BOWEL CANCER SCREENING IN AUSTRALIA AND AOTEAROA NEW ZEALAND

The Royal Australasian College of Surgeons (RACS) acknowledges the significant burden of bowel cancer across communities in Australia and Aotearoa New Zealand. Bowel screening tests are clinically effective, accurate, socially acceptable and cost-efficient, with proven capacity to detect early-stage disease. Ensuring equitable access to screening is essential to reducing the impact of bowel cancer on patients, families, and the broader health system.

RECOMMENDATIONS

1. RACS supports the use of Faecal Immunochemical Test (FIT) as a clinically effective, accurate, socially acceptable, cost-efficient bowel screening tool.

2. RACS supports colonoscopy as the primary method of surveillance for advanced colorectal polyps. Computed tomography (CT) colonography or plain CT abdomen can be used when colonoscopy is refused or contraindicated.

3. RACS urges the Government in Aotearoa New Zealand to reinstate the availability and prioritisation of bowel screening for Māori and Pacific Peoples from 50 years of age once every two years, both to honour its obligations under Te Tiriti o Waitangi and to reduce the inequity seen for this group of patients.

4. RACS commends the Australian Government for lowering the bowel cancer screening age to 45 years and strongly encourages the Government in Aotearoa New Zealand to consider implementing a similar change to address rising levels of early-onset colorectal cancer (EOCRC).

5. RACS calls on governments in Australia and Aotearoa New Zealand to commit resources to:
   - ensure the ease and benefits of screening are widely publicised by way of ongoing advertising campaigns.
   - promote the use of reminders, clinician interventions and clinical decision support tools to promote adherence to screening and to improve follow-up of patients with a positive screening test.
   - improve participation among Māori, Pacific Peoples, Indigenous Australian, rural and socioeconomically disadvantaged populations by partnering with relevant local health bodies and using targeted, culturally tailored advice and support.

6. RACS supports the use evidence-based guidelines by endoscopists for triaging screening and surveillance colonoscopy to minimise low value care and to ensure appropriate cohorts receive this procedure.

BACKGROUND

Incidence and Mortality

The rates of bowel cancer in Australia and Aotearoa New Zealand are among the highest in the world (1). Bowel cancer is the second leading contributor (behind lung cancer) to the overall cancer burden in Australia and Aotearoa New Zealand. Although the incidence of colon cancer has decreased significantly over the last decade among people aged 50 to 74 years in Australia (by 1.6% annually) and Aotearoa New Zealand (by 3.4% annually), the incidence of early-onset colon cancer among people younger than 50 years is on the rise (by 3% annually) (2,3).

The Australian Institute of Health and Welfare estimated that 15,713 Australians will be diagnosed with bowel cancer (43 cases per day) in 2022, with 5,326 people (15 per day) dying from the disease. This represents 9.7% of all new cancer cases and 11% of all cancer-related deaths (4). Men are 1.4 times more likely to be diagnosed with bowel cancer and 1.3 times more likely to die from it than women (5). Each year approximately 3,000 people in Aotearoa New Zealand are diagnosed with bowel cancer and 1,200 die from the disease (6). In both countries Indigenous peoples are more likely to be diagnosed with bowel cancer and to have poorer outcomes than non-Indigenous peoples (7).

Bowel cancer is the most expensive cancer to treat in Australia, costing at least $1.1 billion annually (8). This figure has risen from an estimated $235 million in 2000-01 due largely to the use of more effective but higher cost drugs for treating the cancer, resulting in an improved survival rate, and to the increased incidence of the cancer in line with the ageing of the population. It is one of three cancers for which population-based screening is recommended to detect early-stage disease in people without symptoms (along with breast cancer and cervical cancer, both with national screening programs in both countries). This is fundamental to reducing the morbidity and mortality associated with the disease, as well as reducing higher but less cost-effective treatment for more advanced disease.

The importance of detecting bowel cancer early is seen in the five-year case survival rates, which vary dramatically depending on the stage at which the cancer is detected (9):

- 99% for Stage 1– when the cancer is contained within the bowel wall.
- 89% for Stage 2 – when the cancer has extended through the bowel wall, but with no lymph nodes affected.
- 71% for Stage 3 – when the cancer is present in the lymph nodes; and
- 13% for Stage 4 – when the cancer cannot be removed by surgery or has spread to other areas of the body.

Bowel screening programmes result in a “stage shift” with an increase in earlier stage cancers being detected using bowel screening, prior to bowel screening only 12% of cancers were stage 1, with the introduction of bowel screening this had increased to 37% over all from 2018-2022 (10).

Screening Tools

There are four main screening tools available for the early detection of bowel cancer:

- Faecal Immunochemical Test (FIT)
- Flexible sigmoidoscopy
- Colonoscopy
- CT colonography

Currently, FIT is the preferred screening tool and is endorsed by Cancer Council Australia, the National Health and Medical Research Council (Australia) and Te Whatu Ora - Health New Zealand. The FIT is done by the person in their own home, with the samples sent away for analysis. A positive result must be followed up with a colonoscopy. FIT's only major drawback is its relatively high rate of false-positive results (5%). This drawback notwithstanding, FIT in the home has been chosen by both governments as the primary tool in their national screening programs.

