

Appendix 5: BSP monitoring indicators

The Ministry of Health developed a detailed set of monitoring indicators which were drawn up to monitor and evaluate the progress of the BSP. BSP monitoring indicators can be sourced at <http://www.health.govt.nz/our-work/diseases-and-conditions/cancer-programme/bowel-cancer-programme/bowel-screening-pilot/bowel-screening-pilot-results#bspindicators>. Table 13 is a summary of the Ministry of Health's BSP monitoring indicators as sourced on 29 July 2016.

Table 13: New Zealand BSP Monitoring Indicators for Round 1: 1 January 2012 to 31 December 2014 and for Round 2: 1 January 2014 to 30 September 2015

No	Indicator description	Evidence	Target	Value
1	Overall participation	This is the % of people with a final iFOBT result (positive or negative) out of all those eligible invited by the programme, for the first and subsequent screening round.	60% for first screen (Round 1)	Round 1: 56.8% Average for Round 2: 53.4% Where Round 2 was first screen - Aged in or moved in: 44.4% - Did not respond or unsuccessful in Round 1: 23.5% Where Round 2 was second screen: 83.2%
2	Coverage	This is the % of eligible people in Waitematā DHB region* who were invited to participate during the first screening round.	>95%	97.50%
3	Time to colonoscopy as at December 2015	This is the % of people whose time between the laboratory receiving a positive iFOBT to having a colonoscopy carried out was within a specified target (excludes persons who decline colonoscopy preformed privately).	95% <11 weeks	95%
4	Proportion of individuals with a positive screening test undergoing colonoscopy or CT colonography	This is the % of screened people with a positive iFOBT result who have had a colonoscopy or CT colonography through the programme, or have a date booked for a colonoscopy	>90% undergo colonoscopy or CT colonography	Round 1: 88.1% (95.1%)** Round 2: 85.6% (93.3%) **
5	Colonoscopy completion rate as at September 2015	This is the % of completed colonoscopies (reaching the caecum).	Acceptable >90% Desirable > 95%	Round 1: Approximately 97% Round 2: Approximately 97%
6	Colonoscopy complication rate for perforation or bleeding	This is the number of people requiring admission to hospital for an intermediate or serious adverse event related to perforation or bleeding occurring within 30 days of colonoscopy, per 1000 of those who had a colonoscopy during the first and subsequent screening round.	<10 per 1000 colonoscopies	3.3 per 1000***

FINAL EVALUATION REPORT OF THE BOWEL SCREENING PILOT

No	Indicator description	Evidence	Target	Value
7	Colonoscopy complication rate for events other than perforation or bleeding	This is the number of people requiring admission to hospital for other intermediate or serious adverse events not related to perforation or bleeding occurring within 30 days of colonoscopy, per 1000 of those who had a colonoscopy during the first and subsequent screening round.	No agreed international standard	0.3 per 1000
8	Positivity rate	This is the % of people with a positive iFOBT during the first and subsequent screening round.	6–8% for first screen (Round 1) No agreed target for Round 2	Round 1: 7.5% Average for Round 2: 5.9% Where Round 2 was first screen: - Aged or moved in: 5.2% - Did not respond or unsuccessful in Round 1: 8.5% Where round 2 was second screen: 5.5%
9	Colorectal Cancer (CRC) detection rate	This is the number of people diagnosed with any CRC per 1000 screened with an iFOBT result available for the first and subsequent screening round.	1.8–9.5 First screen (Round 1) per 1000 (Range from population screening programmes with iFOBT)	Round 1: 2.8 per 1000 (3.1 per 1000) **** Round 2: 1.4 per 1000 (1.6 per 1000)****
10	Colorectal Cancer (CRC) Stage at diagnosis (including polyp cancers)	This is the TNM staging for CRC detected at the first and subsequent screening round. In cases where more than one staging was given for an individual only the most serious staging result is included. For cancers found through public colonoscopy.	No agreed international standard	Stage 1: 47.6% Stage 2: 21.6% Stage 3: 22.9% Stage 4: 7.9%
11	Advanced Adenoma detection rate	This is the number of people diagnosed with any advanced adenoma (villous or tubulovillous or, high grade dysplasia or, greater than or equal to 10 mm in size) per 1000 screened with an iFOBT result available for the first and subsequent screening round.	No agreed international standard	Round 1: 15.5 per 1000 Round 2: 7.5 per 1000
12	Adenoma detection rate	This is the number of people diagnosed with any adenoma per 1000 screened with an iFOBT result available for the first and subsequent screening round.	13.3–22.3 per 1000 (Range from population screening programmes with iFOBT)	Round 1: 36.2 per 1000 Round 2: 23.2 per 1000
13	Positive predictive value of iFOBT for cancer	This is the % of people with a malignant outcome in those having a colonoscopy for the first and subsequent screening round.	PPV Cancer first screen 4.5%–8.6%	Round 1: 4.3% (4.4%)***** Round 2: 2.9% (2.9%)*****
14	Positive predictive value of iFOBT for advanced adenoma	This is the % of people with any advanced adenoma in those having a colonoscopy for the first and subsequent screening round.	No agreed international standard	Round 1: 24.0% Round 2: 15.3%

FINAL EVALUATION REPORT OF THE BOWEL SCREENING PILOT

No	Indicator description	Evidence	Target	Value
15	Positive predictive value of iFOBt for adenoma	This is the % of people with any adenoma in those having a colonoscopy for the first and subsequent screening round.	PPV adenoma first screen 9.6–40.3%	Round 1: 56.1% Round 2: 47.7%

* For this indicator, the number of eligible people in the Waitematā is defined as those people residing in the Waitematā DHB region, aged 50-74 based on 2013 census data sourced from StatsNZ.

** This includes those that have chosen to receive a colonoscopy through a private provider.

*** This number was calculated on the expected number of adverse event rates reported in the UK Bowel Cancer Screening Programme Quality Assurance Guideline for Colonoscopy and based on the fact the 7 out of 10 pilot participant proceeding to colonoscopy are identified to have had a lesion.

**** This figure includes those who had cancer found through a colonoscopy undertaken privately.

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Note: Unless otherwise stated, these figures do not include people who have exited the programme and had private colonoscopies, or adenomas and cancers detected through them. Unless otherwise stated, all indicators are based on the European Guidelines for Quality Assurance in Colorectal Cancer Screening and Diagnosis.

The indicators were developed using recommendations and standards set out in the European Guidelines for Quality Assurance in Colorectal Cancer Screening Diagnosis, and the United Kingdom Bowel Screening Programme Quality Assurance Guidelines for Colonoscopy.