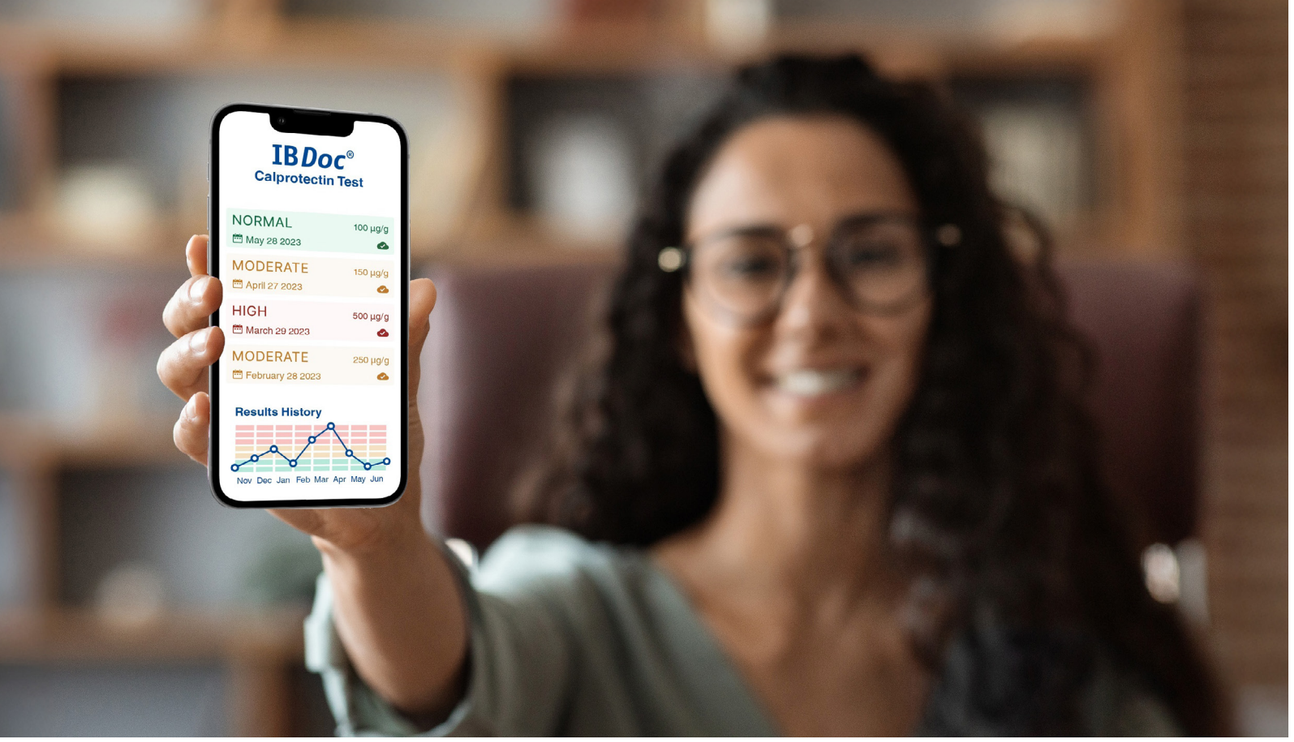

Sustainable IBD Management: IB*Doc*® Home Calprotectin Test Reduces NHS Carbon Footprint

NHS
County Durham and Darlington
NHS Foundation Trust

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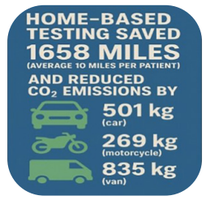
There has been a big drive in recent years to reduce the environmental impact of the NHS – be that their direct (NHS Carbon footprint) or indirect carbon footprint (NHS Carbon footprint Plus which is emissions they can influence), or single use plastics. The aim is to reach net zero for the direct carbon footprint by 2040 and the indirect carbon footprint by 2045. In addition, there are targets to achieve 80% reduction by 2032 and 2039 respectively.[1]

This is a big ask, and is easier said than done, especially in the diagnostics/procedural side of things, because there is a heavy reliance on single use plastics and patients attending hospitals.

County Durham and Darlington introduced the BÜHLMANN IB*Doc*® calprotectin home test, available from Alpha Laboratories, into the gastroenterology department in mid-2023 and rapidly started enrolling patients onto the new test.

