Bowel screening

August 2023
We are committed to advancing equality, promoting diversity and championing human rights. These standards are intended to enhance improvements in health and social care for everyone, regardless of their age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, sexual orientation, socioeconomic status or any other status. Suggested aspects to consider and recommended practice throughout these standards should be interpreted as being inclusive of everyone living in Scotland.

We carried out an equality impact assessment (EQIA) to help us consider if everyone accessing health and social care services will experience the intended benefits of these standards in a fair and equitable way. A copy of the EQIA is available on request.

Healthcare Improvement Scotland is committed to ensuring that our standards are up-to-date, fit for purpose and informed by high quality evidence and best practice. We consistently assess the validity of our standards, working with partners across health and social care, the third sector and those with lived and living experience. We encourage you to contact the standards and indicators team at his.screeningstandards@nhs.scot to notify us of any updates that might require consideration.
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Introduction

Background to the bowel screening standards

Bowel cancer (also known as colorectal cancer) is a significant public health concern in Scotland. Around 4,000 people are newly diagnosed with bowel cancer every year and it is the third most common cancer in Scotland.\textsuperscript{1} Bowel cancer is more prevalent in men though the uptake of bowel screening is higher in women.\textsuperscript{2} Nine out of ten people survive bowel cancer if it is found early and treated.\textsuperscript{2}

Scottish bowel screening programme

The Scottish Bowel Screening Programme (SBoSP), introduced in 2007, is a population-based screening programme which aims to reduce mortality and incidence rates from bowel cancer.\textsuperscript{1, 3}

Everyone with a Community Health Index (CHI) number aged 50-74 years, is invited every two years to complete a home bowel screening test (also known as faecal immunochemical test).\textsuperscript{1-4} People under 50 years are not routinely invited to participate in the bowel screening programme as bowel cancer is more common in people over 50 years of age.\textsuperscript{5} People 75 years or over can self-refer for bowel screening every two years by requesting a bowel screening test from the Scottish Bowel Screening Centre (SBSC) helpline. Further information on bowel screening eligibility is available from the NHS Inform website. Figure 1 below provides an overview of the SBoSP participant pathway.\textsuperscript{5}
The bowel screening test picks up a significant proportion of bowel cancer cases.\textsuperscript{1, 6} The test looks for the presence of blood in the sample. As not all cancers bleed all of the time, people are encouraged to look for any changes in bowel habits such as more frequent or looser stools, blood in the stools and abdominal pain between screening tests, as these could indicate bowel cancer.\textsuperscript{3} When the bowel screening test is positive, the person will be called into hospital for a further investigation called a colonoscopy.\textsuperscript{1} For every 500 people who take the bowel screening test, only ten will need to go for further investigation. Of these 10, one will have bowel cancer.\textsuperscript{1} Some people may receive a ‘false positive’ result. This is when a positive bowel screening test result is followed by a ‘normal’ colonoscopy. The SBoSP and NHS boards have policies and procedures in place to minimise the likelihood and occurrence of anyone experiencing unnecessary further investigation and worry.\textsuperscript{7, 8}

To support informed decision making, all participants are provided with information which covers the bowel screening pathway. This includes information on how to take the test, what test results mean and what to expect when requiring further investigation.\textsuperscript{1, 7}

**Health inequalities**

Health inequalities are the unfair and avoidable differences in the health of individuals or groups within a population. Health inequalities can affect how people engage or not with the SBoSP across all parts of the bowel screening pathway. The Scottish Government has set an
ambition to encourage and support people to reduce their risk of cancer by living healthier lives, through the reduction of health inequalities and improving access to screening.\textsuperscript{9, 10}

The \textit{Scottish Equity in Screening Strategy 2023-26} aims to reduce inequalities across the screening pathway.\textsuperscript{10} It seeks to achieve equity of opportunity to access screening, and equal benefit from screening for all eligible individuals.

### Screening policy and strategy in Scotland

Many stakeholders are involved in the strategic and operational delivery of screening programmes across Scotland, including the Scottish Government and the Scottish Screening Committee (SSC). The Scottish Government sets screening policy for Scotland and approves policy changes, taking into consideration recommendations for new and existing programmes from the UK National Screening Committee and the advice of the SSC. Key partners include NHS National Services Scotland (NSS), Public Health Scotland (PHS), and NHS Education for Scotland (NES). Further information on the roles and responsibilities of these stakeholders and on national screening governance structures can be found in the \textit{National screening oversight: A guide to population screening in Scotland}.\textsuperscript{11}

### Related guidance and policy

The SBoSP manual is available from NSS and provides guidance and standard operating procedures for the programme.

These standards should also be read alongside other relevant legislation and guidance including but not limited to:

- Adults with Incapacity (Scotland) Act 2000\textsuperscript{12}
- Cancer Strategy for Scotland 2023-2033\textsuperscript{9}
- Healthcare Improvement Scotland learning from adverse events framework\textsuperscript{13}
- Health and Social Care Standards\textsuperscript{14}
- National Health and Wellbeing Outcomes\textsuperscript{15}
- National screening oversight: A guide to population screening in Scotland\textsuperscript{11}
- NHS Scotland Climate Emergency and Sustainability Strategy 2022-2026\textsuperscript{16}
- Organisational Duty of Candour guidance\textsuperscript{17}
- Realising Realistic Medicine\textsuperscript{18}
- SBoSP key performance indicators (KPIs)\textsuperscript{6}
- Scotland’s public health priorities\textsuperscript{19}
- other related Healthcare Improvement Scotland guidance, including SIGN guidelines\textsuperscript{20} and Cancer Quality Performance Indicators.\textsuperscript{21}
SBoSP’s key performance indicators

SBoSP’s KPIs are developed, reviewed and monitored by the Programme’s Monitoring and Evaluation Group (MEG). The bowel screening standards do not reference the specifics of each KPI but should be read alongside the KPIs. The KPIs provide a retrospective assessment of the effectiveness of screening, evaluating quality and performance, and act as a driver for continuous improvement, and direct specific review of any areas that appear to be underperforming.

