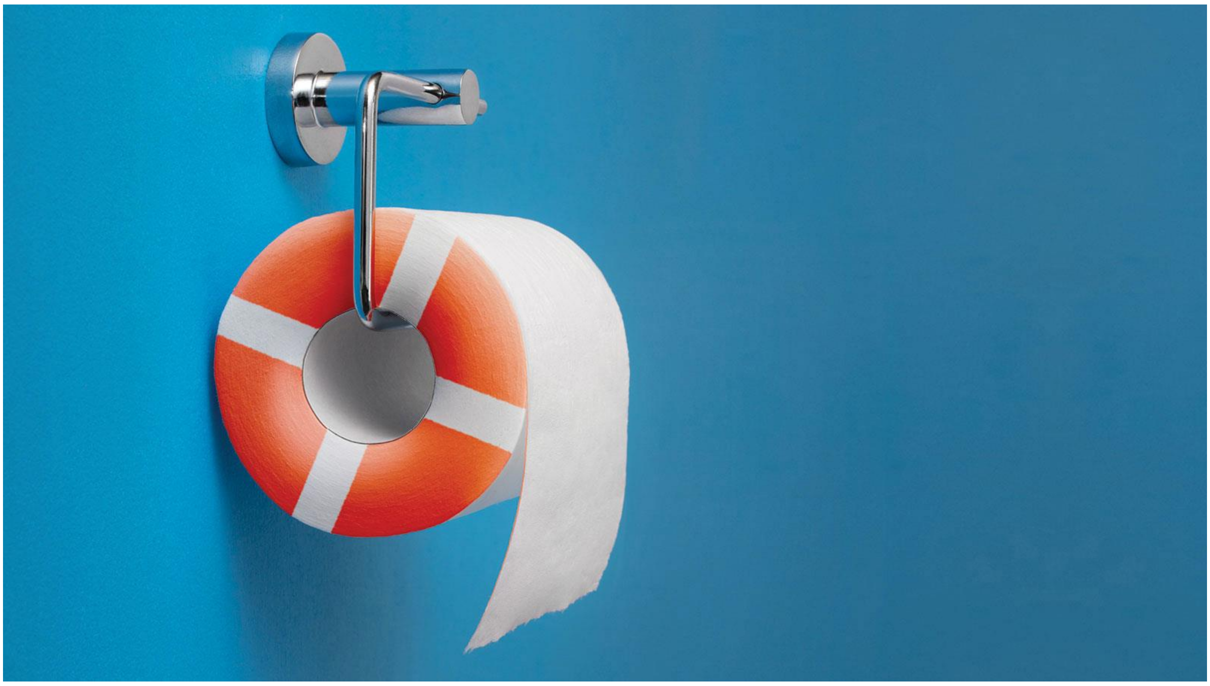
Australian Government
Department of Health

NATIONAL BOWEL CANCER SCREENING PROGRAM

CONSULTATION PAPER
Review of Phase Four of the National Bowel Cancer Screening Program



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Overview

The National Bowel Cancer Screening Program

Each year more than 15,000 cases of bowel cancer are diagnosed in Australia. In 2021, it is estimated that around half that figure (7,365 people, or 47%) would be diagnosed in the 50–74 age bracket. Just under 2,000 people in this age group will die from the disease (around 36% of all bowel cancer deaths)[1].

The Australian Government established the National Bowel Cancer Screening Program (the Program) in 2006 to address the rising incidence and mortality of bowel cancer in Australia. This decision made Australia one of the first countries to offer free bowel cancer screening to a national population.

The Program aims to reduce the incidence of bowel cancer through early detection of pre-cancerous growths and improve survival from bowel cancer. Screening was initially offered to Australians aged 55 and 65, and has gradually been expanded over time.

