

# 1. The new Scottish bowel screening test

**Bowel cancer is the third most common cancer in Scotland. Around 4,000 people in Scotland get bowel cancer every year.**

Bowel screening aims to find cancer at an early stage when treatment is likely to be more effective.

- From November 2017, the Scottish Bowel Screening Programme will transition from the current guaiac faecal occult blood test (gFOBT) to the faecal immunochemical test (FIT).
- Individuals living in Scotland aged between 50 and 74 who are registered on the Community Health Index will continue to be invited by post to participate in bowel screening every two years. Bowel screening is the only screening programme where the test is completed at home and returned in a pre-paid envelope to the bowel screening centre in Dundee. Sheet 2 '**How does bowel screening work?**' explains everything at a glance.
- The new FIT measures micrograms of human haemoglobin per gram of faeces ( $\mu\text{gHb/g}$  faeces) in the test sample. A participant with a screening result of  $80 \mu\text{gHb/g}$  faeces and above will be referred for colonoscopy assessment at their local board. There is a flowchart illustrating the results pathway at the end of sheet 2 '**How does bowel screening work?**'.
- FIT only requires participants to collect one bowel motion sample. It's therefore simpler and more user friendly than the current test which requires samples over three days. We anticipate that FIT's relative ease of use will encourage more people to take part in the programme. See the panel '**FIT has many advantages over gFOBT**' on the next page.

Primary care teams have an important role in reminding eligible patients about the bowel screening test and helping raise awareness of the value of bowel screening. See sheet 6 '**How primary care can help**' for ways to explain to patients the benefits of taking the bowel screening test every two years.

## Why screening matters: early detection

From age 50 onwards the risk of bowel cancer is higher, which is why the Scottish Bowel Screening Programme invites all men and women aged 50–74 to complete a bowel screening test every two years. Early diagnosis is so important as more than 9 out of 10 people diagnosed with stage 1 bowel cancer survive five years or more after diagnosis. To help find bowel cancer early, it's also important to make patients aware of the symptoms to look out for (see sheet 6 '**How primary care can help**'), and the benefits of taking their bowel screening test every two years.

### Fact



**Early detection is key: 9 out of 10 people survive bowel cancer if it's found and treated early.**

The Scottish Government's Cancer Strategy, *Beating Cancer: Ambition and Action 2016*, sets out cancer screening and the reduction of inequalities in screening uptake as key priorities. Screening is also part of the Scottish Government's Detect Cancer Early Programme, which aims to increase the proportion of people diagnosed and treated in the first stages of cancer by 25%.

## FIT has many advantages over gFOBT

- It's easier to use. The participants simply need to unscrew the cap of the test, dip the end of the stick into the bowel motion, then replace the stick in the tube and screw the lid shut.
- It needs just one tiny sample from a single bowel motion, compared to two samples from three different motions for gFOBT.
- It's a more acceptable test, so more people are likely to return it, which should increase uptake.
- It's more reliable as diet and medicines are unlikely to affect results. This is because FIT, unlike gFOBT, is specific for human haemoglobin.
- FIT measures the level of blood in the bowel motion sample, whereas gFOBT only indicates the presence of blood.

We expect this test will lead to increased participation across all social groups. This simpler and more acceptable test is likely to overcome a process barrier for those who find the current gFOBT test difficult or unhygienic to complete.

## FIT pilot

The Scottish Government funded a feasibility study into the use of FIT as a first-line test in bowel screening in two NHS Boards in Scotland between 1 July 2010 and 12 January 2011. See the second page of sheet 5, '**What we know about bowel cancer**', for more information about the FIT pilot.

- FIT tubes were sent to all eligible participants aged 50–74 years in NHS Tayside and NHS Ayrshire & Arran between 1 July 2010 and 12 January 2011. A total of 66,225 FIT kits were sent out. 40,125 were returned to the laboratory (61.1%).
- The cut-off point for referral to colonoscopy was set at 80 µgHb/g faeces to give approximately 2% positivity – comparable with the current gFOBT algorithm.