The KPIs are reported annually by PHS, reviewed by the SBoSP’s MEG and reported to the SBoSP’s programme board.

Scope of the bowel screening standards

The bowel screening standards have been developed to ensure that there is a consistent and equitable approach to the provision and monitoring of the bowel screening pathway in Scotland.

The standards map to the SBoSP participant pathway and apply to all NHSScotland organisations involved in the delivery of the bowel screening programme.

The standards cover the following areas:

- bowel screening invitation (call-recall)
- bowel screening laboratory service
- bowel screening test result
- pre-investigation assessment
- diagnostic investigation
- histopathology.

Healthcare Improvement Scotland’s core screening standards for Scottish screening programmes

Healthcare Improvement Scotland, in partnership with stakeholders, develops national standards for the six national screening programmes in Scotland:

- abdominal aortic aneurysm screening
- bowel screening
- breast screening
- cervical screening
- diabetic eye screening
- pregnancy and newborn screening.
To date, each programme had its own set of standards which covered technical aspects of the screening programme and a core governance section. Each core section covered leadership and governance, training and education, information and support and was tailored to the relevant screening programme.

In 2018, the SSC reviewed screening programmes and made recommendations. Healthcare Improvement Scotland worked collaboratively with stakeholders from across the screening programmes to revise the approach for standards development. It was agreed that Healthcare Improvement Scotland would develop one set of core standards that apply across all screening programmes.

These core screening standards have been coproduced with stakeholders from across the six programmes. They have been informed by each of the six programme’s extant core sections. They apply to all programmes and support consistency in approach across screening. They will minimise duplication across screening quality assurance approaches.

*Note: The bowel screening standards should be read in conjunction with the core screening standards.*

**Format of the standards**

Healthcare Improvement Scotland standards follow the same format. Each standard includes:

- an overarching standard statement of the level of performance to be achieved
- a rationale explaining why the standard is important
- a list of criteria describing what is needed to meet the standard
- what the standards mean if you are a person participating in the bowel screening programme
- what the standards mean if you are a member of staff
- what the standards mean for organisations
- examples of what meeting the standards looks like in practice.

More information about the development of the standards is set out in Appendix 1 and the standards development group membership is given in Appendix 2.

**Implementation**

The bowel screening standards have been co-created with key stakeholders from the bowel screening participant pathway. The standards can also support and inform organisational self-evaluation and improvement.

The SBoSP and NHS boards will implement the standards to assure themselves and relevant governance structures that they are delivering safe, effective and person-centred services across the bowel screening pathway. The bowel screening standards should be read in conjunction with the core screening standards.
Quality of care approach and framework

The bowel screening standards are a key component in supporting the SBoSP’s approach to quality assurance. Monitoring performance against these standards, at a local and national level, aims to improve the quality of the SBoSP.

External quality assurance (EQA) of screening programmes will be delivered using the Healthcare Improvement Scotland quality of care approach and the quality framework. This approach specifies how Healthcare Improvement Scotland will design and deliver EQA activity to support improvement in healthcare.

The approach emphasises the importance of regular, open and honest programme self-evaluation using the quality framework as a basis, combined with other relevant data and intelligence, including performance against these standards.

Healthcare Improvement Scotland quality management system

The Healthcare Improvement Scotland Quality Management System Framework supports health and social care organisations to apply a consistent and coordinated approach to the management of the quality of health and care services. More information about this framework is available on the HIS website.

Terminology

Wherever possible, we have incorporated used generic terminology which can be applied across the bowel screening pathway. The following terms are used throughout this document:

The term **participant/person/people** refers to all individuals, including transmen, transwomen and non-binary people, accessing services, receiving care or support across the bowel screening pathway. This includes people with a CHI number as well as those not registered with a GP. Within the SBoSP pathways, people taking part in screening are referred to as participants.

**Patient** refers to people who have a positive screening result and have been referred for further assessment and investigation.

**Bowel screening test** refers to the faecal immunochemical test, which is used to look for the presence of blood in the stool sample.

**Failsafe** refers to processes designed to ensure that all aspects of the processes are safe and effective, and that there are appropriate mechanisms where an issue or adverse event occurs.
SBoSP refers to the Scottish bowel screening programme participant pathway, from the identification of those eligible for bowel screening through to the diagnosis of a bowel cancer.

SBSC refers to the Scottish Bowel Screening Centre, which is responsible for the call-recall for the programme and the laboratory service.
Summary of standards

Standard 1: Bowel screening invitation
All eligible people are invited for bowel screening once every two years.

Standard 2: Bowel screening laboratory service
The SBSC ensures that the bowel screening laboratory service and processes are carried out in line with nationally required recognised standards.

Standard 3: Bowel screening test result
The SBSC ensures that every bowel screening test result is accurate and reported in a timely manner.

Standard 4: Pre-investigation assessment
NHS boards ensure people with a positive bowel screening result are offered a high quality, timely and person-centred pre-investigation assessment.

