

GUIDANCE FOR PUBLIC HEALTH AND COMMISSIONERS

Withdrawn 02/04/2019

Public Health Resource Unit
BCSP Publication No 3

February 2008

Published by:

NHS Cancer Screening Programmes
Fulwood House
Old Fulwood Road
Sheffield
S10 3TH

Tel: 0114 271 1060

Fax: 0114 271 1089

Email: info@cancerscreening.nhs.uk

Website: www.cancerscreening.nhs.uk

© NHS Cancer Screening Programmes 2008

The contents of this document may be copied for use by staff working in the public sector but may not be copied for any other purpose without prior permission from the NHS Cancer Screening Programmes.

ISBN 978 1 84463 051 6

Further copies of this publication are available from the Department of Health Publications Orderline quoting NHS BCSP Publication No 3

Tel: 08701 555 435

Fax: 01623 724 524

Email: doh@prolog.uk.com

Typeset by Prepress Projects Ltd, Perth (www.prepress-projects.co.uk)

Printed by Duffield Printers Ltd

CONTENTS

	Page No
PREFACE	iv
1. INTRODUCTION	1
1.1 Background	1
1.2 Aims and objectives of the NHS BCSP	1
2. THE SCREENING PROCESS	3
3. ROLES AND RESPONSIBILITIES OF STAKEHOLDERS	6
3.1 NHS Cancer Screening Programmes	6
3.2 Strategic health authorities	6
3.3 Primary care trusts (PCTs)	7
3.4 General practice	7
3.5 Programme hubs	7
3.6 Screening centres	8
3.7 Acute trusts (not screening centres)	8
4. SCREENING POLICY	9
4.1 Age range	9
4.2 Criteria for inclusion in the screening programme	9
4.3 Criteria for exclusion (ceasing)	9
4.4 Equal access for people with disabilities	9
4.5 Monitoring programme performance – national IT system (BCSS)	10
4.6 Quality assurance	10
5. SERVICE PLANNING	11
5.1 Screening centres	11
5.2 Selection of screening centres	11
5.3 Staffing requirements	11
5.4 Screening and surveillance colonoscopies	12
5.5 Referrals to other specialties	13
5.6 Activity and uptake	13
5.7 Commissioning and work programme	14
5.8 Health promotion	14
REFERENCES	16
APPENDIX 1: INFORMATION AND HEALTH PROMOTION	17

PREFACE

This guide is aimed at public health leads and commissioners in primary care trusts (PCTs) to help inform the process of implementation of the NHS Bowel Cancer Screening Programme (NHS BCSP). The guide has been compiled by the Public Health Resource Unit (PHRU) with the help of Sue Gray from the national office of the NHS Cancer Screening Programmes.

The programme will begin by inviting men and women aged 60–69 in order to achieve national coverage with available and expanding capacity. It is planned that this new screening programme will be fully implemented across England by December 2009. This guide applies to the current programme for screening people in the 60–69 years age range.

The *Cancer Reform Strategy*, published in December 2007, announced that in 2010 the screening programme will be extended to all men and women aged 70–75. The Operating Framework for 2008/09 for the NHS in England emphasised that further action will be needed by PCTs to meet the commitments set out in the *Cancer Reform Strategy*. More detailed guidance will be published by the NHS BCSP in 2008.

Further guidance for staff working in the NHS BCSP is available on the BCSP web site (www.bcspp.nhs.uk).

Copies of NHS BCSP publications, including leaflets for people invited for screening, can be found on the NHS Cancer Screening Programmes web site (www.cancerscreening.nhs.uk).

Withdrawn 02/04/2019

I. INTRODUCTION

I.1 Background

Bowel cancer is a major public health problem. It is the second most common cause of cancer death in the United Kingdom.¹ Approximately 30 000 new cases of colorectal cancer are diagnosed each year in England and Wales,² and bowel cancer is the underlying cause of death in 15 000 people every year.² Thus, bowel cancer accounts for 10% of all cancer deaths.³ The incidence in 60- to 69-year-olds is 143 per 100 000 population; however, among those aged 70 and over, it is above 300 per 100 000.⁴ Colon cancer is equally common in men and women, although rectal cancer is more common in men.⁴ A diet low in fibre and vegetables but high in red meat and animal fat is a predisposing factor for the development of the disease.³ A small proportion (5–10%) of colorectal cancers are hereditary and may develop in younger age groups.³

The disease progresses slowly. However, currently 20% of patients first present at A&E departments after experiencing mild symptoms for weeks or months. About 55% of patients are not diagnosed until the disease has spread to lymph nodes or elsewhere.³

Research undertaken in Nottingham⁵ and Funen⁶ in the 1980s showed that screening men and women aged 45–74 for bowel cancer using the faecal occult blood test (FOBT) could reduce the mortality rate from bowel cancer among the screened population by 15%. An independently evaluated pilot in Coventry, Warwickshire, and in Scotland showed that this research can be replicated in an NHS setting.⁷ In September 2000, the *NHS Cancer Plan*⁸ stated that a national bowel cancer screening programme would be introduced subject to evidence of the effectiveness of the pilot.