## 2. How does bowel screening work?

### At a glance:

- All men and women aged between 50 and 74 living in Scotland registered on the Community Health Index are sent the test kit every two years. **GPs are asked to ensure that patients' address details are up to date to make sure everyone gets their invitation.**
- Those aged 75 or over can self-refer by requesting a test kit from the Scottish Bowel Screening Centre (details on the back of the folder).
- The test should be completed at home and returned using the pre-paid envelope provided.
- The test can detect tiny amounts of blood in the sample, which can't normally be seen.
- The Scottish Bowel Screening Centre operates a free confidential helpline with trained staff who are happy to answer any questions (see details on back of folder).
- There is also an online video at [www.nhsinform.scot/bowelscreeningtest](http://www.nhsinform.scot/bowelscreeningtest) about how to complete the test.
- To request/order a replacement kit please direct patients to the Scottish Bowel Screening Centre using the contact details on the back of the folder.
- Patients in longer-term complex care will only be invited if the Community Health Index record is updated with the hospital address.
- You can request screening invitations from the Scottish Bowel Screening Centre (see details on back of folder).
- A second test is only necessary for those who return an untestable kit (for example expired or spoiled).
- A reminder letter is sent to those who do not respond within six weeks.
- GPs will receive an electronic notification at three months if there is no response to the bowel screening invitation.

Please see Figure 1 over the page for the FIT pathway.

### Testing has changed from this



Testing each kit by hand

### to this



Machine analysing each returned test

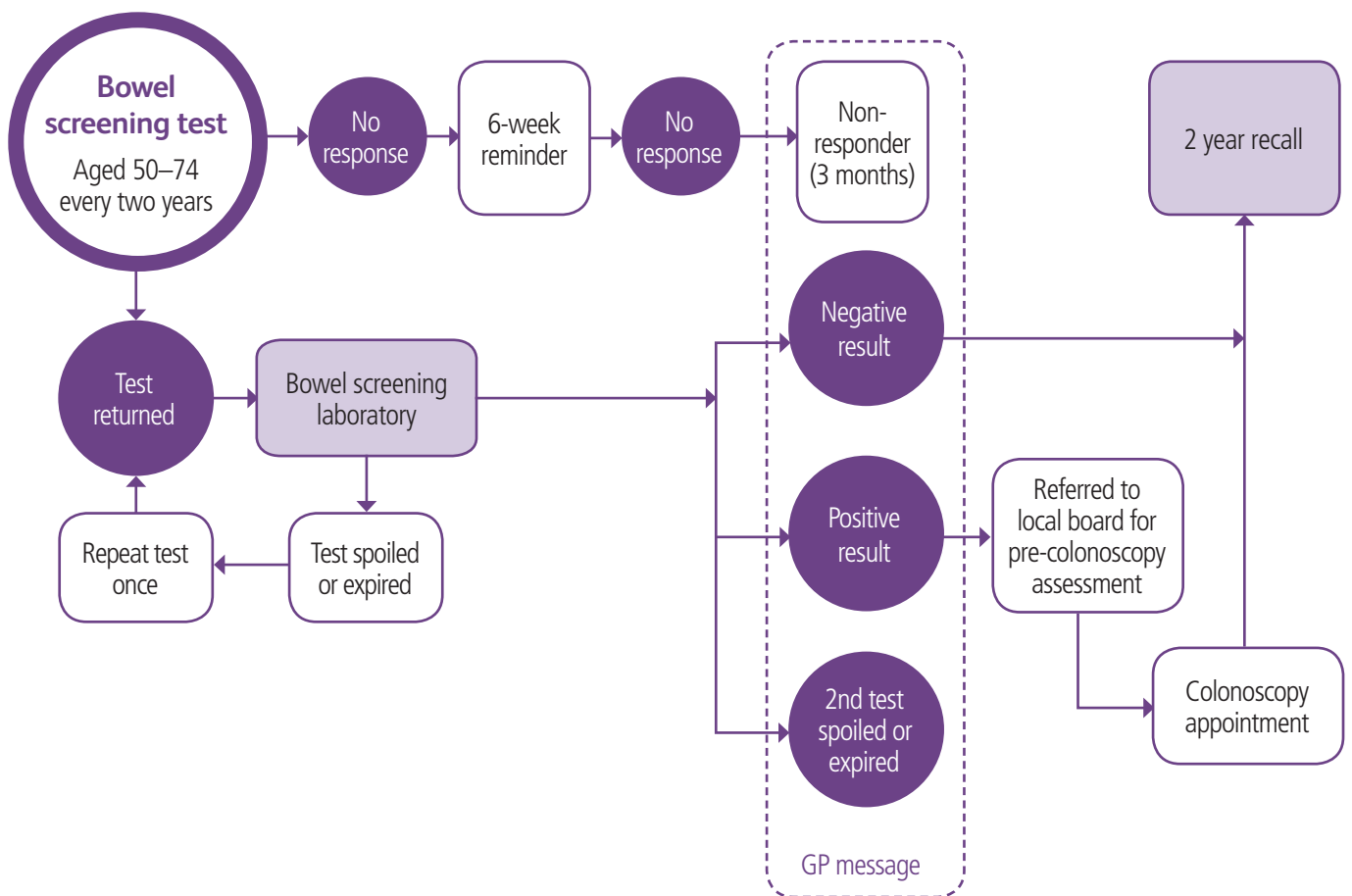
At the bowel screening laboratory in NHS Tayside, automated analysers carry out the testing of each returned test and results are posted to participants within two weeks. GPs are notified by electronic message of results (whether positive or negative) and all NHS Boards are notified of results requiring assessment for a colonoscopy.

