



## **CERVICAL AND BOWEL CANCER SCREENING UPTAKE IN PETERBOROUGH**

**Authors:** Olabisi Williams, Screening and Immunisation Co-ordinator and Colin Uju, Screening and immunisation manager

**Analytical Support:** Paul Bingham, NHS England Analyst, Analytical Services (Midlands & East) and Jane Robinson, Public Health England, Interim Public Health Analyst

**Report:** of Peterborough Cancer Screening Task and Finish Subgroup

**Date:** May 2015

---

### **1. Introduction**

Following recent concerns about low uptakes for cervical and bowel cancer screening and some vaccines programmes in Peterborough, Peterborough Local Authority, Public Health England and NHS England set up a Screening and Immunisation Task and Finish Steering Group; out of which, the Screening Task and Finish subgroup was subsequently constituted. This report presents the findings of the Screening subgroup from the data analysed, the survey undertaken and the evidence gathered locally and nationally; all of which have informed the recommendations outlined in this report.

### **2. Background**

The NHS Bowel Cancer Screening and the Cervical Screening Programmes are two of the 15 national screening programmes in the UK. The Bowel screening programme is aimed at detecting bowel cancer at an early stage (in men and women aged 60-69years with no symptoms), when treatment is more likely to be effective. This age range is currently being extended to 74. Bowel screening, which has been shown to reduce the risk of dying from bowel cancer by 16%, is offered every two years to all eligible men and women. The NHS Cervical Screening Programme, on the other hand, targets women aged 25 to 64; inviting them for regular cervical screening as part of the screening programme. The screening is

intended to detect abnormalities within the cervix that could, if undetected and untreated, develop into cervical cancer. Women aged 25-49 are invited for routine screening every 3 years, whereas those aged 50-64 are invited for routine screening every 5 years.

Following a review of uptake rates for bowel and cervical screening, which have seen a year-on-year decline across Peterborough, a dedicated Task and Finish Cancer Subgroup was constituted. The Subgroup was set up to;

- investigate the reasons underpinning the falling uptake in bowel and cervical screening;
- gain some useful insight into any barriers to uptake;
- as well as explore possible solutions to addressing these issues.

The Group membership consisted, and drew on the expertise, of key partner organisations including; Public Health England, Primary Care, Local Authority, Cambridgeshire and Peterborough Foundation Trust (CPFT), Cambridgeshire and Peterborough CCG, Peterborough and Stamford Hospital Foundation Trust as well as Voluntary Sector Organisations including Jo's Trust, Bowel Cancer UK) .

### **3. Methodology**

The Group utilised a number of data collection methods including;

- Commissioning a quantitative data analysis of the uptake<sup>1</sup> and coverage<sup>2</sup> data across Peterborough.
- Undertaking a qualitative literature review of national evidence and published research on interventions on improving uptake.
- Undertaking a qualitative data collection in the form of a survey of primary care practices
- Drawing on expert views from members of the Task and Finish group