A comparison based on the final evaluation report of the pilot and a formal options appraisal indicated that implementing a screening programme for colorectal cancer was clinically cost-effective compared with not screening the population.³ The publicity around the screening programme and the screening programme itself may also make people more aware of the early signs and symptoms of the disease, leading to early presentation and diagnosis and thus preventing more costly treatment as well as saving lives.³

The Secretary of State for Health announced in October 2004 that the NHS Bowel Cancer Screening Programme (NHS BCSP) would begin in April 2006. The White Paper *Our Health, Our Care, Our Say: a New Direction for Community Services*⁹ reaffirmed the government's commitment to rolling out a screening programme for bowel cancer phased over three years, with the intention that the whole eligible population would be covered by the end of 2009. The programme will begin by inviting men and women aged 60–69 in order to achieve full national coverage with available and expanding capacity. The *Cancer Reform Strategy*¹⁰ announced plans to extend the age of bowel screening from 70 up to 75 years from 2010. As a result, around 1 million more men and women will be screened each year.

I.2 Aims and objectives of the NHS BCSP

The aim of the NHS BCSP is to reduce mortality from bowel cancer in the population covered. The objectives of the programme are to:

- identify and invite eligible men and women for screening
- enable people to make an informed choice about whether or not to participate in the screening programme

- provide clear information quickly to people with either normal or abnormal FOBt results
- diagnose a significant proportion of cancers at an early stage
- minimise anxiety among participants in the programme
- make the best use of screening resources
- maintain minimum standards of screening and continually strive for excellence
- involve and give feedback to the population covered by the programme
- develop the staff who deliver the screening service
- continue research into screening for and diagnosis and treatment of colorectal cancer.

Withdrawn 02/04/2019

2. THE SCREENING PROCESS

The NHS BSCP offers screening to men and women aged 60–69 every two years using a guaiac-based faecal occult blood test (FOBT). People aged 70 or over can be provided with an FOBT kit, on request, every two years.

The programme in England comprises five programme hubs which provide call/recall services, test FOBT kits and despatch test results. Between 90 and 100 local screening centres, each serving a population of 500 000 to 2 million people, will see people who have received abnormal test results through the screening programme. The programme hubs are responsible for arranging specialist screening practitioner (SSP) clinic appointments at the local screening centres for individuals with abnormal test results.

Most people who participate in the NHS BCSP will not see a health professional. They will be sent an FOBT kit in the post and will return this to a laboratory at the programme hub. Most people (98%) will have a normal test result and will be invited to participate again in two years' time. Participants with an abnormal FOBT result are invited to see an SSP at a local screening centre. They are offered colonoscopy as the investigation of choice. Depending on the findings of colonoscopy, they are offered screening again in two years' time, entered into the polyp surveillance programme or referred for treatment at a local hospital.

A flow chart of the screening process is shown in Figure 1. Estimated numbers of referrals for colonoscopy are shown in Table 1.

