



# Risk-stratified FIT for urgent colonoscopy in Lynch Syndrome: A clinical service throughout the COVID-19 pandemic

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## Introduction

Lynch Syndrome (LS) is an inherited disorder characterised by pathogenic variants in mismatch repair (MMR) genes which results in a cumulative lifetime risk of colorectal cancer (CRC). Currently, faecal immunochemical testing (FIT) is routinely used to guide colonoscopy in population-based screening programmes vs surveillance. Herein, we report preliminary results from an NHS England endorsed clinical service implemented during the COVID-19 pandemic (June 2020-March 2021) which used FIT to prioritise colonoscopy in high-risk LS patients in response to limited colonoscopy capacity at this time.

## Aims

- The aims of this clinical service were as follows:
- Identify the highest risk patients within the LS population
  - Assess impact on NHS service teams
  - Assess acceptability of FIT use and
  - Review impact of FIT in risk-stratifying LS patients throughout the pandemic.

## Methods

Regional genetic and endoscopy services across England were invited to participate. Patient eligibility was determined by 1) diagnosis of LS 2) planned colonoscopic surveillance between 1 Mar 2020 and 31 Mar 2021. Requests for FIT testing from participating NHS Trusts were sent to the NHS Bowel Cancer Screening South of England Hub in Guildford. The Hub sent patients a FIT kit (OC-Sensor™, Eiken Chemical Co. Ltd, Tokyo, Japan), instructions for use, a questionnaire to assess patient perceptions of FIT, and a pre-paid return envelope. Laboratory reports with faecal haemoglobin (f-Hb) results were returned electronically for clinical action. LS patients were risk-stratified for colonoscopy based upon the following f-Hb threshold criteria:

- 1) ≥10 f-Hb: triaged for colonoscopy via the NHS' two-week wait (2WW) pathway
- 2) <10 f-Hb: patients scheduled for colonoscopy within 6-12 weeks, where availability permits.

## Results

Fifteen centres in England participated in this clinical service. An uptake rate of 63% was observed (375/588 invites). A summary of findings by FIT cut-offs are detailed within Table 1, below.

Table 1: Summary of findings by FIT cut-offs

Cut-off (µg/g)	Overall Cases w/ Adenomas Total (%)	Advanced Adenomas (AA's)				Pending Colonoscopy or Missing Data
		CRC	NAD	CRC	NAD	
<6	274 (77.6)	61	15	0	91	101
6-9.9	23(6.3)	4	1	0	10	8
≥10	63(17.4)	22	7	3	27	3

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