---

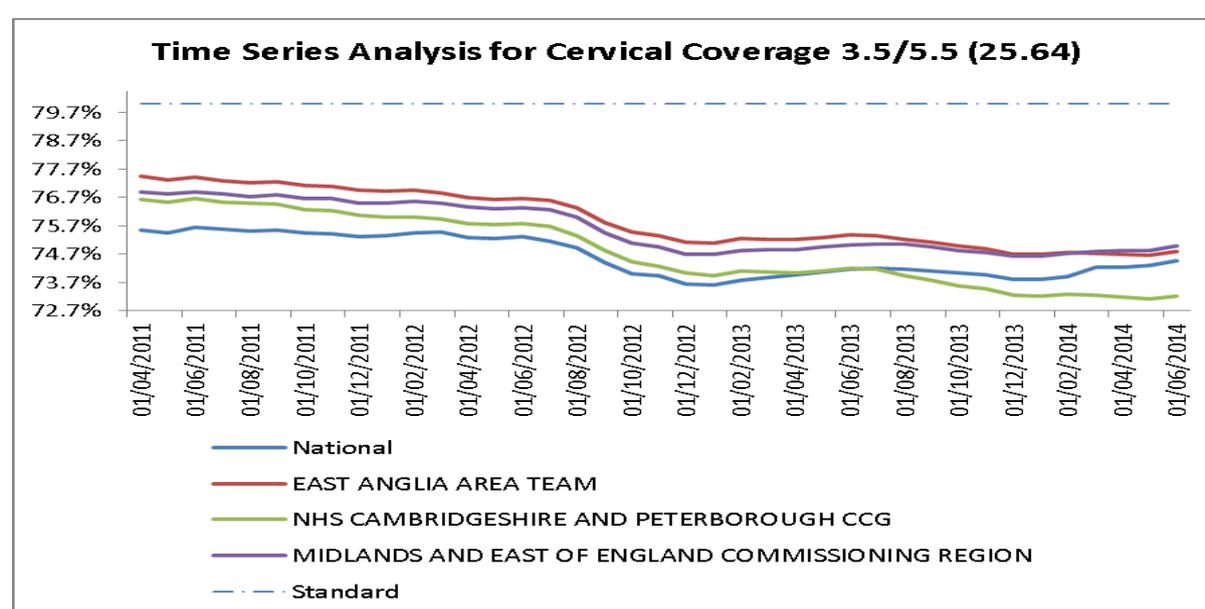
<sup>1</sup> Uptake is an indicator used to measure the proportion of those invited for bowel screening who are adequately screened

<sup>2</sup> Coverage represents the percentage of eligible women within the appropriated age cohorts (25-49 years and 50-64years respectively) adequately screened within the previous 3 ½ or 5 years depending on age.

## 4. Keys Findings and Outcomes

### 4.1. Cervical Screening uptake

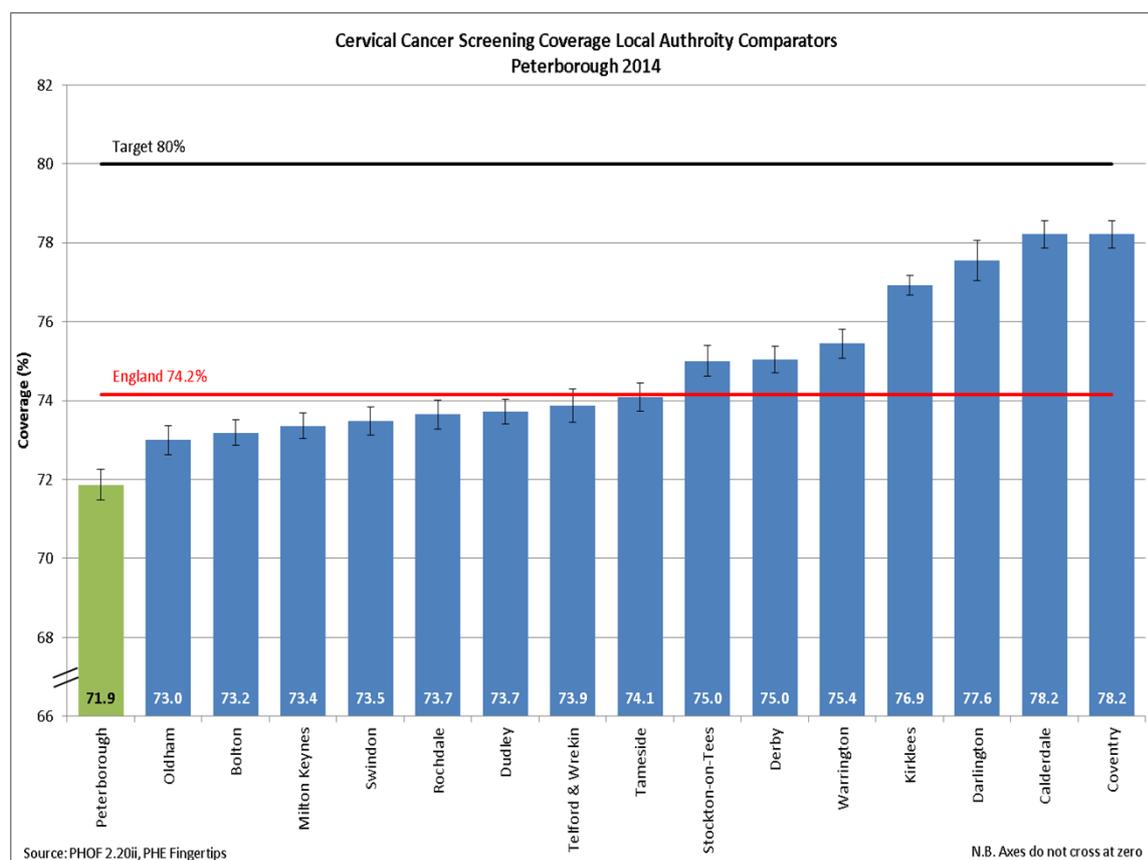
The analysis of the trend data<sup>3</sup> presented in Figure 1 below shows a steady decline in the, local, regional, national as well as the CCG-wide cervical screening coverage across the eligible age range; with the CCG-wide performance being comparatively lower.