Withdrawn 02/04/2019

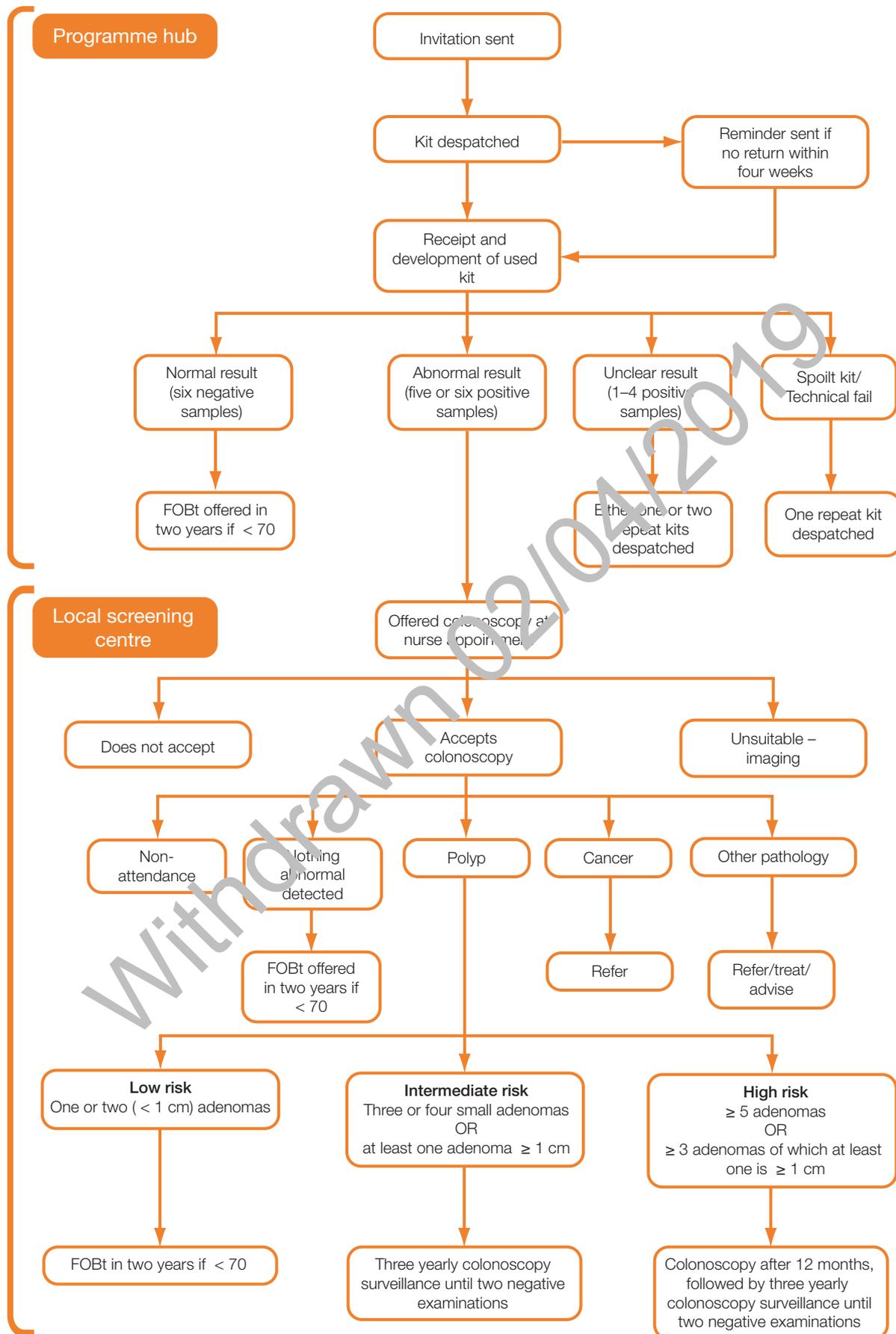


Table 1 Expected referrals for screening colonoscopies

Average population covered by each programme hub (up to 20 screening centres)	10 million people
Minimum resident population per screening centre	500 000 people
Approximately 10% of this population is aged 60–69 and will be invited for screening*	50 000 people eligible
Half the invitations will be sent out in year 1 of the screening round and the remainder in year 2	25 000 invitations per year
The anticipated uptake for the first round of screening is 60%	15 000 kits returned per year
About 2% of kits returned will be abnormal†	300 abnormal test results per year
Number of SSP clinic appointments per year to each screening centre	300 SSP clinic referrals per year
Most people referred to the nurse clinic will be referred for colonoscopy	300 screening colonoscopies per year
Assuming four patients are seen in each colonoscopy clinic and clinics run for 40 weeks per year	One or two colonoscopy clinics per week
People diagnosed with cancer are referred to their local MDT or treating hospital	30 people diagnosed with cancer
After the first round of screening, provision needs to be made for surveillance colonoscopies‡	Approximately 100 in year 2, increasing year on year
Assuming that five patients are seen in each surveillance clinic and clinics run for 40 weeks per year	Three surveillance colonoscopy clinics per week

*Note that the screening population is dynamic with new people entering the programme as they turn 60. This means for planning purposes looking at the population of 58- and 59-year-olds. This is particularly important as this age group is the start of the post-war baby boom.

†It appears from programme rollout that there is an unexpectedly high variation in the percentage of abnormal FOB test results, with a north/south gradient; some screening centres in the north of England have found rates of up to 3% while some in the south have rates well below 2%.

‡The polyp detection rate found during rollout is about 45%, compared with 35% in the pilot study.

3. ROLES AND RESPONSIBILITIES OF STAKEHOLDERS

3.1 NHS Cancer Screening Programmes

The NHS Bowel Cancer Screening Programme is part of the national cancer programme, which is overseen by the National Clinical Director for Cancer. The Director of the NHS Cancer Screening Programmes is accountable to the National Clinical Director for Cancer and maintains a national office for all the cancer screening programmes.

The role of the national office in the Bowel Cancer Screening Programme is to:

- oversee the rollout of the BCSP and to commission services during the rollout period
- roll out and commission the IT system
- develop quality assurance (QA) of the operation of programmes to agreed benchmarks
- develop and monitor the effectiveness of QA
- work with royal colleges, professional bodies, the NHS and the public to support programme developments, including training information review, and to provide technical and IT advice and support.

An advisory committee is being established for this programme.

There will be three phases of the national rollout of the BCSP. Screening centres in the first and second wave have begun operations, and central funding for these first two waves has been assured. The third wave of sites will cover the rest of the population and will be implemented from April 2008. It is planned that bowel cancer screening will be implemented by all PCTs by December 2009. Ministers have committed to providing sufficient funding to enable this to happen.

3.2 Strategic health authorities

Strategic health authorities (SHAs) have the role of coordinating the process of selection of screening centres for populations of at least 0.5 million population but which may go up to 2 million. SHAs will recommend potential centres to the national office to ensure that their responsible populations are included in the screening programme by the end of rollout in December 2009.