Review of Phase Four of the National Bowel Cancer Screening Program

In September 2019, the Department of Health (the Department) engaged Deloitte Access Economics to undertake a comprehensive evaluation (the Review) of Phase Four of the Program (2015-2020). One of the major milestones of Phase Four was expansion of the Program through phased implementation of biennial screening for people aged 50 to 74 by 1 July 2020, as opposed to Phase Three of the Program where screening only occurred every 5 years for people between the age of 50 and 65.

The completion of Phase Four allows the Program to shift focus from expansion to optimisation, providing an opportunity to build on the Program's strengths, as well as identify areas for further improvement. A Review Report for Phase Four has now been finalised and the Department is inviting your feedback on its findings through this Consultation Paper.

The Review found that the Program is a major strength of Australia's public health system and is appropriately placed to evolve from an expansion focus to an optimisation focus as it enters its next phase of implementation. The Review Report identifies opportunities in five key focus areas: Appropriateness of the Program; Appropriateness of colonoscopy; Governance; Data collection and Participation, including:

- Improving participation rates through alternative pathways for engagement, continued education and lowering the screening entry age, starting with under-screened groups including Indigenous Australians.
- Promoting the Program through ongoing engagement with healthcare providers, Primary Health Networks and professional bodies including targeted and coordinated communication campaigns, and innovative modifications to the Program kits and resources.
- Working with the states and territories to reduce waiting times for diagnostic assessment and access to colonoscopy, if needed, for participants in the Program.
- Improving Program data capture by the National Cancer Screening Register to enable more accurate assessment of Program participation rate, diagnostic assessment rate and timeliness.

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[1] Australian Institute of Health and Welfare, National Bowel Cancer Screening: Monitoring Report 2021, Cat. no. CAN 139, https://www.aihw.gov.au/getmedia/9d83956b-37bc-4152-af0a-cbe14ce21d7d/aihw-can-139-National-Bowel-Cancer-Screening-Program-monitoring-report-2021.pdf.aspx?inline=true

To inform the Review, extensive consultation was undertaken and included:

- 67 interviews and focus group meetings with 117 stakeholders from 46 organisations. Stakeholders included Program support officers from states and territories, clinicians, peak professional bodies, non-government organisations and consumer representatives.
- Over 2,000 responses through consumer and clinician surveys, with a further 200 responses received from culturally and linguistically diverse (CALD) respondents.
- Online public submissions were invited to ensure that all interested stakeholders could express their views, with 36 submissions received.

Purpose of this Consultation Paper

This Consultation Paper seeks your feedback on the findings under the five focus areas of the Review Report. The Australian Government is keen to hear from anyone who has an interest in the National Bowel Cancer Screening Program.

How to provide your feedback

You are invited to provide a written submission (no more than 1500 words) via the Department of Health Consultation Hub.

Submissions close 11:59pm Canberra time on 17 June 2022. Submissions will be made publicly available. If you do not wish your submission to be published, please indicate this in the submission.

To guide your consideration and feedback, discussion prompts have been included below under each of the five focus areas of the Review Report. **You may choose to address only some or all of the discussion prompts. Responses are not limited to the discussion prompts and additional relevant information is welcome.** Wherever possible, please provide facts and/or data to support your views.

Review Report – opportunities identified across five focus areas

Note: the numbered points under each Focus Area are taken verbatim from the Review Report. The discussion prompts are targeted questions drafted by the Department to help seek the views of Program participants, clinical experts and administrators.

Focus Area 1: Appropriateness of the Program

1. Consider the feasibility of lowering screening entry age to 40 or 45 for Aboriginal and Torres Strait Islander people, coupled with scale up of the Alternative Pathway pilot for this group.
2. Review timing intervals for reminders with clinical input.
3. Consideration should be given to alternate forms of communication which do not require simultaneous availability of the Participant Follow-Up Function (PFUF) officer and recipient (e.g. email/SMS).

Discussion prompts

- If the eligible age for Aboriginal and Torres Strait Islander people was lowered to 40 or 45, are there particular issues or perceptions that would need to be considered for successful implementation of this approach?
- When following up a positive iFOBT result
    - What is the best way to reach participants?
    - Are follow-up letters and phone calls useful, or would other ways of communicating be more effective?
    - Is the timing for GP and colonoscopy reminders appropriate?

