing to bowel cancer (data to 19 February 2024).

5. This has positive implications for the wider health system, with significantly less resources required to treat early-stage cancers than late stage-disease.

Te Tiriti o Waitangi and cancer screening

6. To give effect to Te Tiriti o Waitangi, He Whakaputanga, the principles articulated by the Waitangi Tribunal in WAI2575, and the health sector principles of the Pae Ora (Healthy Futures) Act 2022, Māori must be actively protected from the harms of cancer including bowel cancer.

7. Māori must receive equitable access to and outcomes from bowel cancer prevention, screening, diagnosis, and treatment. Lowering the age of eligibility for Māori to 50, alongside investment to improve access to screening for groups with low screening rates, are important steps toward this. Specific actions could include prioritising Māori for screening, and embedding pro-equity interventions into the design, implementation, and management of the NBSP.

8. Māori self-determination and sovereignty requires investment in Māori-led solutions, service delivery, coordination, and governance to have a positive impact on equity and maximise Māori health gain.

New Zealand's eligibility age for bowel screening is higher than equivalent programmes internationally, but there are barriers to lowering it at present

9. Other comparable countries start bowel cancer screening programmes at an earlier age than in New Zealand. In Australia, the eligibility age for the bowel screening programme is 50 years, and the United Kingdom has been lowering the eligibility age from 60 to 50 years over four years since April 2021.

10. There is modelling which supports that lowering the screening age for all ethnicities down to 50 years in New Zealand is cost-effective. However, due to the lower incidence of colorectal cancer, higher overall mortality rates, and likely lower screening coverage in this age group, this is likely to increase inequities in Quality Adjusted Life Expectancy for Māori compared to non-Māori[1].

11. It is not currently feasible to lower the screening age for all ethnicities to 50 years due to the increased demand this would place on clinical services, in particular colonoscopy capacity. Colonoscopy services are already struggling to meet clinical waiting time standards. Each month there are approximately:

    a. 100 people provided with a colonoscopy that have waited longer than the 14-day target for urgent colonoscopy

    b. 5,300 people who have waited longer than six weeks for non-urgent colonoscopy and

    c. 3,500 people who have waited longer than 12 weeks following their surveillance target date.

12. These pressures are widespread, with 60-80% of districts not meeting the various wait time targets.

[1] https://aacrjournals.org/cebp/article/26/9/1391/71330/Colorectal-Cancer-Screening-How-Health-Gains-and

Budget 2022 bowel screening tagged contingency

As part of Budget 2022, a tagged contingency was allocated to lower eligibility for the NBSP to 50 years for Māori and Pacific peoples

13. As part of Budget 2022 [CAB-22-MIN-0129 refers], the previous government allocated a tagged operating contingency of $36.141 million over 4 years to 2025/26 (and $13.089 million per annum in outyears) to fund lowering the bowel screening age to 50 years for Māori and Pacific peoples.

14. This age extension aimed to address the marked differences in screening need and health benefits gained across ethnic groups, which are unrecognised by the current eligibility for bowel screening. More specifically, while the NBSP targets resources towards an age cohort (60-74) with high bowel cancer incidence and where the benefits of screening outweigh the inherent risks, this does not account for:

    a. the higher proportion of bowel cancer that occurs in Māori and Pacific peoples at a younger age (before they are eligible for screening)

    b. the younger overall age structure and lower life expectancy for Māori and Pacific peoples, which results in a shorter window of time to benefit from bowel screening in comparison to other ethnic groups.

Funding for the national roll-out required Cabinet approval and was intended to be informed by a small-scale evaluative implementation in three districts

15. The drawdown of the tagged contingency was subject to Cabinet consideration of the findings of a small-scale evaluative implementation in 3 districts, and Joint Ministers' satisfaction on health system capacity and readiness for a national roll out of the age extension. Cabinet has not yet given approval to draw down the tagged contingency, which expires on 1 February 2025.

16. The small-scale evaluative implementation is currently available to 20,000 Māori and Pacific peoples aged 50-59 in 3 districts (Waikato, Te Pae Hauora o Ruahine o Tararua Mid Central, and Tairāwhiti). These districts were chosen as they have a significant proportion of their population who are Māori or Pacific, and because they had the capacity to take on the additional work required, including providing additional screening colonoscopies.

17. The evaluative implementation has been analysed by an external evaluator, with a final report expected in March 2024. Expected lessons include that districts need significant preparation for successful age extension, and that community engagement and non-postal invitations are important to improve participation in Māori and Pacific peoples aged 50-59 years.

18. Once the evaluative implementation comes to an end, this cohort of individuals will be 'grandparented' into the NBSP. This means they will continue to be invited to screen every 2 years until they reach 60 years old.

What would the tagged contingency achieve if distributed across all ethnicities?

19. Broadly, there are two ways in which the tagged contingency could be used for all ethnicities within the current colonoscopy constraints:

a. expanding the eligibility age by a smaller number of years, balanced against forecast colonoscopy demand and capacity; and/or

b. further investing in improving screening rates amongst groups with the lowest participation in bowel screening (e.g. targeting regions with lower uptake).

20. Health outcomes are likely to vary considerably depending on the nature of the scenario – the target cohort, the intervention, the profile of staging at time of diagnosis, the profile of health services required to treat cases identified, and lead time required to implement the change. The associated cost profile is therefore also likely to vary significantly between scenarios.

Modelling work currently underway will help to inform these scenarios and their likely impact

21. In June 2023, the NBSP contracted Erasmus University Rotterdam in the Netherlands to provide detailed analytical analyses on the NBSP using a Microsimulation Screening Analysis (MISCAN) Colorectal Cancer Model[2]. The analysis would identify benefits of the NBSP, ongoing screening and surveillance colonoscopy capacity requirements, and measure the impact of any changes to the parameters of the NBSP.

22. The changes to the parameters of the NBSP that could be modelled include:

a. screening intervals

b. Faecal Immunochemical Testing (FIT) positive threshold levels

c. age eligibility criteria

d. engagement and invitation strategies

e. surveillance protocols.

23. The work required to calibrate the model for the New Zealand context was completed in December 2023. Work is now underway to begin modelling benefits arising from the programme and how the scale of benefits may be extended from modifying the programme's parameters, including through age extension. The exact scenarios to be modelled are still under discussion.

24. The team from Erasmus will visit New Zealand in late April/early May 2024 to present their initial findings, following which a report is expected by the end of June 2024.

25. There is an opportunity for you to shape these scenarios, and for Erasmus to present their initial findings to you, if you wish. Scenarios must be finalised by 31 March 2024.

What needs to be done to consider adjusting the contingency scope?

26. Cabinet agreement is required to alter the scope of the tagged contingency. The contingency has an expiry date of 1 February 2025.

27. If you would like to consider changing the scope of the contingency, we recommend you:

[2] This model was developed by Erasmus University Rotterdam in the Netherlands and has been extensively validated, giving credibility and reliability to its results. The Australian bowel screening programme has also worked with the Erasmus University Medical Center Group.

a. agree to wait until the Erasmus' analysis has been provided in June 2024 before considering options to alter the scope of the tagged contingency; this would ensure there is a solid analytical base used to assess and compare potential options; and

b. commission a policy briefing on option(s) to alter the scope of the tagged contingency (due in August).

28. Alternatively, if you would prefer to take a paper to Cabinet sooner, this is possible with the caveat that the supporting analysis would be considerably less robust.

Next steps

29. Officials are available to discuss the advice in this paper and provide further information if required.