Typically SHAs:

- invite all parties (acute trusts, PCTs, national lead) to a stakeholder meeting to set out the role of the screening centre
- invite bids from trusts keen to be screening centres, emphasising the need for public health input and for evidence that the trust has a robust plan to meet the criteria required to be a centre
- consult with PCTs on the process and the bids
- make the final decision as to which units should be put forward as screening centres to the national office.

Owing to the way populations are geographically spread, decisions made by the SHA may mean that some PCTs are split, with their residents flowing to more than one centre.

SHAs are required to ensure that commissioning arrangements are robust and to monitor performance against national standards, which for bowel cancer screening will mean ensuring that PCTs take the lead as necessary so that a multidisciplinary group and/or specialist teams are convened as needed to support PCT commissioning.

3.3 Primary care trusts (PCTs)

From the outset PCTs need to be involved in the process of selecting proposed screening centres and are responsible for securing and funding the treatment of cancers detected by the BCSP. PCTs must be involved in the selection of screening centres, which may include providing public health and commissioning support for a bid from their local acute trust and a view on the overall SHA-wide process.

PCTs will eventually need to commission screening centres through their local delivery plan (LDP). For the period of rollout, central funding is available for initial implementation, after which the PCTs will commission the service through the LDP. Screening programmes are currently excluded from practice based commissioning and payment by results.

National guidance has been published on collaborative commissioning arrangements for national screening programmes.¹¹ Some elements of the commissioning of the BCSP will, in future, lie with specialist commissioning groups (SCGs). Elements of the screening programme and subsequent service delivery that need to be included within PCT commissioning (apart from excess treatment costs) include endoscopies, the nursing elements for FOBt positive patients, health promotion activities and any specific targeting that might be needed to increase uptake using the NHS BCSP framework. PCT commissioners, including public health, should be involved in the local programme from its planning stages as they will ultimately be responsible for the service, which must fit within the local health economy.

3.4 General practice

The intention of the screening programme is to keep the primary care workload to a minimum. However, screening centres are responsible for disseminating information about the screening programme to primary care teams, e.g. through PCTs, practice visits or regular GP/practice manager meetings. Once screening has begun, some people receiving invitations and test kits may want the opportunity to discuss the screening process with their GPs.

A GP information pack has been developed to assist GPs in dealing with their patients' queries and concerns. Details are at <http://www.cancerscreening.nhs.uk/bowel/ipc-pack.html>. An e-learning facility is also available via the BMA e-learning facility. Promotional posters and leaflet downloads in different languages are available for screening centres to use in providing information about the NHS BCSP for local primary care or health promotion teams (<http://www.cancerscreening.nhs.uk/bowel/publications/index.html>).

3.5 Programme hubs

The NHS BCSP is organised around five programme hubs. Each programme hub covers the same geographical area as the NHS Connecting for Health regional clusters and relates to one local service provider (LSP). The hubs are commissioned and initially funded via the NHS BCSP. There is a service level agreement between the national office and each programme hub that specifies:

- the range of services to be provided
- indicative activity levels

- the value of the agreement
- payment terms.

The main tasks for each programme hub are to:

- manage call and recall for the screening programme
- provide a telephone helpline for people invited for screening
- despatch and process test kits
- send test result letters and notify GPs
- book the first appointment at an SSP clinic for patients with an abnormal test result.

3.6 Screening centres

Up to 20 screening centres will be linked to each programme hub when the programme is fully rolled out. The national office has invited bids from potential centres, which will require sign-off by the relevant SHA. During the rollout phase funding is routed via the national office, after which PCTs will take on the commissioning arrangements. Each centre has a service level agreement with the national office, which specifies:

- the range of services to be provided
- indicative activity levels
- the value of the agreement
- payment terms.

The clinical tasks for each screening centre are to:

- provide SSP led clinics for patients with an abnormal test result
- arrange colonoscopy appointments for patients with an abnormal test result or who are scheduled for polyp surveillance
- arrange alternative investigations for patients in whom colonoscopy has failed or for whom colonoscopy is inappropriate
- ensure appropriate follow up or treatment for patients after colonoscopy.

Other important tasks for screening centres are to:

- provide information about the screening programme for the local health community
- promote the screening programme to the general public in their locality
- provide information and support for local people in completing the FOB test (on referral from the programme hub)
- ensure that data are collected to enable audit and evaluation of the screening programme.

3.7 Acute trusts (not screening centres)

Acute trusts that provide endoscopy services, but which will not be developing into screening centres, will continue to receive referrals from GPs for symptomatic patients in their catchment area. People who are diagnosed as having cancer through the screening programme will be referred from the screening centre to their local cancer service according to local protocols (including provisions for patient choice).

4. SCREENING POLICY

4.1 Age range

The NHS BCSP offers biennial FOB test screening to people in the age range 60–69. People aged 70 and over currently have the option to self-refer, although they will not be invited routinely for screening and will have to make a new request for screening every two years. People under the age of 60 cannot be included in the programme under any circumstances. From 2010 the bowel screening programme will expand to include people up to the age of 75.

