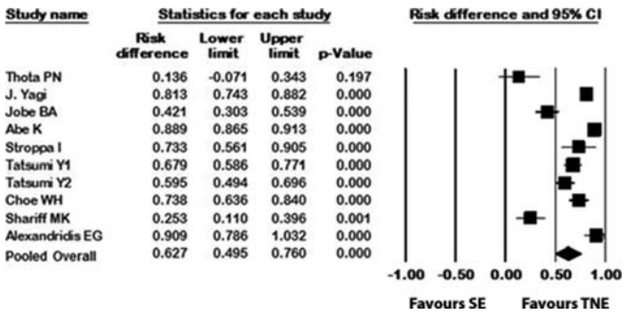

Abstract OC-060 Figure 1

0.50, 0.80; 10 studies) (figure below), while 0.38 preferred TOE over SE (95% CI: -0.04, 0.80; 3 studies).

Conclusion There is no difference between TOE and SE in terms of technical success rate and preference. Success rate of TNE <6 mm in diameter is equivalent to SE, but majority of patients prefer the former over the latter. Hence, TNE (<6 mm in diameter) should be the procedure of choice for screening. Modern disposable and portable TNE devices might be useful for screening in the community.

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Joint endoscopy and bowel cancer screening symposium

OC-061 RATES OF POST COLONOSCOPY COLORECTAL CANCER (PCCRC) ARE SIGNIFICANTLY AFFECTED BY METHODOLOGY, BUT ARE NEVERTHELESS DECLINING IN THE NHS

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Introduction It is recognised that post-colonoscopy colorectal cancer (PCCRC) can be due to missed cancer, or cancer arising from missed or incompletely removed polyps. Thus the rate of post-colonoscopy colorectal cancer (PCCRC) should become a key quality indicator of colonoscopy. A quality indicator should be relevant to patients, clearly defined, standardised, and measurable over time and have a target to aim for. This study compares methods for defining PCCRC rates, proposes a method that best meets these criteria and explores rates over time.

Methods Information on all individuals with a primary colorectal cancer and prior colonoscopic investigations in England between 2001 and 2010 was extracted from the National Cancer Data Repository. Previously published methods (Bressler, Cooper, Singh and leClerc) for deriving PCCRC rates were applied to these data to investigate the effect on the rate. A new method, based on the year of the colonoscopy, not CRC diagnosis, is proposed.

Results Of 297,956 individuals diagnosed with colorectal cancer in the study period a total of 94,648 underwent a colonoscopy in the 3 years prior to their diagnosis. The table illustrates how application of the published methods and exclusion criteria to the dataset produces significantly different PCCRC rates from 2.4 to 7.8%:

Abstract OC-061 Table 1

	Method			
Exclusion criteria	Bressler	Cooper	Singh	le Clerc
Bressler	3.6	4.7	3.9	4.4
Cooper	6.3	7.8	7.0	7.6
Singh	6.1	7.5	6.8	7.4
le Clerc	6.3	2.4	2.4	2.4

The PCCRC rate of 6.8% produced by the Singh method best fulfils the proposed criteria for a quality indicator but it is not suitable for annual reporting: the rate reflects colonoscopy performance in the years preceding the year of reporting. Amending this method to look forward from the time of colonoscopy, rather than backward from the time of diagnosis of cancer, provides a rate relating to the year the procedure was actually performed. This new method demonstrates that PCCRC rates within 3 years of colonoscopy (without exclusions) decreased in the English NHS over 7 years by 29%: from 10.2 to 7.2% for colonoscopies performed in 2001 and 2007 respectively. 25% (37/148 hospitals) achieved a PCCRC for the period of 4.0% or less.

Conclusion PCCRC rates in England are improving over time and comparable to those in other countries. The method used to determine rates significantly affects findings, thus international benchmarking requires an agreed method for defining PCCRC. The Singh and suggested new method provide a PCCRC rate most relevant to patients. It is proposed that on the basis of current evidence, and improvements evident over time in this study, a reasonable target for a national rate of PCCRC up to 3 years following a colonoscopy should be less than 4%.

Disclosure of Interest None Declared.

OC-062 A MULTI-CENTRE PRAGMATIC STUDY OF AN EDUCATIONAL INTERVENTION TO IMPROVE ADENOMA DETECTION AT COLONOSCOPY

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Introduction High quality colonoscopy prevents colorectal cancers. Low adenoma detection rates (ADR) are linked to subsequent high interval cancer rates. Variability in ADR exists between practitioners. Withdrawal time of >6 min, Buscopan use, position change and rectal retroflexion have some evidence to improve lesion detection. Implementation of evidence based 'bundles' of care has shown to be effective in improving outcomes in other clincal settings [1].