Dr Saad Khan and Lead IBD nurse Sue Ritchie presented a retrospective audit the IBD team had completed at The British Society for Gastroenterology conference in Glasgow in June 2025. The audit covered from July 2023 to November 2024 and involved 158 patients that were enrolled onto the IB*Doc* home test. They used the patient postcode information and calculated the distance to the hospital – from this they determined that 1658 miles were saved in delivering stool samples for calprotectin testing to the laboratory, which is an average of 10.4 miles per patient. This then equates to the following in CO_2 emissions depending on the vehicle type used for the journey:[2]

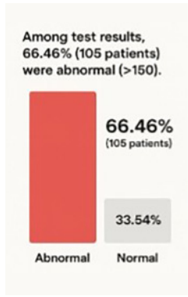


County Durham and Darlington is one of the largest geographical trusts in the North of England, so the patients can be quite a distance from the hospital. They also have patients who go off to university that like to maintain their care under their existing healthcare team. The IB*Doc* home test enables this without them having to travel large distances to get their calprotectin levels checked, and so the potential mileage/CO_2 saving in these circumstances is even higher.

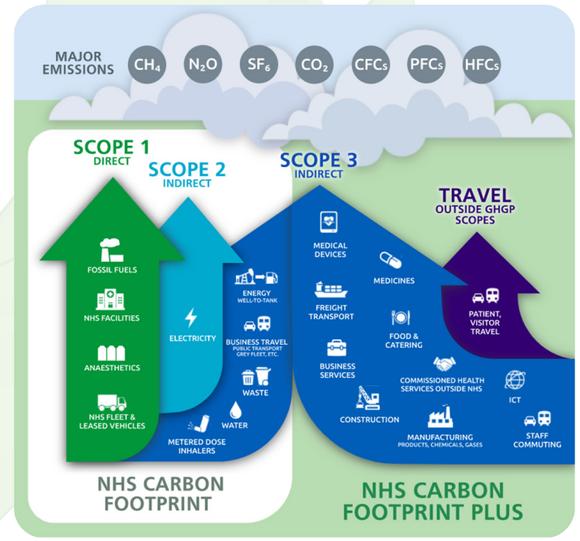
Apart from the CO_2 emissions, the use of the IB*Doc* home test over this time period also saved on the use of approximately 237 single use plastic pots, and sealable plastic bags (which equates to 4266 grams of plastic and 948 grams of plastic respectively) for the transport of the faeces to the laboratory for testing. It also saves 237 request forms to authorise the analysis within the laboratory - everything with the IB*Doc* is electronic, so the paper request form is not required.

In addition to the environmental benefits, the other benefits are (depending on your perspective) even more significant:

- ✓ The time to starting patients on the correct treatment pathway was reduced to an average of 1.7 days which is down from ~2 weeks. In the audit, just over 66% of results were 'abnormal', so a quicker result is obviously better for the patient by improving treatment strategies. It is also potentially cost saving for the NHS due to intervention being initiated before the disease state progresses further, which might potentially require more significant intervention.



- ✓ A quicker result for the 33% of results that were 'normal' relieves patient anxiety.
- ✓ There is a benefit to the staff in not having to chase (or be chased by patients) for lab results.
- ✓ In addition to the obvious benefit of the quicker result meaning quicker start of the appropriate treatment pathway the patients also have the added benefits of:
  - ▷ Reduced anxiety due to reduced time waiting for the results
  - ▷ Home testing eliminates the risk of samples getting lost/leaking enroute to the hospital which then require a sample to be repeated and increases the time to obtaining the result
  - ▷ Elimination of the time required to deliver the traditional sample to the GP/hospital for analysis
  - ▷ Potentially having to get someone else to deliver the sample because the patient isn't well enough.
  - ▷ That's not to mention the challenges faced with hospital parking!



Within the diagnostic arena it is hard to reduce carbon emissions and the requirement for single use plastics, but the IBDoc calprotectin home test does achieve this, as the team conclude in their poster:

> *IBDoc faecal calprotectin testing demonstrated significant environmental benefits by reducing travel and CO_2 emissions while enabling faster clinical assessment. These findings support its adoption as a sustainable, efficient alternative for managing IBD patients.*

Scan to view the full poster

For more information visit:
www.calprotectin.co.uk/ibdoc

References:
1. NHS England: Greener NHS - https://www.england.nhs.uk/greenernhs/a-net-zero-nhs
2. Khan et al; BSG 2025: Impact of Home based faecal calprotectin testing in IBD patients: Environmental sustainability and timely disease monitoring