4.2 Criteria for inclusion in the screening programme

Invitations to participate in the screening programme are sent without any prior knowledge of an individual's medical history, but recipients are invited to telephone the programme hub with queries if screening may not be appropriate.

To be invited to participate, both men and women must:

- be aged 60–69 years (60–75 from 2010 onwards)
- have a functioning bowel
- be registered with the NHS.

An FOBt or colonoscopy carried out in the private sector does not affect a person's entitlement to participate in the BCSP. However, individuals may be advised that screening is inappropriate if they have had a recent colonoscopy through any route.

4.3 Criteria for exclusion (ceasing)

Individuals are excluded from the national screening programme if they:

- have undergone total removal of the large bowel
- are already in a colonoscopy surveillance programme (eg for Crohn's disease)
- have made a request that no further contact be made by the NHS BCSP at any stage (informed dissent).

Formal guidance on ceasing has been published by the NHS Cancer Screening Programmes.¹²

4.4 Equal access for people with disabilities

The NHS Cancer Screening Programmes has updated its guidance on consent issues in cancer screening programmes, and this includes guidance specific to the BCSP.¹³ Work is currently under way to develop and test patient materials for individuals with learning disabilities to help them to understand the screening process and decide whether or not they wish to take part.

Key screening leaflets are available in large print format and in Braille. Audio CDs containing recordings of the three key programme leaflets are also available (www.cancerscreening.nhs.uk/bowel/publications/information-leaflets.html).

4.5 Monitoring programme performance – national IT system (BCSS)

A national IT system – the bowel cancer screening system (BCSS) – has been designed and built by NHS Connecting for Health to support the BCSP. The system offers a range of functions that enable programme hubs and screening centres to manage the programme. These functions include:

- selection of screening subjects
- call and recall
- logging receipt of test kits and test kit results
- booking SSP clinic appointments
- recording of colonoscopy and histopathology results
- letter production
- reporting programme activity.

The BCSS provides a series of strategic reports that contain statistics about programme activity (eg count of letter types sent, FOB test results count). Programme hubs are expected to report regularly to the national office on programme activity.

All screening centres are required to use this system, which is provided free of any licensing charge.

Programme hubs and screening centres will be required to work towards meeting the national standard for cancer waiting times (the 62 day wait) for patients who are diagnosed with bowel cancer through the screening programme. All patients diagnosed with cancer are included in the 31 day wait target.

National statistical returns (KC returns) are being developed by the NHS Health and Social Care Information Centre.

4.6 Quality assurance

Initial process quality standards have been developed based on the process measures in the screening trials and elsewhere in the literature. These will be subject to constant review, revision and augmentation throughout the rollout period. Regular review of performance against these standards and revision of the standards will be a feature of the operation of the bowel cancer screening programme in the longer term. Arrangements for quality assurance are being developed as programme hubs and screening centres become operational. National professional coordinating groups are being set up, and the intention is that a QA director will be appointed for each SHA.

5. SERVICE PLANNING

5.1 Screening centres

Screening centres act as the local management point for the NHS BCSP. They provide clinics led by SSPs and colonoscopy for patients with abnormal FOB test results and are the primary source of information about the programme for the local health community.

Screening centres have an active role in promoting the programme to the local population. They will have to take account of local issues, including likely uptake based on the experience of other cancer screening programmes. The *Guidebook for Programme Hubs and Screening Centres*¹⁴ details how screening centres should be developed within an existing endoscopy service.

5.2 Selection of screening centres

Strategic health authorities are coordinating the process of selection of screening centres across their health economies. Bids are invited from trusts to provide screening centres that cover a population of between 0.5 and 2 million. PCTs should be involved both in the process of developing the bids from the trusts to ensure that they cover the requirements for their populations and in the consultation process with the SHA. PCTs will need to be involved in considering how trusts will meet the stringent criteria required by the NHS BCSP before they can become operational.

The minimum criteria are as follows:

- scores on the endoscopy global rating scale (GRS) must be sufficiently high.¹⁵ In particular, timeliness must be at level A at least three months prior to the start of screening and must be sustained at this level thereafter. In addition, all endoscopy units within a trust that undertakes screening colonoscopies must be at level A for timeliness even when screening is not undertaken in that endoscopy unit.
- a visit by the Joint Advisory Group (JAG) on Gastrointestinal Endoscopy must have given the endoscopy unit full or conditional accreditation.¹⁶

In addition, the screening centre must have a minimum of two colonoscopists who have successfully completed the process for accreditation for screening colonoscopists.¹⁶

JAG visits to potential screening centres are organised through the JAG office at the Royal College of Physicians, London. The national office of the NHS Cancer Screening Programmes will provide the JAG office with a list of endoscopy units to be visited.

Details of the JAG accreditation process can be found on the JAG web site (www.thejag.org.uk). Details of how to apply for accreditation as a screening colonoscopist are on the BCSP web site (www.bcsp.nhs.uk).

