A NICE FIT!
Fulfilling the new NICE NG12 requirements
Use FIT and f-Hb – not gFOBT

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Faecal occult blood tests (FOBT), which are actually tests for haemoglobin in faeces, are widely used in asymptomatic population screening for colorectal cancer (CRC). In contrast to previous recommendations, recent guidelines from the National Institute for Health and Care Excellence (NICE) state that, in possible CRC in those presenting in primary care with lower abdominal symptoms, patients who do not meet criteria for suspected cancer referral should be offered FOBT. The guideline is to offer FOBT to adults without rectal bleeding who are aged 50 years and over with unexplained abdominal pain or weight loss, or are aged under 60 years with changes in their bowel habit or iron-deficiency anaemia, or are aged 60 years and over and have anaemia even in the absence of iron deficiency. The evidence base for this was mainly generated from only five studies with guaiac FOBT (gFOBT). However, gFOBT have many well-documented disadvantages and have been replaced by faecal immunochemical tests for haemoglobin (FIT), especially quantitative immunoturbidimetric methods, which allow faecal haemoglobin concentration (f-Hb) to be quantitated.

Laboratories will undoubtedly now be faced with requests from primary care for FOBT with the NICE guidelines being used as justification for these requests. However, many laboratories have eliminated and discouraged use of gFOBT. NICE did recognise this and stated that current practice would have to be modified to make this test available.

When discussing how to manage this current controversial situation, it is important to recognise the deficiencies of gFOBT. A number of excellent recent publications, documented below and unfortunately mainly published since the NICE guidelines were being generated, show that f-Hb has very high sensitivity for CRC (often 100%) and can therefore be used as a rule-in test. However, higher-risk adenoma, possible precursor lesions for CRC, and inflammatory bowel disease are also significant colorectal diseases worthy of inclusion or exclusion. At a low cut-off, f-Hb has very high negative predictive value (approaching 100% for CRC and all of these diseases) and a negative test provides considerable reassurance that significant colorectal disease is absent. Now, the strong evidence is that application of f-Hb could undoubtedly rationalise the ever-growing number of referrals for colonoscopy in those presenting in primary care with symptoms, especially since all of these symptoms have low positive predictive value. Although some matters require further resolution before f-Hb can be thought of as a totally mature investigation, requests for FOBT should be fulfilled by FIT, ideally through f-Hb measurement, and definitely not through reinstitution of the now obsolete gFOBT.

Peer-reviewed studies on f-Hb in assessment of the symptomatic include:


Alpha Laboratories now offers an automated quantitative solution for Faecal Immunochemical Testing (FIT) with the Kyowa Medex HM-JACKarc system.