Standard 5: Diagnostic investigation
NHS boards ensure high quality, safe and timely diagnostic investigation is available following a positive bowel screening result.

Standard 6: Histopathology
NHS boards ensure histopathology for bowel screening is carried out in line with national standards.
Standard 1: Bowel screening invitation

Standard statement
All eligible people are invited for bowel screening once every two years.

Rationale
An effective call-recall system is required to ensure all eligible people are invited as part of the SBoSP. Call-recall is managed by the SBSC through the Bowel Screening System (BoSS) IT system, identifying eligible people by their CHI number. GP practices can support the programme by ensuring address details remain up to date. The SBoSP manual provides guidance for NHS boards and GP practices to ensure that eligible people not accessible through their CHI number (for example travelling people, people in long stay NHS care) are able to participate in bowel screening.

People are eligible for bowel screening on their 50th birthday and are invited every two years until their 75th birthday to complete and return a home bowel screening test. People can opt-out of the SBoSP either for a specific screening round or permanently by contacting the SBSC helpline. Where people have opted-out for a screening round and are within the eligibility criteria, they can rejoin at a later date by contacting the SBSC helpline. The person’s GP should be notified when an individual has opted-out permanently or for a screening round.

The invitation and kit are issued together. When the invitation is issued along with the kit, a range of information is available for people to make an informed choice on whether to participate or not. The invitation includes an information leaflet covering instructions for completing the bowel screening test, who to contact about results and where to request a replacement test. Further information including videos on completing the bowel screening test, is available from NHS Inform website.

The SBoSP and NHS boards have a commitment to deliver effective and robust leadership, and clinical governance mechanisms which ensures there are appropriate failsafes in place to ensure effective quality control around all processes and screening incident management procedures. The SBoSP and NHS boards will monitor, review and undertake a range of quality assurance processes in line with Healthcare Improvement Scotland’s core screening standards, the SBoSP KPIs, the National screening oversight: a guide to national population screening in Scotland and the SBoSP manual.
Criteria

1.1 The SBSC uses the national BoSS IT system to:

- routinely invite eligible people for bowel screening
- send reminders to people who have not responded
- send a notification to the person’s registered GP, where there has been no response to the invitation or the person has opted-out
- send the results of the bowel screening test.

1.2 Invitation letters include a bowel screening test and information leaflet to enable informed choice. This information includes:

- why they have been offered a bowel screening test
- the intended benefits for health and risk of potential harms of bowel screening
- an explanation of how to complete the bowel screening test correctly
- what the results mean and that results will be received within two weeks of returning the completed bowel screening test
- what happens if there is a positive test result
- how to access information in formats and languages appropriate to their needs
- the SBSC helpline number to request a replacement bowel screening test, to opt-out of screening or for any further information including where results have not been received.

1.3 The SBSC has systems and processes in place to:

- follow-up people who have not responded to bowel screening invitations within nationally agreed timeframes
- send kits to people over the age of 75 years (with no symptoms) who have requested a bowel screening test
- ensure that failsafe protocols are adhered to by all staff involved in call-recall
- alert the SBoSP to any issues with the call-recall function.

1.4 The call-recall process including uptake is monitored, reported and reviewed in line with the SBoSP KPIs, Scottish Equity in Screening Strategy and SBoSP manual.6, 10
### What does the standard mean for the person taking part in bowel screening?

You can be confident that you:
- will be invited to take part in bowel screening before your 51st birthday and every two years until the day before your 75th birthday
- will be given information on how to complete the bowel screening test
- can access information in different formats including easy read, audio, video guides, British Sign Language, and other languages
- can contact the SBSC helpline number if you need any further information or you would like to talk about opting out of bowel screening.

### What does the standard mean for staff?

Staff, in line with their role, responsibilities and workplace setting understand:
- eligibility criteria for bowel screening including the opting-out process
- governance structures of the SBoSP
- call-recall system, protocols and pathways
- failsafe processes including the escalation pathway
- monitoring, reporting and reviewing SBoSP KPIs for their local eligible population.

### What does the standard mean for the organisation?

The SBSC ensures:
- robust governance arrangements are in place for the effective delivery of their role within the programme
- an effective programme call-recall system is in place
- failsafe and escalation arrangements are place, including action plans for where issues or concerns have been identified.

The SBoSP monitors and reviews the:
- call-recall system performance in line with the SBoSP KPIs, with particular focus on addressing inequalities of access, by the programme’s MEG
- performance of the SBSC through the annual performance appraisal process with National Services Division (the SBSC’s commissioner).
Examples of what meeting this standard might look like

| • National protocols for inviting eligible people to participate in bowel screening including identifying people without a CHI.  
• Demonstration of action plans to implement the [Scottish Equity in Screening Strategy](#).  
• Examples of invitation and follow-up communications in range of formats including digital materials and languages.  
• Evidence of adherence to failsafe processes including reporting.  
• Protocols for information sharing between staff, which are compliant with General Data Protection Regulations.  
• Collection of data for KPIs around uptake.⁶  
• Action plans to demonstrate adherence to [Healthcare Improvement Scotland’s core screening standards](#). |
Standard 2: Bowel screening laboratory service

**Standard statement**

The SBSC ensures that the bowel screening laboratory service and processes are carried out in line with nationally required recognised standards.

**Rationale**

The SBSC laboratory is nationally commissioned by NSD and is delivered by NHS Tayside. The SBSC laboratory processes and analyses the bowel screening test samples received as part of the SBoSP.

