



Efficient and cost-effective diagnosis of IBD: Now and the future

June 2025

Introduction

Inflammatory bowel disease (IBD) is a group of conditions that cause inflammation of the tissues in the digestive tract. It is becoming increasingly common, with over 500,000 people in the UK now living with the condition. IBD can have a serious impact on daily life, affecting both physical health and mental wellbeing, and is placing a significant financial burden on the NHS.^(1,2)

Despite this, receiving a timely and accurate diagnosis remains a challenge. Delays may result from low awareness in primary care, stigma around bowel symptoms, variable access to testing, and inconsistent referral pathways into specialist NHS care.⁽³⁾ Symptoms can be vague or change over time and are often like symptoms experienced in other lower gastrointestinal conditions. Getting a diagnosis therefore usually involves multiple steps which can be time consuming and complex. Stark disparities in the length of time for diagnosis remain with length of time from symptoms to diagnosis ranging from 11 months to 47 years. This is a deep health inequity considering the significant burden on patients caused by delayed diagnosis.

A global study has found that patients who wait longest to be diagnosed with Crohn's or Colitis are between two and four times more likely to develop adverse and costly clinical outcomes, including emergency surgery. This means thousands of costly and complex operations are needed due to delays in the diagnosis of inflammatory bowel disease.⁽³⁾

Time to first treatment is critical in IBD care to reduce inflammation, prevent disease progression, and improve long-term outcomes, increasing the need to get a fast and accurate diagnosis.^(2,4,5)

In February 2025, KPMG and Crohn's & Colitis UK convened a roundtable with various personnel involved in the IBD ecosystem, including gastroenterologists, IBD specialist nurses, private sector representatives, NHS policymakers, pharmaceutical companies, pharmacists, a pharmacy chain representative and patient representatives.

Through focused discussions, the group explored how to improve IBD referral pathways and reduce time to first treatment within the NHS, whilst retaining an integrated, patient-centred approach.

The roundtable discussion revealed that partnership working among public, private and third sectors can play a role in advancing the adoption of the Lower GI Pathway. A focus on referral efficiency and digital infrastructure can drive progress.

Referral efficiency can be achieved by reducing variation in how referrals are made, as well as information and tests that accompany them. The Lower GI Pathway holds the potential to address this. Digital infrastructure underpins the ability to share information seamlessly, tract patient progress and reduce administrative burden.

Currently fragmented and paper-based systems make it harder for clinicians to coordinate care and for patients to stay informed about their next steps.





Enhancing diagnosis of IBD: a summary

Achieving early diagnosis of IBD requires coordinated efforts across referral efficiency, digital innovation, and stakeholder collaboration. With targeted implementation of the Lower Gastrointestinal Pathway, supported by adaptations to care delivery models such as one-stop clinics and Al-driven triage, the NHS can deliver faster, more consistent, and person-centred care for people living with IBD

1

Standardise the primary care pathway for the assessment of lower gastrointestinal disease

Promote consistent national adoption by embedding the pathway within ICS-level strategies, GP systems, and clinical training programs. Position the microsite not only as a diagnostic pathway, but as a platform for patient education and engagement



Strengthen diagnostic efficiency through wider participant enablement

Expand access to Faecal Immunochemical Test and Faecal Calprotectin testing by enabling community pharmacies and primary care teams to lead on early testing and triage. Empower Advanced Nurse Practitioners and nurse endoscopists with a defined remit to fast-track appropriate referrals

3

Leverage digital infrastructure to improve visibility and flow

Prioritise investment in universal Electronic Patient Records (EPRs), shared care records, and Al-driven triage tools, such as chatbots to improve communication between primary and secondary care, reduce unnecessary appointments, and support timely decision-making

4

Embed incentives and governance into local implementation

Align pathway uptake with performance measures and local incentives where appropriate. Establish clinical champions and clear governance frameworks to drive delivery, accountability, and sustainability

5

Foster strategic partnerships with the private and third sectors

Encourage open, transparent collaboration with pharmaceutical and technology partners to support workforce upskilling and scale local innovation, while maintaining alignment with clinical priorities and public trust



Implementation of the Lower GI Pathway

In 2024, Crohn's & Colitis UK, in partnership with other charities, professional organisations, healthcare professionals and people with lived experience, launched the Primary Care Diagnostic Pathway for lower gastrointestinal (GI) symptoms (Lower GI Pathway: <u>The path to a correct diagnosis |</u> <u>What's up with my gut?</u>). Endorsed by the Royal Colleges of General Practitioners and Nursing, this pathway is based on best practices from current guidelines. In addition to the adult and paediatric diagnostic pathways for healthcare professionals, the dedicated microsite hosts a patient and parent toolkit with supporting resources to help during and after diagnosis.