Methods We aimed to evaluate the feasibility of implementing a 'bundle' comprising the above measures into routine practice and effect on ADR. Twelve English endoscopy units participated. All nominated a lead endoscopist and nurse. A model combining central training, locally led implementation, feedback and ongoing study team support was used. Colonoscopist's ADRs were measured for 3 months prior to implementation and for a 9 month period following. Colonoscopists performing

Abstract OC-062 Table 1

	Before		After			
Quartile	N	ADR (%)	N	ADR (%)	Difference ratio	p value ADR
Upper	785	27.4	2508	21.5	0.78	<0.001
Upper middle	1116	17.5	3119	19.2	1.10	0.20
Lower middle	785	13.3	2539	19.3	1.45	<0.001
Lower	936	7.3	2405	13.9	1.90	<0.001

N = number of colonoscopies

≥25 procedures during the period before were ranked according to ADR and quartiles constructed. Change in Buscopan use was used as a surrogate marker for intervention uptake. A corrected Chi Squared test was used to check for significant change.

Results One hundred and eighteen and 68 colonoscopists were included in the global and quartile analyses. The study included 17508 colonoscopies, 4351 and 13157 in the pre and post intervention periods respectively. There was a significant global increase in buscopan use (15.8 vs. 54.4%, $p < 0.001$), also seen in each quartile, and ADR (16.0 vs. 18.1%, $p = 0.002$), Table 1.

Conclusion Our evidence based educational intervention resulted in a significant change in behaviour, evidenced by increased Buscopan use. A significant increase in ADR occurred globally and in the two lower quartiles. A fall was seen in the upper quartile, but the ADR in this group remained above that in the other groups and the global mean of 18.1%. This study demonstrates that simple evidence based educational interventions with support can significantly change practice and ADR, particularly amongst the poorest performers.

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Disclosure of Interest None Declared.

Joint neuro-gastroenterology/motility and AGIP section free papers

OC-063 PHARYNGEAL ELECTRICAL STIMULATION (PES) IN DYSPHAGIA POST-ACUTE STROKE: A DOUBLE-BLIND, RANDOMISED TRIAL

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Introduction Pharyngeal Electrical Stimulation (PES) is known to activate pharyngeal motor pathways. It has shown promise in acute stroke pilot studies, having improved swallowing function at 2-weeks.[1,2]

Methods We aimed to recruit 100 hospitalised patients with new-onset dysphagia within 6 weeks of stroke at three Greater Manchester centres. Participants were randomised to either Active or Sham PES. Both interventions were delivered via an intraluminal pharyngeal catheter, left *in situ* for 10 min, once-daily for 3 days. Active intervention was delivered at optimal parameters (5Hz, at 75% maximum-tolerated intensity). The primary outcome measure was intended to be penetration-aspiration scores on videofluoroscopic assessment at 2-weeks. Owing to logistic difficulties with videofluoroscopy, prior to unblinding and analysis of data, we upgraded the dichotomised Dysphagia Severity Rating (DSR) scale,[2] assessed by independent, blinded speech therapists, to be the primary outcome: mild/no dysphagia (scores 0–3) or moderate-severe dysphagia (scores 4–12). We analysed under the intention to treat principle using logistic regression with an odds ratio (OR)/ Hazards ratio (HR) >1 indicating a favourable outcome for the active group.

Results We recruited 36 participants: median age 71y; 61% male, 92% moderate-severe dysphagia; 58% with enteral feeding tubes in-situ. At 2-weeks, 11/18 (61%) in the active group had DSR <4 compared with 9/18 (50%) in the sham group: OR (95% CI) = 2.53 (0.52 to 14.56). Patients in the active group also had shorter times to hospital discharge (39 vs. 52 days, HR (95% CI) of 1.19 (0.55, 2.57)) and removal of nasogastric feeding tubes (8 vs.14 days, HR (95% CI) of 2.01 (0.51, 7.93)). By 3 months, all but 3 patients in each group had DSR <4: OR (95% CI) = 1.0 (0.13 to 7.02).

Conclusion The observed differences are consistent with the hypothesised effect of PES in accelerating recovery of swallowing over the first 2-weeks following treatment. Lower than desired recruitment prevents definitive answers from this study but study design experience and outcome data reported here are essential to inform a definitive, multi-centre randomised trial.

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OC-064 PSYCHOPHYSIOLOGICAL AND CORTICAL RESPONSES TO VISUALLY INDUCED MOTION SICKNESS

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Introduction Nausea is an aversive experience, which negatively impacts on quality of life, adherence to treatment and is a cause for discontinuation of the development of novel compounds. Significant knowledge gaps remain in our understanding of the cortical and psychophysiological mechanisms involved in the genesis and maintenance of nausea. We aimed to develop and validate a readily administered a visually induced motion sickness (VIMS) stimulus to examine the psychophysiological changes induced by the stimulus and characterise the changes in cortical activity using functional magnetic resonance imaging (fMRI).

Methods A 10-min video of motion and a control video of a still image were presented to 98 healthy volunteers (mean age