NHS
Cambridgeshire and Peterborough
Clinical Commissioning Group

Lower Gastrointestinal Endoscopy (Colonoscopy or Sigmoidoscopy)

Scope

This policy covers ***elective*** lower gastrointestinal (GI) endoscopy for:

- diagnosis of suspected cancer and adenomatous polyps following NICE guidance
- routine surveillance for conditions with increased risk of colorectal cancer (CRC), such as previous cancer or adenomatous polyps and family history of CRC or inflammatory bowel disease
- diagnosis and follow up of inflammatory bowel disease
- investigation of persistent low risk symptoms (ie FIT negative)

It does not include the NHS bowel cancer screening programme. It does not cover endoscopy in medical emergencies, or in urgent acute care.

Policy

It is the responsibility of referring and treating clinicians to ensure compliance with this policy. Referral proforma should be attached to the patient notes to aid the clinical audit process and provide evidence of compliance with the policy. For patients not meeting the policy criteria, clinicians can apply for funding to the Exceptional Cases Panel by completing the exceptional funding section of the referral proforma:

The CCG will fund elective lower GI endoscopy according to the following criteria:

Diagnosis of suspected cancer

The following three tables shows the criteria for referral on the NG12 suspected cancer pathway and the use of the Faecal Immunochemical Test (FIT) in determining whether patients with non-2 week wait (2ww) symptoms are at higher risk of cancer.

Most patients referred on the 2ww pathway should have a FIT at the time of referral which helps secondary care triage effectively. However, if: the patient has:

- Active rectal bleeding - Do not do FIT.
- Intermittent rectal bleeding - FIT can be done.
- Abdominal, rectal or anal mass - FIT not required, but may be done.

2ww Suspected Cancer Pathway NICE Guidance (NG12)	
All referrals should include FBC, eGFR, Ferritin, Creatinine, Rectal exam (if tolerated)	
≥ 40 years with unexplained weight loss and abdominal pain	FIT
≥ 50 years with unexplained rectal bleeding	x
≥ 60 years with iron deficiency anaemia*	FIT Coeliac
≥ 60 years with change in bowel habit	FIT
< 50 years with rectal bleeding and any of • abdominal pain • **OR** change in bowel habit • **OR** weight loss • **OR** iron deficiency anaemia	x
• Rectal mass	x
Abdominal mass	+/-FIT
Anal mass/ulceration	+/-FIT

Symptoms that need 2ww cancer pathway referral –If FIT is positive >10ug/gm [NICE Diagnostics Guidance (DG30)]	
≥ 50 with unexplained abdominal pain or weight loss	FIT
< 60 with change in bowel habit or Iron Deficiency Anaemia*	FIT Coeliac
≥ 60 with anaemia* **without** iron deficiency	FIT

Symptoms above and FIT Negative <10ug/g

- If no other concerning symptoms do not have to be referred on 2ww.
- Safety-net: actively monitor symptoms in low risk (but not no risk) of cancer.
- Up to 10% of people with colorectal CA present with FIT <10ug/g FIT negative.
- Increased risk of missed cancers if rectal bleeding or obstructive symptoms or palpable abdominal mass or anaemias.