Source: https://www.whatsupwithmygut.org.uk/about-us



Source: https://www.whatsupwithmygut.org.uk/about-us



Implementation considerations

The Lower GI Pathway has the potential to accelerate diagnosis and ultimately improve outcomes for people living with IBD. The first step to success will be embedding use of the diagnostic pathway within routine clinical practice in primary care, where early identification and appropriate referral have a major impact.

To support implementation, roundtable participants identified the key enablers and barriers to widespread adoption (see table 1).

Table 1: Barriers and enablers for implementation of the Lower GI Pathway

	Barriers	Potential enablers
Access to diagnostics	 Insufficient access to diagnostic tests (eg: Faecal Immunochemical Test (FIT)/Faecal Calprotectin (FCP)) Regional variation in diagnostic capacity, including workforce 	 Strengthened collaboration between primary and secondary care Expand use of digital tools to streamline test access and triage Utilise community diagnostic centres to expand capacity
Governance and policy	 Unclear roles and decision-making authority across GP practices, Trusts and ICSs Lack of alignment on pathway ownership and decision-making 	 Better define governance structures to support local adoption Clinical Reference Groups (CRGs) support to align local processes Health Innovation Networks to support pilots and scale-up
Financial and workforce capacity	 Lack of financial or workforce-related incentives for adoption Competing workload priorities in primary and secondary care leading to slow uptake Perception of increased workload for clinicians Lack of evidence of short-term cost benefits 	 Linking adoption to performance indicators (e.g. QOFs) and financial outcomes Targeted local funding and support for pilot sites
Awareness and education	 Limited awareness among GPs, clinicians and patients about the pathway Resistance to change among some healthcare professionals 	 Targeted education and training across stakeholder groups (e.g. pharmacists, AHPs) Gastroenterologist letter addendums to raise GP awareness Local clinical champions (especially AHPs) to support uptake and communication Incorporation into CPD programmes
Operational & continuous improvement	 Lack of standardised framework to guide implementation Challenges in scaling pilots due to operational constraints Limited data collection makes effectiveness hard to measure 	 Structured pilot programmes with clear KPIs Establish feedback mechanisms to refine pathway Digital checklists within EPRs to reduce admin burden and drive behavioural change Leverage national tools, such as electronic health systems/records to monitor progression and impact



Broadly, the enablers and barriers can be considered through five lenses:

Access to diagnostics	Long waiting times for endoscopies is likely to stall the implementation of the Lower GI Pathway, as GPs are more likely to rule out any urgent referrals for serious, non-cancer conditions like IBD, and only refer patients with positive FIT test and normal colonoscopy under the urgent pathway. Currently, only a handful of ICSs have a have a clear pathway in primary care to investigate diseases of the gut other than cancer. While community diagnostic centres offer a route to improve access, this will need to be coupled with a closer integration between primary and secondary care, including shared diagnostic slots, digital referrals and clearly defined testing protocols.	
Governance and policy	Clear leadership and defined decision-making structures are essential to embed the pathway in local systems. At the frontline, Integrated Care Systems (ICSs), Trusts, and GP networks must ensure roles and responsibilities are agreed, so that those implementing the pathway have both the remit and the support to act. Local CRGs can serve as anchor points for alignment, helping to embed the pathway into governance and quality frameworks. National endorsement through the Getting It Right First-Time programme can reduce variation and reinforce consistency in how the pathway is applied. Strong policy signalling and defined local governance are key to enabling widespread adoption with accountability.	
Financial and workforce capacity	Without adequate resourcing and incentives, even the most well-designed diagnostic pathway may be a struggle to embed. Competing demands in primary and secondary care can deprioritise implementation unless there is a clear operational driver, such as improved patient flow or reduced unplanned admissions. Local clinical champions can help promote uptake, especially when aligned with QI or performance frameworks. Supporting adoption with workforce capacity planning, funded pilot sites, and practical training is key. Strategic partnerships including pharma and medtech may play a role in providing implementation support or resources, if aligned transparently with NHS priorities.	
Awareness and education	Adoption begins with awareness, and ensuring familiarity in primary care with the Lower GI Pathway is fundamental for use in practice. At a local level, individual allied health professionals (AHPs) in primary care may take a role as "clinical champions", promoting the presence and advocating for use of the pathway in their practices. Gastroenterologists might distribute the pathway in addendums to their clinical letters to GPs, and the pathway could be integrated into a formalised CPD programme. Beyond this, the private sector can support awareness initiatives via various mechanisms (see next page). Viewing the pathway as a toolkit for all primary care professionals – in particular, GPs and pharmacist will be central to these activities.	
Operational & continuous improvement	For the pathway to deliver lasting value, it must be embedded into everyday practice. Pilot programmes should be backed by change management support and regular data capture. Digital integration, such as pathway prompts within EPR systems, can support consistent use.	



