A review of bowel cancer screening in Southwark

Southwark's Joint Strategic Needs Assessment

People & Health Intelligence Section

Public Health Division, Place & Wellbeing

November 2018

GATEWAY INFORMATION

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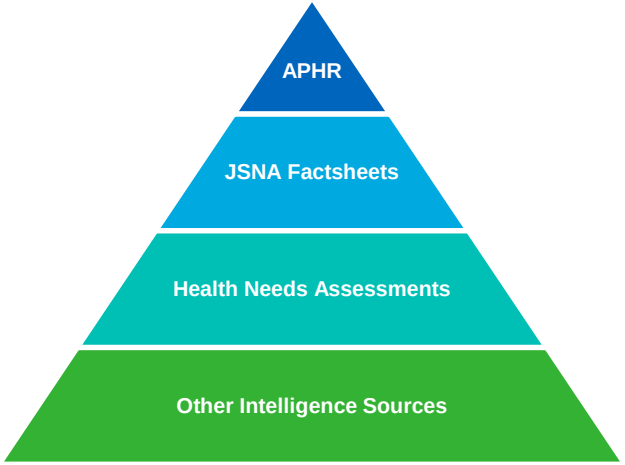
Health Needs Assessments form part of Southwark's Joint Strategic Needs Assessment process

BACKGROUND

The Joint Strategic Needs Assessment (JSNA) is the ongoing process through which we seek to identify the current and future health and wellbeing needs of our local population.

- The purpose of the JSNA is to inform and underpin the Joint Health and Wellbeing Strategy and other local plans that seek to improve the health of our residents.
- The JSNA is built from a range of resources that contribute to our understanding of need. In Southwark we have structured these resources around 4 tiers:



Tier I: The Annual Public Health Report provides an overview of health and wellbeing in the borough.

Tier II: JSNA Factsheets provide a short overview of health issues in the borough.

Tier III: Health Needs Assessments provide an in-depth review of specific issues.

Tier IV: Other sources of intelligence include Local Health Profiles and national Outcome Frameworks.

- This document forms part of those resources.
- All our resources are available via: www.southwark.gov.uk/JSNA

This health needs assessment provides an overview of bowel cancer screening in Southwark

AIMS & OBJECTIVES

This review aims to produce an overview of bowel cancer screening in Southwark and develop recommendations to improve uptake in the borough. The objectives of this report are:

- Summarise current national and local policy surrounding bowel cancer screening.
- Evaluate existing bowel cancer screening provision in Southwark.
- Review the epidemiology of bowel cancer and bowel cancer screening in Southwark. and draw comparison with that in London and England.
- Consult relevant stakeholders and identify local opportunities to improve coverage in Southwark based on the evidence.
- Propose evidence-based recommendations to improve bowel cancer screening uptake in Southwark.

This report will provide local stakeholders with an overview of the needs of the local population and potential methods through which those needs could be met.

CONTENTS

Bowel cancer screening refers to the NHS Bowel Cancer Screening Programme (BCSP)

SCOPE & DEFINITIONS

Scope	Included	Excluded
FOBt	Faecal occult blood testing screening offered to all adults between ages of 60-74 as part of Bowel Cancer Screening Programme Screening for asymptomatic individuals	FOBt for symptomatic individuals FOBt used in secondary care Screening programmes for other types of cancer or any other medical conditions
One-off flexible sigmoidoscopy	One-off flexible sigmoidoscopy offered at age 55 to all eligible adults.	Flexible sigmoidoscopy for symptomatic individuals, including unsuspected expected cancer 2 week wait colonoscopy. Elective list flexible sigmoidoscopy due to primary/secondary care referrals
Eligible patients	Patients aged 60-74 at time of FOBt invite Patients aged 55 to 60 at time of one-off flexible sigmoidoscopy	Symptomatic patients Patients with previous colon cancer Patients with previous colonic surgery Patients under colonic surveillance

Definitions:

- **Bowel (or colorectal) cancer:** a malignant neoplasm (cancer) of the colon, rectosigmoid junction or rectum.
- **Flexible sigmoidoscopy:** a procedure in which a trained medical professional uses a flexible, narrow tube with a light and camera on one end, to identify and in many cases treat any abnormalities within the rectum and lower colon.
- **Faecal Occult Blood testing (FOBt):** a test that checks for occult (hidden) blood in the stool. Multiple small samples of stool are placed in a special collection tube or card and sent to a doctor or laboratory for testing. Blood in the stool may be a sign of colorectal cancer or other problems, such as polyps, ulcers, or haemorrhoids.
- **Faecal Immunochemical Test (FIT)**: a test that uses antibodies which specifically recognise human haemoglobin to detect and quantify the amount of human blood in a single stool sample.

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Prevention and early identification of bowel cancer is a priority for population health

INTRODUCTION : BOWEL CANCER

Bowel (or colorectal) cancer is a major cause of illness, disability and death in England

- 41,804 cases were diagnosed in 2015, making bowel cancer the 4th most common cancer diagnosis in England, accounting for 12% of all registered cancers.
- There is a disparity in incidence between sexes, with the age-standardised incidence in men approximately 49% higher than that of women in 2016.
- Variation has also been demonstrated by ethnic group - between 2006 and 2010, bowel cancer accounted for 17% of all cancers among Chinese men, compared to only 9% in Black men.

Bowel cancer is the second biggest cause of cancer death in England

- There were 16,384 bowel cancer deaths in England in 2016, representing approximately 10% of annual cancer deaths.
- Age standardised bowel cancer mortality rates have decreased by 14% since 2004.
- However, there are significant inequalities in bowel cancer mortality, with bowel cancer deaths more common in people living in the most deprived communities than those living in affluent communities, plus differences in mortality due to race and gender.
- It has been calculated that approximately 860 cancer deaths could be prevented a year if all people experienced the same mortality rates as the least deprived quintile.

References
1. Cancer Research UK, Bowel Cancer Statistics
2. The National Cancer Registration and Analysis Service
3. National Cancer Intelligence Network Cancer and equality groups: key metrics 2014 report

Bowel screening has been proven to increase rates of early diagnosis and decrease mortality from bowel cancer

INTRODUCTION : BOWEL CANCER SCREENING

Bowel cancer screening was initially proposed as a tool to facilitate earlier diagnosis and therefore improve mortality. The following tests have been utilised:

- **Faecal occult blood testing** allows the early detection of blood in the stool, which is often an early indicator of bowel cancer or pre-malignant polyps in asymptomatic patients.
- Samples of faeces are wiped on a special card at a patient's home, which can then sent to a laboratory for testing by post.
- Patients that have a certain level of blood in their stool and therefore are at higher risk of colon cancer can then be invited to undertake further investigations, such as a colonoscopy.
- Research has demonstrated that adoption of FOBt screening can improve mortality from colorectal cancer by 16%.

- One-off **bowel scope screening** involves asymptomatic patients being offered a flexible-sigmoidoscopy to detect colorectal cancer or pre-malignant polyps.
- At this appointment, any detected abnormality can be either treated during the procedure, preventing future complications, or a referral can be made on for further treatment.
- Research has demonstrated that one-off flexible sigmoidoscopy provides a 35% reduction in both incidence and mortality in screened patients.

References
1. The National Cancer Registration Office, East Anglia via Cancer Research UK 2002-2006 data
2. Logan et al, 2012. Outcomes of the Bowel Cancer Screening Programme in England after the first million tests. BMJ

CONTENTS

The NHS Bowel Cancer Screening Programme has been implemented to reduce mortality from bowel cancer

NATIONAL POLICY CONTEXT

The UK National Screening Committee (UK NSC) advises ministers and the NHS about population screening and appropriate implementation of screening programmes.

- Following a statement in the September 2000 *NHS Cancer Plan* supporting nationwide screening, bowel cancer screening with Faecal Occult Blood testing (FOBt) for men and women aged 50 to 74 was recommended by the UK NSC in 2003.
- The Health Secretary announced in October 2004 that the NHS Bowel Cancer Screening Programme (BCSP) would be rolled out nationally in April 2006, phased over a three year period, initially being offered every two years between the ages of 60-69.
- *The Cancer Reform Strategy* published in December 2008 announced the age range for FOBt bowel cancer screening be extended to 60-74 from 2010.
- In 2011, the UK NSC recommended that screening for bowel cancer using one off flexible sigmoidoscopy at age 55 also met their criteria and should be adopted into the BCSP.
- In 2015, the UK NSC recommended that the FOB Test should be replaced by the Faecal Immunochemical Test (FIT) as the primary test for bowel cancer - ministers accepted the findings of this review in August 2018 and agreed to provide FIT testing nationwide also extending eligibility to persons aged 50-74.

References
1. NHS Public Health function agreement 2017-2018 Service specification no. 26 BCSP

The programme is coordinated through five central geographical screening hubs

NATIONAL POLICY CONTEXT

The Bowel Cancer Screening Programme is commissioned by NHS England. It is organised around five separate programme hubs across the country – Northern, Southern, Eastern, Midlands/North West and London hubs. Each of these hubs is linked to a number of screening centres.

The commissioned role of the programme hubs is as follows:

- Manage ‘call and recall’ for the screening programme.
- Dispatch test kits to eligible patients, process returned test kits, send test result letters and notify GPs of results.
- Provide a telephone helpline for those invited to screening
- Book initial appointments at a specialist screening practitioner (SSP) clinic for patients with abnormal test results.

The commissioned roles of the screening centres are as follows:

- Provide SSP clinics for patients with abnormal test results
- Arrange colonoscopy appointments for patients with abnormal results
- Arrange appropriate follow up and treatment for patients following colonoscopy
- Arrange one-off flexible sigmoidoscopy screening appointments to responders aged 55-59
- The bowel cancer screening pathway is illustrated in Appendix A.

