Bowel Screening Initiatives and Improving Uptake

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Interventions to Increase Screening Uptake
Health Improvement Principal
1 WTE

Health Promotion Outreach Officer
0.76/1.0 WTE

Health Promotion Support Worker
0.5 WTE
Types of Interventions

- **GPs & Primary Care Staff Training**
  - Raise awareness of Screening Programme
  - Different elements of programme
  - Symptoms & Benefits of early diagnosis
  - How to instruct patients on using the kit
  - Change to FIT

- **Community Outreach Interventions**
  - Audit of all Community Orgs
  - Mapped according to Borough & Ward Profile - including % of BAME, language, IMD scores
  - Engagement Priority set HIGH MEDIUM LOW
  - Engagement set with regard to reducing inequalities

- **Bowel Scope Reminder CQUIN**
  - 12 Month reminder letter
  - 600 letters sent per month
  - Trial of prompts for DNRs
  - Increase in uptake reported quarterly

- **GP Non-responder Support Service**
  - EMIS search FOBt non-responders
  - Mailout to previous 12 month non-responders
  - Then search conducted monthly
  - Follow up support by phone call or letter
  - Replacement KIT requests
Type of Intervention

- GP Non-responder Support Service: 32.4%
- Bowel Scope DNA/DNR Reminder Project: 29.6%
- Community Event: 14.8%
- GP Training: 13.4%
- Resources: 9.9%

Intervention counts by type

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP Non-responder Support Service</td>
<td>46</td>
</tr>
<tr>
<td>Bowel Scope Reminder Project - CQUIN</td>
<td>42</td>
</tr>
<tr>
<td>Community Events</td>
<td>21</td>
</tr>
<tr>
<td>GP Training</td>
<td>19</td>
</tr>
<tr>
<td>Resources</td>
<td>14</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>142</strong></td>
</tr>
</tbody>
</table>
GP Non Responder Support Service

Pilot with 20 GPs

• Aims to support individual GPs increase screening uptake rate
• As a “way in” to conduct training with primary care staff on BCSP

• 3717 non-responders contacted

• Overall average of 5.3% increase in screening uptake of previous non-responders across the 20 practices

• Highest increase: 20% increase in one GP Practice – written up as best practice case study
### Civic Medical Centre Uptake

<table>
<thead>
<tr>
<th>GP Name</th>
<th>Quarter</th>
<th>Fiscal quarter</th>
<th>Invited</th>
<th>Adequately screened</th>
<th>Definitive abnormalities</th>
<th>Uptake</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Civic Medical Centre</td>
<td>1</td>
<td>2015 - 2016 Q4</td>
<td>40</td>
<td>12</td>
<td>0</td>
<td>30.00%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2016 - 2017 Q1</td>
<td>49</td>
<td>15</td>
<td>1</td>
<td>30.61%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2016 - 2017 Q2</td>
<td>57</td>
<td>28</td>
<td>1</td>
<td>49.12%</td>
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<tr>
<td></td>
<td>4</td>
<td>2016 - 2017 Q3</td>
<td>50</td>
<td>15</td>
<td>1</td>
<td>30.00%</td>
</tr>
</tbody>
</table>

**The Civic Medical Centre Total** 196 70 3 35.71%

### Table 12 Civic MC uptake 2016/17

<table>
<thead>
<tr>
<th>GP Name</th>
<th>Quarter</th>
<th>Fiscal quarter</th>
<th>Invited</th>
<th>Adequately screened</th>
<th>Definitive abnormalities</th>
<th>Uptake</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Civic Medical Centre</td>
<td>1</td>
<td>2016 - 2017 Q4</td>
<td>56</td>
<td>27</td>
<td>1</td>
<td>48.21%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2017 - 2018 Q1</td>
<td>45</td>
<td>23</td>
<td>0</td>
<td>51.11%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>2017 - 2018 Q2</td>
<td>48</td>
<td>29</td>
<td>0</td>
<td>60.42%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>2017 - 2018 Q3</td>
<td>34</td>
<td>13</td>
<td>0</td>
<td>38.24%</td>
</tr>
</tbody>
</table>