Role of the private sector in implementing the Lower GI Pathway

The private sector, including the pharmaceutical industry, was explored in supporting adoption of the Lower GI Pathway. Proposed activities included:



Raising awareness and delivering education:

field-based employees who already engage with primary and secondary care professionals may disseminate the pathway in parallel with their routine interactions.

᠆᠊ᡃ᠍ᢒᢅᢇ		
Ľ	=	
	=	

Best practice sharing:

when the pathway is used in singular local contexts, pharmaceutical companies can share qualitative insights and success stories with the wider stakeholders, leveraging their network across the gastroenterology community.





Reducing time to first treatment

Delays in IBD diagnosis and referral can significantly postpone the start of treatment, increasing the risk of complications and disease progression.



KPMG

Proposed solutions

To reduce the time to first treatment, roundtable participants focused conversations around two key themes; enhancing referral efficiency and utilising digital infrastructure. These were identified as the most immediate and actionable levers to improve diagnostic timelines, reduce variation in care, and support better continuity between primary and secondary services.



Referral efficiency

is critical to ensuring patients with suspected IBD are identified early and directed to the right care setting without unnecessary delay. Variability in how referrals are made and the tests and information that accompany them can contribute to avoidable delays. The Lower GI Pathway holds the potential to improve referral efficiency.



Digital infrastructure

underpins the ability to share information seamlessly, track patient progress, and reduce administrative burden. Fragmented or paper-based systems make it harder for clinicians to coordinate care and for patients to stay informed about their next steps.





Various interventions or changes to practice were discussed by participants, as outlined below.



A. Operational and process efficiencies

Dedicated gastroenterology IBD leads within hospitals for rapid triage and immediate referral coordination

Refresh of consultant-to-consultant referral guidelines to streamline communication and reduce delays

Community-based triage via enhanced use of ANPs, including near-term review pre- and post-colonoscopy

"Urgent IBD clinics" with a four-week wait time target, analogous to the two-week cancer pathway, for accelerated specialist review

Retaining IBD colonoscopies and pathology reviews in-house* vs. outsourcing cancer colonoscopies

"One stop shop" diagnostic colonoscopy and treatment initiation clinics including TB screening on-the-day**

Nurse endoscopist autonomy to recommend that GPs prescribe anti-inflammatory drugs to treat IBD

Offering FIT and FCP testing in community pharmacies



Deep dive: FIT and FCP testing in community pharmacies

Making these tests available in pharmacies can be achieved via two mechanisms:

- 1. Tests available in pharmacies following GP requests: This streamlined approach facilitates earlier detection, reduces the burden on GPs, and expedites referrals to specialists when necessary. The NHS Right Care scenario illustrates a case where a GP arranges for a patient to complete FCP testing at a local community diagnostic hub, highlighting the potential for community-based testing to enhance diagnostic efficiency.⁽⁷⁾
- 2. Pharmacies able to request tests independently: Allowing community pharmacies to request FIT and FCP tests offers a faster route into the diagnostic pathway for patients with gut symptoms. Results would be shared with the GP, who can then determine whether referral to secondary care is needed. This approach would reduce pressure on GP appointments, speeds up access to testing, and ensure more informed referrals, supporting earlier diagnosis and better patient outcomes.