Alternative presentation of when to refer

<table>
<tr><th>Symptoms</th><th>Age under 40</th><th>40-49</th><th>50-59</th><th>60 and over</th></tr>
<tr><td>Rectal or abdominal mass</td><td>2ww</td><td>2ww</td><td>2ww</td><td>2ww</td></tr>
<tr><td>Unexplained rectal bleeding</td><td colspan="2">2ww if in addition has any of abdominal pain/change in bowel habit/weight loss/Iron deficiency anaemia</td><td>2ww</td><td>2ww</td></tr>
<tr><td rowspan="2">Iron deficiency anaemia in men or non-menstruating women
Do FIT in all</td><td colspan="2">FIT positive 2ww</td><td>2ww</td><td>2ww</td></tr>
<tr><td colspan="3">FIT negative
If no other concerning symptoms
do not have to be referred on 2ww.
Ensure safety netting.</td><td>2ww</td></tr>
<tr><td>Changes in bowel habit
Do FIT in all</td><td colspan="3">FIT positive 2ww</td><td>2ww +FIT</td></tr>
<tr><td>Non iron deficiency anaemia</td><td colspan="3">Consider other pathways/investigations</td><td>FIT positive 2ww</td></tr>
<tr><td>Unexplained weight loss AND abdominal pain</td><td>Consider other pathways/ investigations</td><td>2ww + FIT</td><td>2ww +FIT</td><td>2ww +FIT</td></tr>
<tr><td>Unexplained weight loss OR abdominal pain</td><td colspan="2">Consider other pathways/investigations</td><td>FIT positive 2ww</td><td>FIT positive 2ww</td></tr>
</table>

Routine Surveillance for conditions at higher risk of future colorectal cancer (CRC)

The relevant British Society of Gastroenterology surveillance guidelines should be followed.

Either of the following put individuals at high-risk for future CRC following polypectomy:

- 2 or more premalignant polyps including at least one advanced colorectal polyp (defined as a serrated polyp of at least 10mm in size or containing any grade of dysplasia, or an adenoma of at least 10mm in size or containing high-grade dysplasia); OR
- 5 or more premalignant polyps.

Surveillance colonoscopy after polypectomy

For individuals at high-risk and under the age of 75 and whose life-expectancy is great than 10 years:

- Offer one-off surveillance colonoscopy at 3 years.

For individuals with no high-risk findings:

- No colonoscopic surveillance should be undertaken.
- Individuals should be strongly encouraged to participate in their national bowl screening programme when invited.
- For individuals not at high-risk who are more than 10 years younger than the national bowel screening programme lower age-limit, consider for surveillance colonoscopy after 5 or 10 years, individual to age and other risk factors.

Surveillance colonoscopy (after potentially curative CRC) resection

- Offer a clearance colonoscopy ~~1 year after~~within a year of initial ~~surgical~~ resection.
- Then offer a surveillance colonoscopy after a further 3 years.
- Further surveillance colonoscopy to be determined in accordance with the post-polypectomy high-risk criteria.

Surveillance after pathologically en bloc R0 EMR or ESD of LNPCPs or early polyp cancers:

- No site-checks are required.
- Offer surveillance colonoscopy after 3 years.
- Further surveillance colonoscopy to be determined in accordance with the post-polypectomy high-risk criteria.

Surveillance after piecemeal EMR or ESD of LNPCPs (large non-pedunculated colorectal polyps of at least 20mm in size)

- Site-checks at 2-6 months and 18 months from the original resection Once no recurrence is confirmed, patients should undergo post-polypectomy surveillance after 3 years.
- Further surveillance colonoscopy to be determined in accordance with the post-polypectomy high-risk criteria.

Surveillance where histological completeness of excision cannot be determined in patients with: (i) a non-pedunculated polyps of 10-19mm in size, or (ii) an adenoma containing high-grade dysplasia, or (iii) a serrated polyp containing any dysplasia:

- Site-check should be considered within 2-6 months.
- Further surveillance colonoscopy to be determined in accordance with the post-polypectomy high-risk criteria.

Ongoing colonoscopic surveillance

- To be determined by the findings at each surveillance procedure, using the high-risk criteria to stratify risk.
- Where there are no high-risk findings, colonoscopic surveillance should cease but individuals should be encouraged to participate in the national bowel screening programme when invited.

Colonoscopic surveillance for people with inflammatory bowel disease

Offer colonoscopic surveillance to people with inflammatory bowel disease (IBD) whose symptoms started 10 years ago and who have:

- Ulcerative colitis (but not proctitis alone).
- Crohn's colitis involving more than one segment of colon.
- Offer a baseline colonoscopy with chromoscopy and targeted biopsy of any abnormal areas to people with IBD who are being considered for colonoscopic surveillance to determine their risk of developing CRC (see table here in NICE guidance CG118).