**The Civic Medical Centre Total** 183 92 1 50.27%

### Table 13 Civic MC uptake 2017/18
CQUIN – Bowel Scope DNA/DNR Reminder Project

• Result of UCL RCT
• Commissioned for 2\textsuperscript{nd} year
• 2017/18 – 5,078 reminder letters sent

• 8.7\% increase in uptake – 441 additional bowel scopes
• No significant difference:
  - between men and women
  - or quintiles of area-level deprivation

- 43\% no abnormalities detected
- 14.5\% had polyps with no other pathology
- 7.7\% had polyps with other pathology
- 34\% had pathology without polyps
Of those with polyps (n=98)

- 45 were classified as low risk
- 6 intermediate risk
- 9 high risk
- 1 cancer
- Overall adenoma detection rate 13.8 % (n=61)
- 23 individuals referred to colonoscopy
- 14 referred to surveillance
Community Interventions

Aims to create an evidence base & reduce inequalities by:

- Cross reference BCSS screening data with borough & ward profiles, community groups went through the following process:
  
  - **Mapped** according to the ward it belonged to within the borough – IMD score
  
  - **Included statistics** “Percentage of those for whom English isn’t a first language”, “BAME percentage”, “Social Housing percentage” were then added next to each record;
  
  - And finally we **gave a priority** which was High, Medium or Low depending upon the above factors and also according the background understanding / research of the group and its area.
This process has allowed interventions to be targeted and has led to a wide diversity of organisations where interventions have taken place across all localities.
### Community event counts by CCG

<table>
<thead>
<tr>
<th>CCG</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brent</td>
<td>8</td>
</tr>
<tr>
<td>Harrow</td>
<td>4</td>
</tr>
<tr>
<td>Hillingdon</td>
<td>3</td>
</tr>
<tr>
<td>N. Ealing</td>
<td>5</td>
</tr>
<tr>
<td>Pan district</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Community events</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>
21 interventions across the locality in 2017/18

• Asset based community development approach
• Create a pool of Health Champions to conduct interventions in their own communities
• Diverse range – includes:
  - PLIAS – Prisoner Advice and Liaison Service
  - Rotary Clubs
  - Afro-Caribbean, Somali, Irish, Guajarati & Asian Women’s Associations
  - PWLD
  - Sensory impaired
Primary Care Engagement

• Quarterly mail outs to GPs with respective screening rates
• Direct support with NRSS
• Training to all primary care staff on BCSP

- Providing up to date information – The facts about bowel cancer
- Different elements of the screening programme
- Benefits of early detection
- Ensuring staff feel confident on how to use the bowel cancer testing kit and are able to explain it to patients in a simple and concise manner
- The change to FIT
- How to access free resources such as leaflets and posters
177 Primary Care staff trained on the BCSP in 2017/18
Social Media – increased presence 2017/18

Over 1000 new users on the bowel screening website
www.stmarksbowelscreen.co.uk

New patient story in Guajarati – the ex mayor of Brent tells how his cancer was discovered through screening and encourages the south Asian communities to get screened

Twitter - @stmarksbcsc

Over 390 posts in 2017/18
Reached users 26,500 times in Bowel Cancer Awareness Month
Royal Pharmaceutical Society - increasing our work with pharmacies

- Lecture Evening – RPS London North West Learning Forum

- The Cancer Patient Pathway & the Role of Screening
  - 110 Pharmacists attended
  - 9 signed up for in-house staff training
  - Article for the RPS Pharmaceutical Research & Educational Journal
Active Research – collaboration with UCL Behavioural Sciences Department

• Interim review paper
  “Uptake and clinical outcomes of self-referred bowel-scope (flexible sigmoidoscopy) screening appointments at St Mark’s Hospital”
  ❑ Poster Presentations
  ❑ BSG Conference
  ❑ PHE Cancer Data Outcomes Conference – awarded 1st Best Scientific Poster