*As cancer pathways are generally more well-defined and standardised, and patients are less likely to receive continuous management by the gastro team compared to people living with IBD

** Note that sedation of individuals undergoing colonoscopies is a key limiting factor to obtaining consent for further workup and treatment initiation



B. Digital infrastructure

Ensure electronic patient records have been implemented in all trusts

Implement National Care Record Service (NCRS) system for GPs to see results and referrals

Chatbot embedded in the NHS app to support and triage people on waiting lists

Automated letters / digital messages for patients based on referral data, e.g. links to information on IBS if symptoms suggest non-inflammatory cause

Automated review of workup, with letters sent to GP if no calprotectin conducted



Deep dive: Al-driven chatbots for waitlist management

Artificial Intelligence (AI) chatbots can play a significant role in managing patient waitlists by automating the patient communication and validation processes. For example, (details from Manchester pilot). Similarly, the NHS's expansion of AI to reduce missed appointments has shown promise in freeing up staff time and bringing down waiting lists for elective care. ^(10, 11)

While digital infrastructure underpins many of these improvements, the interventions that deliver most directly on reducing time to first treatment are those that streamline triage, testing, and communication. Across all proposed changes, success relies on three consistent drivers:

Clear clinical leadership to champion adoption

Cross-sector collaboration between primary care, hospitals, and digital innovators Integration into existing workflows, minimising disruption and administrative burden



Role of the private sector in reducing time to first treatment

Various mechanisms of collaboration between the private sector – including the pharmaceutical industry and pharmacy chains – were proposed to support the previously explored interventions, as outlined below. Joint Working ⁽⁴⁾ between the pharmaceutical industry, NHS bodies and charities like Crohn's & Colitis UK was hypothesised as a particularly useful approach to support change at a local level.



Pathway mapping

convening stakeholders to identify and concretely map bottlenecks or duplication of effort which can be minimised or removed, and design the ideal future state



Best practice sharing

when changes are made in isolated settings, sharing best practices and drivers of success with other local systems or providers nationally

Robust collaborative mechanisms



Digital pathway implementation via Joint Working⁽⁴⁾

pharmaceutical industry providing shared resource or funding alongside local care providers to run pilots implementing any of the digital tools suggested

Ŷ,

Diagnostic optimisation

supporting deployment of diagnostic testing in settings outside of GP practices or hospitals (such as pharmacies)



Data collection

for example, on Patient Reported Outcome Measures



Potentially transferrable case studies

The following case studies highlight transferable models from across the NHS, offering practical insights around efficient and patient-centred pathways that could be applied in the IBD context.

One-Stop Urology Clinic – Guy's and St Thomas' NHS Foundation Trust (GSTT)

Context:



To improve efficiency and reduce patient anxiety, GSTT developed a one-stop clinic designed to provide comprehensive assessments for various urological conditions within a single visit, combining diagnostics and specialist input in a single appointment

Intervention:



- Patients received a urology consultation, diagnostic imaging (ultrasound/CT), and flexible cystoscopy all in one visit
- This was followed by an immediate discussion of results and care planning

Impact:

Relevance to IBD:

into a single clinic visit.

- Reduced number of hospital visits
- Faster diagnosis and earlier treatment
- Higher patient satisfaction (12)

This model offers a strong blueprint for IBD care;

pre-treatment TB screening, and treatment initiation

particularly for patients with moderate to severe

symptoms. A similar approach could integrate

specialist / ANP consultation, endoscopy,

AI Chatbot for Waitlist Management – Lancashire and South Cumbria NHS

Context:



Faced with surgical backlogs, the NHS in Lancashire and South Cumbria introduced an AI chatbot to contact patients on waitlists and revalidate their need for care

Intervention:



- Patients received automated messages asking whether they still required treatment, whether symptoms had changed, and if they wanted to stay on the list
- Information was used to update prioritisation or remove patients no longer needing care

Impact:



- Reduced unnecessary appointments
- Improved triage accuracy
- Significant time and cost savings (chatbot saved £1.88 per patient, with an annual savings projected at £47,015 for the Integrated Care Board (ICB))⁽¹³⁾

Relevance to IBD:

An Al-driven triage tool could be used in specialist services to screen patients referred with GI symptoms. By collecting key symptom data (e.g. presence of red flags, duration, weight loss), it could help identify those needing urgent review versus those suitable for remote monitoring or FIT/FCP testing, in turn reducing unnecessary referrals and delays.