Formal accreditation of laboratory services is an essential means of assessing the technical competence of the commissioned laboratory service to perform the bowel screening test. Good clinical governance ensures that bowel screening tests are processed within an environment that can deliver high reliability and accuracy. Laboratory processes must comply with national and local guidance and standard operating procedures, including the UK Accreditation Service (UKAS) standards.

NHS Tayside has a responsibility, through the commissioning service level agreement with NSD, to ensure the SBSC laboratory staff have access to ongoing training, supervision and assessment to ensure all staff maintain professional accreditation, in line with national guidance.

**Criteria**

2.1 The SBSC laboratory service maintains accreditation with UKAS.

2.2 The SBSC laboratory service has a designated clinical lead and service manager.

2.3 The processing of the bowel screening sample is undertaken using equipment and techniques in line with UKAS standards.

2.4 All laboratory staff are trained to the required standards of competence and undertake regular training, supervision and assessment, appropriate to their roles and responsibilities to ensure skills and competencies remain at an accepted level.
2.5 The SBSC laboratory service can demonstrate participation in relevant quality assurance and improvement frameworks including:

- adherence to national standards and procedures for reporting samples and monitoring quality
- adherence to the requirements set out in the SBoSP manual
- regular reporting of relevant KPIs and laboratory process turnaround times
- procedures to detect, report and manage developing or acute issues relating to quality.

2.6 The SBSC laboratory service monitors and reports on incomplete screening samples including continuous improvement plans and actions undertaken where appropriate.

2.7 The SBSC laboratory service works collaboratively with the SBoSP governance groups and other relevant clinical departments to enable appropriate laboratory staff participation in multidisciplinary team meetings and other relevant forums.

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<tr>
<th>What does the standard mean for the person taking part in bowel screening?</th>
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<td>You can be confident that your bowel screening test is correct and has been analysed accurately and by properly trained staff.</td>
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<th>What does the standard mean for staff?</th>
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<tr>
<td>Staff, in line with their role, responsibilities and workplace setting:</td>
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  - understand and work within, national standards and KPIs relating to laboratory processes and procedures that support the SBSC
  - are encouraged to identify areas of improvement and report these within the appropriate governance framework
  - demonstrate knowledge and skills required in line with professional competency frameworks
  - are supervised appropriately
  - are supported to attend regular training, continued professional development and assessment.
### What does the standard mean for the SBSC?

The SBSC, in line with their governance and delivery responsibilities:

- ensures it meets standards and requirements for safe and effective laboratory processes and procedures
- is clear about the commitments and obligations of the SBSC laboratory service
- reviews internal and external monitoring and quality reports relating to bowel screening laboratory processes to ensure quality and to identify issues in a timely manner.

### Examples of what meeting this standard might look like

- Evidence of UKAS accreditation to ISO15189.24
- Evidence of staff qualifications, competencies signed off and continued professional development.
- Evidence of regular data collection and audit of unsatisfactory (incomplete, spoiled or expired) samples and actions taken.
- Evidence of timely laboratory process turnaround times.
- Annual reports submitted to NSD.
- Lessons learnt reports from screening incidents and adverse events.
- Participation in the SBoSP governance meetings for example, programme boards, monitoring and evaluation groups.
Standard 3: Bowel screening test result

**Standard statement**

The SBSC ensures that every bowel screening test result is accurate and reported in a timely manner.

**Rationale**

The provision of accurate results with information on what the bowel screening test result means for the person is an essential part of the SBoSP. The bowel screening test result is expected within two weeks of the laboratory receiving the sample. The wait for a bowel screening test result may be an anxious and stressful time for people. The timeliness of providing these results is important for both the person’s experience, and potentially, for individual and clinical outcomes.

All completed bowel screening results are recorded on the BoSS IT system and notifications are automatically sent to the person. To support effective communication and clinical governance, GP practices are informed whether or not the person has participated and the person’s test result whether negative or positive.

Those with negative results remain within in the bowel screening programme and will be invited to participate in future testing as per the programme’s criteria. They are encouraged to contact their GP should they experience any symptoms including changes in bowel habits, blood in the stools and abdominal pain between bowel screening tests.

Where a positive result has been detected, the results are also sent to the relevant department at the person’s local NHS board to begin the pre-assessment stage.

Note: This standard relates to **accurately completed tests** which have been processed by the bowel screening laboratory.

Incomplete tests cannot be analysed by the bowel screening laboratory service and the service is unable to contact people who have not labelled their bowel screening test correctly. People are encouraged to contact the SBSC if they have not received their results within two weeks.
Criteria

3.1 SBSC laboratory staff ensure that all completed bowel screening test results are processed, accurately recorded, issued within nationally agreed timeframes and in line with the SBoSP manual.

3.2 People receive their bowel screening result, with person-centred information, within two weeks of laboratory receiving the sample.

3.3 People with a negative bowel screening result:
   - are returned back to the SBoSP and will receive a further invitation in two years’ time in line with the eligibility criteria
   - should contact their GP if they experience any symptoms between screening invitations.

3.4 Where there is a positive bowel screening result, the results will be sent electronically within 24 hours to the:
   - local NHS board to begin the pre-investigation assessment pathway
   - person’s registered GP for information.

What does the standard mean for the person taking part in bowel screening?

You can be confident that you will receive:
- your results within two weeks of the laboratory receiving your completed bowel screening test
- information about what the results means and where you can go for support, if you need it.

What does the standard mean for staff?