References
1. NHS Public Health function agreement 2017-2018 Service specification no. 26 BCSP

The National Cancer Strategy proposed the introduction of cancer alliances, FIT testing and bowel scope screening

NATIONAL POLICY CONTEXT

Achieving World Class Cancer Outcomes: A Strategy for England 2015-2020 **was published by NHS England in 2015. It outlined aims for the NHS to make 'progress in reducing preventable cancers, increasing survival and improving patient experience and quality of life by 2020', recommending the following:**

- Cancer Alliances to be established across the country, in order to better co-ordinate and improve care being provided between services in the UK.
- Advised to roll out complementary bowel scope screening for 55 year olds along the FOBt.
- The documented supported replacement of FOBt with faecal immunochemical test (FIT), after positive findings from the FIT pilot demonstrated improved uptake within both sexes and across all quintiles of the index of multiple deprivation, particularly within the most deprived quintile.
- The strategy described an ambition to incentivise GPs to take responsibility for driving increased uptake of FIT and one-off flexible sigmoidoscopy in their populations
- Outlined an aim to achieve 75% uptake in all CCGs by 2020.

References
1. Achieving World Class Cancer Outcomes: A Strategy for England 2015-2020, NHS England

Bowel Cancer Screening has been highlighted as one of the priorities regarding cancer care in London

REGIONAL POLICY CONTEXT

The *Model of Care* was developed in 2010:

- This document proposed clinically-led solutions to enable improvements to be made to London's cancer services, aiming to facilitate earlier diagnoses, reduce inequalities and uptake of services, and improve patient care, outcomes and experience.

The *Five year Cancer Commissioning Strategy for London, April 2014,* replaced the 2010 Document Model of Care following changes in commissioning arrangements:

- Underpinned by the values of the *Model of Care*, this strategy specifically recommended that bowel cancer screening should be viewed as a priority area for improvement within London.
- The document highlighted that GP practices felt unable to intervene in bowel screening, and that much of the problems surrounding bowel cancer screening lay with the national programme.

***Increasing participation in bowel screening through enhanced primary care services in London and West Essex* was published in January 2017, recommending the following:**

- Improved data collection at practice level to enable monitoring and evaluation
- Both commissioners and GP practices to utilise Open Exeter service to monitor BCSP.
- BCSP to ensure continuation of GP endorsed invitations to eligible patients
- Prioritise reducing inequalities in access, by targeting services towards those least likely to participate in screening.

References
1. Five Year Cancer Commissioning Strategy for London – NHS England 2015

In Southwark the local service is organised through the London Hub and Kings College Hospital screening centre

LOCAL POLICY CONTEXT

BCSP test kits, and one-off scope invitations are sent to Southwark residents and processed by the London Hub, which is located in St Luke's Hospital, North London.

- The patient's Southwark GP practice is automatically sent a notification informing them whether a patient's test kit either has or has not been returned. This is attached to a patient's EMIS GP record – however this notification is not automatically visible to GPs.

King's College Hospital is the agreed local screening centre for Southwark (and Lambeth) residents.

- When test kits are returned and give a positive result, both the patient and King's College Hospital Screening Centre are notified, and an invitation to meet with a specialist screening practitioner (SSP) is arranged. If the patient does not attend, they are contacted directly by the screening centre, and their local Southwark GP is also notified.
- If a patient accepts an invitation for a one-off bowel scope, an appointment must be arranged for them to attend for a flexible sigmoidoscopy at the screening centre.

***Southwark Health and Wellbeing Strategy 2015-2020* highlighted increased uptake of screening as a priority area in producing healthier and more resilient communities.**

- However, there is no specific borough-wide strategy for tackling high cancer rates and mortality, nor any specified strategy regarding improving cancer screening uptake.

References
1. Guidance for Public Health and Commissioners – Public Health Resource Unit Publication No. 3 2008

CONTENTS

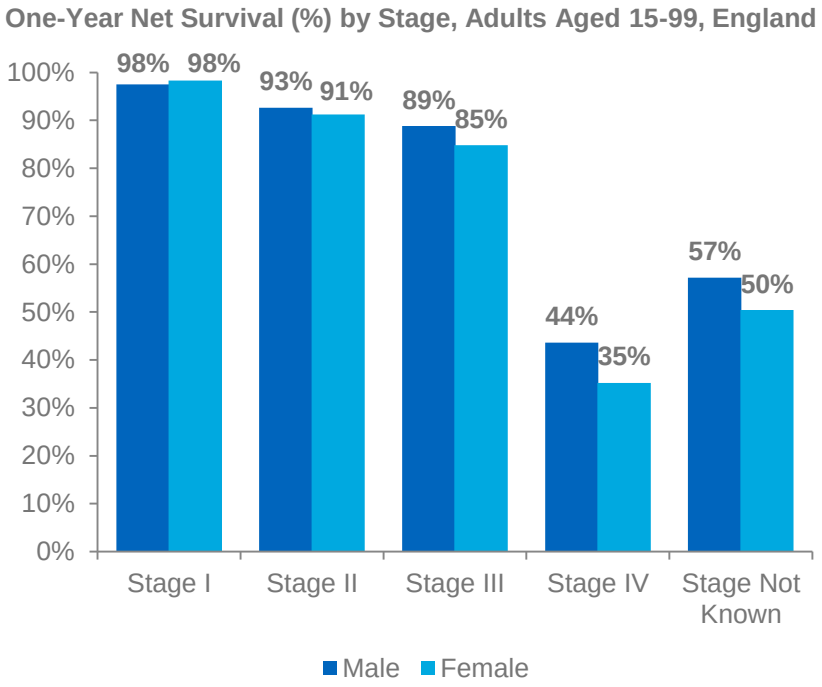
Early diagnosis of bowel cancer improves treatment options and reduces mortality

NATIONAL PICTURE - MORTALITY & EARLY DIAGNOSIS

England's five year relative survival rates for colon (51%)and rectal cancer (53%) fall significantly below the average for Europe (56% and 55% respectively)

Diagnosis of colorectal cancer at an early stage or when there are precancerous lesions present has been identified as an area in which these poor cancer mortality statistics could be substantially improved.

- Earlier diagnosis facilitates a substantial increase in the likelihood of successful treatment.
- The difference in one year survival between stage one and stage four cancer is vast[1]
  - Stage One: One year survival = 98% for men and women
  - Stage Four: One year survival = 44% for men and 35% for women



References

1. The National Cancer Registration Office, East Anglia via Cancer Research UK 2002-2006 data
2. Logan et al, 2012. Outcomes of the Bowel Cancer Screening Programme in England after the first million tests. BMJ

The number of people screened in England has increased, however uptake remains below performance thresholds

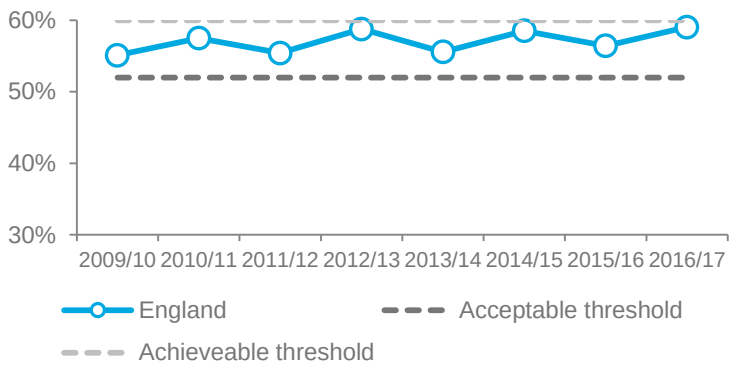
NATIONAL PICTURE - UPTAKE & COVERAGE

National uptake of FOBt bowel cancer screening has fluctuated since 2009/10, with overall uptake in 2016/17 close to 60% national performance threshold.

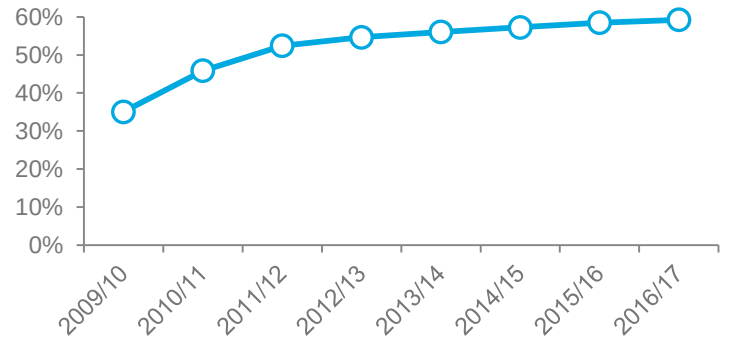
- In 2016/17, just over 4,400,000 people were invited to FOBt screening in England, with 59% taking up screening.
- Of these, just over 43,000 people had an abnormal result (1.66%)
- 3,021 people were subsequently diagnosed with cancer (approximately 1/1500 FOB tests).
- 8,891 people were diagnosed with intermediate or high risk adenomas. (approximately 1/500).

National coverage meanwhile has steadily increased from 35.0% in 2009/10 to 59.1% in 2016/17.

Uptake rates in England, with national performance thresholds



Proportion of eligible persons screened adequately in the previous 2.5 years (coverage), England



References

1. PHE, NHS Screening Programmes in England
2. PHE, Bowel cancer screening programme standards valid for data collected from 1 April 2018

Certain groups are more likely to participate in bowel cancer screening than others

NATIONAL PICTURE - PROTECTED CHARACTERISTICS

Studies have examined screening uptake and coverage across different communities.

Characteristic	Role
Age	Originally the screening was available to everyone aged 60-69, but it was extended to include population aged 60 to 74 years. The 60-64 year age group are less likely to attend for screening.
Sex	Bowel cancer affects more men than women nationally, but women are more likely to participate in screening.
Sexual orientation	No data found.
Maternity status	No data found.
Gender reassignment	No data found.
Race	Uptake is lower in more ethnically diverse areas
Disability	Mortality from bowel cancer in people with learning disabilities is significantly higher than for others. Coverage of bowel cancer screening is lower in PWLDs. By age 60 a substantial proportion of PWLDs will be being supported by paid care staff in residential care or supported living settings. Colorectal screening will unusually depend on this group providing assistance
Religion or belief	No data found.
Marriage or civil partnership	No data found.