References

- 1. Li, L., Wu, C. Y., Hong, L. H., Guo, H. Z., & Zhang, Z. (2024). Diagnosis and management of inflammatory bowel disease. *Journal of Evidence-Based Medicine*, *17*(2), 409–433. <u>https://doi.org/10.1111/jebm.12626</u>
- 2. BD UK. (2024). The state of IBD care in the UK. https://ibduk.org/reports
- Din, S., Reddy, P. A., & Agarwal, T. D. (2025). Primary care diagnostic pathways for lower gastrointestinal symptoms. *The Lancet Gastroenterology & Hepatology*, *10*(1), 9–11. <u>https://doi.org/10.1016/S2468-1253(24)00350-9</u>
- 4. Association of the British Pharmaceutical Industry (ABPI). (2021). *Collaborative working and joint working: A toolkit for industry and NHS Wales*. <u>https://www.abpi.org.uk/publications/collaborative-working-and-joint-working-a-toolkit-for-industry-and-nhs-wales/</u>
- AWARE-IBD Diagnostic Delay Working Group. (2024). Sources of diagnostic delay for people with Crohn's disease and ulcerative colitis: Qualitative research study. *PLOS ONE, 19*(6), e0301672. <u>https://doi.org/10.1371/journal.pone.0301672</u>
- 6. IBD UK. (2023). National report. https://s3.eu-west-2.amazonaws.com/sr-crohns-craft/images/IBD-UK-National-Report_7OCT_v9_WITH-HYPERLINKS_compressed.pdf
- 7. NHS England. (2024). *RightCare scenario: Inflammatory bowel disease*. <u>https://www.england.nhs.uk/wp-content/uploads/2024/06/RightCare-IBD-scenario-June-2024.pdf</u>
- 8. Queensland Health. (2014). Overview of the planned introduction of nurse endoscopy in Queensland. https://www.health.qld.gov.au/ data/assets/pdf file/0032/382973/endoscopyoverview2014 part4.pdf
- 9. uPerform. (2023). *Preparing for the NHS EPR and digital transformation mandate*. <u>https://www.uperform.com/blog/nhs-epr-digital-transformation/</u>
- 10. Health Innovation North West Coast. (2023). Simple AI tools help save money and reduce waiting lists in Lancashire and South Cumbria. <u>https://www.healthinnovationnwc.nhs.uk/news/Simple-AI-tools-help-save-money-and-reduce-waiting-lists-in-Lancashire-and-South-Cumbria</u>
- 11. NHS England. (2024). NHS AI expansion to help tackle missed appointments and improve waiting times. <u>https://www.england.nhs.uk/2024/03/nhs-ai-expansion-to-help-tackle-missed-appointments-and-improve-waiting-times/</u>
- 12. Guy's and St Thomas' NHS Foundation Trust. (n.d.). Urology services. <u>https://www.guysandstthomas.nhs.uk/our-services/urology-services</u>
- Health Innovation North West Coast. (2023). Simple AI tools help save money and reduce waiting lists in Lancashire and South Cumbria. <u>https://www.healthinnovationnwc.nhs.uk/news/Simple-AI-tools-help-save-money-and-reduce-waiting-lists-in-Lancashire-and-South-Cumbria</u>
- Law, C. C. Y., Tkachuk, B., Lieto, S., Narula, N., Walsh, S., Colombel, J.-F., & Ungaro, R. C. (2024). Early biologic treatment decreases risk of surgery in Crohn's disease but not in ulcerative colitis: Systematic review and meta-analysis. *Inflammatory Bowel Diseases*, *30*(7), 1080–1086. <u>Early Biologic Treatment Decreases Risk</u> of Surgery in Crohn's Disease but not in Ulcerative Colitis: Systematic Review and Meta-Analysis - PubMed



Contacts



Dr Guillaume Favier Partner – Healthcare and Life Sciences Strategy KPMG UK guillaume.favier@kpmg.co.uk



Burcu Borysik Head of Policy & Campaigns Crohn's & Colitis UK <u>burcu.borysik@crohnsandcolitis.org.uk</u>



Dr Matthew Lagomarsino Associate Director – Healthcare and Life Sciences Strategy KPMG UK matt.lagomarsino@kpmg.co.uk



Jess Turner Head of Health Services Crohn's & Colitis UK jess.turner@crohnsandcolitis.org.uk



Aishwarya Miglani Assistant Manager – Healthcare and Life Sciences Strategy KPMG UK aishwarya.miglani@kpmg.co.uk



Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

The roundtable participants outlined on page 3, whilst contributing to the discussion that informed this paper, have not been involved in its publication



kpmg.com/uk

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2025 KPMG LLP, a UK limited liability partnership and a member firm of the KPMG global organisation of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organisation.

Document Classification: KPMG Public

Create: CRT160543A | June