Division of Laboratory Medicine

Biochemistry

Faecal Immunochemical Testing (FIT)

FIT is a diagnostic test that acts as a primary care triage tool to identify those low risk patients that require further investigation via colonoscopy or CT colonography. FIT is not a 'rule out' for patients who are medium and high risk patients.

The current national guidance for FIT testing is contained in NICE guidance DG30 which evaluates the role of FIT testing as a triage test for patients in primary care with defined symptoms amounting to a low risk (but not no risk) of cancer (<3%).

FIT is now available to Primary Care Users for non-urgent colonoscopy referrals. Patients with red flags must still follow the 2WW urgent referral pathway

Use of FIT in primary care could result in avoidance of invasive tests for patients with negative results. Shorter waiting times for colonoscopies for higher risk patients (including those with FIT positive results).

Patients should be advised that even if they have had a recent national screening FIT test which was negative, once symptomatic, the new test is valuable and may be positive (since different cut-offs are used for asymptomatic screening).

FIT can detect human haemoglobin (Hb) at lower concentrations and with much less interference than non-specific colourimetric screening test commonly known as faecal occult blood test (FOB). It can detect cancers at an earlier stage, and particularly advanced adenomas (tumours that may become cancers) and will have fewer false positives. This means removal of many more polyps at colonoscopy that might otherwise grow into cancers.

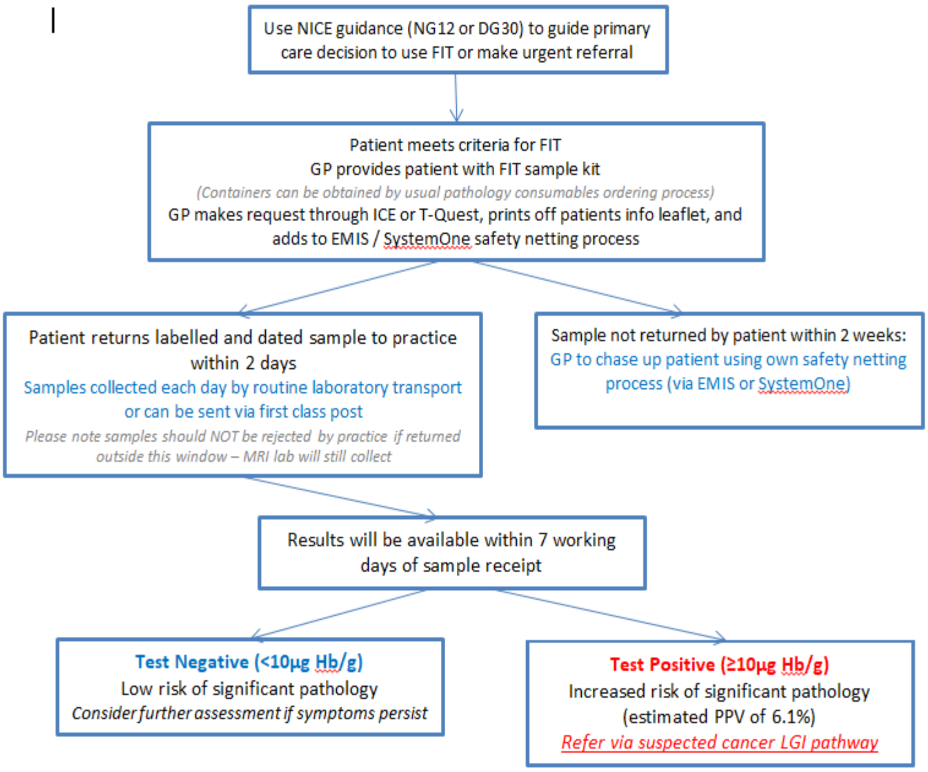
Criteria for FIT based on NICE guidance DG30

Adults aged ≥ 50, **without** rectal bleeding and unexplained:

- Abdominal pain or
- Weight loss

Adults aged ≥ 60, **without** rectal bleeding and unexplained:

- Anaemia without iron deficiency



General information

Collection container: A designated “picker” is required for this test and cannot be used for other faecal investigations (e.g. calprotectin or elastase).

Type and volume of sample: A fresh sample of faeces is required to be collected (patient instructions available). The patient should not have loose watery stools at the time of collection. An adequate amount will be collected if the indentations in the collection device are filled.

Specimen transport/special precautions: The sample is stable for up to 14 days in ambient temperatures <25˚C when collected into a picker. Routine laboratory transport should be used to get the samples to the Oxford Road Site or first class post with suitably approved transport containers from external users.

Laboratory information

Method principle: The HM-Jackarc automated benchtop analyser uses integrated sphere latex turbidimetry to measure faecal immunochemical haemoglobin concentration.

Biological cut off:

- NEGATIVE result (<10ug Hb/g faeces). Low risk of significant pathology. Further management or re-test required if symptoms persist.
- POSITIVE result (>10ug Hb/g faeces). High risk of significant pathology.
- NOTE: false negatives are possible if the patient had loose watery stools at the time of collection.

Turnaround time: 1 week

Clinical information

Factors known to significantly affect the results:

Potential false negative could be reported if the patient has loose, watery stools at the time of collection.

There is a very small risk that a false negative could be reported if the patient has beta thalassaemia major or hereditary persistent foetal haemoglobin but these patients are very rare.

Clinical decision points: This is outlined in the local pathway in the introduction above.

https://www.nice.org.uk/guidance/dg30/chapter/1-Recommendations and https://www.nice.org.uk/guidance/dg30/resources/resource-impact-report-pdf-4540427101

https://www.faecal-immunochemical-test.co.uk/

(Last updated September 2020)