References

1. Von Wagner et al, 2011. Inequalities in participation in an organized national colorectal cancer screening programme: results from the first 2.6 million invitations in England

Early nationwide studies demonstrated substantial inequalities in uptake of bowel cancer screening

NATIONAL PICTURE - SOCIOECONOMIC VARIATION IN UPTAKE

Data collected from the results of the first 1 million FOBt testing kits as part of the BCSP programme gave a clear illustration of the challenges faced by the BCSP:

- Uptake in men (49.6% overall) was substantially poorer than in women (54.4% overall).
- Uptake in the most deprived areas (41.7% overall) was significantly lower than in areas with the least deprivation (61.4% overall).

These findings were replicated in a further study of the first 2.6 million FOBt invitations, investigating inequalities in uptake:

- The most deprived quintile had significantly lower uptake (35.0%) than least deprived quintile (61.1%) – the probability of returning a FOBt kit was estimated to decrease by 0.41% with every unit increase in IMD.
- Areas with the highest proportion of non-white residents within a postcode sector (38.2%) had substantially lower uptake rates than areas with the lowest proportion (55.0%) – decline in participation relating to greater ethnic diversity was also more pronounced in men than women.

References
1. Logan et al, 2012. Outcomes of the Bowel Cancer Screening Programme in England after the first million tests. BMJ
2. Von Wagner et al. Inequalities in participation in an organised national colorectal cancer screening programme: results from the first 2.6 million invitations in England. Oxford Academic.

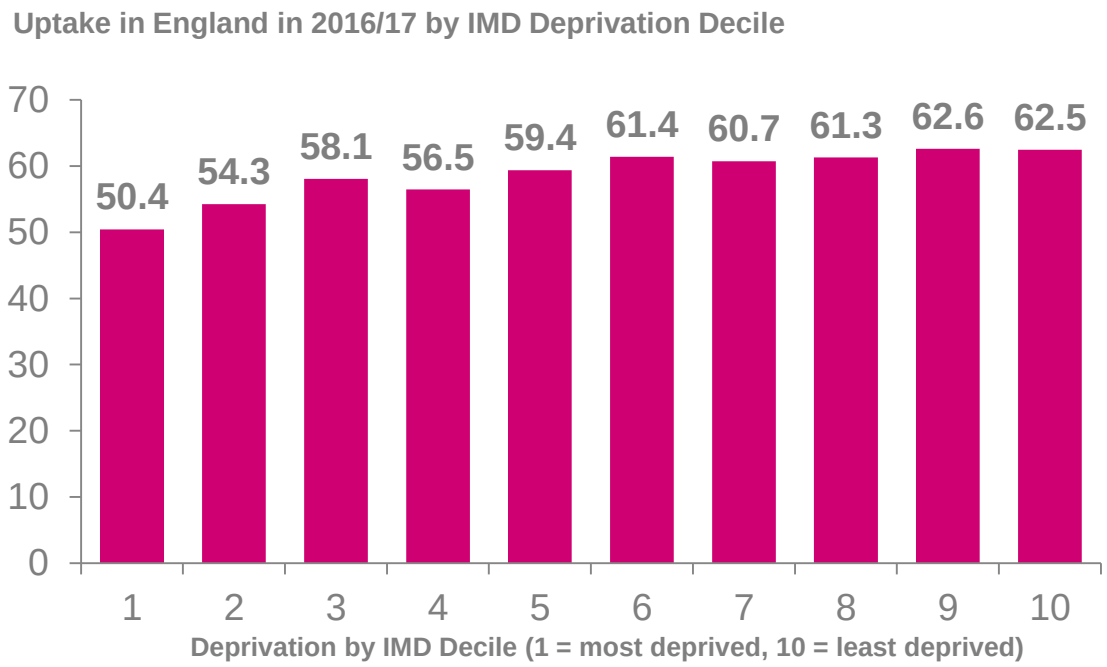
Socioeconomic inequalities continues to have a detrimental effect on uptake

NATIONAL PICTURE - SOCIOECONOMIC VARIATION IN UPTAKE

The most recent data demonstrates a persistent trend towards lower uptake in areas of higher deprivation

- However, the gradient of uptake between the most and the least deprived areas in England appears to have reduced since the results of the first million FOB tests were published in 2011.

- There is no available data on uptake by gender or ethnicity from 2016/17 from which similar comparisons can be drawn.



References

1. Public Health England – Public Health Profiles, Fingertips.

Southwark Council
southwark.gov.uk

CONTENTS

The rate of bowel cancer incidence in Southwark is similar to the rest of South East London and England.

THE LOCAL PICTURE

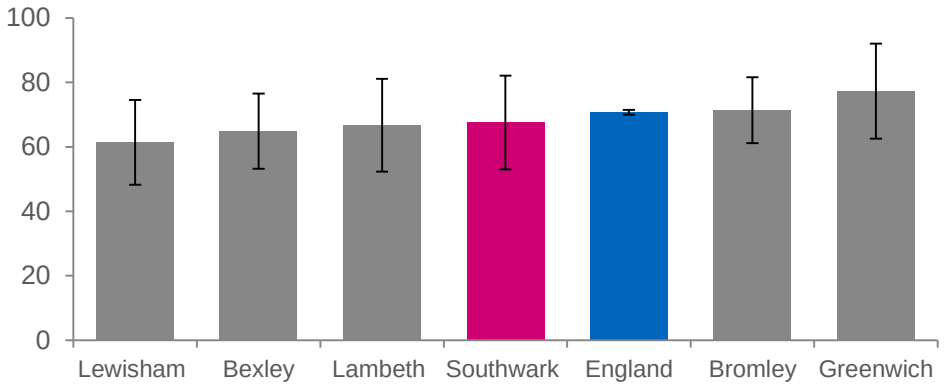
Bowel cancer accounts for approximately 11% of all new cancers in Southwark.

- In 2015, there were 105 new cases of bowel cancer in Southwark. This equates to an age standardised cancer incidence rate of 68 per 100,000 people.
- A similar number of men (55) and women (50) were diagnosed with bowel cancer.

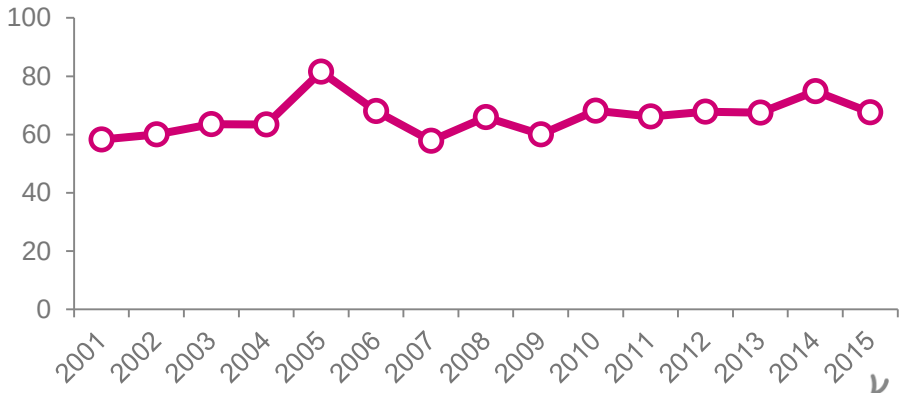
Age standardised rates of bowel cancer are comparable to the rest of south east London.

- There is no statistically significant difference in the rate of bowel cancer in Southwark compared to other boroughs in South East London or the rest of England.
- The age standardised rate of bowel cancer in Southwark has been broadly stable since 2001 with fluctuations likely due to small numbers than actual variation.

Age standardised rate of bowel cancer incidence, South East London and England, 2015



Age standardised rate of bowel cancer incidence per 100,000, Southwark, 2001-15



References

1. The National Cancer Registration and Analysis Service

Southwark Council
southwark.gov.uk

Bowel cancer incidence increases with age and bowel cancer accounts for one in ten cancer deaths in Southwark

THE LOCAL PICTURE

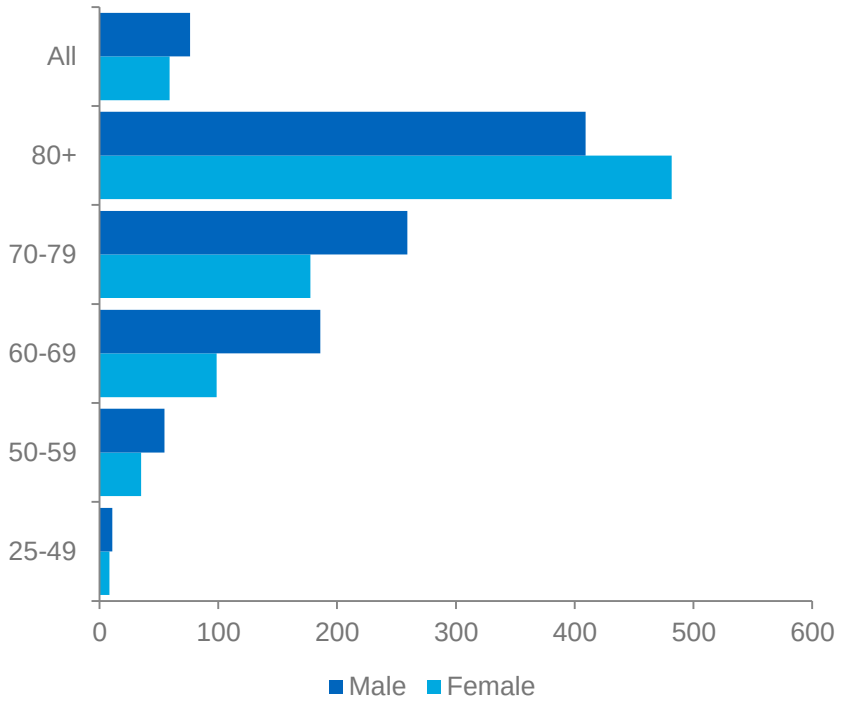
Age and sex standardised bowel cancer incidence rates increase with age

- In 2015, 72% of the 105 people diagnosed with bowel cancer were aged over 60 and rates of bowel cancer incidence climb steadily after this age.
- Whilst men have higher rates of bowel cancer than women nationally, there is no statistically significant difference at Southwark level as there are few cases.

Bowel cancer deaths account for 10% of all cancer deaths in Southwark

- In 2015, 38 people died from bowel cancer in Southwark – an age-sex standardised mortality rate of 26 per 100,000 population.
- This rate is not statistically different from England or other boroughs in south east London.