## Results

Most participants will be told by letter that their **test results show that there is no requirement for further investigation at this time**. They will be sent another test in two years' time if still aged between 50 and 74. Any test returned with **80 µgHb/g faeces** or above will generate a letter to the participant referring them to their local NHS Board for a follow-up assessment for a colonoscopy. The local NHS Board will contact the participant within seven days to arrange a pre-colonoscopy assessment.

Pre-assessment is expected to be carried out within two weeks of the positive result. This will either be over the telephone or at an appointment. Participants will receive a full explanation of the colonoscopy, associated risks and possible outcomes. Following assessment, if the patient meets the criteria they will be provided with an appointment for a colonoscopy.

Figure 1: The FIT pathway



People can still take the test after they turn 75 but self-referral is required by contacting the helpline. If a test is spoiled or expired, people can request a replacement kit by contacting the helpline. Contact details are on the back of the folder.

## 3. What FIT screening results mean

### The Scottish Screening Committee approved the cut-off point for referral for FIT.

Following extensive discussion and examination of existing evidence, the Scottish Screening Committee agreed a single cut-off of 80 µgHb/g faeces for the implementation of FIT in the Scottish Bowel Screening Programme. The UK National Screening Committee has stated that the FIT cut-off point for referral should be decided by each UK nation.

FIT measures micrograms of human haemoglobin per gram of faeces (µgHb/g faeces) in the test sample. If the sample's faecal haemoglobin concentration level is at or above the programme's cut-off point for referral, that participant will be referred to the individual NHS Board's services for further investigation.

### Symptomatic patients

**Screening is for people with no symptoms.** If people are worried about bowel symptoms they should see their GP (see sheet 6 '**How primary care can help**' for a list of signs and symptoms).

There's growing evidence that FIT can be used to help triage people with possible bowel cancer symptoms. In the primary care setting FIT can be used in a completely different way with different, more sensitive cut-off levels from the screening programme. This is in order to quickly and effectively determine the need for further diagnostic tests, such as a colonoscopy in symptomatic patients.

- A negative FIT screening result should not be used to guide the investigation of a symptomatic patient presenting with symptoms.
- A recent symptomatic FIT result should not be used as a substitute screening test.
- Patients should always be advised to take the screening test regardless of previous symptomatic test results.



