

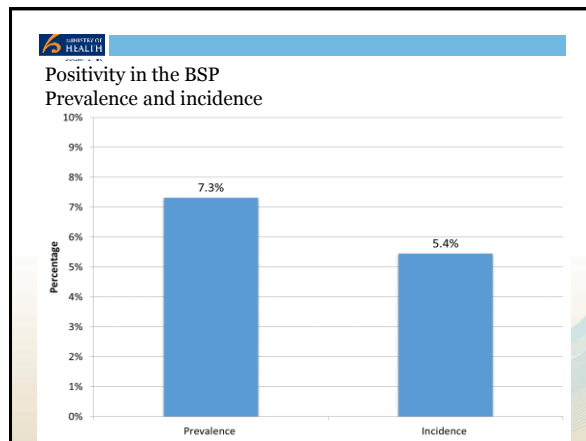
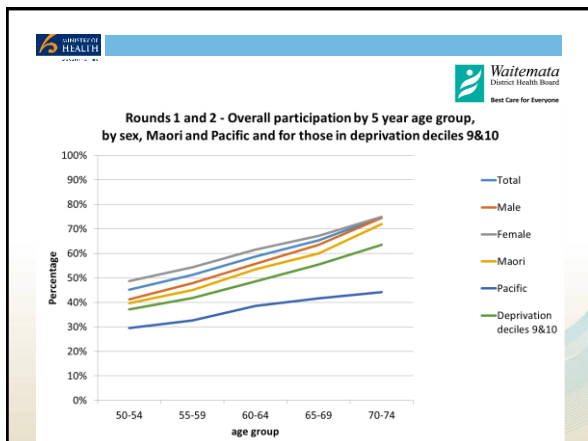
New Zealand pilot study of FIT-based CRC screening

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Introduction



- New Zealand (NZ) initiated a 4 year Bowel Screening Pilot in 2012 offering over 120,000 men and women aged 50-74 years biennial screening using a quantitative fecal immunochemical test (FIT) for hemoglobin (Hb) (OC-SENSOR).
- Invitation generated from a population register.
- The cut-off for positivity (referral for colonoscopy) in the pilot is 15 µg Hb/g feces (75 ng Hb/mL buffer).
- Measured µg Hb level/g feces recorded for each participant.



Bowel Screening Pilot results to 30 September 2015 (pulled 26/2/2016)

	Rd 1	Rd 2
CRC detection rate DR/1000 screened	2.8	1.4
Advanced adenoma DR	15.5	7.5
Adenoma DR	36.2	23.2
PPV CRC %	4.3	2.9
PPV Advanced adenoma %	24.0	15.3
PPV adenoma %	56.1	47.7
Numbers cancers found (private)	192 (22)	92(10)

Description	Colorectal Cancer (CRC) Stage at diagnosis
Evidence	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.
Target	No agreed international standard
Value	<ul style="list-style-type: none"> • Stage 1: 47.6% • Stage 2: 21.6% • Stage 3: 22.9% • Stage 4: 7.9%

 **Table 1: For age group 50-74 years at various Hb concentration cut-offs^a as at May 2015** 

Cut-off for positivity	50-74 yrs				
	75	100	150	200	250
ng/mL buffer					
µg Hb/g feces	15	20	30	40	50
Positivity	7.5%	6.3%	5.0%	4.2%	3.7%
PPV CRC	4.2%	4.6%	5.4%	6.1%	6.7%
PPV AdA	24.3%	26.1%	28.4%	33.6%	34.5%
CRC DR/1,000 screened	2.72	2.53	2.36	2.27	2.17
Reduction in colonoscopy (%)	Ref	15.9%	32.8%	43.2%	50.4%
CRC (% detected)	Ref	93.0%	86.6%	83.3%	79.6%

Advanced adenoma > 10mm, high grade dysplasia, villous component