• 12 Month Review
  ❑ 2 abstracts submitted EUG Conference Vienna
  ❑ Our work with GPs will also be presented
Summary

- 3 Year Health Improvement Strategy 2018 -21
- Evidence base for interventions to reduce inequalities in access to screening
- Intervention monitoring by location & type

- Primary Care Engagement Plan
  - Active data base of GPs, mail outs,
  - Primary Care training
  - GP Non-responder Support Service

- Asset based community development – Health Champions
  - Increasing work with pharmacies through RPS
  - 35 events during Bowel Cancer Awareness Month

- CQUIN year 2
  - 600 reminder letters each month – target of 7% uptake

- Continued collaboration in active research
  - New GP Endorsement for BS Study – UCL
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All experiments were on Flexible Sigmoidoscopy (FS)

- All participants were aged 35-54

- Consisted of hypothetical online experiments

- Included filter questions to exclude intenders before exposure to experimental manipulation

- Included control questions to ensure understanding of manipulation
Social norm experiment

4 conditions:

- **Echo and confirm** ('you guessed uptake is x out of 10; uptake is x out of 10')

- **Echo with proportional augmentation** ('you guessed x out of 10; uptake is x+3 out of 10')

- **Echo with standard augmentation** (you guessed x out of 10; uptake is 8 out of 10)

- **Standard augmentation alone** ('uptake is 8 out of 10').
Social norm experiment

Share of individuals stating that they would probably or definitely participate

Percentage intending

Echo | Augmented | No feedback 8/10 | Feedback 8/10

N=1.432
Choice experiments
Experiment 1: Offering women the choice of the practitioner’
  - No choice vs choice between 2 alternatives
  - Heterogeneous alternatives (female vs male)

Experiment 2: Offering different timed appointments
  - No choice vs choice between 2, 4 or 6 alternatives
  - Homogeneous alternatives (similar appointment times)

Experiment 3: Offering different hospitals
  - No choice vs choice between 2 hospitals
  - Heterogeneous alternatives (one hospital is clearly worse)
Practitioner’s sex experiment

4 conditions

- *Usual care* (no choice, unknown practitioner sex)
- *Opposite sex* (no choice, practitioner would be male)
- *Same sex* (no choice, practitioner would be female)
- *Active choice* (practitioner’ sex can be chosen)
Practitioner’s sex experiment

Share of women saying that they would probably or definitely participate

- Usual care
- Opposite sex
- Active choice
- Same sex

(N=1,010)
4 conditions

- Offer 1 timed appointment (no choice)
- Offer 2 timed appointments to choose from
- Offer 4 timed appointments to choose from
- Offer 6 timed appointments to choose from
Share of individuals stating that they would probably or definitely participate

N=1,908
2 conditions

- Control (standard target hospital is offered)
- Decoy (standard target and inferior* decoy hospitals are offered to choose from)

* Note: inferior only refers to travel or waiting time but not quality of service or other attributes.
Presentation of alternatives

**Control condition**

- Screening at Hospital X
  - Can detect abnormal growths
  - 30min travel
  - No screening
    - Cannot detect abnormal growths
    - No travel time

**Decoy condition**

- No screening
  - No travel time
  - Can detect abnormal growths
  - 30min travel
    - Can detect abnormal growths
    - 60min travel
  - Screening at Hospital X
    - Cannot detect abnormal growths
Hospital choice experiment (decoy)
Presentation of alternatives in 2\textsuperscript{nd} experiment

Control condition

- No screening
  - No travel time
  - No waiting time
  - Cannot detect abnormal growths

- Screening at Hospital X
  - 30min travel
  - 45min waiting
  - Can detect abnormal growths
Presentation of alternatives in 2\textsuperscript{nd} experiment

**Weak decoy condition**

- No screening
  - No travel time
    - 30min travel
    - Can detect abnormal growths
      - 45min waiting
  - Cannot detect abnormal growths
    - Can detect abnormal growths
      - 45min waiting
  - No waiting time
    - 45min waiting