Focus area 2: Appropriateness of colonoscopy

4. Support the Australian Commission on Safety & Quality in Healthcare with its implementation of the Colonoscopy Clinical Care Standards and monitor colonoscopy performance against colonoscopy quality standards.
5. Work with states and territories to pilot projects that reshape the Participant Follow-Up Function (PFUF) role in line with innovative colonoscopy access models.
6. Engage with Primary Health Network's and professional bodies (e.g. The Royal Australian College of General Practitioners and The Royal Australasian College of Physicians) to promote a comprehensive set of educational materials which describe the NHMRC-approved clinical practice guidelines[2],[3], the Program's full alignment with biennial screening recommendations, and recent changes to the Medical Benefits Schedule item codes for colonoscopy.

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[2] Clinical practice guidelines for the prevention, early detection and management of colorectal cancer: www.clinicalguidelines.gov.au/portal/2587/clinical-practice-guidelines-prevention-early-detection-and-management-colorectal-cancer

[3] Clinical practice guidelines for surveillance colonoscopy – in adenoma follow-up; following curative resection of colorectal cancer; and for cancer surveillance in inflammatory bowel disease: https://wiki.cancer.org.au/australia/Guidelines:Colorectal_cancer/Colonoscopy_surveillance

Discussion prompts

- Are you aware of developments in research that would be of interest to the Program which aim to improve standardised colonoscopy care in Australia?
- What aspects of the Participant Follow-Up Function role are working well; is there anything you would change?
- Are you aware of other innovative colonoscopy access models that could be applied in an Australian context?
- What approaches do you consider may be effective in increasing the awareness of the appropriate use of colonoscopy amongst healthcare professionals, i.e. minimising low value colonoscopies?
- What approaches (including audience and format) do you consider may be effective in delivering targeted education about the benefits of screening and when to refer a patient for a colonoscopy?

Focus Area 3: Governance

7. Re-configure Program Delivery Advisory Group (PDAG)[4] to include jurisdictional representatives that are able to provide operational advice on contextual issues related to colonoscopy access.
8. Promote the Program's research priorities to external researchers.
9. Reset the working relationship with all [governance group] stakeholders to ensure needs are being met in regard to the purpose of each group and expectations on information sharing.

Discussion prompts

- What mechanisms could be put in place to ensure that operational advice in relation to colonoscopy access is provided by the Program Delivery Advisory Group (PDAG)?
- When considering the promotion of the Program's key research priorities to academic organisations, what do you see as the key enablers and challenges?
- Do you have any practical suggestions to improve/strengthen Program governance?

Focus Area 4: Data Collection

10. Reconvene a working group with the goal of prioritising initiatives to address data gaps and agree on any required changes to the endorsed set of key performance indicators (KPIs)[5] (see **Appendix A**). This group should be set-up over the medium to long term to manage the stakeholder engagement, effort and time required to implement and oversee initiatives to address data gaps.

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[4] PDAG consists of NBCS Program managers from every state and territory health governments and is chaired by the Australian Government, Department of Health.

[5] Australian Institute of Health and Welfare 2014 Key performance indicators for the National Bowel Cancer Screening Program technical report: www.aihw.gov.au/reports/cancer-screening/key-performance-indicators-for-the-national-bowel/contents/table-of-contents

11. Improve visibility of the target population's participation in other forms of bowel cancer screening, including via over-the-counter iFOBT kits or kits provided by clinicians. Identifying invitees in the target population deemed to be at higher risk for bowel cancer (who may be undergoing surveillance colonoscopies) would also allow a more accurate measure of the true Program participation rate.