Age-sex standardised rate of bowel cancer incidence per 100,000 by age group, Southwark, 2015



References

1. The National Cancer Registration and Analysis Service

Southwark Council
southwark.gov.uk

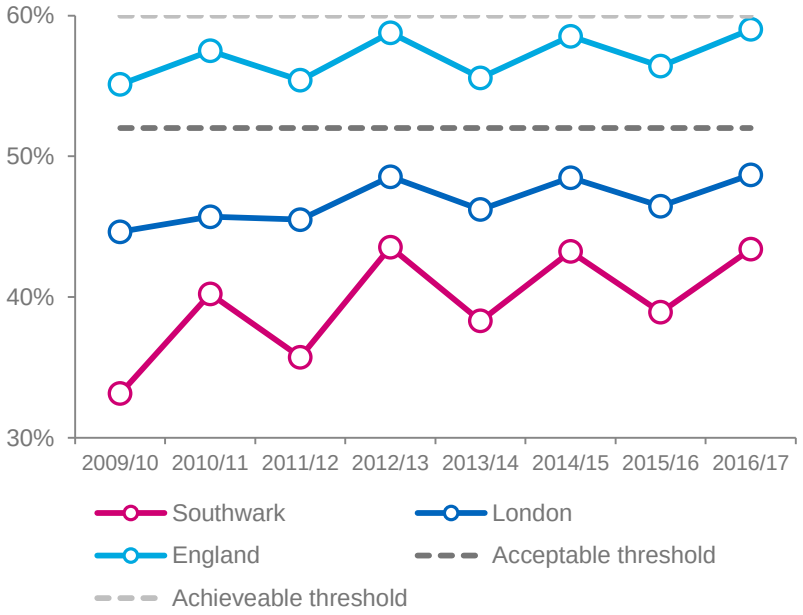
The number of people screened in Southwark has increased, but uptake remains below the London average

THE LOCAL PICTURE - UPTAKE

The total number of people screened for bowel cancer has increased, but uptake % has not.

- Eligible people are invited to screen every two years, and should attend within 6 months of invitation.
- In Southwark in 2016/17, almost 5,700 eligible people were adequately screened within 6 months of invite – more than double the 2,600 in 2009/10.
- However, local population increases mean that there was also a 67% increase in eligible people being invited for screening to 13,000.
- Accordingly, despite this increase in number of people screened annually, the proportion of all eligible people screened has not significantly increased, fluctuating at around 40% since 2010/11.
- This uptake is lower than uptake across London (49%) and England (59%), and significantly lower than most boroughs in SEL.
- The uptake rate in Southwark does not meet the national acceptable threshold of 52%.

Uptake (%) in Southwark, London and England, with national performance thresholds, 2009/10 to 2016/17



References

1. PHE, National General Practice Profiles
2. PHE, Bowel cancer screening programme standards valid for data collected from 1 April 2018

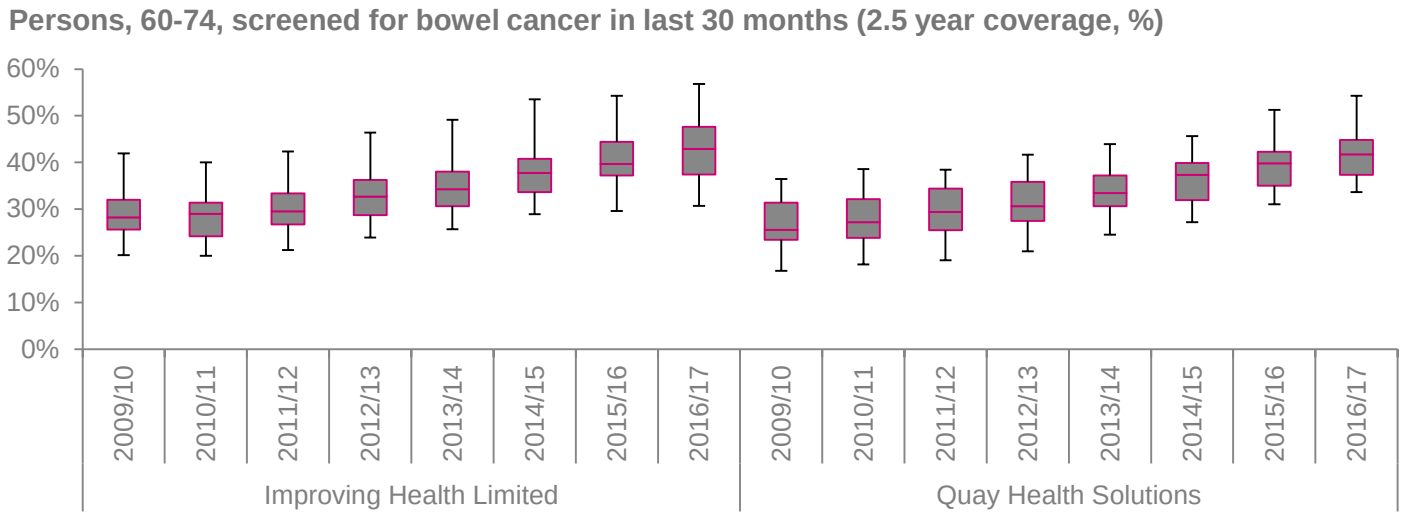
Southwark Council
southwark.gov.uk

Screening coverage is increasing across Southwark, but there is considerable variation across GP practices

THE LOCAL PICTURE

There is variation in bowel screening coverage across GP practices and federations

- The graph shows that average screening coverage (median represented by pink line in the middle of the box) has been increasing across GP practices in both GP Federations.
- However, there is a considerable variation in coverage across GP practices, particularly in Improving Health Limited in 2016/17, as indicated by the size of the grey box in each year.



- In order to reach the acceptable uptake threshold (52%), an additional 1,100 people would have to be screened in Southwark each year. On average, this would equate to an additional 29 patients per practice. An additional 54 patients per practice would have to be screen to reach the “achievable” performance threshold (60%).

References

1. The National Cancer Registration and Analysis Service

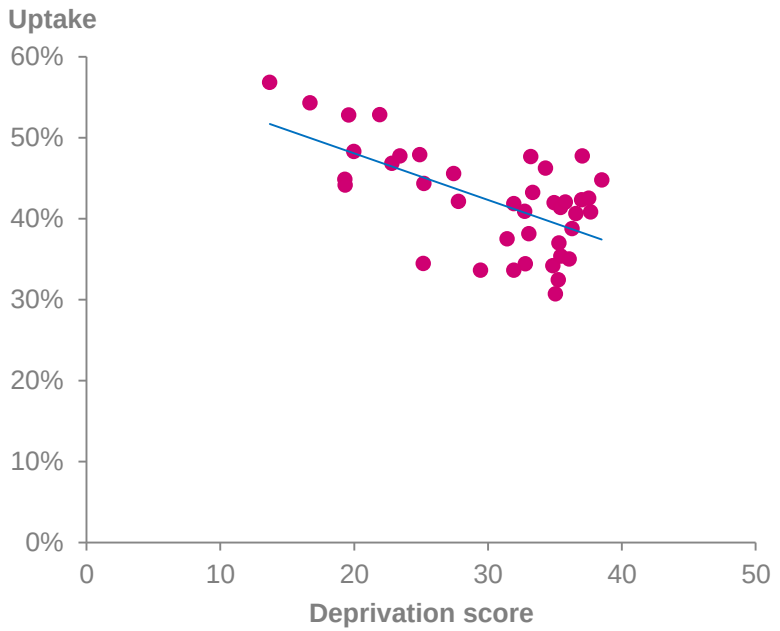
GP practices with lower levels of deprivation typically have higher screening coverage, but this is not the full picture

THE LOCAL PICTURE

Variation in screening coverage is related to deprivation.

- The chart shows the correlation between bowel cancer screening coverage in each GP practice and their level of deprivation (a higher number represents higher levels of deprivation).
- Generally, the trend indicates that GP practices in more deprived areas have lower bowel cancer screening coverage.
- However, the relationship isn't clear cut and there is also considerable variation in coverage across practices with similar deprivation scores e.g. a 17 percentage point difference between practices with a similar a deprivation score of (35-37).
- It can be quite difficult to obtain accurate deprivation scores for GP practices in Southwark, given the rapidly evolving nature of the borough.

Bowel cancer screening coverage in Southwark of GP practices in Southwark, by deprivation 2016/17



References

1. PHE, National General Practice Profiles
2. The National Cancer Registration and Analysis Service
3. Bowel cancer screening programme standards valid for data collected from 1 April 2018

Southwark Council
southwark.gov.uk

We worked with Nexus Health Group to understand more about who is and is not being screening in Southwark

DATA SOURCES

Data were extracted by Nexus Health Group, a partnership of a number of GP surgeries in the north of Southwark.

- With almost 70,000 patients registered at Nexus out of a total registered population of 325,000, Nexus accounts for just under one-quarter of all registered patients in Southwark.
- The branches listed in the data extraction are: Princess Street (Main branch), Aylesbury Medical Centre, Dun Cow Surgery, Manor Place Surgery, Commercial Way, Surrey Docks Health Centre, Decima Street.

Cohort eligible for bowel cancer screening aged 60-74 (n=6010).

- All patients aged 60-74 on the date of extraction (15 June 2018) were included in the sample.
- All patients who had bowel cancer screening administered in the 2 year period 15.6.2016 – 15.6.2018 were categorised as having screening administered.
- It is assumed that all patients in the cohort were invited over the two year period. Those who were 60 and 61 will not have been eligible for screening during the entire 2 year period.
- Non-identifiable data (age, gender, ethnicity, whether patient was housebound, LSOA, registered branch) was shared with the Southwark Public Health team for analysis.