**Strong decoy condition**

- No screening
  - Cannot detect abnormal growths
    - No waiting time
  - Can detect abnormal growths
    - 45min waiting
    - 30min travel
  - No travel time
    - 60min travel
Hospital choice experiment 2 (ongoing)

 Individuals choosing target hospital

<table>
<thead>
<tr>
<th></th>
<th>Percentage choosing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td></td>
</tr>
<tr>
<td>Weak decoy</td>
<td></td>
</tr>
<tr>
<td>Strong decoy</td>
<td></td>
</tr>
</tbody>
</table>

N=441
Interventions to help increase uptake of bowel cancer screening

Precaution Adoption Process Model (Weinstein, 1988)
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

Lancet 2016; 387: 751-59

The screening programme aims to find bowel cancer early

“It is just like having breast screening because it can pick up whatever is wrong before it develops into something bigger. If the doctors find something early it can be dealt with, and if they don’t find anything then you’re happy.”
(Hyacinth)

Most people (98 out of 100) will get a ‘normal’ result from the test kit

“When I got my reply to say everything was clear I was delighted. It was such a relief.”
(Cynthia)

A small number of people (2 out of 100) get an ‘abnormal’ result and are offered a follow-up investigation

“I went and spoke to a very nice lady who explained that even though people get a call back they don’t often get a cancer result. I felt a lot calmer after the appointment. I had the follow-up investigation the following Monday. They found two growths, which were removed. The results were fine and everything was ok.”
(Monica)

Bowel cancer often has no early warning signs

“I was very lucky to have had the cancer picked up through screening. I had no symptoms at all so I would not have known anything was wrong. By the time I had got any symptoms, it would probably have been a lot more serious.”
(Maureen)

Bowel cancer found through the screening programme is likely to be at an early stage and can be successfully treated

“The decision I made to complete the test kit was probably the best decision I have ever made in my life. Had I not taken that course of action, there is no doubt in my mind I would not be alive today.”
(Harold)
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

Lancet 2016; 387: 751-59


Your GP practice, Timbuktu General Practice, supports the Bowel Cancer Screening Programme

A REMINDER TO YOU

Doing the test kit is important because the risk of bowel cancer increases as you get older. If bowel cancer is found early, treatment is more successful. It’s never too late to do the test. Call Freephone 0800 707 60 60 if you need to speak to a helpline assistant.
Can patient navigation help?

Patient Navigation’s Origin and Evolution

The concept of patient navigation was founded and pioneered by Harold P. Freeman in 1990 for the purpose of eliminating barriers to timely cancer screening, diagnosis, treatment, and supportive care. It has since evolved to include the timely movement of an individual across the entire health care continuum from prevention, detection, diagnosis, treatment, and supportive, to end-of-life care.

To check available dates and to apply, click here or call 1-846-380-4060 to learn more.
Pre-invitation letter

(Invitation letter
(with an appointment note and an information leaflet))

2 weeks

Invitation letter

(2 weeks to respond)

Confirmed appointment

No

Enema preparation letter and leaflet

2 weeks

Do not attend their appointment: Cancellation letter sent

2 weeks

Attend appointment

Appointment cancelled: Cancellation letter sent

2 weeks to respond

No confirmation

Patient navigation is not a feasible intervention within the structure of the English NHS Bowel Cancer Screening Programme.
Using primary care to increase uptake of bowel scope screening in Yorkshire (Hull): evaluation paper and telephone based interventions
## BSS leaflet: An early draft

### What you need to do now

**Don’t miss out!**

- If you are aged 55 and have a bowel scope screening test
- Or if you are 60, you will normally only get one invitation.

If you have had a bowel scope screening test, you have been invited at 55/60 and are aged between 55 to 60, call 800 000 000 to book an appointment.

About 400 people take up this bowel scope screening test at Castle Hill Hospital every month.

### Are you aged 55 to 59?

**Then you need to know two things about bowel cancer:**

1. **It’s the second biggest cancer killer in the UK.** After the age of 50, your risk of developing bowel cancer begins to rapidly increase.