Discussion prompts

- What could the Department do to further facilitate collection of data from healthcare providers, and other sources into the National Cancer Screening Register (NCSR) to inform Program participation rate?
- What would encourage healthcare providers to further facilitate provision of data, including colonoscopy reports into the NCSR to enable more accurate assessment of diagnostic assessment rate and timeliness of assessment?
- What changes would you make to the participation/colonoscopy patient form to improve data collection by the NCSR?
- Do you have further comments on the evaluation of data by and for the Program, and how to improve completion of data collection?

Focus Area 5: Participation

12. Implement sustained and coordinated media and communications campaigns. Campaigns should be national in nature (across jurisdictional and cancer charities, where possible) to promote a coordinated message that minimises fragmentation and duplication of effort.
13. Use the primary care sector as a resource to promote participation through education and opportunistic provision of kits. GPs, practice nurses and pharmacists are well placed to promote and provide counselling regarding Program participation.
14. Consider piloting sample drop-off points. Trials of this nature should initially be targeted at people in regional areas due to their unique challenges in complying with the strict return postage requirements.
15. Scale up the Alternative Pathway pilot, as appropriate in other population groups. This includes other locations targeted at [increasing participation of] Aboriginal and Torres Strait Islander people, as well as exploration of how the pilot could be tailored to address access barriers faced by invitees from culturally and linguistically diverse backgrounds.
16. Explore utilisation of the NCSR to improve participation. This could include electronic reminders, streamlined processes for completion of personal details, access to in-language communications, as well as personalised invitations based on Program screening history and/or demographic factors. However, given phone/email contact information is unavailable for first-time screeners, mechanisms to collect this information from other government databases, such as MyGov, may be required.
17. Modify kit contents and accessories to mitigate common reasons for non-completion. This may include an action plan for completion contained in the kit instructions (to overcome the procrastination barrier), and/or provision of accessories such as an opaque bag for fridge storage (to overcome perceived hygiene concerns).

Discussion prompts

- Do you think there are benefits to making screening kits available over the counter at pharmacies and community health organisations? Should the kits be made more widely available through GPs, rather than relying on kits being mailed out?
- When considering the role of primary care in promoting bowel cancer screening, what are possible strategies or promotional activities that you think would best support health professionals from within this sector to increase participation in the Program?
- What do you see are the issues/challenges with piloting drop-off points, particularly for people living in rural and remote areas? What are some potential solutions?
- If you could change anything with the screening kits, what would it be?
- Do you have further comments on the evaluation of participation in the Program?

Next Steps

Your feedback will assist to inform the Australian Government's response to the Review Report. Thank you for your interest and we look forward to receiving your submissions.

Appendix A - Key performance indicators for the National Bowel Cancer Screening Program

The NBCSP has 11 endorsed indicators used for monitoring the NBCSP.

Indicators are important health surveillance tools that are used to establish points of reference, monitor the health of populations, and evaluate the outcomes of treatments, health service use, interventions and health Programs (AIHW 2008a).

Table 1 - NBCSP performance indicators

	Indicator	**Rationale** *(+ value where data is available)*
1	**Participation rate** The percentage of people invited to screen through the NBCSP in a 24-month period who returned a completed screening test within the defined 24-month period or the following 6 months.	The participation rate is a key indicator that measures the proportion of those invited who participate in the Program. Without participation, the NBCSP cannot achieve earlier detection. The Program should therefore monitor participation to ensure acceptability, equity and uptake, with the aim that reductions in incidence, morbidity and mortality can be achieved. Participation is the number of people screened, not the number of tests completed and is divided by the number of people invited. National Health and Medical Research Council guidelines recommend a two-yearly screening interval for colorectal cancer screening in Australia (ACN 2005). Accordingly, this participation indicator counts participation activity over a 24-month period and uses a 6-month follow-up period to ensure those invited have had time to respond. Although it would be ideal to adjust for people who do not screen because they participate in other forms of screening or surveillance, this is not currently possible due to restrictions in the data available. However, people who opt off or suspend from the Program without completing the test will not be counted. *Value = 43.5% (from NBCSP Monitoring Report 2021)*
2	**Screening positivity rate** The percentage of people who returned a valid NBCSP screening test and received a positive screening result (warranting further assessment) in a defined 12-month period.	The positive screening test rate determines the diagnostic assessment workload and lesion detection rate. It is important that the accepted positivity range is reviewed, revised if necessary, and defensible. Monitoring this is useful for Program planning and quality assurance. Further, monitoring the positivity rate by various

