Report Supplementary Material 5

Table 2. Uptake, test positivity, and diagnostic yield of the FIT overall and at rounds 1, 2, and 3, by age at invite

		Round										ılative (a	cross all	End-o	of-study co	Entire study		
		1			2			3			rounds)			exam	ination	findings		
															% of			
				% of			% of			% of			% of		end-of-	% of		% of
Age at			% of	entire		% of	entire		% of	entire		% of	entire		study	entire		entire
invite				study		round	study		round	study		all	study		colonic	study		study
(years)	Findings	n	1	findings	n	2	findings	n	3	findings	n	rounds	findings	n	exam	findings	n	findings
≤ 65	Invited	3950			2681			2567			3950							
	Completed FIT ^a	2880	72.9		2604	97.1		2489	97.0		2880	72.9						
	Tested positive	147 ^b	5.1°		107	4.1°		98	3.9°		352 ^d	12.2°						
	Invited for colonic examination	-	-		-	-		-	-		-	-		-	-		-	-
	Colonic examination performed	138	93.9e	5.5 ^f	101	94.4 ^e	4.0^{f}	90	91.8e	3.6 ^f	329	93.5 ^e	13.0 ^f	2203	-	87.0 ^f	2532	
	Colonoscopy	137	99.3 ^g	5.5 ^f	98	97.0 ^g	3.9 ^f	89	98.9 ^g	3.6 ^f	324	98.5 ^g	13.0 ^f	2162	98.1 ^g	87.0 ^f	2486	98.2 ^g
	CTC (no colonoscopy)	1	$0.7^{\rm g}$	$2.2^{\rm f}$	3	3.0^{g}	6.5 ^f	1	1.1 ^g	$2.2^{\rm f}$	5	1.5 ^g	10.9 ^f	41	1.9 ^g	89.1 ^f	46	1.8 ^g
	Diagnostic yield																	
	ACN ^h	36	26.1i	17.1 ^f	17	16.8i	8.1 ^f	17	18.9 ⁱ	8.1 ^f	70	21.3^{i}	33.2^{f}	141	6.4 ⁱ	66.8 ^f	211	8.3i
	CRC	2	1.4 ⁱ	16.7 ^f	3	3.0^{i}	25.0 ^f	2	2.2^{i}	16.7 ^f	7	2.1i	58.3 ^f	5	0.2^{i}	41.7^{f}	12	0.5i
	AAs	36	26.1i	17.8 ^f	14	13.9i	6.9 ^f	15	16.7 ⁱ	7.4 ^f	65	19.8i	32.2 ^f	137	6.2i	67.8 ^f	202	8.0i
> 65	Invited	4058			2822			2653			4058							
	Completed FIT ^a	3066	75.6		2746	97.3		2569	96.8		3066	75.6						
	Tested positive	200 ^b	6.5°		135	4.9°		108	4.2 ^c		443 ^d	14.4°						

Invited for colonic examination	-	-		-	-		-	-		-	-		_	-		_	
Colonic examination performed	191	95.5 ^e	$7.2^{\rm f}$	123	91.1e	4.6 ^f	101	93.5 ^e	3.8^{f}	415	93.7 ^e	15.6 ^f	2252	-	84.4 ^f	2667	
Colonoscopy	184	96.3 ^g	7.0^{f}	122	99.2 ^g	4.7 ^f	96	95.0^{g}	$3.7^{\rm f}$	402	96.9 ^g	15.4 ^f	2209	98.1 ^g	84.6 ^f	2611	97.9 ^g
CTC (no colonoscopy)	6	3.1^{g}	11.1 ^f	1	0.8^{g}	1.9 ^f	5	5.0^{g}	9.3 ^f	12	2.9^{g}	22.2^{f}	42	1.9 ^g	77.8 ^f	54	2.0^{g}
FS (no colonoscopy or CTC)	1	0.5^{g}	50.0^{f}	0	0^{g}	$0^{\rm f}$	0	0^{g}	$0^{\rm f}$	1	0.2^{g}	$50.0^{\rm f}$	1	0.04^{g}	50.0^{f}	2	0.07^{g}
Diagnostic yield																	
$\mathbf{ACN}^{\mathrm{h}}$	47	24.6^{i}	$18.7^{\rm f}$	26	21.1^{i}	$10.3^{\rm f}$	22	21.8^{i}	8.7 ^f	95	22.9^{i}	37.8 ^f	157	7.0^{i}	62.3 ^f	252	9.4 ⁱ
CRC	6	3.1^{i}	42.9^{f}	5	4.1 ⁱ	$35.7^{\rm f}$	0	0^{i}	0^{f}	11	2.7^{i}	78.6 ^f	3	0.1^{i}	21.4 ^f	14	0.5 ⁱ
AAs	42	22.0i	17.4 ^f	23	18.7 ⁱ	9.5 ^f	22	21.8i	9.1 ^f	87	21.0^{i}	36.1 ^f	154	6.8 ⁱ	63.9 ^f	241	9.2 ⁱ

FIT, faecal immunochemical test; CTC, computed tomography colonography; FS, flexible sigmoidoscopy; ACN, advanced colorectal neoplasia; CRC, colorectal cancer; AA, advanced adenoma.

- a. Completion of FIT test was defined as having provided consent, returned an analysable round 1 FIT kit, and not subsequently withdrawn from the study.
- b. Three participants were defined as 'FIT positive' in round 1 during the pilot phase based on a threshold of $20 \mu g/g$ with a reading that was $< 40 \mu g/g$ (i.e. that did not meet the positivity threshold used in the rest of the study).
- c. Percentages calculated using the number of those who completed FIT as the denominator. Positivity was defined as $\geq 40\mu g$ Hb/g faeces for the majority of the study, with the exception of the pilot phase where a threshold of $20\mu g$ Hb/g faeces was used.
- d. Participants who tested positive at any round, regardless of whether they completed FIT at all rounds to which they were invited.
- e. Percentages calculated using the number of those who tested positive as the denominator.
- f. Percentages calculated using the row total from the entire study findings as the denominator.
- g. Percentages calculated using the number of those who had a colonic examination performed as the denominator.
- h. ACN was defined as CRC or AA. Six participants in the entire study had both CRC and AA.
- i. Diagnostic yield in participants who had a colonic examination performed.