5.3 Staffing requirements

Each centre will have to identify the following roles around a single clinical team:

- screening centre clinical director (who may in addition hold one of the roles below)
- clinical lead for colonoscopy
- clinical lead for pathology

- clinical lead for radiology
- clinical lead for nursing (who may also be, but is not necessarily, one of the specialist screening practitioners).

The job plan of each accredited endoscopist must include a minimum of one session a week in for screening colonoscopy, which equates to 150 screening colonoscopies per annum.

An adequate number of nursing staff with at least two SSPs should be available to provide SSP led clinics for people with abnormal FoBT results, and to ensure that the care provided by the screening centre meets the needs of the individual. SSPs may also have a role in health promotion activities to improve access to screening.

Training for SSPs has been developed in conjunction with Liverpool John Moores University. In addition, the national office has appointed a lead endoscopy nurse for each SHA, who will share experience and expertise with each screening centre as it becomes operational.

Feedback from first wave screening centres has indicated that, in order for the new screening programme to be developed and function effectively, a screening centre administrator is invaluable. This manager coordinates the various functions of the screening centre, including working with PCTs about health promotion initiatives, liaising with the programme hubs about patient flows and data quality and managing the day to day operation of the programme locally.

If the screening centre has multiple sites there must be frequent, regular meetings, at least monthly, of the teams and cross cover of staff across sites.

For more detail of the roles and responsibilities of screening centre staff see the *Guidebook for Programme Hubs and Screening Centre Staff*¹⁴ produced by the national office.

5.4 Screening and surveillance colonoscopies

A proportion of people who attend for a screening colonoscopy will be entered into the surveillance programme and asked to attend for a further colonoscopy because polyps detected are considered to be at intermediate or high risk of developing into cancer. These patients will not be sent any invitations to take part in FOB testing until they leave surveillance. They will have a surveillance due date set. Patients with intermediate risk polyps will be offered repeat colonoscopy every three years. Those patients with high risk polyps will be offered annual colonoscopy. Pilot sites found that 35% of people undergoing a screening colonoscopy were subsequently included in the surveillance programme. Experience so far from programme rollout has found that the percentage of people included in the surveillance programme is about 45%. Polyp surveillance should normally be carried out according to the British Society of Gastroenterology (BSG) guidelines and patients may move, over time, from one risk group to another.¹⁸

Once individuals reach their 70th birthday, they will not be managed within the screening programme unless the surveillance appointment is their first. The screening centre must ensure that there are prearranged referral pathways for patients who need continued surveillance.

5.5 Referrals to other specialties

For patients diagnosed with cancer, there must be a protocol for handover of responsibility from the NHS BCSP to a named clinician at the treating hospital. This may not be the same hospital that

provides colonoscopy. The SSP is responsible for ensuring that the case is discussed at the next available MDT and, wherever possible, should attend the MDT in person to present the case.

Screening centres must have prearranged referral pathways for any patients who need further investigation or treatment for incidental findings of conditions other than bowel cancer. Occasionally surveillance of polyps will need to be linked with management of comorbidities or incidental findings and this may mean the patient moving out of the screening programme.

5.6 Activity and uptake

Uptake rates of the bowel cancer screening test by different groups in the population vary, as they do in the breast and cervical screening programmes.^{18,19} Variation in uptake will have a marked impact on the activity of the screening centre. The pilot sites reported:^{18,19}

- a lower uptake in men (47.7%) than in women (56.2%)
- a higher uptake in the older age group (65–69 years) (58.5%)
- a decrease in uptake with increasing deprivation from 61.2% to 37.2% in index of multiple deprivation (IMD) quintiles 1 to 5
- a decrease in uptake from areas with a high proportion of minority ethnic groups, particularly those from the Indian subcontinent (40.4%).

These factors must be taken into account when predicting activity at the screening centre. Typically, areas of high deprivation and containing high proportions of minority ethnic groups will have the lowest uptake rates, which will translate into lower activity for the screening centre. In an area with a population of 500 000, a 45% uptake would mean that 225 positive tests per year would require a screening colonoscopy whereas a 60% uptake would result in 300 procedures, a difference of 25%.

Screening centres for many PCTs may not be based at the local hospital where patients are usually referred for endoscopy. It is important to model the flows of patients into the local screening centres, and PCTs must ensure that the service to all their residents is equitable if it is supplied by more than one screening centre. A screening plan must be developed to ensure that work flow into endoscopy sites and the treating hospital is kept even.

The increased referrals to the local oncology department from the screening centres should be planned to determine the additional activity to the trust and cost to the PCT. In order to model the patient flows, an assumption about the level of uptake needs to be made. A range of uptakes should be used to indicate how different levels will affect capacity and funding. In the first round of screening by the pilot sites, the reported uptake was 58.5%, whereas in the second round it had dropped to 51.3%.¹⁸

The activity of the national BCSP will increase year on year due to the incremental activity of the surveillance programme and an ageing population. It will be important to model the activity of the screening centre in relation to each PCT within the centre's catchment each year to determine the likely capacity needs and funding requirements. The box overleaf gives an example of how the surveillance programme will add to the workload in the first six years for a population of 500 000 with an uptake rate of 60%. Colonoscopic intervals in the surveillance programme are based on the BSG guidelines²⁰ adopted by the NHS BCSP.