Staff, in line with their role, responsibilities and workplace setting have an understanding of:
- national standards relating to the timeliness of laboratory processes and procedures that support the SBoSP and can demonstrate how they meet these
- their responsibilities regarding referrals received from the SBSC
- their responsibilities in the timely and accurate sharing of information for example, with the person’s GP.
### What does the standard mean for the SBSC?

The SBSC, in line with their governance and delivery responsibilities:

- can demonstrate there are processes in place which ensure that all bowel screening test results are accurate
- ensures that communication of results to the person is accurate and timely.

### Examples of what meeting this standard might look like

- KPIs on referral rates.
- Performance management reports on turnaround times and results issued.
- Monitoring of the number of incomplete tests received.
- Monitoring of adverse events or screening incidents that affect the issuing of results on the BoSS system.
Standard 4: Pre-investigation assessment

Standard statement
NHS boards ensure people with a positive bowel screening result are offered a high quality, timely and person-centred pre-investigation assessment.

Rationale
NHS boards are responsible for providing pre-investigation assessment following a positive bowel screening test result.11

Pre-investigation assessment is required to assess clinical suitability for diagnostic investigation and to enable the person to make an informed choice about proceeding with any further investigation. Decision making should be informed, supported and incorporate the principles of realistic medicine. The pre-investigation assessment is undertaken by trained and competent staff.

The SBoSP manual sets out the guidance and requirements for NHS boards for undertaking pre-investigation assessment.

When someone has undergone pre-investigation assessment and is considered clinically unsuitable or has declined a colonoscopy, this information is shared with the relevant GP practice and in line with relevant data protection guidance.

Criteria

4.1 NHS boards ensure the pre-investigation assessment pathway is carried out in line with the SBoSP manual and within nationally agreed timeframes.

4.2 NHS boards ensure that when a positive test result is received from the SBSC:
   - the person is provided with a timely pre-investigation assessment
   - there is timely communication and information transfer between the relevant departments, services and healthcare professionals.

4.3 Pre-investigation assessments:
   - are undertaken by trained and experienced healthcare professionals
   - assess clinical suitability for screening using validated tools
   - consider follow-up diagnostic protocols and pathways, where appropriate.
4.4 NHS boards ensure that people undergoing pre-investigation assessment receive information and support which is tailored to their needs and enables informed choice. This includes:

- the reason for pre-investigation assessment including assessment for clinical suitability
- what to expect from the colonoscopy including risks and benefits
- what support is available for people considered not clinically suitable for colonoscopy, and where appropriate alternative options
- when to expect an appointment for the investigation.

4.5 NHS boards provide timely follow-up of people who have not attended for pre-investigation assessment and offer further opportunity to attend.

4.6 NHS boards inform the person’s GP practice of the outcome of the pre-investigation assessment, including individuals who choose not to have colonoscopy or have not responded to a pre-investigation invitation.

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<td>You can be confident that you will:</td>
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<tr>
<td>• be assessed by a trained professional who will look at your results and discuss</td>
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<td>what diagnostic investigation is available for you</td>
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<td>• be informed how long you will need to wait for the investigation</td>
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<td>• receive information to help you make your decision about your options, and you</td>
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<td>will be given time and space to discuss these</td>
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<td>• be respected in any decision you make.</td>
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<td>• demonstrate knowledge and skills in undertaking pre-investigation assessment</td>
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<tr>
<td>• have knowledge in pre-investigation protocols and guidance</td>
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<tr>
<td>• provide relevant information in a way that is appropriate to the person to support</td>
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<td>them to make an informed choice.</td>
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### What does the standard mean for the NHS board?

**NHS boards:**
- have processes in place to ensure that pre-investigation assessment is carried out in line with national protocols and guidance and within an appropriate timeframe\(^{11}\)
- ensure that pre-investigation assessment is carried out by appropriately trained and competent staff
- monitor, report and review their processes in line with the KPIs for the SBoSP.\(^6\)

### Examples of what meeting this standard might look like

- Monitoring and reporting on referral times for pre-investigation assessment.
- Evidence of appropriate information sharing between NHS boards and GP practices, for example key information summary and electronic patient record.
- Evaluation of training needs and training programmes.\(^{25}\)
- Documentation relating to shared decision making and informed choice.
- Provision and uptake of training for staff to provide a responsive and person-centred service and information to people attending for pre-investigation assessment.
- Waiting list management for bowel screening patients.
- Signposting to appropriate online resources, for example NHS Inform or Bowel Cancer UK.\(^1\), \(^3\), \(^7\)
Standard 5: Diagnostic investigation

**Standard statement**

NHS boards ensure high quality, safe and timely diagnostic investigation is available following a positive bowel screening result.

**Rationale**

Colonoscopy is the primary method of investigation following a positive bowel screening test result. Colonoscopy maximises the detection and biopsy of polyps, adenomas and cancers. NHS boards are responsible for providing high quality, safe and timely colonoscopy services as part of the SBoSP. The service should be delivered in line with national guidance. NHS boards are responsible for ensuring endoscopy units performing colonoscopies are resourced to deliver a high quality service.

Given the high rate of polypectomy in bowel screening, colonoscopy should be considered high risk for bleeding when determining the management of patients on anti-coagulant or anti-platelet therapy in line with national guidance. Careful consideration should be given to people who are clinically unfit for colonoscopy including those with significant co-morbidity or frailty where the risk of colonoscopy outweighs the benefits. In such cases, patients may benefit from computed tomography colonoscopy after full discussion with clinical staff. Computed tomography colonoscopy should be carried out in line with national guidance.