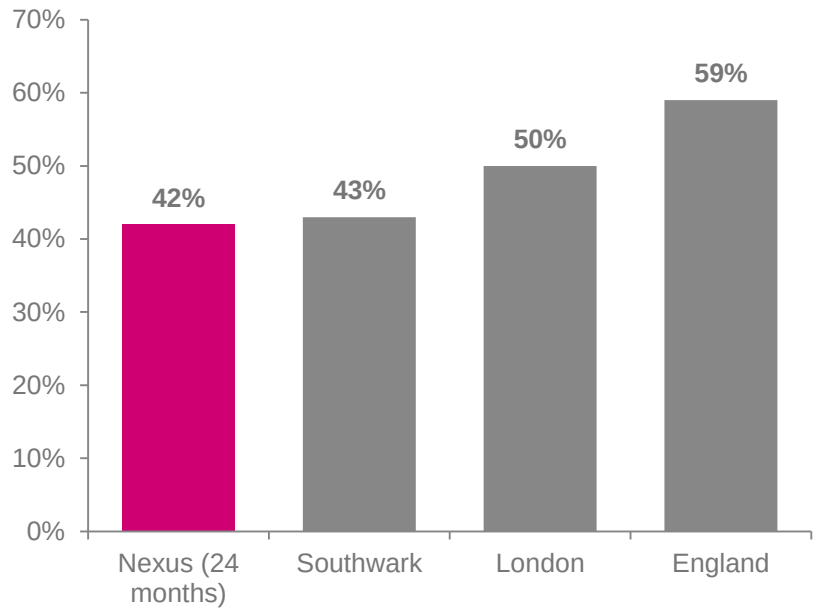
Bowel cancer screening rates in Nexus Health Group are comparable to the Southwark average.

COMPARING COHORT TO RESPONSE

Data extracted from Nexus reviews screening over 24 months, while benchmarked indicators cover 30 months.

- Data from patients aged 60-74 on 15 June 2018 and registered with Nexus Health Group were included. The Nexus Health Group accounts for just under one-quarter of all patients registered in Southwark.
- The cohort was analysed to see how many had bowel cancer screening administered between 15 June 2016 and 15 June 2018 – 42% of the eligible cohort had been screened in the last 24 months.
- This is not directly comparable to benchmarked indicators for Southwark, but it is broadly in line with those indicators i.e. 43% of people aged 60-74 were screened for bowel cancer in the last 30 months (coverage) and within 6 months of invitation (uptake) in 2016/17.

Bowel cancer screening in the last 30 months in Southwark, London and England (2016/17) compared to Nexus screening in 24 months (June 2016-18).



References

1. Nexus GP data, extract dated: 15.6.2018

Older age groups are more likely to screen. Women are more likely than men in the younger age group.

AGE & GENDER

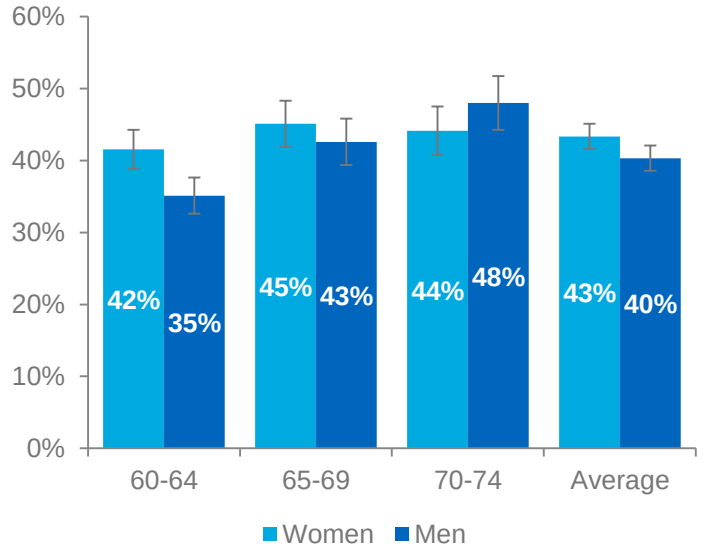
Among younger groups, women have higher rates of screening than men, but converge with age.

- Women at Nexus have significantly higher rates of screening than men in the 60-64 age group.
- While screening rates do not significantly increase for women with age, they do for men, increasing from 35% in men aged 60-64 to 43% at age 65-69 and 48% at age 70-74.
- Thus, there is no significant difference in screening between men and women from the age of 65.
- This reflects national evidence that uptake increases with age in men (49% at 60-64 years; 53% at 65-69 years) but not women (57 vs 56%).

Despite the fact that the test is posted to patient's home, there is variation by patient mobility.

- There was variation in screening uptake linked to patient mobility – people who are housebound were significantly less likely to undertake screening than people that are housebound (uptake of 21%). It is unclear what is driving this.

Bowel cancer screening in Nexus Health Group by age group, June 2016 to June 2018.



References

1. Nexus GP data, extract dated: 15.6.2018
2. Wagner 2011, Inequalities in participation in an organized national colorectal cancer screening programme: results from the first 2.6 million invitations in England.

People from Black ethnic background and those without English as a first language were less likely to screen.

ETHNICITY & FIRST LANGUAGE

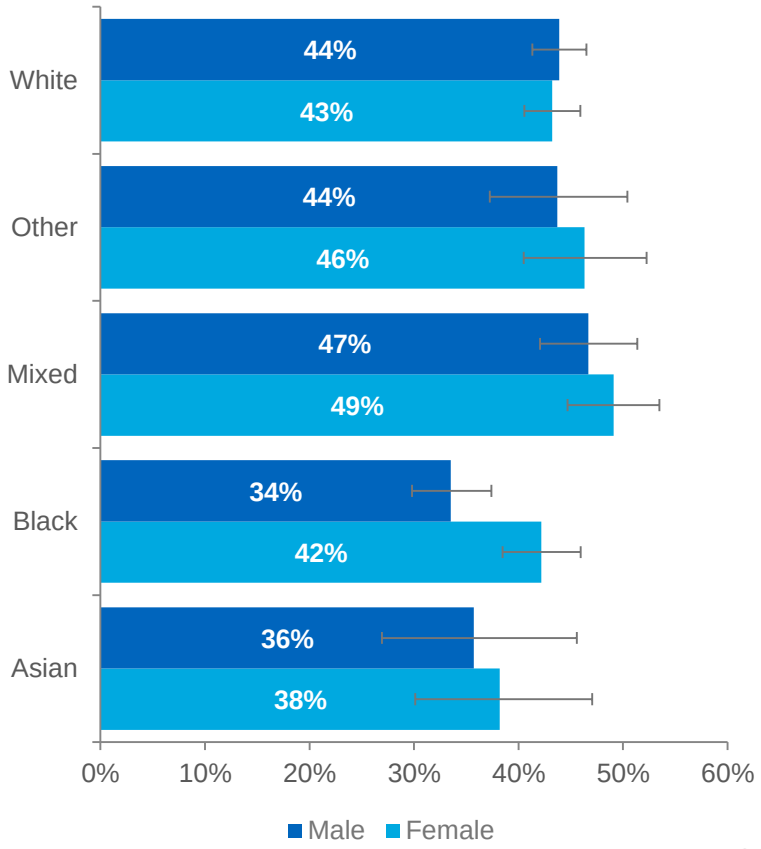
Screening is lower among people from Black ethnic background than White, Mixed or Other backgrounds.

- Ethnicity was recorded for 93% of patients.
- People from mixed ethnic backgrounds (48%) had significantly higher uptake than all other people (41%) – including those who had no recorded ethnicity.
- Uptake in people from Black ethnic groups (38%) was significantly lower than people from White (44%), Mixed (48%) and Other ethnic backgrounds (45%).
- People from an Asian background accounted for only 4% of the cohort and thus has less reliable estimates.
- Black ethnicity was the only group where women had a significantly higher uptake than men – all other groups were similar.

People with English as a first language were more likely to be screened than those with another first language.

- Data completion on first language was poor – only 41% had their first language recorded.
- People with English recorded as their first language (44%) were significantly more likely to undertake bowel cancer screening than people with English recorded as a second or other language (36%).

Bowel cancer screening in Nexus Health Group, by ethnic group, June 2016 to June 2018.



References

1. Nexus GP data, extract dated: 15.6.2018

Southwark Council
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People living in more deprived areas are significantly less likely to undertake bowel cancer screening.

BRANCH SITE & DEPRIVATION

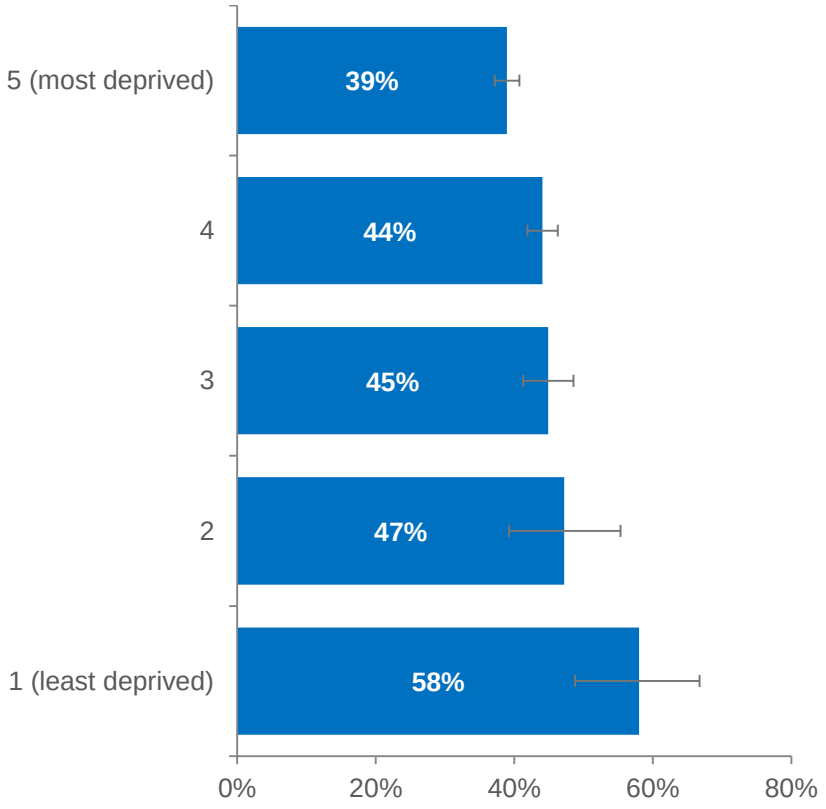
The north of the borough, where Nexus Health Group is located, is an area of high deprivation.