**Figure 1: Cambridgeshire and Peterborough CCG Cervical Screening Coverage Trend 25 – 64 years**

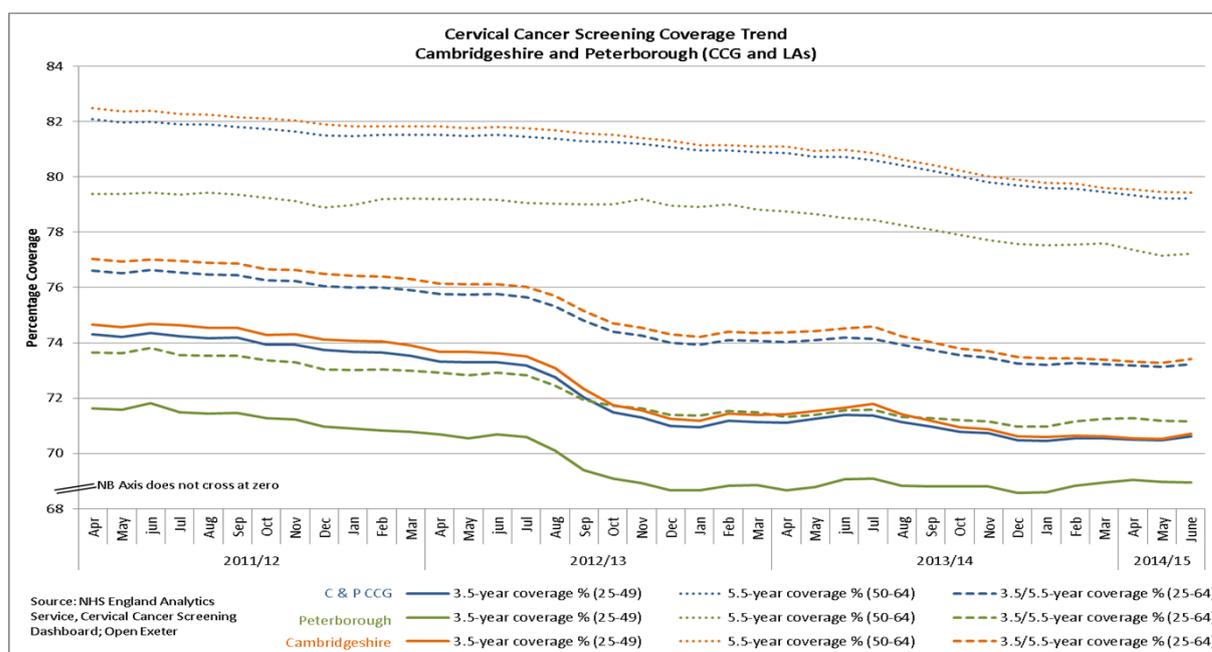
When compared with other local authorities that are most similar in demographic profiling (using CIPFA Nearest Neighbour comparators) (Fig. 2 overleaf), Peterborough has the lowest coverage and is statistically significantly lower than those local authorities in its comparator group. Peterborough is also statistically significantly lower than the England average as well as the national target of 80%.