The SBoSP monitors KPIs relating to diagnostic investigation including, adenoma detection rate, colonoscopy completion rate and colonoscopy complication rate.

The SBoSP pathway ends with colonoscopy. Most participating in the SBoSP will receive a negative result and will be recalled while eligible. Those with a positive result with further investigation will either have no further investigation and will be recalled in two years, or be referred for further management depending on the colonoscopy outcome.

NHS boards have responsibility for diagnosis, treatment and management of people following bowel screening.

Trained and competent staff should be supported by a lead clinician for the bowel screening programme who assures the accuracy and quality of diagnostic investigation.
Criteria

5.1 NHS boards ensure that diagnostic investigation is high quality, safe and timely and carried out in line with the SBoSP manual and clinical guidance.

5.2 NHS boards ensure that all patients who are eligible and clinically suitable for screening colonoscopy receive a timely invitation which includes information on the investigative procedure.

5.3 NHS boards ensure that endoscopy units undertaking screening colonoscopy:
   • are staffed by trained healthcare professionals
   • participate (or have plans to participate) in the national endoscopy database
   • schedule a maximum of four patients per screening colonoscopy clinical list.

5.4 NHS boards ensure that colonoscopy is carried out by a colonoscopist who can evidence achieving nationally agreed KPIs including colonoscopy completion rate and adenoma detection rate.

5.5 Data from the national colonoscopy KPIs are reviewed annually by the clinical group with oversight by the clinical lead.

5.6 Where a colonoscopy has been unsuccessful, a repeat colonoscopy or a computed tomography colonography is offered as clinically appropriate and within nationally agreed timescales following discussion with the person.

5.7 Computed tomography colonography is offered as an alternative first line investigation to colonoscopy and in line with national guidance for patients who:
   • are on anti-coagulation or anti-platelet therapy and unable to discontinue medication prior to colonoscopy
   • have significant comorbidities
   • have any other clinical contraindication(s).

5.8 NHS boards ensure that computed tomography colonography is carried out in line with national guidance and to nationally agreed timescales.

5.9 NHS boards ensure that endoscopy units undertaking bowel screening:
   • have systems in place to review quality assurance data and KPIs
   • have a risk reporting system, which allows investigation of issues arising from diagnostic investigation
   • support multidisciplinary discussion of cases including complex polyps
   • enable protected time for staff to attend multidisciplinary meetings.
5.10 NHS boards have a system in place to monitor and review at appropriate governance forums:
   - outcomes from diagnostic investigation
   - mortality and readmission resulting from procedures
   - post-colonoscopy cancer rates.

5.11 NHS boards ensure that clear information is provided to the person explaining:
   - the outcome of the diagnostic investigation
   - any post-investigation care
   - the reason for any subsequent investigation or referral to other services.

5.12 NHS boards ensure that there are pathways and protocols in place for onward referral, surveillance, treatment and management of bowel cancer.

5.13 NHS boards ensure that the person’s GP practice receive in a timely manner:
   - a copy of the colonoscopy report
   - information on any further referral or treatment plans including anticipated timeframes.

### What does the standard mean for the person with a positive bowel screening test result having an investigation?

**You can be confident:**
- that all investigations are right for you and completed properly
- will know how long you will need to wait for the investigation
- will be told if you need a repeat colonoscopy
- will be given information and support about any investigation or treatment that you may need, and have opportunities to discuss these with staff.

### What does the standard mean for staff?

**Staff, in line with their role, responsibilities and workplace setting:**
- demonstrate knowledge and skills in undertaking diagnostic investigation in line with professional competency frameworks
- understand, and work within, national guidance, KPIs and other relevant quality assurance frameworks
- provide relevant information in a way that is appropriate for the individual and signpost the individual to appropriate services and support, where required
- are supported to attend regular training, multidisciplinary reviews and continued professional development.
<table>
<thead>
<tr>
<th>What does the standard mean for the NHS board?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS boards in line with their governance and delivery responsibilities:</td>
</tr>
<tr>
<td>• have processes and protocols in place to ensure that colonoscopy and computed tomography colonography are carried out in line with national guidance</td>
</tr>
<tr>
<td>• ensure diagnostic investigation is carried out by appropriately trained and competent staff</td>
</tr>
<tr>
<td>• monitor, report and review on KPIs and other quality data for example, the national endoscopy database.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of what meeting this standard might look like</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Compliance with best practice and national guidance, for example standards of practice for computed tomography colonography.</td>
</tr>
<tr>
<td>• Reporting and review of quality data and KPIs, for example adenoma detection rate, referral times.</td>
</tr>
<tr>
<td>• Standard operating procedures and pathways including version control.</td>
</tr>
<tr>
<td>• Evidence of information sharing.</td>
</tr>
<tr>
<td>• Evidence of staff training, multidisciplinary case reviews and training needs analysis.</td>
</tr>
</tbody>
</table>
Standard 6: Histopathology

**Standard statement**

NHS boards ensure histopathology for bowel screening is carried out in line with national standards.

**Rationale**

The success of the bowel screening is dependent on accurate and reliable diagnosis and effective clinical management of pre-cancerous and cancerous lesions. The management of patients with screen-detected lesions must be based on accurate histopathology. Clinical care and patient outcomes are improved through local and national monitoring of both histopathology reporting practice and clinical audit. Pathology departments are required to be accredited to ISO 15189. NHS boards are responsible for ensuring regular review and maintain accreditation.

**Criteria**

6.1 NHS boards ensure that pathology departments and pathologists associated with the SBoSP follow the respective guidance and requirements set out in SBoSP manual.

