## Editorials



## A bowel cancer screening plan at last

More lives will be saved by fully implementing the National Bowel Cancer Screening Program in 2020

**Paul B Grogan** Director, Advocacy and Policy

> Ian N Olver MB BS, MD, PhD Chief Executive Officer

Cancer Council Australia, Sydney, NSW.

> paul.grogan@ cancer.org.au

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he 2014–15 federal Budget included an announcement of \$95.9 million for the long-awaited full implementation of the National Bowel Cancer Screening Program (NBCSP) by 1 July 2020.¹ From that date, all Australians aged 50 to 74 years will finally be invited to screen for bowel cancer every 2 years with a faecal occult blood test (FOBT).

The announcement included a plan to incrementally expand the program, currently offered to people aged 50, 55, 60 and 65 years. The program will include 70-year-olds (through a previous funding commitment in 2012) and 74-year-olds from July 2015; people turning 64 and 72 years from 2016; and those aged 54, 58 and 68 years from 2017. The four remaining age groups (52, 56, 62 and 66 years) will be included from 2018 to 2020.<sup>1</sup>

The rationale is consistent with results from a study by Cenin and colleagues published in this issue of the Journal, which prioritised age groups according to the mortality-reduction benefit that can be expected from FOBT screening.<sup>2</sup> Benefit is derived from prioritising screening according to age-based risk and closing gaps in the existing age cohort to shift from 5-yearly to biennial screening.<sup>3</sup>

A final implementation plan for the NBCSP has been a long time coming. The program was introduced in August 2006 with the mail-out of FOBT kits to people turning 55 and 65 years. While sporadic funding increases in the interim have been welcomed, there have also been unacceptable delays and ongoing concerns. For example, the 2012–13 Budget provided a much-needed \$50 million to expand the NBCSP; however, the final implementation date was set as 2034.4 Cancer Council Australia therefore believed it was critical to provide evidence of the enormous potential benefits of completing the program by an acceptable date of 2020.

Cenin and colleagues used the MISCAN (microsimulation screening analysis)-Colon model to examine mortality gains with full implementation of the NBCSP by 2035 compared with full implementation by 2020<sup>2</sup> — the year recommended by Cancer Council Australia in its 2013 election priorities. The model estimated that full implementation by 2020 would prevent 35 000 (100% extra) bowel cancer deaths over the following four decades.

Now that the future of the NBCSP is assured, it is essential to engage with general practitioners and other health care professionals to improve participation and facilitate continuous improvement in service delivery.

The most recent data available show that, of people invited to participate in the NBCSP between July 2012 and June 2013, only 33.5% did so.<sup>5</sup> This is an unacceptably low rate. However, it was not unexpected, given the low awareness among Australians about bowel cancer,<sup>6</sup> the novelty of population screening for men and the lack of targeted communication about the NBCSP. A large-scale communications campaign, during program expansion and after full implementation, will be needed to improve participation rates if the NBCSP is to fulfil its potential to reduce bowel cancer mortality.

Since the inception of the NBCSP, GPs have been identified as critical partners. The government has sought to promote GP involvement in the NBCSP through GP representation on relevant committees, and through engagement with the Royal Australian College of General Practitioners (RACGP). While general practice resources such as the RACGP "red book" recommend FOBT screening for 50–74-year-olds, it will become increasingly important to consult closely with the primary care sector and provide support to GPs to facilitate their role in the expanded NBCSP.

GPs are well placed to promote the use of the FOBT as the recommended screening tool for average-risk people currently outside the NBCSP. This would help reduce the strain on colonoscopy services. More than 500 000 colonoscopies are conducted annually in Australia. While there is no national dataset on how many of these are performed on asymptomatic, average-risk patients, it is thought that a significant number are done as first-line screening.

Currently, 7.5% of FOBTs completed through the NBCSP return a positive result.<sup>5</sup> Of those patients, around 70% present for colonoscopy. Of these, one in 32 are diagnosed with a confirmed or suspected cancer and one in 17 are diagnosed with advanced adenoma.<sup>5</sup> The FOBT is therefore a valuable tool for prioritising the use of colonoscopy for patients who are at higher than average bowel cancer risk or are symptomatic.

Throughout the NBCSP's expansion, there has also been discussion about virtual colonoscopy, flexible sigmoidoscopy and plasma DNA testing as alternative screening tools. There is no evidence to suggest virtual colonoscopy would be a feasible alternative to the FOBT.<sup>8</sup> Although flexible sigmoidoscopy has been shown to be effective in randomised trials,<sup>9</sup> it is significantly more expensive than the FOBT and questions remain about its acceptability.

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DNA biomarker tests using plasma and faecal stool samples are also available; however, they are unsuitable for screening, as they have significantly lower sensitivity than the FOBT for advanced adenoma and for stage A cancer.<sup>10-12</sup>

Importantly, South Australian data have shown that twice the number of stage A cancers were diagnosed in people invited to participate in the NBCSP compared with people who were not and who had presented with a symptom.<sup>13</sup>

The NBCSP's potential to prevent a total of 70 000 Australian bowel cancer deaths over the next four decades is compelling.

Competing interests: The research by Cenin et al was led by our colleagues in Western Australia and involved members of Cancer Council Australia's Cancer Screening Committee and coopted external experts. It was done for the purposes of contributing to the literature and estimating the mortality reduction benefits of an expedited NBCSP implementation plan.

Provenance: Commissioned; not externally peer reviewed.

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