- Overall, 39% of Southwark residents live in areas considered to be the most deprived nationally.
- By contrast, 47% of the people aged 60-74 registered with Nexus Health Group live in areas considered to be the most deprived nationally.
- There are similar levels of deprivation across practices with the notable exception of Surrey Docks which is considerably less deprived.

There was significant variation in screening by the deprivation of the area in which the person lived.

- Bowel cancer screening was significantly lower among those living in the most deprived quintile (39%) compared to those living in the least deprived quintile (58%).
- For the least deprived group screening is comparable to the national average (59% in 2016/17).

Bowel cancer screening by deprivation in Nexus Health Group, June 2016 to June 2018.



References

1. Nexus GP data, extract dated: 15.6.2018

Southwark Council
southwark.gov.uk

Regression additionally highlights that deprivation and screening are linked in men but not women.

MULTIVARIATE LOGISTIC REGRESSION

A multivariate logistic regression* was additionally run to further understand the factors influencing screening uptake. This was run first for all people, then for men and women separately and the sex-specific results are summarised here.

- **Deprivation** – Men in the most and second most deprived quintiles were significantly less likely to undertake screening than men in the least deprived quintile (62% and 54% respectively). There was no relationship between uptake and deprivation among women.
- **Age groups** – With increasing age, men became more likely to undertake screening - men aged 65-69 were 44% more likely to undertake screening and men aged 70-74 were 63% more likely when compared to 60-64 age group. Women aged 65-69 were 22% more likely than those aged 60-64. There was no significant difference in women aged 70-74.
- **Sex** – There was no significant difference in uptake between men and women.
- **Ethnicity** – Men from Black ethnic groups were shown to be 24% less likely to undertake bowel screening compared to men from White ethnic groups. Women from a Mixed ethnic background were 27% more likely to undertake bowel screening compared to women from a White background. No other ethnic groups were significantly different.
- **Housebound** – Housebound men and housebound women were both significantly less likely (62% and 65% less likely respectively) to undertake screening than men and women who were not housebound.
- **Branch** – There was no significant difference in uptake across surgeries for men or women.

* Full regression output for all persons, men and women can be found in the appendix.

Bowel cancer screening is lowest among people living in deprived areas and with English as a second language.

SUMMARY

This analysis aimed to investigate whether Southwark's low levels of bowel cancer screening is driven by our more deprived and ethnically diverse population mix.

- Bowel cancer screening uptake in Southwark (43%) is lower than London (49%) and England (59%), and is below the 52% threshold required to reduce bowel cancer mortality.
- This analysis investigates whether low bowel cancer screening in Southwark is linked to the higher prevalence of factors associated with lower screening uptake.

Bowel cancer screening is lower among people living in the most deprived areas, those without English as a first language, people from a Black ethnic background and those who are housebound.

- Data from 60-74 year olds registered with Nexus Health Group were extracted. This practice accounts for 22% of all registered patients in Southwark. Screening uptake over 24 months within the practice (42%) was similar to screening over 30 months (43%) in Southwark as a whole.
- Among younger groups, women have higher rates of screening than men, but this converges with age.
- Uptake in people from Black ethnic groups (38%) was significantly lower than people from White (44%), Mixed (48%) and Other ethnic backgrounds (45%). Black ethnicity was the only group where women had a significantly higher uptake than men – all other groups were similar.
- People with English as a first language were significantly more likely to screen (44%) than those with English as a second or other language (36%).
- Bowel cancer screening was significantly lower among those living in the most deprived quintile (39%) compared to those living in the least deprived quintile (58%).
- There was variation in access based on patient mobility – people who were housebound were less 64% likely to undertake screening than people that were not.

CONTENTS

Non-responders report a variety of reasons for not having engaged with the screening process

BARRIERS TO UPTAKE

A 2016 systematic review and meta-study synthesis of qualitative research into bowel screening identified the following barriers to screening uptake:

- Lack of awareness of bowel screening programmes or the need for asymptomatic testing.
- Fear of cancer and a lack of understanding of treatment options or the benefits of early diagnosis.
- Cultural issues including beliefs in natural remedies, cultural reluctance to engage in screening or access healthcare unless very unwell, and the perceived threat of bowel screening to masculinity.
- Competing health demands and scheduling difficulties limiting uptake of available screening services.
- A number of these barriers were accentuated within minority groups.
- Conversely, the study highlighted a strong relationship between greater knowledge of colorectal cancer and intent to undergo screening.

A report into bowel screening in SE London suggested that typically lower uptake in black and minority ethnic (BAME) groups across the UK, in combination with the high proportion of BAME residents in Southwark, may be a significant factor in the low uptake across Southwark.

References

1. Honein-AbouHaidar et al, 2016. Systematic Review and Meta-study Synthesis of Qualitative Studies Evaluating Facilitators and Barriers to Participation in Colorectal Cancer Screening,
2. Bowel Cancer Screening:A review of the Six South East London Boroughs, Dr Nadia Ramjogn, 2012

We need to target several areas of resistance to increase engagement with screening

OVERCOMING BARRIERS TO UPTAKE

NHS England, Cancer Research UK and Macmillan published the document *Interventions to increase bowel screening uptake* in 2017, summarising 12 interventional trials undertaken across the country. It recommended the following:

- Interventions should prioritise reducing inequalities in screening access.
- BCSP should accelerate the continuation of GP endorsed screening invitations (6% increase in uptake demonstrated).
- Provision of a facility for GPs to order replacement self-test kits on behalf of patients.
- Different communication methods to suit the needs of different population groups
- GPs should be engaged to support screening participation.

- Studies have demonstrated up to a 12% increase in uptake when an enhanced reminder letter is used in combination with GP practice-endorsed letters.
- A 2015 Lancet study illustrated that utilising written methods alone is of limited value when aiming to reduce inequalities in uptake.
- Interventions targeted towards ethnically-diverse groups using personally delivered health promotion (by telephone/face-to-face) increased uptake from 39.1% to 46.7%.

References

1. Interventions to increase bowel screening uptake, ACE Bowel Screening Cluster, August 2017. NHSE/CRUK/Macmillan
2. Wardle et al, 2016. Effects of evidence-based strategies to reduce the socioeconomic gradient of uptake in the English NHS Bowel Cancer Screening Programme (ASCEND): four cluster-randomised controlled trials & Equal access to colorectal cancer screening, The Lancet
3. Hewitson et al, 2011. Primary care endorsement letter and a patient leaflet to improve participation in colorectal cancer screening: results of a factorial randomised trial, British Journal of Cancer, 2011
4. Shankleman et al, 2014. Evaluation of a service intervention to improve awareness and uptake of bowel cancer screening in ethnically-diverse areas, British Journal of Cancer, 2014.

A number of initiatives are being undertaken locally with a view to increase uptake

LOCAL INITIATIVES

Initiatives that are underway in Southwark to increase screening uptake are as follows:

- Bowel Cancer UK (BCUK) and Jo's Trust are undertaking a training pilot programme to healthcare professionals in Southwark to increase screening uptake and cancer outcomes.

Initiatives in local areas that could be considered:

- Lambeth CCG have included bowel cancer screening as part of their PMS contract. This involves £1.00 remuneration for GP practices adopting techniques such as telephone follow-up, reminder letters, and improved coding and data collection to improve uptake.

- BCUK are aiming to target hard-to-reach groups through bowel cancer workshops and volunteer-led awareness events in community venues. Hackney CCG support BCUK's partnership with Community African Network, with 25 awareness events scheduled between now and May 2019 aiming to improve screening in Black African communities.

- Cancer Research UK (CRUK) have projects in Lewisham and Bromley aimed at training non-clinical staff to encourage screening uptake in GP practices.
- CRUK also provide community engagement services in Lewisham through 'talk cancer' sessions. These target hard-to-reach groups that don't typically engage with programmes.

References
1. Primary Care Commissioning Committee (May 2017) Lambeth CCG
2. Stakeholder engagement (BCUK, CRUK, Jo's Trust), September 2018

Local CCGs have accessed transformation funding to develop innovative interventions to increase uptake

LOCAL INITIATIVES

A number of CCGs across London, including many within the NW and SW Cancer Alliance, are utilising transformation funding to boost bowel screening uptake and target hard-to-reach groups:

- RM Partners (the NW and SW London Cancer Alliance) have procured a call-reminder service from a not-for-profit organisation called Community Links.

- Community Links work alongside GP practices and recruits staff that represent the local community in a given area. These recruits are then trained to go into GP practices and provide a reminder service, education and encouragement to eligible non-responders via an out-of-hours telephone service. They are also able to immediately re-order test kits from the Hub for patients that would like to undergo bowel screening following this intervention.

- In areas with high levels of a spoken first language other than English, the project aims to recruit staff that can provide this telephone service in that language.
- By directly targeting non-native English speakers and hard-to-reach ethnic groups, this intervention has the potential to reduce the inequalities seen in bowel screening uptake.
- Outcomes from the initial stages of these projects have been demonstrated to be extremely promising, such as a 6.7% increase in uptake between 2015 and 2017 across Newham.

Improved access to and application of transformation funding in Southwark may enable us to consider provision of similar interventions in the future.

References

1. Community links – bowel cancer screening. url: https:\\www.community-links.org/health/bowel-cancer-screening/
2. https://www.england.nhs.uk/cancer/improve/cancer-alliances-improving-care-locally/nhs-england-support-and-funding-for-cancer-alliances/

The successful roll out of all recommended screening tests may impact both screening uptake and outcomes

NEW INTERVENTIONS

One-off bowel scope screening has been proven to improve outcomes, however also demonstrates similar problems with uptake in hard-to-reach groups:

- 17 years following screening, one-off flexible sigmoidoscopy conferred a 26% reduction in cancer incidence, with a 30% reduction in colorectal cancer mortality.
- The UK pilot study demonstrated uptake of 43.1%, with uptake higher in men than women, uptake lower in the most deprived quintile (33%) compared to the least deprived (53%) and areas with the highest level of ethnic diversity (39%) having lower uptake than remaining areas (41-47%).