Activity in the first six years of the NHS BCSP for a population of 500 000

This model assumes that bowel cancer screening is offered every two years, so that half the eligible population will be invited yearly, and that the uptake rate is 60%. The model shows how, in addition to screening colonoscopies, there will be a number of high risk (HR) and intermediate risk (IR) surveillance colonoscopies referred from previous years.

Year 1: 300 screening colonoscopies

Year 2: 300 screening colonoscopies + year 1 (HR)

Year 3: 300 screening colonoscopies + year 1 (HR) + year 2 (HR)

Year 4: 300 screening colonoscopies + year 1 (HR) + year 2 (HR) + year 3 (HR) + year 1 (IR)

Year 5: 300 screening colonoscopies + year 1 (HR) + year 2 (HR) + year 3 (HR) + year 4 (HR) + year 2 (IR)

Year 6: 300 screening colonoscopies + year 1 (HR) + year 2 (HR) + year 3 (HR) + year 4 (HR) + year 5 (HR) + year 3 (IR)

This model is simplistic as it does not reflect that patients may move from high risk to intermediate risk and from intermediate to low risk and that a proportion may leave the programme. It does, however, show how important it will be to have a thorough local understanding of the level of surveillance colonoscopies to be able to predict the capacity and funding needs each year. A more comprehensive model for use by PCTs and screening centres is currently being developed.²¹ Changes to the model to take account of the extended age range from 2010 have not yet been finalised. However, estimates show that there is likely to be an increase in cost and capacity needs of 30% over and above levels for programme inviting 60 to 69 year olds.

It is important also to note that the screening population is dynamic, with new people entering the programme all the time as they turn 60. This may necessitate, for planning purposes, looking at the population aged 53 and 59. This is particularly important as this age group constitutes the start of the post-war baby boom.

Standard reports from the BCSS are being developed to assist PCTs to refine their modelling.

5.7 Commissioning and work programme

Once the screening programme has moved beyond the rollout phase, a lead PCT should be identified to commission bowel cancer screening on behalf of all those PCTs using the same centre. A screening plan should be drawn up by the trust in consultation with PCTs. Screening centres should be able to demonstrate how they will maintain the GRS criteria. This will be achieved through modelling of the increased activity and flow, effective management of clinics and by training and appointment of staff. Each screening centre covers a population of between 500 000 and 2 million and, although the centre may have multiple sites, there must only be one clinical lead and one set of protocols across them.

5.8 Health promotion

Health promotion is a vital component of the BCSP. Evidence from the pilots^{18,19} has shown that uptake of the screening test varies significantly between different groups in the population. Typically, areas with high deprivation and high proportions of minority ethnic groups will have the lowest uptake rates. Uptake is also lower among men than among women.

Screening centres will initially hold the funding for carrying out health promotion initiatives for bowel cancer screening and are required to liaise with the PCT to use their public health expertise in this area. It is recommended that a health promotion group is set up to steer the work locally. This should involve a strong public health input as well as local screening commissioners, SSPs and community groups. There is currently little evidence about the type of health promotion that would be effective for the BCSP, but it is likely that a multistrategy approach would have the best outcome.¹⁵ This would include general health promotion (local newspaper, radio and television), targeting hard-to-reach groups and giving information to professionals in the community via continuing professional development (CPD) training. The national office has a number of research initiatives in hand to investigate the most appropriate way to inform practice about the programme. The national office is also keen to encourage and support local initiatives that may provide models for others to follow.

The national office has developed its leaflets in 19 languages and an audio CD is available in five languages. Posters are available and the national office will continue to develop new materials as the screening programme becomes established. Further details are given in the Appendix.