Screening Programs

In 2006 the Australian Government established the National Bowel Cancer Screening Program (NBCSP). The NBCSP offers free biennial screening with an FIT to people aged 45 to 74 years. Since the program began, approximately 9.2 million screening tests have been completed, and an estimated 4.3 million people have participated at least once (11). This represents a participation rate of nearly 44%, with women being more likely to take the test than men (46% versus 42%). Of those who received a positive test (7% of people screened), 62% had a follow-up colonoscopy within a median 49 days of their screening test (11). If the current rate of participation is maintained, then the NBCSP will likely prevent 92,200 cancer cases and 59,000 deaths between 2015 and 2040 (12).

Aotearoa New Zealand implemented its National Bowel Screening Programme in 2017. The program provides free biennial bowel screening with an FIT for all New Zealanders aged 60 to 74 years. In 2023 the program was expanded to include Māori and Pacific Peoples aged 50 to 59 years, however this was reversed in 2025 and instead the screening age for all populations was lowered from 60 to 58 years of age. There will be a staged lowering of the age to 58 in two tranches starting in October 2025. The participation rate for the first three years of the program was 57%. Around 7% of people screened receive a positive test result, of which approximately 84% have a follow-up colonoscopy (13, 14).

KEY ISSUES

Impact of Health Inequities on Bowel Screening

Health inequities in Australia and Aotearoa New Zealand can significantly impact bowel screening uptake and patient outcomes. In Aotearoa New Zealand, participation rates for Asian, Māori and Pacific people were lower than for other ethnic groups, with rates also declining with increasing deprivation (15, 16). Similarly in Australia bowel screening uptake is lowest for people living in the lowest socioeconomic areas, Indigenous Australians and for individuals who speak a language other than English at home (17). With late-stage diagnosis resulting in increased mortality, improving screening rates are vital to addressing disparities such as the five-year risk of death from colorectal cancer being significantly higher in Māori (47%) and Pacific Peoples (59%) than in other ethnic groups (38%) (18). This is comparable in Australia where the five-year chance of survival for Indigenous Australians is 54% (19) when the overall Australian average is 71% (20).

RACS recognises achieving equity in Aotearoa New Zealand's bowel screening program requires an approach based on Te Tiriti o Waitangi. As highlighted in the WAI 2575 inquiry into health inequities, there remains a significant gap between current practice and Te Tiriti obligations (21). The recent decision to remove access for Māori and Pacific Peoples to bowel screening at 50 years of age represents a significant retrograde step in honouring this commitment. While the move to standardise access for all populations at 58 years of age may result in some additional cancer detections among Māori and Pacific Peoples, it will not address the persistent inequities (22).

Programs and resources that are led by and tailored to specific populations is a vital approach in addressing systemic health inequities and promoting culturally safe care. A pilot Indigenous-led Alternative Pathway to Bowel Screening project (2015) recorded significantly higher participation rates among Indigenous Australians (39.8%) compared to the standard pathway (23.3%), aligning closely with participation rates of non-Indigenous Australians (40.6%) (23). In Aotearoa New Zealand, a study found that structured primary health care campaigns can increase requests for bowel screening kits, particularly Māori and Pacific patients, with a 134% increase over 2 years (24).

Increasing Incidence of Bowel Cancer in Younger Populations

While bowel cancer often associated with older populations, there is an increasing incidence of bowel cancer in younger populations (25). The number of colon cancer cases diagnosed in Australia in people aged under 50 years has more than doubled since 2000 (26), while in Aotearoa New Zealand the rate of EOCRC has increased 26 per cent per decade on average over the past twenty years (27). While the Government in Aotearoa New Zealand has announced it will lower the NBSP age from 60 to 58 for all New Zealanders, this remains significantly later than in Australia and America (45) and the UK (50). Given the increase in Aotearoa New Zealand is driven by increasing numbers of younger Māori patients, the decision to remove access to bowel screening for this population from 50 years of age is particularly alarming. The increasing rate of bowel cancer among younger populations will drive increasing costs within the health systems unless it is detected earlier.

SUMMARY

There is wide acknowledgement that colorectal cancer is an exemplar disease for population-level screening and early intervention is essential for maximising treatment outcomes and survival (28, 29). Screening tests are effective and accurate, socially acceptable, cost effective and able to detect latent and early symptomatic disease (28, 29). Economic modelling has indicated that the costs of bowel cancer screening in both countries are more than offset by the savings from avoided treatment costs. Support for initiatives that address health inequities (29) in vulnerable populations and monitoring the increasing rate of bowel cancer diagnosis among younger populations will be essential to reducing the impact of bowel cancer and improving patient outcomes for all communities in Australia and Aotearoa New Zealand. RACS encourages endoscopists to consider use of endoscopy resources wisely for screening and surveillance procedures, using evidence based guidelines to ensure patients who will benefit from the procedure have prioritised access and low value care is minimised.

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