FIT has demonstrated in a number of trials to be superior to FOBt, demonstrating higher sensitivity, specificity and uptake. Results from the UK pilot study of FIT (using 20μg/g cut-off) demonstrated the following:

- Overall uptake increased by 7%.
- Increase in uptake was observed across all deprivation quintiles.
- Uptake from previous non-responders almost doubled (from 12.5% to 23.9%).
- Increase in overall uptake was significantly higher in men than women.
- Cancer detection increased twofold; detection of advanced adenomas fivefold.
- A further study also demonstrated FIT to be cost-effective at all positivity thresholds.

References

1. Moss et al, 2015. NHS Bowel Cancer Screening Programmes: Evaluation of pilot of Faecal Immunochemical Test : Final report. Centre for cancer prevention.
2. Moss et al, 2017. Increased uptake and improved outcomes of bowel cancer screening with a faecal immunochemical test: results from a pilot study within the national screening programme in England, BMJ

As these tests are introduced across Southwark, impact on current services will need to be monitored

IMPACT ON CURRENT SERVICES

Bowel scope screening began being introduced in Southwark in February 2018 and is currently being rolled out across the borough for people aged 55. FIT testing is planned to be introduced nationwide towards the end of 2018 between the ages of 50 and 74.

- Increased sensitivity of FIT testing for detecting bowel cancers and malignant adenomas compared to FOBt, in addition to the increased age range for testing, could result in an increase in referrals for further investigations. This would lead to increased pressure on bowel scope services with restricted capacity.
- Uptake of one-off bowel scope screening will also place further pressure on local scoping services.
- The NSC and British Society of Gastroenterologists therefore agreed to introduce FIT screening at a 'positive test' threshold that will not increase pressure on colonoscopy services, with a plan to adjust the threshold in line with colonoscopy service capacity.
- Setting a higher threshold means that the test would reduce the number of false-positives i.e.: there would be fewer patients with a positive test that do not have a bowel cancer or malignant adenoma. However, more patients with actual cancers or malignant adenomas would therefore have a negative test result and would not be offered further investigations.

References
1. Wilschut et al, 2011. Faecal Occult Blood Testing When Colonoscopy Capacity is Limited, Oxford Academic.
2. Murphy et al, 2017. Cost-effectiveness of the faecal immunochemical test at a range of positivity thresholds compared with the guaiac faecal occult blood test in the NHS Bowel Cancer Screening Programme in England, BMJ Open.

CONTENTS

Screening rates in Southwark remain unacceptably low, however there are opportunities to improve uptake

KEY FINDINGS

- While the rates of bowel screening in Southwark have increased since the introduction of the programme, they remain substantially below both the London and national average, and the level required for the programme to be effective in reducing mortality.

- Data obtained locally from primary care has demonstrated that vast socioeconomic variation across Southwark does impact on our uptake and is an important factor to consider when targeting interventions within the borough. Uptake is particularly low in certain groups, such as Black men, people that do not speak English as a first language, and people who are housebound. Action should be taken to address these inequalities.

- Despite increased screening uptake being identified as a priority in Southwark's Health and Wellbeing Strategy 2015-2020, there is an absence of a co-ordinated, borough-specific strategy aimed at improving bowel cancer screening uptake.

- Without significant intervention and progress in this field, Southwark is extremely unlikely to meet NHS England's aim to achieve 75% uptake by 2020.

- Imminent changes to the national programme provide opportunities to implement new and innovative approaches to improve bowel cancer screening uptake in Southwark and reduce the inequalities that exist across the borough.

The following opportunities to improve bowel cancer screening in Southwark have been identified (1 of 2)

Recommendation	Details	Suggested owner
GOVERNANCE		
Improve governance arrangements	Review the existing structures that dictate the governance and organisation surrounding bowel cancer screening in Southwark, in order to clarify ownership and accountability for bowel cancer screening in South East London.	**STP, NHSE**, Public Health, CCG
Develop strategic approach	From the results of this review, develop a co-ordinated strategy to improve bowel cancer screening uptake across Southwark, and in particular to address inequalities in uptake, for example the low uptake in Black men and the housebound.	**STP, NHSE**, Public Health, CCG
EDUCATION & AWARENESS		
Target national campaigns	Work with partners to direct national promotion campaigns such as 'Be Clear on Cancer' towards our most at-risk residents in the borough, and with an aim to reduce inequalities.	**Public Health**, CCG
Utilise technology to raise overall awareness	Develop a communication plan to promote and raise awareness of bowel cancer screening in Southwark, including real-life case studies, particularly focused on hard-to-reach groups with the lowest uptake.	**Public Health**, CCG/Southwark Council Comms
Improve knowledge and confidence of healthcare workers	Develop a suite of education resources targeting healthcare workers in Southwark, to enable them to better promote bowel screening.	**Public Health, CCG,** CRUK
	Identify alternative forums, such as protected learning time events and general practice forums, promoting awareness and discussion of bowel cancer screening and ways to improve uptake.	**Public Health, CCG**, CRUK

The following opportunities to improve bowel cancer screening in Southwark have been identified (1 of 2)

Recommendation	Details	Suggested owner
SERVICE DELIVERY		
Promote early FIT testing provision	Advocating and facilitating the roll out of FIT testing across Southwark at the earliest possible opportunity.	**Public Health**, **CCG**, NHSE
Promote one-off bowel scope provision	Advocating and facilitating the roll out of one-off bowel scope screening consistently across the entire borough.	**Public Health**, **CCG**, NHSE
Promote provision of GP-endorsed letters	Advocating and facilitating the provision of GP-endorsed bowel screening invite letters to Southwark patients.	**Public Health**, **NHSE, London Hub**
Improve data-sharing between GPs and Hub	All Southwark GPs to be made aware of and encouraged to adopt EMIS system alerts available through the London Hub system.	**London Hub, GP Services**, Public Health
Explore pilot opportunities	Explore opportunities for Southwark to become a pilot site for new interventions aimed at improving uptake and reducing the identified inequalities in bowel screening within the borough, e.g. enhanced reminder letters, non-responder call reminder services.	Public Health, **SEL Cancer Alliance**, London Hub
Activate charitable organisations and resources	Engage local community and charitable organisations to ensure that all available resources are utilised, particularly targeting increased uptake in areas with high levels of ethnic diversity and deprivation.	**Public Health**, BCUK, Jo's Trust, CRUK

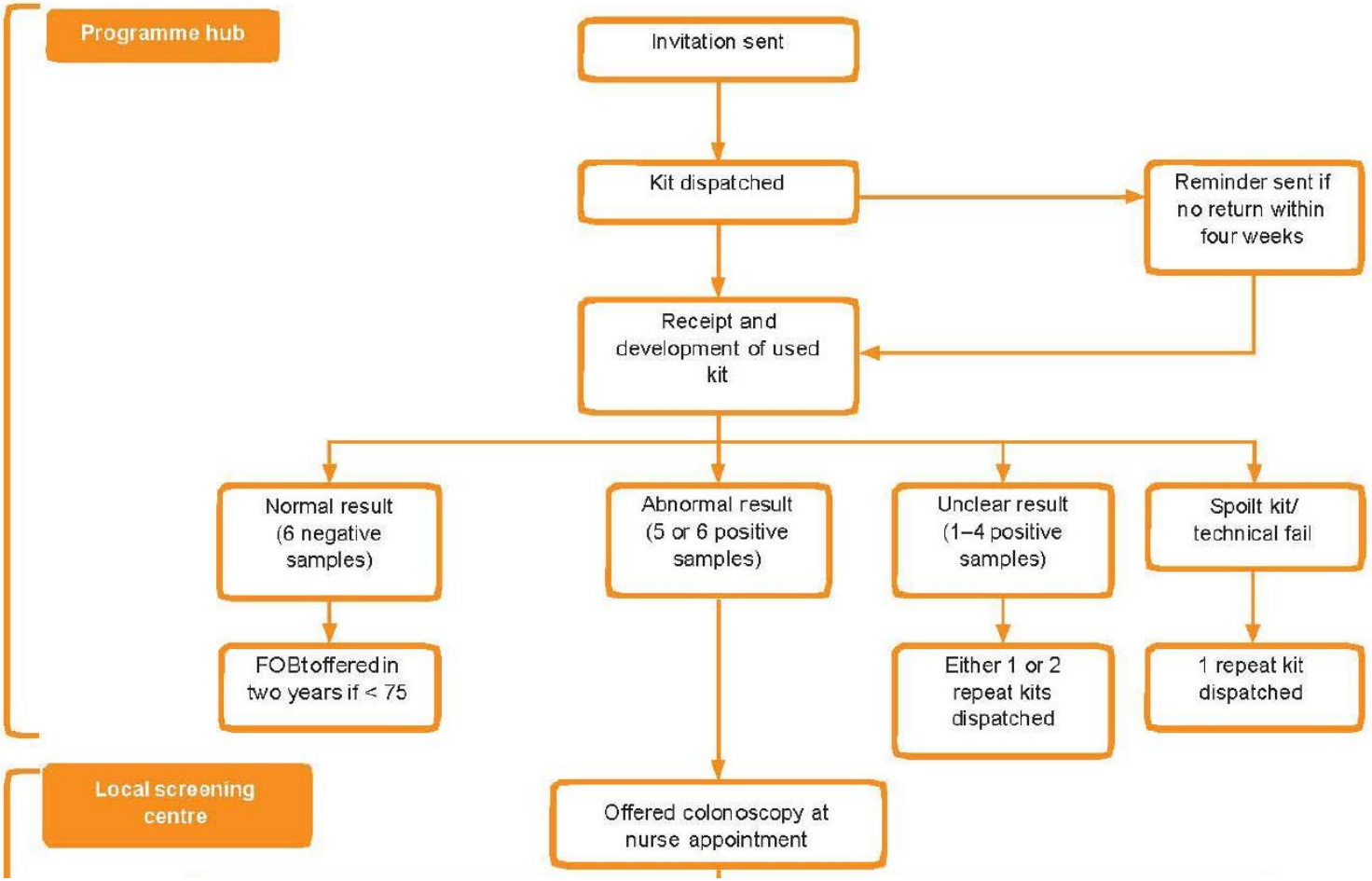
Find out more at
southwark.gov.uk/JSNA

People & Health Intelligence Section

Southwark Public Health

APPENDIX A - The NHS bowel cancer screening programme follows a nationally recognised pathway

