

# Post-colonoscopy colorectal cancers rates in the English National Health

# National Cancer Intelligence Network Data Briefing

## **Background**

The main diagnostic test used to identify colorectal cancer is a colonoscopy.

Unfortunately the test is not 100% accurate and some individuals may undergo a negative colonoscopy but subsequently be diagnosed with a cancer - a post-colonoscopy colorectal cancer or PCCRC.

### Key messages

- The overall proportion of individuals who developed a bowel cancer within three years of a colonoscopy in the English NHS between 2001 and 2007 was 8.6%.
- The proportion of people undergoing colonoscopy who developed a bowel cancer within three years fell from 10.6% in 2001 to 7.3% in 2007

Such cancers may occur as a result of a rapidly growing new tumour that was not present at initial colonoscopy but, more frequently, because precancerous lesions were missed or inadequately removed or the disease was simply missed by the colonoscopist.

The rate of PCCRC occurrence is, therefore, an important quality indicator of a colonoscopy service and this study aimed to investigate the PCCRC rate across the English NHS

#### **Methods**

All individuals diagnosed with colorectal cancer between 2001 and 2010 in England were identified in the National Cancer Data Repository (NCDR) and their hospital records used to identify all colonoscopies undertaken prior to their diagnosis.

The interval between each colonoscopy and the cancer diagnosis was determined and colonoscopies that had a cancer diagnosed greater than 6 months after then were considered to be "false negative".

The PCCRC rate was defined as the number of false negative colonoscopies divided by the total number of colonscopies undertaken.

#### Results

The overall proportion of individuals who developed a PCCRC within three years of a colonoscopy undertaken between 2001 and 2007 in the English NHS was 8.6% but rates fell from 10.6% in 2001 to 7.3% in 2007.

PCCRC rates are falling across the English NHS but rates should be monitored to ensure the quality of its colonoscopy service.

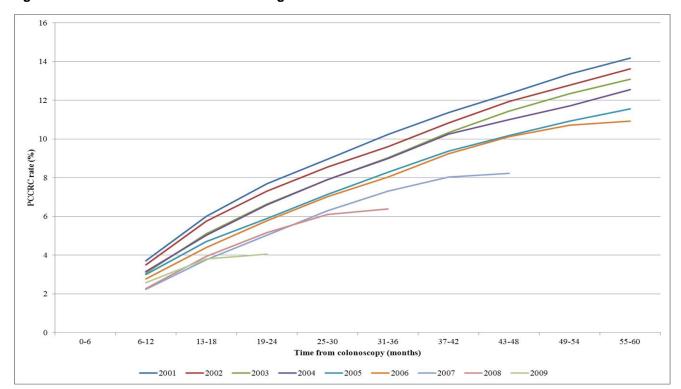


Figure 1: PCCRC rates over time in the English NHS

#### **FIND OUT MORE:**

Full details of this study are presented in the peer reviewed journal article Morris EJA, Rutter M, Finan PJ, Thomas JD, Valori R. Postcolonoscopy colorectal cancer (PCCRC) rates vary considerably depending on the method used to calculate them: a retrospective observational population-based study of PCCRC in the English National Health Service. Gut - in press

The PHE Knowledge and Intelligence Team Northern and Yorkshire is the lead KIT for colorectal cancer. <a href="https://www.gov.uk/government/organisations/public-health-england">https://www.gov.uk/government/organisations/public-health-england</a>

#### Other useful resources within the NCIN partnership:

What cancer statistics are available and where can I find them? <a href="http://www.ncin.org.uk/publications/reports/">http://www.ncin.org.uk/publications/reports/</a>

Public Health England's National Cancer Intelligence Network (NCIN) is a UK-wide initiative, working to drive improvements in cancer awareness, prevention, diagnosis and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.