Withdrawn 02/04/2019

REFERENCES

1. *CancerStats Monograph*. London: Cancer Research UK, 2004.
2. *Cancer Trends in England and Wales 1950–1999*. London: Office of National Statistics.
3. *Colorectal Cancer Screening Options Appraisal: Cost-effectiveness, Cost-utility and Resource Impact of Alternative Screening Options for Colorectal Cancer*. School of Health and Related Research, University of Sheffield. Report to the Department of Health, September 2004 (available at www.cancerscreening.nhs.uk).
4. Office of National Statistics. *Registration of Cancer Diagnosed in 2004 in England*. Series MBI No. 35. London: HMSO, 2006.
5. Hardcastle JD, Chamberlain JO, Robinson MH, *et al*. Randomised controlled trial of faecal-occult-blood screening for colorectal cancer. *Lancet*, 1996, 348: 1472–1477.
6. Kronborg O, Fenger C, Olsen J, *et al*. Randomised study of screening for colorectal cancer with faecal-occult-blood test. *Lancet*, 1996, 348: 1467–1471.
7. UK Colorectal Cancer Screening Pilot Group. Results of the first round of a demonstration pilot of screening for colorectal cancer in the United Kingdom.
8. *The NHS Cancer Plan: A Plan for Investment, a Plan for Reform*. London: Department of Health, 2000.
9. Department of Health. *Our Health, Our Care, Our Say: a New Direction for Community Services*. The Stationery Office, 2006.
10. *Cancer Reform Strategy*. London: Department of Health, 2007.
11. *Commissioning and Managing Screening Programmes in the NHS in England*. Screening Policy Team, Department of Health, 2005.
12. *Bowel Cancer Screening Programme Ceasing Guidelines*. NHS Cancer Screening Programmes, 2007 (NHS BCSP Publication No 2).
13. *Consent to Cancer Screening*. NHS Cancer Screening Programmes, 2008 (NHS Cancer Screening Series No 4).
14. *Guidebook for Programme Hubs and Screening Centres, Version 2*. NHS Cancer Screening Programmes, 2006 (Version 3 in preparation).
15. *Endoscopy Global Rating Scale*. NHS Cancer Screening Programmes, 2005 (NHS BCSP Implementation Guide No 2) (available on the BCSP web site: www.bcsp.nhs.uk).
16. *JAG Accreditation and Re-accreditation of Endoscopy Units*. NHS Cancer Screening Programmes, 2005 (NHS BCSP Implementation Guide No 4) (available on the BCSP web site: www.bcsp.nhs.uk).
17. *Accreditation of Colonoscopists*. NHS Cancer Screening Programmes, 2005 (NHS BCSP Implementation Guide No 3 Version 2) (available on the BCSP web site: www.bcsp.nhs.uk).
18. *English Pilot of Bowel Cancer Screening: an Evaluation of the Second Round*. London: Institute of Cancer Research, 2006.
19. *Ethnicity: UK Colorectal Cancer Screening Pilot*. Final report. NHS Cancer Screening Programmes, 2003 (available at the NHS Cancer Screening Programmes web site: <http://www.cancerscreening.nhs.uk/bowel/ethnicity-finalreport.pdf>).
20. Atkin WS, Saunders BR. Surveillance guidelines after removal of colorectal adenomatous polyps. *Gut*, 2002, 51 (Suppl. V), v9.
21. Nnoaham K, Lines C. Modelling future capacity needs and spending on colonoscopy in the English Bowel Cancer Screening Programme (submitted for publication).

APPENDIX I: INFORMATION AND HEALTH PROMOTION

Programme promotion and publicity materials

Screening can go live only in areas where a screening centre is accredited and has approval from the national office. Screening centres should ensure that, once their 'go live' date is confirmed, they make arrangements for local GPs to receive copies of the NHS BCSP GP pack. It may also be helpful to contact local pharmacies to explain the introduction of the programme, so that they are aware of what the programme is and how it works.

Promotion and publicity of the screening programme should be kept within those areas in which the screening programme has gone live. This is to avoid raising expectation unnecessarily amongst those for whom screening is not yet available. Once the programme is rolled out across the country (by the end of 2009), widespread national publicity will be considered.

The NHS Cancer Screening Programmes press office can be contacted for advice and assistance in liaising with local media.

Production of publicity materials

The national office has produced a poster for the screening programme, and further designs are being commissioned. Patient information leaflets are also available free of charge, for use in awareness raising initiatives.

Screening centres and programme hubs are welcome to develop their own publicity materials. In many instances, this is a preferable approach, as materials can be specifically tailored to target a local audience. *Any materials developed locally must be sent to the national office for approval prior to production.* This is to ensure that consistent messages are being used across the programme, that the programme logo is being used correctly, and that the national office remains aware of all the materials being used for the programme under its administration.

Copies of local materials should be sent (electronically where possible) to the national office, so that they can be included on the BCSP web site. In this way, ideas and initiatives can be shared across the programme as a whole.

The national office does not produce 'freebie' items such as balloons, pens, 'bugs', etc. Screening centres and hubs are welcome to produce such materials for their own promotional events, subject to the correct use of the programme logo and any key messages.

NHS BCSP logo

The 'logo' of the NHS BCSP is currently simply the NHS logo and programme title:



Bowel Cancer Screening Programme

Screening centres and hubs must not produce their own logo design, as this will fragment the identity of a national screening programme.

National information available as PDFs to download from the NHS Cancer Screening Programmes website

Bowel Cancer Screening kit instruction leaflet (available in 19 languages)

Bowel Cancer Screening – The Facts (available in 19 languages)

Bowel Cancer Screening – The Facts (large print version available in English only)

Bowel Cancer Screening – The Colonoscopy Investigation (available in 19 languages)

Bowel Cancer Screening – The Colonoscopy Investigation (large print version available in English only)

Bowel Cancer Screening – audio and video resources (ordering details available on web site)

Information Pack for GPs (ordering details available on website)

<http://www.cancerscreening.nhs.uk/bowel/publications/index.html>

Withdrawn 02/04/2019

Withdrawn 02/04/2019

Withdrawn 02/04/2019