

## Appendix 1: Updated evaluation judgements against objectives

Below are the updated evaluation findings for Round 2 across the six evaluation objectives. Evaluation objectives on screening effectiveness, participation and coverage and cost effectiveness have not been updated here as they are updated in sections 3 and 4, respectively.

### Programme design

Having an eligible population database (the Register) continues to be a strength of the BSP. The Register enables the identification of the eligible population, the distribution of kits and monitoring of participation, and informs targeted participant follow-up and CAR activities.

Data quality and completeness of Register data are essential to ensure the effectiveness of BSP processes and enable quality monitoring. The Ministry's reviews demonstrated the quality of the data on the BSP Register was good, and highlighted a lack of currency of participant contact details (Karalic 2014, Lee 2014). While the Register has been upgraded during the Pilot, there are a number of manual processes required to deliver components of the screening pathway. Further, the Register does not link to other health systems (e.g. the Cancer Register or Births and Deaths Register). As a result it is difficult to check for eligibility and people who have died can be inadvertently invited. If the Register is to be used in a national programme, a systematic review of its functionality is needed to determine whether it can operate efficiently for a national bowel screening programme.

### Acceptability to providers

In Round 2, qualitative feedback from providers emphasised the ongoing acceptability of the BSP and its design in the community, primary care and hospital setting. Support for a national screening programme continues, and a sense of urgency is growing on the need to act. The work of the BSP Programme Manager supported by the WDHB BSP Clinical Director were noted as critical to engendering and maintaining this ongoing support.

### Service delivery and workforce capacity

In Round 2, the BSP screening pathway continues to be implemented as intended. Māori and Pacific BSP participants interviewed indicated a mainly positive experience of the screening pathway. In Round 2, pressure on colonoscopy and treatment capacity has declined due to increased and enhanced management of capacity and lower iFOBT positivity rates.

LabPLUS continue to be seen as having quality processes in place, being timely in their delivery, and engaged with the wider BSP screening pathway. In Round 2, the number of pathologists involved in the BSP increased from two to five. Pathologists are joining MDMs via video conference which is more time efficient.

At the end of Round 2, surveillance colonoscopies are impacting on the symptomatic list. Concerns have been raised that BSP participants requiring surveillance colonoscopies at one year are not receiving timely appointments. This is currently being reviewed.

General practice has an important role in informing about and encouraging their patients to take part in the BSP and complete their screening pathway.

### Quality monitoring

In Round 2, quality indicators continued to be reviewed in every third WDHB Steering Group meeting. All admissions to hospital after a BSP colonoscopy are reviewed to see if they are

mild, intermediate or severe. Readmission analysis was used to inform quality improvements to practices or processes to reduce the number of readmissions.

The interim quality standards developed for the BSP are seen at a national and regional governance level to be appropriate for the national screening programme, and the BSP mostly meets the standards.

Quality standards for the BSP are interim. A process is therefore needed to review and finalise them for a national programme.

### **Acceptability to the target population**

The acceptability of the BSP (defined by awareness, attitudes and knowledge) varies amongst the eligible population, reflecting it is not a homogenous group. Acceptability of the BSP is higher amongst the eligible European/Other group (non-Māori and non-Pacific), and lower amongst eligible Māori and Pacific people (Litmus 2014a).

Since the launch of the BSP, awareness of the BSP has significantly increased amongst the eligible European/Other group. Knowledge about bowel cancer risk factors, symptoms and bowel cancer tests has also increased. Perceptions of the iFOBT have also become more positive with significant increases in disagreement that the iFOBT is painful, embarrassing, inconvenient, messy and inaccurate (Litmus 2014a).

Compared with the European/Other group, Māori and Pacific people have lower awareness of bowel cancer risk factors, symptoms and bowel cancer tests including the iFOBT which may reflect their lower levels of participation. Other barriers to participation include a dislike of bowel screening, a preference for seeing their doctor, not being concerned, a fatalistic attitude of 'what will be will be' or not wanting to know, and not wanting to do the test at home. Pacific people also perceive the iFOBT as messy (Litmus 2014a).

BSP participants' experience of the BSP continues to be mainly positive. Pākehā, Māori and Pacific BSP participants interviewed in Round 1 consistently described their experience of the BSP as convenient, the iFOBT as easy to do with timely results and progression along the pathway. For those with a positive iFOBT, the communication about their results was reassuring, and their colonoscopy experience was timely and respectful (Litmus 2013). Māori and Pacific BSP participants interviewed in Round 2 also noted that after being supported to complete the iFOBT kit, they found the process easy and not as bad as they had first imagined.

### **Fair access for all New Zealanders**

BSP screening Round 2 has been used to trial new initiatives to assess whether they increase participation by Māori and Pacific people, and other eligible participants. Towards the end of Round 2, there is increasing confidence amongst stakeholders that an equity focus is an integral part of the BSP. In Round 2, there was a greater governance level focus on equity in the BSP at WDHB and the Ministry with a requirement for regular updates and KPIs on activities to increase Māori and Pacific participation.

Māori leadership in particular was strengthened, including those with a depth of clinical, screening and community knowledge, and having representation on key governance groups. Pacific leadership was enhanced, but involvement continues to be ad hoc due to the significant demands on their capacity. While leadership has strengthened, the role of the Kaitiaki Roopu has waned and needs to be reviewed.

New initiatives were introduced in Round 2 including strengthening active follow-up, primary care initiatives, and trialling lab drop-off for completed iFOBT. Other initiatives continue to be explored for Round 3 including pay-for-performance which is being discussed with PHOs

and general practice. The new initiatives were fully operational in 2015. It is not possible at this stage to determine whether they are impacting positively on the overall population participation rates for Māori and Pacific people as the epidemiological results are based on the first 36 months of the pilot. Individually, the evidence shows they are supporting Māori and Pacific people to take part.

Active follow-up is mainly achieving the KPI that 95% of Māori and Pacific non-responders on the active follow-up database receive a minimum of three phone call attempts within a month of referral, with at least one of the calls made outside office hours. Active follow-up has an estimated conversion rate of over 20% for both Māori and Pacific people who received a kit and did not return it by four weeks. In 2015, this equates to 686 out of 2,641 Māori non-responders at four weeks who went on to complete their iFOBT kit after contact or attempted contact by active follow-up (26%), and 651 out of the 3,010 Pacific people (22%).

In 2015, DRINFO and Patient Dashboard were updated to enable opportunistic and systematic patient reminders on completing their iFOBT kit by general practice. Awareness and use of these tools is high for reminders for screening tests in general. However, they are less frequently used for bowel screening reminders. Using Patient Dashboard, general practice can fax the BSP Coordination Centre to send a replacement iFOBT kit to their patients. Between October 2014 and 31 January 2016, the BSP Coordination Centre received 1,622 fax requests from general practice to send out a replacement bowel screening kit to patients, and received back 888 completed iFOBT kits (a return rate of 55%).