<sup>3</sup> Data were only available to quarter 1 2014/15 at the time of the analysis, with trend data being from April 2011



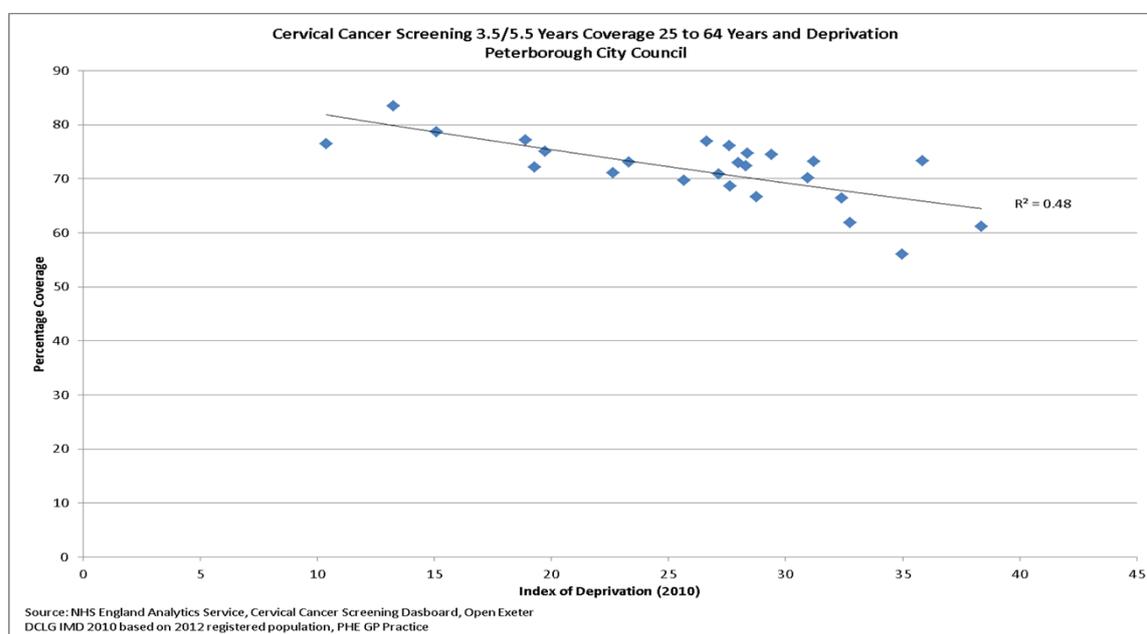
**Figure 2: Peterborough Cervical Coverage Compared with Similar Local Authorities**

Clearly, the decline in uptake for cervical screening is a national and far-reaching issue which is not unique to just the Peterborough population. That said, it is worth noting that the trends depicted in Fig. 1 masks the considerable variation in performance across the Cambridgeshire and Peterborough CCG practices and at the Local Authority levels as well as between the different eligible age cohorts. Coverage in the younger age cohort (25 – 49) is generally lower than in the 50 – 64 age group, with Peterborough trend being considerably lower compared with other trended data. (Fig. 3)