2. **One easy NS-15 test is the best way to help prevent bowel cancer.**

**One thing you shouldn’t ignore:**

I would urge anyone aged 55 to 59 to take this test, potentially life-saving, one-of-a-kind that significantly reduces your risk of getting bowel cancer. Make sure you call 800 000 000 for half and the other half.

You would like to find out more about the bowel screening?

800 000 000

cancerscreening.nhs.uk/bowel

### At 55+ you need to know about bowel cancer

- **Bowel cancer is the second biggest cancer killer in the UK.** It’s the third most common cancer.

- From the age of 55, your risk of getting bowel cancer begins to increase rapidly.

Bowel cancer is any cancer that begins in the large bowel – part of your digestive system.

### Good News

The good news is that there is a test which helps prevent bowel cancer: it’s called the bowel scope screening test.

**Preventing bowel cancer**

- The single test substantially cuts your chances of getting bowel cancer in the future.

- Unlike other cancer screening programmes, you only need to take part in a bowel scope screening test once.

- In the unlikely event that you have bowel cancer, a bowel scope screening test can pick it up early when the cancer is more treatable.

### One easy test could save your life

**Bowel scope screening takes place at Castle Hill Hospital, Cottingham.**

Cottingham is the only hospital in the Holochrome to specialise in bowel and gut problems.

**On the day of your appointment, a specially trained nurse or doctor will look inside your lower bowel (but your bottom) using a thin flexible tube called a colonoscope. The test is done in a private room and nearly everyone says it’s not embarrassing.**

- The procedure around 30 minutes.
- Most people say they felt no pain, or only mild pain.

Before and after the test, you’ll have plenty of time to talk to doctors and nurses and have a cup of tea.

**I must admit I was nervous, but the specially trained nurse explained everything very clearly. It wasn’t painful at all. I was fitted with a polyp and then felt all-clear, which was a huge relief!**

My friend died from bowel cancer 5 years ago, so I was determined this wouldn’t happen to me. (Audrey, 60)

### Polyps and bowel cancer

Bowel cancer develops from polyps, which are small growths in your bowel. Most polyps are harmless, but some can turn into cancer if left untreated.

By removing any polyps in your bowel during the test, bowel scope screening is an extremely effective way of reducing the chance that you will get bowel cancer in the future.

**Benefits of the bowel scope screening test**

- **You only need to take part in bowel scope screening once.**
- You’ll also have peace of mind knowing that you’ve dramatically reduced your risk of developing bowel cancer in the future.

**The staff at the hospital were great. The doctor found a polyp, which he removed. I didn’t have anything to eat. The doctor explained that polyps often don’t have any symptoms, so people don’t always know they have them. I’m glad they found the polyp before it had a chance to become something more serious.**
One quick test could save your life

Bowel scope screening dramatically cuts your chances of getting bowel cancer by removing polyps [polyps], which are small growths in your bowel. Most polyps are harmless, but some can turn into cancer.

**Polyps**

- Without screening polyps go undetected and may grow
- With screening, if polyps are found they can be removed during the test

**Polyp has grown and developed into bowel cancer**

- Polyps have been removed, so risk of developing bowel cancer dramatically reduced

The test looks at the lower part of your bowel only, as this is the area where most polyps are found.

Your chance to reduce your risk of bowel cancer

At 55 you need to start the bowel cancer screening programme.

- Bowel cancer is the fourth most common cancer in the UK.
- Most people who get bowel cancer are over 50.
- Your risk of bowel cancer increases as you become healthier.
<table>
<thead>
<tr>
<th>Interventions</th>
<th>Control Group</th>
<th>Intervention Group 1</th>
<th>Intervention Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primer letter and local leaflet</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Standard NHS programme invitation and reminder</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Self-referral reminder letter</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Patient navigation call</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Uptake**

- Control Group: 35%
- Intervention Group 1: 46%
- Intervention Group 2: 54%

**Hypothesis**
Thank you for listening

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