Introduction Bowel Scope screening (BoSS) was launched in 2013 for individuals aged 55 after a landmark study showed that sigmoidoscopy based colorectal cancer (CRC) screening reduced cancer incidence by 23%.[1] Longer term follow up in this study showed that the protection given by sigmoidoscopy based screening from colorectal cancer lasted at least 17 years.[2]

What is not known is how subjects who underwent BoSS at age 55, would interact with the home faecal occult blood/immunochemical test (FOBt/FIT) based screening offered at age 60, compared to non-BoSS screened subjects engaging who engage with FOBt/FIT.

Methods 429 Northamptonshire subjects who underwent BoSS in 2014 had their interaction with the FOBt/FIT screening in 2019 recorded and analysed, benchmarked against non-BoSS screened subjects' data (from Exeter database dashboard; 2017 & 2018).

Results 429 subjects' data analysed, 205 females (47.8%), 412 subjects attended a BoSS examination. 30/412 had $\geq$ 1 adenoma (7.3%). 304/412 returned a FOBt/FIT kit (73.8%), 5/304 were positive (1.6%), one patient diagnosed with CRC. One FOBt/FIT non-responder diagnosed with CRC.

Abstract P78 Table 1

	BoSS cohort 2019	FOBt data 2017	FOBt data 2018
Uptake	304/412, 73.8% †‡	45869/75082, 61.1% †	51600/82185, 62.8% ‡
Positivity	5/304, 1.6%	953/45869, 2.1%	974/51600, 1.9%

†‡ For Boss cohort vs FOBt 2017, and for Boss cohort vs FOBt 2018; $p < 0.0001$

Conclusion The cohort of subjects who underwent BoSS in 2014 were significantly more likely to return FOBt/FIT kits when compared to a non-BoSS screened population (benchmarked with data from 2017 & 2018), Even considering the switch to FIT from FOBT during 2019, the marked improvement in returns suggests that the majority of subjects who underwent BoSS found it a positive experience making them much more likely to engage with FOBt/FIT at the age of 60 and older.

Despite the higher uptake, the positivity rate is lower for the BoSS cohort than the non-BoSS screened population. The sample size is too small to reach statistical significance, but if this trend for lower positivity is established when looking a bigger sample (eg; all the regions of England), this may represent the benefits shown in the original studies. [1, 2]

REFERENCES

1. W S Atkin, R Edwards, I Kralj-Hans, *et al*. Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer: a multicentre randomised controlled trial. *Lancet* 2010; **375**: 1624–1633.
2. W S Atkin, K Wooldrage, D M Parkin, *et al*. Long term effects of once-only flexible sigmoidoscopy screening after 17 years of follow-up: the UK Flexible Sigmoidoscopy Screening Trial. *Lancet* 2017; **389**: 1299–1311.

P79 THE EFFECT OF ENDOCUFF/ENDOCUFF VISION ON LOWER GI ENDOSCOPY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction Colonoscopy is the gold standard investigation for lower gastrointestinal symptoms with adenoma detection rate (ADR) considered the most important benchmark for evaluating the quality and completeness of mucosal visualisation. A number of devices to improve ADR have been investigated.

This systematic review and meta-analysis assessed the effects of using Endocuff/Endocuff Vision assisted colonoscopy (EAC) on ADR and other clinical and resource-use related outcomes compared with standard colonoscopy (SC).

Methods Searches were conducted of Medline, Embase, Web of Science, Scopus and the Cochrane Central Register to 08/02/2019. Studies published in English, as full papers or conference abstracts, comparing Endocuff (EC)/Endocuff Vision (EV) with SC were eligible. Studies of polyposis syndromes and inflammatory bowel disease surveillance were excluded.

Data were abstracted by two independent reviewers, including ADR and other key polyp/adenoma variables (mean adenomas per procedure/polyp detection rate/mean polyps per procedure) and procedure variables (procedure time/withdrawal time/caecal intubation time/caecal intubation rate/complication rate). The quality of eligible studies was assessed using the Cochrane risk of bias tool. Meta-analysis, using random effects models, was used to compute pooled estimates of outcomes (mean difference, 95% confidence interval) across studies.

Results We identified 8 randomised controlled trials and 2 crossover studies involving 6238 patients; 8 studies evaluated EC and 2 EV. All studies included mixed populations by indication and endoscopist experience. EAC improved ADR by 7.06% (3.81–10.31%; 10 studies), MAP by 0.19 (0.02–0.37; 9 studies), PDR by 9.5% (5.6—13.34%; 7 studies) and MPP by 0.38 (0.12–0.30; 5 studies) compared to SC. There were no significant differences in advanced adenoma and sessile serrated lesion detection rates: 0.85% (-2.74–4.43; 3 studies) and 0.28% (-1.67–2.22; 3 studies) respectively. There were no significant differences in procedure variables. Complications were uncommon. Cuff exchange rates ranged from 1.3–7.0% in 6 studies. All 10 studies were rated low risk of bias. Subgroup analysis for EC studies only showed an increased ADR of 8.02% (3.91–12.13%) and PDR by 12.00% (6.88–17.11%).

Conclusion Endocuff/Endocuff Vision are associated with increased ADR, MAP, PDR and MPP compared with standard endoscopy with no detrimental effects on procedure measures. Cost-effectiveness analyses are lacking but would be valuable to inform practice recommendations