were labelled as true positive (CRC within 0 to 6 months of the procedure), false negative (CRC within 6 to 36 months) and true negative (CRC beyond 36 months). The PCCRC-3 yr rate was calculated as: $\frac{\text{false negatives}}{\text{true positive} + \text{false negative}} \times 100\%$.

The PCCRC-3 yr rate was calculated for each year from 2006 to 2012. In addition, the rate in each colonoscopy provider was calculated, and organisations grouped using quintiles. PCCRC rates were calculated in relation to patient and tumour characteristics.

Results Between 2006 and 2012 1 08 908 colonoscopies followed by a diagnosis of CRC were identified. Of these, 93 240 (86%) were labelled true positive, 7781 (7%) were false negatives, and 7887 (7%) were true negative tests. There was a significant reduction in PCCRC-3 yr rates, from 8.6% in 2006 to 7.5% in 2012 (χ^2 for trend $p < 0.01$). There was variation in unadjusted, mean PCCRC-3 yr rate between NHS Trusts from 5% (SD $\pm 2\%$) in the highest performing quintile to 11% (SD $\pm 2\%$) in the lowest. PCCRCs were significantly associated with female sex, right-sided colonic lesions, inflammatory bowel disease and diverticular disease diagnosis, mucinous CRC and in individuals with metachronous CRC.

Conclusion There has been a significant reduction in PCCRC-3 yr rates from 2006 to 2012, likely to be related to improvements in colonoscopic quality: particularly improved caecal intubation and bowel preparation resulting in improved lesion recognition and removal. There appears to be unwarranted variation of PCCRC-3 yr rates across NHS trusts. Reasons for this variation need to be explored and subject to quality improvement projects. Evidence from this study can be used to help target those at highest risk of PCCRC.

REFERENCES

1. Morris EJA, et al. *Gut* 2014;**64**:1248–56.
2. Beintaris I, et al. *UEG J* 2017;**5**:P0436.

OWE-034 EVALUATION OF A NEW CARE PATHWAY TO REDUCE HOSPITAL ADMISSIONS FOR PRIMARY CONSTIPATION

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Introduction HES data revealed 301 acute hospital admissions over 1 year in a single trust were assigned a primary diagnosis of constipation. This study evaluates a new patient pathway focused on reducing hospital admissions due to constipation, with the opportunity for rapid access to a new acute constipation clinic (ACC)

Methods 216 of the 301 patients were admitted to the trust via the Accident and Emergency Department (AED). The average length of stay was calculated as 3.3 days, totalling 713 bed days. This equates to £2 85 120 per annum, based on a local tariff of approximately £400 per day.

To reduce admissions/costs related to constipation within our Trust a pathway was proposed by the specialist physiotherapy clinicians. These patients would be managed and treated in the ACC.

Clinicians led a bid to an in-hospital initiative, resulting in funding of £16 000 for a 12 month study. This secured a staff member for 14.25 hours per week to develop, implement, organise and audit the pathway.

The pathway was formalised, see below, including the development of information leaflets for patients. Changes to practice and patient flow were introduced within AED for patients presenting with primary constipation. Administration staff were trained to liaise between AED and the ACC. Data was collected prospectively.

Abstract OWE-034 Figure 1 AED/ACC constipation pathway

Results Over the year, 70 patients were referred to the ACC using the new pathway, thereby avoiding hospital admission. This equates to a saving of 231 bed days per annum at the estimated cost of £92 400. Data showed that a number of patients were regular attenders at AED, 9 patients had more than 5 previous admissions with constipation.

Conclusions The study has confirmed the benefits of introducing a patient care pathway for patients presenting to the AED with primary constipation.

The introduction of this pathway provides AED staff with a safe, suitable and efficient treatment pathway for patients with constipation, reducing hospital admissions and bed stays.

The pathway allows patients to manage their symptoms in their own home with support from specialist clinicians, enhancing patient dignity. Although the majority of patients were discharged after this acute episode, the information gathered in the ACC identified patients requiring referral to the functional bowel clinic for ongoing, long term management. Further audit of this patient group will hopefully demonstrate a reduction in future AED attendances and admissions due to constipation.

ADTU-07 5-AMINOSALICYLIC ACID TARGETS COLORECTAL CANCER STEMNESS IN VITRO

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Introduction The mechanism by which 5-aminosalicylic acid (5-ASA) reduces colorectal cancer risk in ulcerative colitis is not fully understood and appears to involve multiple targets. Although previously reported to target wnt signalling, the