# 4. Roles and responsibilities within the Scottish Bowel Screening Programme – who does what

## Role of the Scottish Bowel Screening Centre

The Scottish Bowel Screening Centre, based in Dundee, has four main roles in relation to the Scottish Bowel Screening Programme:

- Call/recall – see sheet 2 ‘**How does bowel screening work?**’
- Consultant-led accredited laboratory which carries out testing of completed bowel screening tests
- Dedicated bowel screening helpline – with trained staff to take calls on **0800 0121 833** (textphone **18001 0800 0121 833**) or respond to emails (**bowelscreening.tayside@nhs.net**)
- Ensures all NHS Boards are notified of results requiring colonoscopy assessment.

## Role of local NHS Boards

NHS Boards are responsible for providing pre-assessment for colonoscopy and the colonoscopy itself. They’re also responsible for collecting clinical data on all bowel screening referrals. Regular reports are available on performance of bowel screening per NHS Board area.

NHS Board screening coordinators within NHS Board public health departments oversee the effective running of the screening programme within their NHS Board area.

Please contact your local NHS Board public health department to speak to your board’s screening coordinator or to ask for annual reports on performance of bowel screening.

NHS Boards ensure that the service meets the NHS Healthcare Improvement Scotland standards available via a link at [www.healthscotland.scot/bowelscreening](http://www.healthscotland.scot/bowelscreening).

## Scottish Bowel Screening Programme KPIs

These indicators were developed to monitor and evaluate the screening programme. It must be noted that NHS Boards have been participating in the programme for different lengths of time, so this means data are affected by how long an area has been screening for. The key performance indicators (KPIs) are reported for a two-year (screening) period and the latest report of the KPIs for the Scottish Bowel Screening Programme can be viewed in the KPI Report published August 2017, which can be found at: <http://isdscotland.org/Health-Topics/Cancer>

## Role of the National Services Division (NSD)

NSD commissions and coordinates key elements of the Scottish Bowel Screening Programme.





# 5. What we know about bowel cancer

## Bowel cancer in Scotland

Bowel cancer is a major public health problem in Scotland, which has a higher rate of bowel cancer than most other countries in the Western world. In Scotland, it's the third most commonly diagnosed cancer in both men and women with approximately 3,700 new cases diagnosed in 2015. Ninety-five percent of cases occur in people aged over 50 years.

Over the last 10 years, bowel cancer incidence and mortality rates (2005–2015) in Scotland have decreased (see ISD link below) in both sexes. Bowel cancer is the second most common cause of cancer death for both men and women, with around 1,600 people dying of the disease in Scotland each year.

The five-year relative survival rate is approximately 60% for both sexes. The Scottish Bowel Screening Programme was launched in Scotland in 2007 with all NHS Health Boards participating by December 2009.

## Bowel screening uptake

### At a glance uptake:

- The uptake of bowel screening in Scotland is yet to meet the Healthcare Improvement Scotland standard of 60%.
- Uptake is higher in women than in men.
- Uptake is lowest in the most deprived areas.
- Men are more likely than women to have a positive screening test result.
- More cancers are detected in men than in women.
- **Bowel screening uptake is lowest in 50–54 year olds, those from areas of high deprivation, and men.**

For more information on incidence, mortality, deprivation and trends over time, please visit:

[www.isdscotland.org/Health-Topics/Cancer/Bowel-Screening](http://www.isdscotland.org/Health-Topics/Cancer/Bowel-Screening)

## Up to 31 October 2016 in the Scottish Bowel Screening Programme



Over  
**2.2 million**  
people were invited.



Nearly  
**1.4 million**  
people took up the offer  
and achieved a final result.



Over  
**5,000 cancers**  
were diagnosed  
through screening

### Increased detection of disease and morbidity

The pilot for FIT as a first-line test showed a five percentage point increase in uptake and similar detection of disease to gFOBT. Therefore, should the same increase in uptake take place across Scotland there would be nearly 50 extra cancers detected each year. Recent ISD figures show that two-thirds of screening detected bowel cancers are detected at the earliest stages (Dukes A and B). (Scottish Bowel Screening Programme Key Performance Indicators 2017, ISD Scotland.)

### Referrals to colonoscopy

Increased uptake in the programme has the potential to increase referrals for colonoscopy.