6.2 NHS boards ensure that pathology departments undertaking bowel screening are accredited to ISO 15189.

6.3 NHS boards ensure that pathology departments undertaking histopathology for bowel are staffed by trained healthcare professionals.

6.4 NHS boards ensure that pathology departments undertaking histopathology for bowel screening:

- have systems in place to review quality assurance data and KPIs
- have a risk reporting system, which allows investigation of issues arising from histopathology
- support multidisciplinary discussion of cases
- enable protected time for staff to attend multidisciplinary meetings.

6.5 Histopathology reporting is carried out in line with national guidance relating to colorectal cancer and pre-cancerous lesions as well as screen-detected lesions.

6.6 All pathology departments reporting bowel screening resection cases ensure that they facilitate audit and meet audit criteria of reported lesions in line with national guidance.
6.7 Pathologists reporting bowel screening histopathology specimens participate in the national Gastrointestinal Pathology Screening External Quality (EQA) scheme or equivalent.

<table>
<thead>
<tr>
<th>What does the standard mean for the person?</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can be confident that your sample has been analysed accurately and by properly trained staff.</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>What does the standard mean for staff?</th>
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<tbody>
<tr>
<td>Staff, in line with their role, responsibilities and workplace setting:</td>
</tr>
<tr>
<td>• demonstrate knowledge and skills required in line with professional competency frameworks</td>
</tr>
<tr>
<td>• deliver high quality and accurate histopathology within a reasonable time frame</td>
</tr>
<tr>
<td>• participate in multidisciplinary team reviews and discussion of histopathology outcomes.</td>
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<table>
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<tr>
<th>What does the standard mean for the NHS board?</th>
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<tbody>
<tr>
<td>NHS boards:</td>
</tr>
<tr>
<td>• have robust protocols in place to deliver timely and high quality histopathology</td>
</tr>
<tr>
<td>• ensure the pathology department is accredited and is reviewed yearly</td>
</tr>
<tr>
<td>• facilitate multidisciplinary team discussion as appropriate in line with national guidance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Examples of what meeting this standard might look like</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pathology departments adhere to reporting standards and audit criteria set out in national guidance.</td>
</tr>
<tr>
<td>• Reporting of polyp cancer rates and other quality data.</td>
</tr>
<tr>
<td>• Completeness of staging data for colorectal cancer.</td>
</tr>
<tr>
<td>• Demonstration of accreditation and regular review.</td>
</tr>
</tbody>
</table>
Appendix 1: Development of the bowel screening standards

Healthcare Improvement Scotland has established a robust process for developing standards which is informed by international standards development methodology. This ensures they:

• are fit for purpose and informed by current evidence and practice
• set out clearly what people who experience services can expect to experience
• are an effective quality assurance tool.

The bowel screening standards have been informed by current evidence, best practice recommendations and developed by expert group consensus.

Evidence base

A systematic review of the literature was carried out using an explicit search strategy devised by an information scientist in Healthcare Improvement Scotland. Additional searching was done through citation chaining and identified websites, grey literature and stakeholder knowledge. Searches included Scottish Government, PHS, NICE, SIGN, NHS Evidence and Department of Health websites. This evidence was also informed equalities impact assessments.

Development activities

A standards development group, chaired by Professor Bob Steele, Clinical Director for the SBoSP, was convened in December 2022 to consider the evidence and to review the 2015 bowel screening standards.

The bowel screening standards were developed in parallel with the core screening standards.

Membership of the development group is set out in Appendix 2.

Each standard is underpinned by the views and expectations of healthcare staff, third sector representatives, people participating in screening and the public. Information has been gathered from a number of sources and activities, including:

• review of scoping engagement from 2020 to identify any changes to the bowel screening participant pathway
• scope approval at the first bowel screening standards development group meeting on 1 December 2022
• two development group meetings on 1 December 2022 and 1 February 2023
• six-week consultation period including a survey and stakeholder workshops
• a final development group meeting held on 1 June 2023
• editorial review panel meeting on 19 July 2023.

Consultation feedback and finalisation of standards

Following a six-week consultation, the standards development group reconvened to review all comments received and agree any required changes. More information can be found in the consultation feedback report which is available on request from the Standards and Indicators team.

Quality assurance

All development group members were responsible for advising on the professional aspects of the standards. Clinical members of the development group advised on clinical aspects of the work. The chair had lead responsibility for formal clinical assurance and sign off on the technical and professional validity and acceptability of any reports or recommendations from the group.

All development group members made a declaration of interest at the beginning of the project. They also reviewed and agreed to the development group’s terms of reference. More details are available on request from his.screeningstandards@nhs.scot.

An editorial panel met on the 19 July 2023 to review and agree the bowel screening standards and the core screening standards as a final quality assurance check. Membership of the editorial panel is outlined in Appendix 3.

The editorial panel ensured that:

• the standards are developed according to agreed Healthcare Improvement Scotland methodologies
• the standards document addresses the areas to be covered within the agreed scope
• any risk of bias in the standards development process as a whole is minimised.

The standards were developed within the Operating Framework for Healthcare Improvement Scotland and the Scottish Government (December 2018), which highlights the principles of independence, openness, transparency, and accountability.