NATIONAL SCREENING PATHWAY (1 of 2)

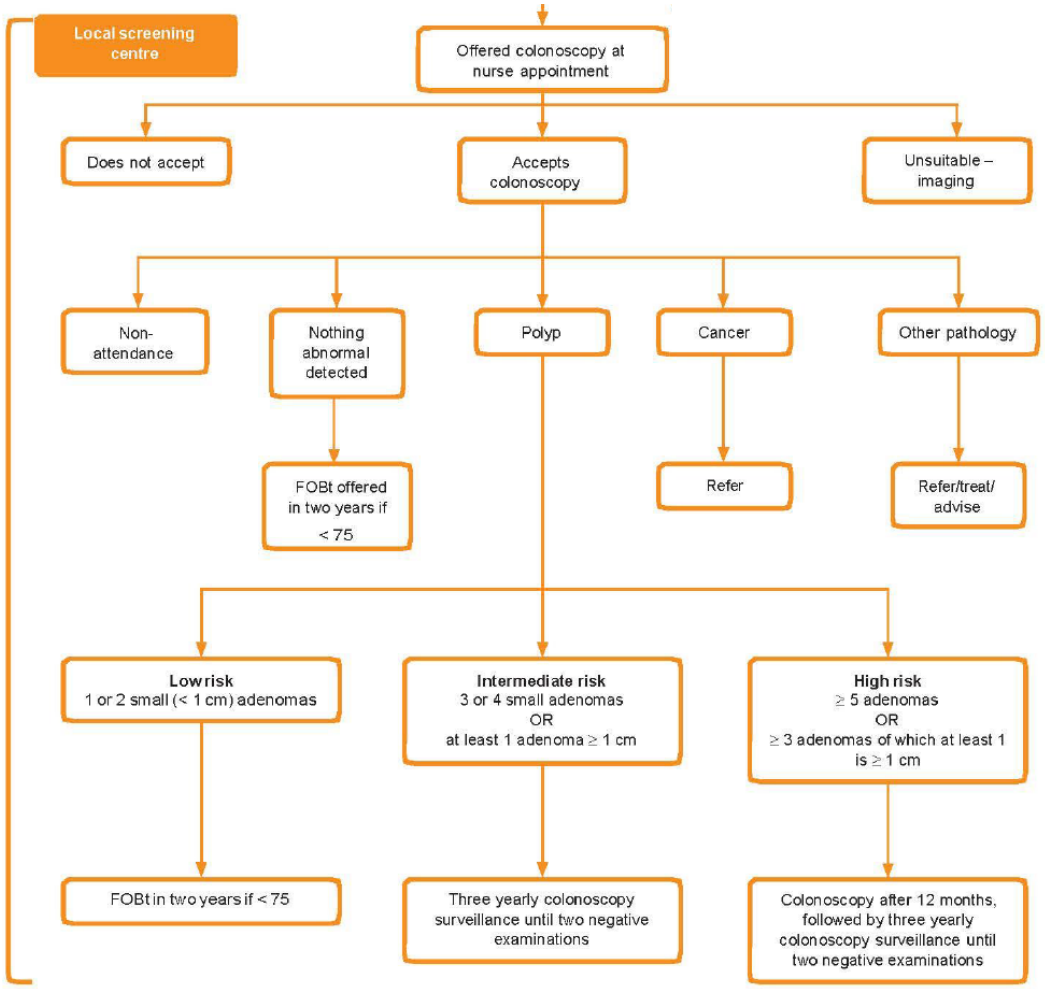


References

1. NHS Public Health function agreement 2017-2018 Service specification no. 26 BCSP

Those who screen positive are invited for colonoscopy at their local screening centre

NATIONAL SCREENING PATHWAY (2 of 2)



References

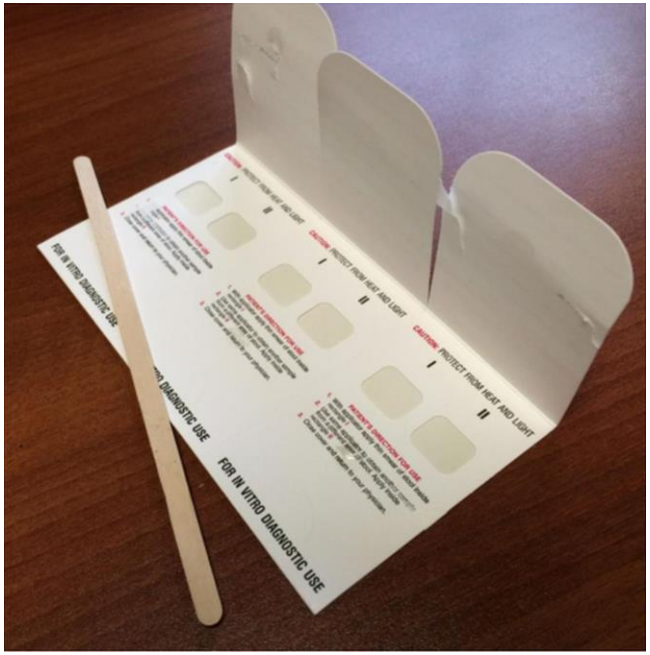
1. NHS Public Health function agreement 2017-2018 Service specification no. 26 BCSP

APPENDIX B - The gFOBt involves taking two samples from three different stools on different days

POLICY CONTEXT

Bowel cancer testing kits

- The current test is the guaiac Faecal Occult Blood Test (gFOBt)
- Samples from three stools are taken on three different days and require two samples from each stool
- The sample sections detect haem, changing colour when hydrogen peroxide is added
- Certain foods and medications can create false positives
- When all three samples are used sensitivity is 92% and specificity 94% for cancer detection
- For the detection of pre-cancerous adenomas the sensitivity is 10%[3]
- The gFOBt kit will be replaced by the Faecal Immunochemical test (FIT) in 2019



References

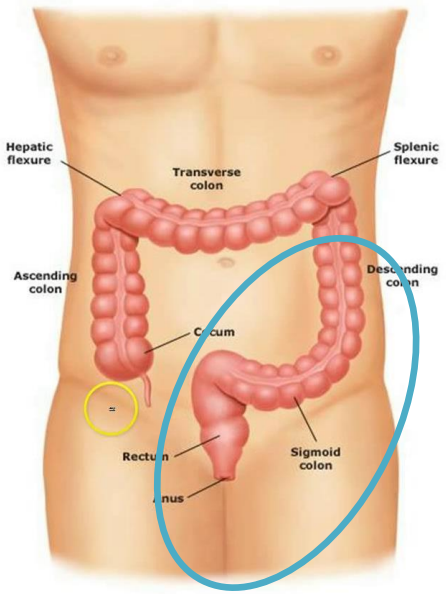
1. Public Health England, July 2016. Health Matters: Improving the diagnosis and prevention of bowel cancer.
2. The National Cancer Registration Service, Eastern Office and Cancer Research UK. http://ecric.org.uk/
3. Faecal calprotectin and faecal occult blood tests in the diagnosis of colorectal carcinoma and adenoma (2001) Tibble et al. Gut

A flexible sigmoidoscopy investigation only looks at the lower part of the large intestine

FLEXIBLE SIGMOIDOSCOPY

A more invasive test, called a colonoscopy, is able to look at all of the large intestine. However, most bowel cancers occur in the lower part of the intestine, so flexible-sigmoidoscopy is still effective at screening for bowel cancer.

Areas accessed by flexible sigmoidoscopy



Flexible sigmoidoscopy screening has been proven to prevent deaths from bowel cancer

- A large trial looked at the effectiveness of flexible sigmoidoscopy as a screening test for bowel cancer. 170,000 people took part in the trial.
- The people who underwent flexible sigmoidoscopy screening had a 23% lower risk of developing bowel cancer.
- The people who underwent flexible sigmoidoscopy screening had a 31% lower risk of dying from colorectal cancer.
- For every 191 people screened, one case of bowel cancer is avoided.
- For every 489 people screened, one death from bowel cancer is avoided.

References:

1. Having a flexible sigmoidoscopy – an examination of your large bowel. Guy's and St Thomas' NHS Foundation Trust
2. Atkin, WS et al (2010) Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer: a multicentre randomised controlled trial. Lancet.

APPENDIX C - Multivariate logistic regression highlighting links between screening uptake and socioeconomic factors

MULTIVARIATE LOGISTIC REGRESSION

A logistic regression was run to understand the factors influencing screening uptake.

Characteristics	All people		Women		Men	
	Odds Ratio	P>|z|	Odds Ratio	P>|z|	Odds Ratio	P>|z|
Deprivation quintile (ref: 1 = least deprived)						
2	0.660	NS	0.664	NS	0.639	NS
3	0.628	<0.05	0.724	NS	0.537	NS
4	0.584	<0.05	0.720	NS	0.462	<0.05
5 = most deprived	0.485	<0.01	0.614	NS	0.375	<0.01
Age group (ref: 60-64)						
65-69	1.321	<0.01	1.218	<0.05	1.437	<0.01
70-74	1.359	<0.01	1.152	NS	1.627	<0.01
Sex (ref: male)	1.075	NS				
Ethnicity (ref: White)						
Black	0.896	NS	1.049	NS	0.756	<0.05
Mixed	1.181	<0.05	1.265	<0.05	1.111	NS
Other	1.097	NS	1.166	NS	1.050	NS
Asian	0.763	NS	0.805	NS	0.721	NS
Housebound	0.355	<0.01	0.347	<0.01	0.376	<0.05
Branch (ref: Princess Street)						
Commercial Way	1.013	NS	0.946	NS	1.088	NS
Decima Street	0.937	NS	0.877	NS	1.008	NS
Dun Cow Surgery	0.821	NS	0.883	NS	0.774	NS
Manor Place Surgery	0.828	NS	0.756	NS	0.921	NS
Aylesbury Medical Centre	0.775	<0.05	0.790	NS	0.774	NS
Surrey Docks Health Centre	0.804	NS	0.758	NS	0.841	NS
cons	1.299	0.259	1.195	NS	1.535	NS