### Projected uptake

The pilot study reported improved uptake of screening compared with the current gFOBT algorithm. The evidence from the pilot suggests that participants found the instructions easier to understand and the FIT sampling device easier and more acceptable to use, resulting in an increased uptake. The study reported an increase of 4.8 percentage points (58.5% vs. 53.7%) over the current programme which would translate into over 40,000 additional participants being screened each year.

## 6. How primary care can help

### Primary care can help by doing the following:

- Ensure patient details are up to date on the Community Health Index record.
- Display posters and leaflets about the new test in practices. Samples of these are included in this folder and are also available in Polish, Urdu, Chinese and Easy Read formats – call **0131 314 5300**, email **nhs.healthscotland-alternativeformats@nhs.net** or go to **nhsinform.scot/bowelscreening**
- Provide information to patients (help demonstrate how to use the kit – enclosed demonstration kits provided for this purpose).
- Discuss the new test with your relevant patient groups as the opportunity arises. This will help to build a greater understanding of bowel cancer and the role of screening in early detection.
- You may wish to develop a plan for your practice that details your approach to targeting non-responders.

### It's important to remind patients to do their bowel screening test every time they're invited.

After that you can still request a test by contacting the Bowel Screening Centre (details on the back of the folder).

### It's also helpful to remind patients to never ignore symptoms.

While the screening test picks up most bowel cancer, it doesn't find all bowel cancer. This is because FIT detects blood and not all cancers bleed all of the time, or sometimes don't at all. You should remind patients to look out for symptoms of bowel cancer (see opposite).

### Information to give to patients on signs and symptoms:

- repeated bleeding from your bottom or blood in your poo
- a recent change in your bowel habit (how often you go to the toilet) that continues for more than four weeks without going back to normal
- watery poo on its own or with constipation (constipation on its own is less likely to be serious)
- severe pain in your tummy that won't go away, especially after eating
- you've recently lost weight without trying
- you feel tired all the time.

For clear messages about keeping your bowel healthy and reducing the risk of developing bowel cancer visit [www.nhsinform.scot/preventing-bowel-cancer](http://www.nhsinform.scot/preventing-bowel-cancer)

Cancer Research UK have produced a Scottish Bowel Screening GP Good Practice guide – a link to this information can be found at [www.healthscotland.scot/bowelscreening](http://www.healthscotland.scot/bowelscreening)

Bowel Cancer UK have produced a FIT resource for people with learning disabilities (LD) and their care providers. This resource was designed, developed and published using co-production and engagement approaches involving a wide representation of stakeholders, as well as people with LD. The purpose of the resource is to inform people with LD about the Scottish Bowel Screening Programme and how to look after their digestive health. A link to this resource can be found at

[www.healthscotland.scot/bowelscreening](http://www.healthscotland.scot/bowelscreening)

### Information for patients on how to reduce their risk of bowel cancer:

As well as doing your bowel screening test you can try:

- eating a healthy diet containing wholegrains like wholegrain bread and cereals, beans, pulses, and plenty of fruit and vegetables – limit foods high in sugar or fat and avoid sugary drinks
- avoiding processed meat like bacon and sausages, and limiting red meat
- being more active in everyday life, this includes walking more and sitting less
- getting to and keeping to a healthy weight – avoid gaining weight and try losing weight if overweight
- drinking less alcohol – not drinking alcohol is better for cancer prevention – visit [www.alcohol-focus-scotland.org.uk](http://www.alcohol-focus-scotland.org.uk) for more information
- stopping smoking – if you do smoke, call the free Smokeline on 0800 84 84 84 or visit [www.nhsinform.scot/smokeline](http://www.nhsinform.scot/smokeline) to help you quit.

You can find more information about healthy living by visiting [www.nhsinform.scot/healthy-living](http://www.nhsinform.scot/healthy-living)

### Facts



**No screening test is 100% effective as not all cancers bleed all of the time. This means that sometimes a cancer is missed by the screening programme. This is referred to as an interval cancer – a cancer diagnosed in the two year interval between a negative bowel screening test and the next invitation.**