		stratifications may reveal emerging positive or negative trends that need to be investigated, and rectified if necessary. As a measure of Program performance, the screening positivity is presented for a defined 12-month period. To ensure the latest screening results are being monitored, this indicator counts all tests analysed in the defined period, not tests from those invited in the defined period; therefore, the cohort monitored is different from that in the participation indicator. *Value = 7% (from NBCSP Monitoring Report 2021)*
3	**Diagnostic assessment rate** The percentage of people who returned a positive NBCSP screening test in a 12-month period, and had a follow-up diagnostic assessment, measured 12 months after the defined period.	The appropriate movement of people from participation to diagnostic assessment is a key indicator of the efficiency and the impact of the Program in reducing morbidity and mortality from colorectal cancer. While not all participants with a positive screen will necessarily undergo assessment, according to the Population Based Screening Framework (AHMAC 2008), systems should be in place to ensure timely follow-up to diagnostic assessment for individuals with a positive screening test. Assessment services should be managed in a way that provides equity of access to the relevant assessment services regardless of geographic location, ethnicity or socioeconomic status. Annual monitoring of the diagnostic assessment rate by various stratifications may reveal emerging positive or negative trends that need to be investigated and rectified if necessary. To reduce the effect of any time lag between invitation, positive screen and diagnostic assessment, this indicator includes all those with a positive screen in the defined period, not all those invited in the defined period. *Value = 62% (from NBCSP Monitoring Report 2021)*
4	**Time between positive screen and diagnostic assessment** For those who received a positive NBCSP screening test (warranting further assessment) in a defined 12-month period, the time interval between the positive screening test and a follow-up diagnostic assessment, measured as	There are various steps, participant decisions and wait times in the pathway between a positive screen and a diagnostic assessment. Therefore, this indicator should not be considered a hospital wait time indicator. However, after a positive screen, further diagnostic evaluation should occur in a timely fashion as there is a defined risk of colorectal cancer in those with a positive screening test. *Value - 49 days (from NBCSP Monitoring Report 2021)*

	median, 90th percentile, and participant diagnostic assessments within certain time cut offs, measured 12 months after the defined period.	
5a	**Adenoma detection rate** The proportion of people who returned a valid NBCSP screening test in a defined 12-month period who were diagnosed with an adenoma within the defined period or the following 12 months.	Adenomas are benign growths that have the potential to become cancerous, and their removal is likely to lower the risk of future colorectal cancer. Therefore, the adenoma detection rate (particularly the detection of advanced adenomas) is one measure of the effectiveness of the Program. This indicator is defined to calculate the proportion of people who screened and had an adenoma detected, not the number of adenomas found per 100 diagnostic assessments. Therefore, it should not be used as a measure of the quality of diagnostic assessment. To reduce the effect of any time lag between invitation, positive screen, diagnostic assessment and histopathology, this indicator includes all those who screened in the defined period, not all those invited in the defined period (who had a positive screen).
5b	**The positive predictive value of diagnostic assessment for detecting adenoma** The percentage of people who returned a positive NBCSP screening test (warranting further assessment) that underwent a diagnostic assessment and were diagnosed with an adenoma, measured 12 months after the defined period.	The NBCSP aims to maximise the early detection of colorectal cancer in the target population. Adenomas are benign growths that have the potential to become cancerous, and their removal is likely to lower the risk of future colorectal cancer in these patients. This indicator calculates the positive predictive value of follow-up assessment for detecting adenomas. This is a measure of the quality and effectiveness of diagnostic assessment for detecting serious colorectal abnormality. Monitoring the positive predictive value of diagnostic assessment for detecting adenoma by various stratifications may also reveal emerging positive or negative trends that need to be investigated and rectified if necessary. To reduce the effect of any time lag between invitation, positive screen, diagnostic assessment and histopathology, this indicator includes all those who underwent diagnostic assessment in the defined period, not all those invited in the defined period (who had undergone diagnostic assessment).
6a	**Colorectal cancer detection rate** The proportion of people who returned a valid NBCSP	The NBCSP aims to maximise the early detection of colorectal cancer in the target population.