Offer colonoscopic surveillance to people with IBD based on their risk (see table) determined at their last colonoscopy:

- Low risk: offer colonoscopy at 5 years.
- Intermediate risk: offer colonoscopy at 3 years.
- high risk: offer colonoscopy at 1 year.

Other conditions:

- Acromegaly: older than 40 years - 3 yearly or 5-10 yearly, depending on baseline findings.
- Ureterosigmoidostomy: 10 years after the original intervention, then annually.

Colonoscopic surveillance for people with an increased lifetime risk of CRC due to hereditary factors ~~family history of CRC~~

Colonoscopy should only be offered to people identified in accordance with the British Society of Gastroenterology guidelines.

For individuals with moderate familial CRC risk:

- Offer one-off colonoscopy at age 55 years
- Subsequent colonoscopic surveillance should be performed as determined by post-polypectomy surveillance guidelines

For individuals with high familial CRC risk (a cluster of 3x FDRs with CRC across >1 generation):

- Offer colonoscopy every 5 years from age 40 years to age 75 years.

Lynch Syndrome (LS) and Lynch-like Syndrome

For individuals with LS that are MLH1 and MSH2 mutation carriers:

- Offer colonoscopic surveillance every 2 years from age 25 years to age 75 years

For individuals with LS that are MSH6 and PMS2 mutation carriers:

- Offer colonoscopic surveillance every 2 years from age 35 years to age 75 years

For individuals with Lynch-like Syndrome with deficient MMR tumours without hypermethylation/BRAF pathogenic variant and no pathogenic constitutional pathogenic variant in MMR genes (and their unaffected FDRs), and no evidence of biallelic somatic MMR gene inactivation:

- Offer colonoscopic surveillance every 2 years from age 25 years to age 75 years

Early Onset CRC (EOCRC)

For individuals diagnosed with CRC under age 50 years, where hereditary CRC symptoms have been excluded:

- Offer standard post-CRC colonoscopy surveillance after 3 years
- Then continue colonoscopic surveillance every 5 years until eligible for national screening

Serrated Polyposis Syndrome (SPS)

For individuals with SPS:

- Offer colonoscopic surveillance every year from diagnosis once the colon has been cleared of all lesions >5mm in size
- If no polyps ≥ 10mm in size are identified at subsequent surveillance examinations, the interval can be extended to every 2 years

For first degree relatives of patients with SPS:

- Offer an index colonoscopic screening examination at age 40 or ten years prior to the diagnosis of the index case
- Offer a surveillance colonoscopy every 5 years until age 75 years, unless polyp burden indicates an examination is required earlier according to postpolypectomy surveillance guidelines

Multiple Colorectal Adenoma (MCRA)

For individuals with MCRA (defined as having 10 or more metachronous adenomas):

- Offer colonoscopic surveillance annually~~every 1-2 years~~ from diagnosis to age 75 years. After the colon has been cleared of all lesions >5mm in size, or, where no polyps 10mm or greater in size are identified at subsequent surveillance examinations, the interval can be extended to 2 yearly.

Familiar Adenomatous Polyposis (FAP)

For individuals confirmed to have FAP on predictive genetic testing:

- Offer colonoscopic surveillance from 12-14 years
- Then offer surveillance colonoscopy every 1-3 years, personalised according to colonic phenotype

For individuals who have a first degree relative with a clinical diagnosis of FAP (ie "at risk") and in whom a APC mutation has not been identified:

- Offer colorectal surveillance from 12-14 years
- Then offer every 5 years until either a clinical diagnosis is made and they are managed as FAP or the national screening age is reached

MUTYH-associated Polyposis (MAP)

For individuals with MAP:

- Offer colorectal surveillance from 18-20 years, and if surgery is not undertaken, repeat annually

For monoallelic MUTYH pathogenic variant carriers:

- The risk of colorectal cancer is not sufficiently different to population risk to meet thresholds for screening and routine colonoscopy is not recommended.

