

## NHS Tayside Receives Global Recognition for Efficient and Effective Investigation of Patients with New Bowel Symptoms Using Faecal Immunochemical Tests (FIT)



Pictured from left to right: Craig Mowat, Lynn Taylor, Ian Kennedy and Judith Strachan

Bowel symptoms are often difficult to assess as patient presentations can vary from bleeding, palpable masses, iron deficiency anemia to non-specific symptoms. Thus, patients often require further investigation through colonoscopy to diagnose or rule-out significant bowel disease, including colorectal cancer.

At NHS Tayside in Dundee, Scotland, approximately 4,000 patients/year are referred for colonoscopy. However, the prevalence of significant bowel disease is low, with colorectal cancer found in only 2% of patients and inflammatory bowel disease diagnosed in 5%. Despite the low prevalence of disease, 35-40% of all colonoscopy referrals were marked as “urgent” or “urgent, suspected cancer”. Thus, a significant opportunity existed to improve the investigation pathway for patients with bowel symptoms.

Use of faecal immunochemical tests (FIT) was integrated into the Colorectal pathway at NHS Tayside through the collaborative efforts of Primary Care Physicians, Surgery and Gastroenterology departments, Information Technology (IT), Health Records and Laboratory Medicine. The substantial benefits of this program have been recently published, highlighting that by using a low faecal hemoglobin (fHb) as an indicator of risk for significant bowel disease, the rates of referral for colonoscopy have decreased by 15% over 12 months (1). As such, 2,521 patients have been able to seek care in the community, without the delays and discomfort associated with colonoscopies, or the risks associated with not having one.

Further, in patients with fHb  $\geq 10$  the prevalence of significant bowel disease was 32.3%, compared to 6.6% in those with fHb  $< 10$ . Consequently, patients with an elevated fHb had expedited investigations and management of patients was enabled through urgent colonoscopies and care.

For their impressive improvements to patient care, the innovative team behind the clinical care initiative entitled “Use of faecal immunochemical tests (FIT) unlocks the door to efficient and effective investigation of patients with new bowel symptoms” was awarded a prestigious 2020 UNIVANTS of Healthcare Excellence Award with the Designation of Distinction (2). Congratulations to Judith Strachan, *BSc(Hons), FRCPath, Consultant Clinical Scientist, Blood Sciences/Scottish Bowel Screening Laboratory, NHS Tayside*, Andrew Cowie, *MD, IT Manager, Blood Sciences*, Craig Mowat, *MD, Gastroenterologist*, Lynne Taylor, *Medical Laboratory Assistant*. This team, along with many other valued contributors at NHS Tayside associated with the FIT undertaking, are leading best practices through collaboration and avant-garde thinking.

### THREE KEY TAKEAWAYS

1. Bowel symptoms are difficult to assess, and often require a colonoscopy for fear of missing significant disease, including colorectal cancer.
2. Low fHb is a valued rule-out tool for significant bowel disease, whereas fHb  $\geq 10$  have a  $> 50\%$  risk of significant bowel disease.
3. Incorporating fHb into a Colorectal Pathway can substantially reduce referrals decrease costs and maximize patient experiences, all without compromising high quality care.

### REFERENCES

1. Strachan and Mowat, et al. The use of faecal haemoglobin in deciding which patients presenting to Primary Care require further investigation (and how quickly) – the FIT approach. *eJIFCC* 2021;32:1:052-060.
2. Strain C and Ravalico TH. Laboratory medicine and healthcare excellence; Till death do us part. *eJIFCC* 2021;32:1:007-019.