FIT 62 years, p = 0.10) and gender (p = 0.41). Although the differences did not reach significance, advanced pathology in the FIT group was much higher, both in polyps ≥10mm diameter (FIT 86% v no FIT 14%, p = 0.30) and CRC incidence (FIT 4.5% v no FIT 1.0%, p = 0.19).

Conclusions Despite the challenges of managing clinical services during a pandemic, our data demonstrates an increased use of FIT in the colorectal pathway in line with updated guidance. This is particularly encouraging as there was insufficient time for an adequate communication strategy. However, a substantial proportion of patients were referred based on FIT results with neither NG12 nor DG30 compliant symptoms; perhaps showing that FIT can potentially increase referrals if used incorrectly. Some patients were referred with a negative FIT and a preponderance of NG12 symptoms, possibly indicating that clinical concern over traditional cancer risk may prompt referral despite an objectively very low cancer risk.

**FIT-99**

**FAecal immunochemical Tests for younger patients Presenting with bowel symptoms**

1Lefkotha Zacharopoulou*, 1Rigers Cama, 1Neel Kapoor, 1Leila Mebarek, 1Haroon Bhatti, 2Philip Sawyer, 2Bharat Patel, 1Jonathan Landy. 1Gastroenterology Dept, West Hertfordshire Hospitals NHS Trust, Watford, WD18 0HB; 2Parkbury House Surgery, Herts Valleys CCG, St Albans, AL1 3HD; 3Chemical Pathology Dept, West Hertfordshire Hospitals NHS Trust, Watford, WD18 0HB

### Introduction

Quantitative faecal immunochemical tests (FIT) are recommended by NICE (DG30) guidelines for use in patients with suspected colorectal cancer in primary care. However, the utility of FIT in patients under the age of 50 versus the use of faecal calprotectin is unclear. In 2019, Herts Valleys CCG instituted the use of FIT for patients over the age of 40 years, presenting with symptoms meeting DG30 and some lower risk NG12 criteria, excluding those with higher risk symptoms of iron deficiency anaemia (IDA), mass or rectal bleeding. We aim to evaluate the accuracy of FIT for significant bowel disease (SBD) in patients under 50 years with those 50-59 and over 60 years in our population.

### Methods

The medical records of all patients undertaking a FIT sample with a minimum of 6 months follow up between June 2019 and July 2020 were reviewed. The outcome of SBD (a composite of either colorectal cancer, inflammatory bowel disease or high-risk adenomas (defined as polyps of ≥1cm, ≥5 polyps or high-grade dysplasia) was recorded. FIT analysis was performed using a single OC-Sensor io analyser (Eiken Chemical Co., Tokyo, Japan). The sensitivity, specificity, predictive values and accuracy of FIT for SBD were assessed for each age group. Fisher’s exact test was used to assess the differences in sensitivity and specificity of FIT between patients <50 and older age groups. MedCalc® statistical software was used for all calculations.

### Results

3460 patients with bowel symptoms undertook a FIT sample. 132 patients had SBD. 13% of patients were <50 with a FIT result ≥10µg/g in 12%. 22% were 50-59 with a FIT result ≥10µg/g in 16%. 65% were ≥60 with a FIT result ≥10µg/g in 26%. The sensitivity, specificity, PPV, NPV and accuracy of a FIT result ≥10µg/g for patients 50-59 were 83% (CI 66 to 95.8%), 87% (CI 84 to 89%), 19% (CI 15.8% to 23%), 99.4% (CI 98.5% to 99.8%) and 87% (CI 84% to 89%) and for patients ≥60 years were 86% (CI 77 to 92%), 77% (CI 75 to 78.5%), 14% (CI 13 to 16%), 99.2% (CI 98.7% to 99.5%) and 77% (CI 75% to 79%). The sensitivity, specificity, PPV, NPV and accuracy of a FIT result ≥10µg/g for patients <50 years were 87.5% (CI 47 to 99.7%) p=1.0, 89% (CI 85.7 to 91.9%) p=0.35 and <0.01, 13% (CI 9 to 17.8%), 99.7% (CI 98.4 to 99.96%) and 89% (CI 86 to 92%) respectively.

### Conclusion

FIT performed well for the detection of SBD in all age groups with equivalent sensitivity between age groups and improved specificity in younger age groups compared with patients ≥60 years.