Peutz-Jeghers Syndrome (PJS)

For asymptomatic individuals with PSJ:

- Offer colorectal surveillance from 8 years
- If baseline colonoscopy is normal, deferred until 18 years, however if polyps are found at baseline examination, repeat every 3 years

For symptomatic patients, investigate earlier

Juvenile Polyposis Syndrome (JPS)

For asymptomatic individuals with JPS:

- Offer colorectal surveillance from 15 years
- Then offer a surveillance colonoscopy every 1-3 years, personalised according to colorectal phenotype

For symptomatic patients, investigate earlier

For some patients with multiple risk factors for CRC, for example those with Lynch Syndrome and inflammatory bowel disease/multiple polyps, more frequent colonoscopy may be indicated. This needs to be guided by clinicians but with a clear scientific rationale linked to risk management.

Diagnosis and follow up of patients with suspected and/or confirmed inflammatory bowel disease

- Patients with new suspected inflammatory bowel disease should be assessed by a specialist team within 4 weeks (**NICE QS81**)
- Refer to guidance including use of calprotectin test **here** and notes below**

Other

- Persistent unexplained "low risk" symptoms such as abdominal tenderness or diarrhoea and who are referred for an opinion on management, following all reasonable assessment, including a FIT test and treatment in primary care.

Notes

- *Iron deficiency anaemia less than 11g/dl in men and less than10g/dl in non-menstruating women (may be lower in older patients).
- **Where there is a strong suspicion of Inflammatory Bowel Disease (eg family history, extra-intestinal symptoms, raised CRP/ESR), faecal calprotectin may aid in the diagnosis. While faecal calprotectin is not a definitive diagnostic tests, patients with levels <50 mcg/g can be

reassured and patients with levels >200 mcg/g should be referred. Patients with levels between 50-200 mcg/g should have a repeat test after 3 months and referred if levels have gone up or if other features are strongly indicative of a diagnosis of IBD. Faecal calprotectin is a sensitive test with many false positives and may be raised with NSAID treatment (excluding low dose (75mg) aspirin, liver cirrhosis, infectious colitis (salmonella, C Difficile etc).

- For details on diagnosis and management of Irritable Bowel Syndrome please go to the following links: **Calprotectin advice** and **IBS advice** or go to the **Digestive diseases** page of the CCG web site.

Rationale

Lower GI endoscopy is usually performed in the diagnosis of colorectal cancer, inflammatory bowel disease and adenomas/polyps.

Colorectal cancer is the third commonest cancer in the UK and is associated with increasing age (80% occur after the age of 60 years), genetic and lifestyle factors (smoking, low fibre diet, red and processed meat intake, inactivity, obesity and high alcohol consumption). After the age of 40 years bowel cancer is more common in males than females. The rising incidence of bowel cancer since the 1970s appears to have stabilised in recent years and may be decreasing in the UK. Roll out of a NHS Bowel Cancer Screening Programme (BCSP) for people aged between 60 and 74 years, led to increases in lower GI endoscopies in the period from 2006/7 to 2008/9. This policy does not cover the NHS BCSP which is under the remit of NHS England.

Symptoms of colorectal cancer include rectal bleeding, change in bowel habit to increased frequency and/or looseness of stool, anaemia, weight loss and abdominal mass. Rectal bleeding is a common symptom and in patients below the age of 30 years is more likely to be due to haemorrhoids (piles), anal fissure or inflammatory bowel disease. Patients with haemorrhoids or anal fissures often self-manage with topical treatment, and increasing fluids and fibre in their diet. Eight percent of patients over the age of 50 years presenting to primary care with rectal bleeding will have colorectal cancer.

In patients with IBD, endoscopy may be necessary to confirm a working diagnosis, response to treatment and the extent of the disease. Whilst this argues in favour of earlier referral for endoscopy, symptoms of irritable bowel syndrome (IBS) are common and are similar to those presented in IBD.

