50% of patients (pts.) die of CRC annualy, one of the reasons being late diagnosis (>50% pts diagnosed in stage 3/4). 5 year survival increased in CR by 10%/last decade: exceeds 60%, leading to increased prevalence of CRC by 64%. Alarming data is that 20.5% of these pts. are younger than 60 yrs. Screening programme (ScP) in CR was introduced in 2000 as opportunistic double-step programme based on GP provided gFOBT test. Screening colonocopies were introduced in 2009 and are evaluated by Czech Statistical Center. Currently: 225 screening centres (audited for quality and safety by Ministry of Health).

Methods Top 4 problems of ScP: 1. Insufficient coverage of target population (25% in 2011 × 45% to 65% is desirable). 2. Incomplete switch to iFOBT although the numbers are increasing (71% in 2013 iFOBT). Optimal cut-off for our population in Czech pilot study =75 ng/ml 3. Roughly 16% pts. in whom CRC was not their first cancer (probably reflects our "tunnel vision") 4. Measures of good quality colonoscopy are not regularly evaluated by all centres. Overall in CR, ADR in 2006–12= 33% for FOBT+colonoscopies and 25% for scr. colonoscopies.

Results Quality of colonoscopy is one of the crucial points of ScP success–results of our screening centre: Endoscopist No. of colonoscopies/yr–ADR2010–2011–2012–2013-Caecal int. rate

E1 457/277/243/383-40.3% >44.3% >34.6% >40.7% >99/ 99.3/97.1/100 E2 280/279/389/601-40.7% >32.2% >35.3% >40.5% >97.2/95/98.7/99.3 E3 227/174/162/160-23.6% >26.9% >27.0% >36.6% >93.5/92.5/89/85.7 E4 167/145/ 267/330-28.6% >19.6% >20.9% >19.0% 99.2/89.7/96.9/95 E5 (as of 2011)- $\frac{116}{115}\frac{176-30.5\%}{28\%} > 28\% > \frac{22.9\%}{28\%} > \frac{-86.3}{28\%}$ 91.3/93. It is advisable that endoscopists with ADR <20% measure their extubation time regularly. ADR (2013) of screening colonoscopies = 33.8% (M40.0%, F27.2%). Of interest is also a non-negligible number of adenomas in patients <50 years (11.1% in 2013). Future: Personalised invitation. To increase the effectiveness of ScP, in 2014 started system of population-wide personalised invitations. Health Insurance Companies invite clients who did not undergo any screening during last 5 years (birthday letter): uniform algorithm of invitations. Number of screen colonoscopies should increase by 20-30% and we expect some harvesting effect (increased incidence of CRC during first years). It should lead to earlier diagnosis and treatment of CRC and should bring savings.

Conclusion Opportunistic ScP in CR during last 3 years reached achievable limit and system of population-wide personalised invitation letters by health care payers should lead to increased uptake of screening colonoscopies. The necessity of good quality colonoscopy service for the community is also 'Conditio sine qua non' for the programme to be effective.

Disclosure of Interest None Declared.

## PWE-014 JESREY FLEXIBLE SIGMOIDOSCOPY BOWEL CANCER PROGRAMME: ONE YEAR'S EXPERIENCE

<sup>1</sup>M Duku\*, <sup>1</sup>D Ng, <sup>1</sup>S De George, <sup>1</sup>T Hughes, <sup>2</sup>K Tierney, <sup>3</sup>S Turnbull, <sup>3</sup>L Diggle. <sup>1</sup>Gastroenterology, Jersey General Hospital, St Helier, Jersey; <sup>2</sup>IT Department, Jersey General Hospital, St Helier, Jersey; <sup>3</sup>Public Health, Jersey General Hospital, St Helier, Jersey

10.1136/gutjnl-2014-307263.274

**Introduction** Randomised control trials (RCTs) have demonstrated that once-only flexible sigmoidoscopy (FS) between ages of 55 to 64 reduces both incidence and mortality from colorectal cancer. A key marker of quality in FS screening is adenoma

Abstract PWE-014 Table 1				
		Adenomas detected (%)		
	No. screened (M/F)	Low risk (%)	High risk (%)	Total
Endoscopist 1	244 (120/124)	23	13	36
Endoscopist 2	209 (94/115)	24	11	35
	453 (213/239)	74 (16.3%)	24 (5.3%)	71 (15.7%)

detection rate (ADR), which relies on effective bowel preparation and good technique. The States of Jersey introduced onceonly FS at age 60 in February 2013. This study aims to evaluate the one-year outcomes of the programme.

Methods Jersey residents aged 60 were invited by post to participate in the programme. Responders were telephone pre-assessed for eligiblity and bowel habit and assigned one of two bowel cleansing regimes; two fleet enemas + senna/bisacodyl or moviprep. FS were performed, unsedated, by two experienced gastroenterologists using paediatric colonoscopes, with the aim of visualising at least 60cm (straightened endoscope) of the left colon. Clients with poor bowel preparation had additional fleet enema and re-scoped on the same day or returned on a later day following moviprep. All polyps =1 cm were removed during FS. Indication for colonoscopy was the presence of high-risk lesions (adenoma =1 cm, adenoma with high grade dysplasia or a villous component and = 3 adenomas). After FS, clients were given a questionnaire, which included a pain score.

Results 768 clients were invited. 60 were ineligible. 453 had the FS. The uptake was 69.2% and overall ADR was 15.7% (Table 1) which are higher than in the RCTs.

FS was well tolarated. Only 36 (13.9%) required entonox. 79% reported no or mild discomfort and only 1% reported severe discomfort. 1 client had an incomplete examination due to pain.

435 (96.03%) had 2 fleet enemas plus senna or bisacodyl and 18 (3.97%) had moviprep as the first bowel prep. The quality was excellent or good in 83%. Only 32 (7%) had poor prep and needed repeat bowel preperation.

There were no major complications during bowel preparation or the FS. 1 patient reported abdominal cramps during bowel preparation and 2 and vasovagal episodes immediately after the FS. None required hospital admission.

Conclusion FS screening using two enemas is acceptable and safe. Better bowel preparation and complete examination of the left colon contributed to the high ADR. The impact of the uptake and high ADR on the incidence and mortality of CRC in Jersey will likley be greater than that seen in the RCTs.

Disclosure of Interest None Declared.

## PWE-015 BIOMARKERS FOR EARLY DETECTION OF COLORECTAL CANCER AND POLYPS: SYSTEMATIC REVIEW

<sup>1</sup>R Shah\*, <sup>2</sup>E Jones, <sup>2</sup>V Vidart, <sup>3</sup>P Kuppen, <sup>4</sup>J Conti, <sup>1</sup>N Francis. <sup>1</sup>General Surgery, Yeovil, UK; <sup>2</sup>Yeovil District Hospital NHS Trust, Yeovil, UK; <sup>3</sup>Gastroenterology, Leiden University Medical Centre, Leiden, Netherlands; <sup>4</sup>General Surgery, Portsmouth Hospitals NHS Trust, Portsmouth, UK

10.1136/gutjnl-2014-307263.275

**Introduction** Early detection of colorectal cancer plays an important role in patient survival. A screening program for colorectal cancer has been proven to reduce mortality from the disease. There is a growing interest in potential biomarkers to predict early colorectal cancer as current screening modalities

Gut 2014;**63**(Suppl 1):A1–A288