For more information about Healthcare Improvement Scotland’s role, direction and priorities, please visit: www.healthcareimprovementscotland.org/
## Appendix 2: Membership of the bowel screening standards development group

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bob Steele</strong> (Chair)</td>
<td>Clinical Director</td>
<td>Scottish Bowel Screening Programme</td>
</tr>
<tr>
<td>Catriona Anderson</td>
<td>Associate Service Manager</td>
<td>Scottish Bowel Screening Programme</td>
</tr>
<tr>
<td>Julie Anderson</td>
<td>Portfolio Manager – Screening Services</td>
<td>NHS National Services Scotland</td>
</tr>
<tr>
<td>Sheila Bell</td>
<td>Nurse Endoscopist</td>
<td>NHS Lothian</td>
</tr>
<tr>
<td>Julieann Brennan</td>
<td>Board Coordinator</td>
<td>NHS Borders</td>
</tr>
<tr>
<td>Gavin Clark</td>
<td>Principal Information Analyst</td>
<td>Public Health Scotland</td>
</tr>
<tr>
<td>Neil Cruickshank</td>
<td>Colorectal Surgeon</td>
<td>NHS Fife</td>
</tr>
<tr>
<td>Helena Davidson</td>
<td>Colorectal Cancer Screening Nurse</td>
<td>NHS Fife</td>
</tr>
<tr>
<td>Ann-Marie Digan</td>
<td>Administration Manager</td>
<td>Scottish Bowel Screening Programme</td>
</tr>
<tr>
<td>Mohamed Elhassan (from May 2023)</td>
<td>Consultant Pathologist</td>
<td>NHS Lanarkshire</td>
</tr>
<tr>
<td>Stephen Glancy</td>
<td>Consultant Radiologist</td>
<td>NHS Lothian</td>
</tr>
<tr>
<td>Belinda Henshaw-Brunton</td>
<td>Senior Inspector/Reviewer</td>
<td>Healthcare Improvement Scotland</td>
</tr>
<tr>
<td>Simita Kumar</td>
<td>Health Improvement Programme Manager</td>
<td>Public Health Scotland</td>
</tr>
<tr>
<td>Calum McGillivray</td>
<td>Screening Team Lead</td>
<td>NHS Greater Glasgow &amp; Clyde</td>
</tr>
<tr>
<td>Gerard McMahon</td>
<td>Head of External Affairs (Devolved Nations)</td>
<td>Bowel Cancer UK</td>
</tr>
<tr>
<td>William Moore</td>
<td>Board Coordinator</td>
<td>NHS Grampian</td>
</tr>
<tr>
<td>Colin Noble</td>
<td>Consultant Gastroenterologist</td>
<td>NHS Lothian</td>
</tr>
<tr>
<td>Petra Onoetiyi</td>
<td>Public Partner</td>
<td>Healthcare Improvement Scotland</td>
</tr>
<tr>
<td>Name</td>
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<td>Organisation</td>
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<tr>
<td>Perminder Phull</td>
<td>Consultant Gastroenterologist</td>
<td>NHS Grampian</td>
</tr>
<tr>
<td>Lorna Porteous</td>
<td>Lead GP for Cancer and Palliative Care</td>
<td>NHS Lothian</td>
</tr>
<tr>
<td>Helen Reed</td>
<td>Health Improvement Lead</td>
<td>NHS National Services Scotland</td>
</tr>
<tr>
<td>Tasmin Sommerfield</td>
<td>Scottish Clinical Advisor (Screening)</td>
<td>NHS National Services Scotland</td>
</tr>
<tr>
<td>Judith Strachan</td>
<td>Consultant Clinical Scientist</td>
<td>NHS Tayside</td>
</tr>
<tr>
<td>Garrick Wagner</td>
<td>Senior Programme Manager</td>
<td>NHS National Services Scotland</td>
</tr>
<tr>
<td>Maggie Watts</td>
<td>Director of Public Health</td>
<td>NHS Western Isles</td>
</tr>
<tr>
<td>Jack Winter</td>
<td>Consultant Gastroenterologist</td>
<td>NHS Greater Glasgow &amp; Clyde</td>
</tr>
</tbody>
</table>

The standards development group was supported by the following members of Healthcare Improvement Scotland’s standards and indicators team:

- Dominika Klukowska – Administrative Officer
- Jen Layden – Programme Manager (bowel screening standards)
- Silas McGilvray – Project Officer (core screening standards)
- Mhairi McNamee – Programme Manager (core screening standards)
- Carolyn Roper – Project Officer (bowel screening standards)
- Fiona Wardell – Team Lead
**Appendix 3: Membership of the bowel and core screening standards editorial review panel**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gareth Brown</td>
<td>Chair - Core Screening standards Director of Screening</td>
<td>NHS National Services Scotland</td>
</tr>
<tr>
<td>Jen Layden</td>
<td>Programme Manager (Bowel screening standards)</td>
<td>Healthcare Improvement Scotland</td>
</tr>
<tr>
<td>Mhairi McNamee</td>
<td>Programme Manager (Core screening standards)</td>
<td>Healthcare Improvement Scotland</td>
</tr>
<tr>
<td>Safia Qureshi</td>
<td>Director of Evidence</td>
<td>Healthcare Improvement Scotland</td>
</tr>
<tr>
<td>Bob Steele</td>
<td>Chair – Bowel Screening Standards Clinical Director</td>
<td>Scottish Bowel Screening Programme</td>
</tr>
<tr>
<td>Fiona Wardell</td>
<td>Team Lead, Standards and Indicators</td>
<td>Healthcare Improvement Scotland</td>
</tr>
</tbody>
</table>
References


You can read and download this document from our website. We are happy to consider requests for other languages or formats. Please contact our Equality and Diversity Advisor on 0141 225 6999 or email contactpublicinvolvement.his@nhs.scot

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