NICE DG30[3] recommends FIT testing for adoption in primary care to guide referral for suspected colorectal cancer in people without rectal bleeding who have unexplained symptoms but do not meet the criteria for a suspected cancer pathway referral. NHS England recommended use of FIT testing to aid triage of patients with symptoms of colorectal cancer during the COVID-19 pandemic[2]. From the published evidence, in the absence of iron deficiency anaemia, a palpable abdominal mass, rectal bleeding, or obstructive symptoms, a FIT <10ug/gm has a negative predictive value (NPV) for CRC of 95%. While the NPV and positive predictive value (PPV) of FIT test results 10-100ug/gm are unknown, preliminary data (supported by data from FIT pioneer sites) show that a FIT test >100ug/gm is associated with a 1:4 chance of CRC or other significant pathology[2].

References

1. National Institute of Health and Care Excellence. Suspected Cancer: recognition and referral. NICE guidance [NG12]. Published 23/6/15 (updated 26/7/17). https://www.nice.org.uk/guidance/ng12 [accessed 21/07/2020]
2. NHS England. Specialty guides for patient management during the coronavirus pandemic: Clinical guide for triaging patients with lower gastrointestinal symptoms. Published 16/6/20 version 1. Accessible at: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/06/C0551-triaging-patients-with-lower-gi-symptoms-16-june.pdf (accessed 4/11/20)
3. National Institute of Health and Care Excellence. Quantitative faecal immunochemical tests to guide referral for colorectal cancer in primary care [DG 30]. Published 26/07/2017. Accessible at https://www.nice.org.uk/guidance/dg30/ (accessed 3/11/20)

4. Rutter MD, East J, Rees CJ, et al. British Society of Gastroenterology/Association of Coloproctology of Great Britain and Ireland/Public Health England post-polypectomy and post-colorectal cancer resection surveillance guidelines. *Gut*. 2020;69(2):201-223. doi:10.1136/gutjnl-2019-319858: https://www.bsg.org.uk/wp-content/uploads/2019/09/Figure-1-surveillance-algorithm-1-scaled.jpeg?x53171 [accessed 21/07/2020]
5. National Institute of Health and Care Excellence. Colorectal cancer prevention: colonoscopic surveillance in adults with ulcerative colitis, Crohn's disease or adenomas. CG118. Published 23/3/2011 [accessed 18/08/20]
6. Cairns S R, Scholefield J H, Steele R J, and colleagues. Guidelines for colorectal cancer screening and surveillance in moderate and high-risk groups (update from 2002). Gut 2010; 59:666-690
7. Monahan KJ, Bradshaw N, Dolwani S, et al. Guidelines for the management of hereditary colorectal cancer from the British Society of Gastroenterology (BSG)/Association of Coloproctology of Great Britain and Ireland (ACPGBI)/United Kingdom Cancer Genetics Group (UKCGG). *Gut*. 2020;69(3):411-444. doi:10.1136/gutjnl-2019-319915
8. National Institute of Health and Care Excellence. Inflammatory Bowel Disease Quality Standard 81 (QS81). Published 26/02/2015 [accessed 9/12/20]

Glossary

Acromegaly:	Acromegaly is a condition in which the body produces too much growth hormone, leading to excess growth of body tissues over time.
Adenomas:	Adenomas are small growths on the inner lining of the intestine.
Faecal calprotectin:	Faecal calprotectin is a substance that is released into the intestines in excess when there is any inflammation there. Its presence can mean a person has an inflammatory bowel disease such as Crohn's Disease or Ulcerative Colitis.
IBD:	Inflammatory bowel disease is a group of inflammatory conditions of the large and small intestine. The two major types of IBD are Ulcerative colitis and Crohn's disease.
IBS:	Irritable bowel syndrome is a common condition of the digestive system of unknown cause. It can cause bouts of stomach cramps, bloating, diarrhoea and constipation.
Ureterosigmoidostomy:	A surgical procedure where the ureters which carry urine from the kidneys, are diverted into the large intestine.