	screening test in a 12-month period and were diagnosed with a screen-detected colorectal cancer, measured 12 months after the defined period.	This can be achieved by detecting cases of colorectal cancer before a person has symptoms, enabling early intervention. The cancer detection rate is a key indicator of Program effectiveness, especially when comparing this rate to the known colorectal cancer incidence rate in the target population. Monitoring the cancer detection rate by various stratifications may also reveal emerging positive or negative trends that need to be investigated and rectified if necessary. To reduce the effect of any time lag between invitation, positive screen, diagnostic assessment and histopathology, this indicator includes all those who screened in the defined period, not all those invited in the defined period (who had a positive screen).
6b	**The positive predictive value of diagnostic assessment for detecting colorectal cancer** The percentage of people who returned a positive NBCSP screening test (warranting further assessment) that underwent a diagnostic assessment and were diagnosed with cancer, measured 12 months after the defined period.	This indicator calculates the positive predictive value of follow-up assessment for detecting cancers. This is a measure of the quality and effectiveness of diagnostic assessment. The NBCSP aims to maximise the early detection of colorectal cancer in the target population. This can be achieved by detecting cases of colorectal cancer before a person has symptoms, enabling early intervention.
7	**Interval cancer rate** The proportion of people who returned a NBCSP screening test in a defined 12-month period who were diagnosed with colorectal cancer (not involving a positive NBCSP screen and positive assessment) in the following 24-month period, or before their next screen, whichever comes first.	An interval cancer is a colorectal cancer that is diagnosed after a screen that detected no cancer and before the next screen or in the following 24 months, whichever is earlier. Interval cancers are inevitable in a population based screening Program; a low interval cancer rate is desirable. A high interval cancer rate reduces the potential for the Program to achieve reductions in morbidity and mortality from colorectal cancer. Monitoring interval cancer rates is also important to assess the diagnostic assessment component of the screening pathway. Monitoring the interval cancer rate by various stratifications may also reveal emerging positive or negative trends that need to be investigated and rectified if necessary
8	**Cancer clinico-pathological stage distribution** The percentage of people who had received a NBCSP invite and were later diagnosed with colorectal cancer in a defined	A key goal of the NBCSP is to detect colorectal cancers at an earlier clinico-pathological stage than would otherwise have been detected if there was no organised colorectal screening Program in Australia. Detecting cancer at an earlier clinico-pathological stage is associated with improved patient prognosis (Morris et al. 2007).

	12-month period, by clinico-pathological stage.	
9	**Adverse events—hospital admission** The rate at which people who had a diagnostic assessment in a defined 12-month period were admitted to hospital within 30 days of the assessment, measured 6 months after the defined period.	As with any invasive procedure, there is the risk of an adverse event occurring with a colonoscopy or other diagnostic assessment. Maximising benefit and minimising harm is an important tenet of population screening. Accordingly, it is important to report the known harms from screening when monitoring the performance of the Program.
10	**Incidence of colorectal cancer** The incidence rate of colorectal cancer per 100,000 estimated resident population in a 12-month period.	Incidence data provide contextual information about the number of new cases of colorectal cancer in the population
11	**Mortality from colorectal cancer** The mortality of colorectal cancer per 100,000 estimated resident population in a 12-month period.	Mortality data provide contextual information about trends in the level of colorectal cancer mortality in the population *Value = 0.5 per 10,000 assessments (from NBCSP Monitoring Report 2021)*