**Figure 3: Cervical Screening Coverage Trend**

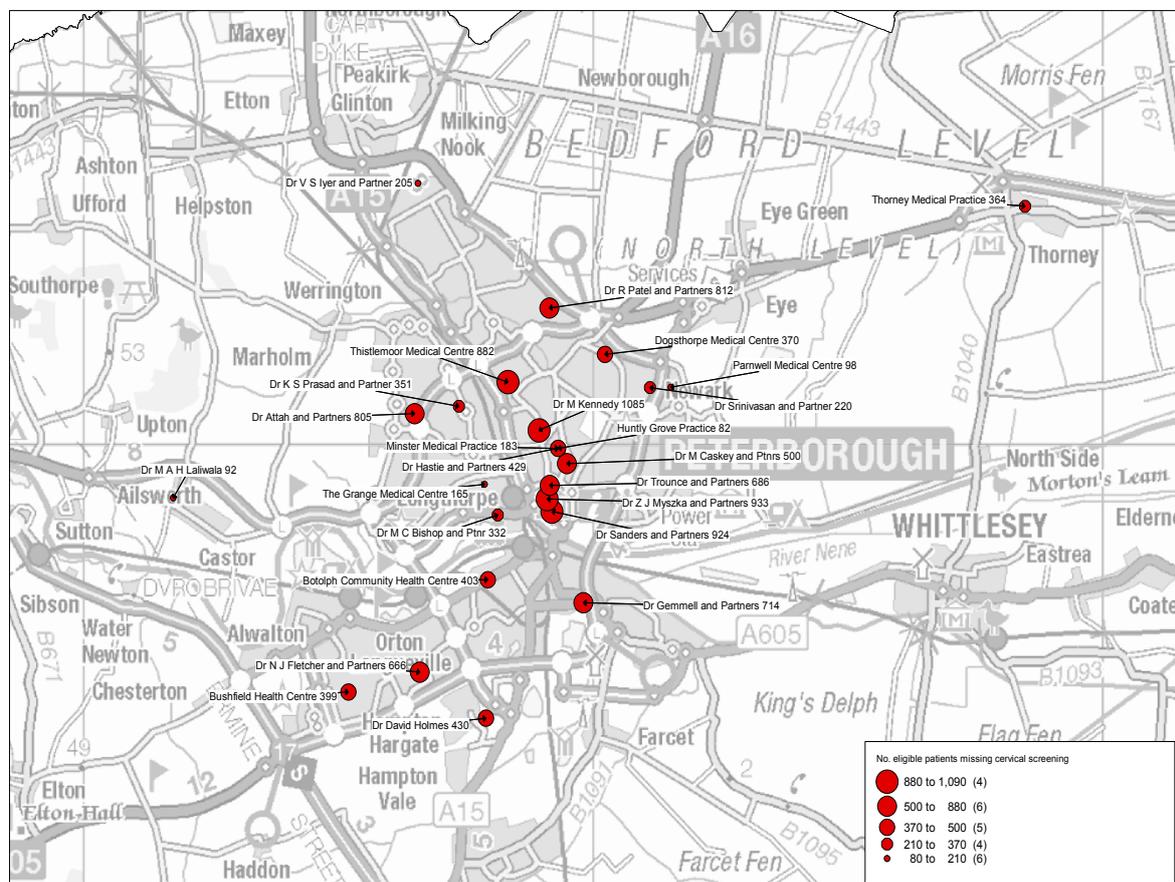
The cervical screening coverage data was correlated against deprivation data (Index of Multiple Deprivation 2010). This analysis shows a fairly strong correlation to deprivation for Peterborough ( $R^2$  0.48)<sup>4</sup> and lends considerable support the theory that the practices with the more deprived populations have the lowest uptake. (Fig.4).



**Figure 4: Cervical Screening Coverage data correlated to Index of Multiple Deprivation 2010 (Peterborough) 25 to 64 years**

<sup>4</sup>  $R^2$  value of 1.00 shows 100% correlation

A mapping of the coverage data indicates that the area from the North West of Peterborough City covering areas around the A15 and Lincoln road has the poorest uptakes and this is the same area with the highest deprivation scores in Peterborough.



**Figure 5: Cervical Screening Coverage mapped on the Peterborough City map**

A practice level review of coverage data for all the practices in the Peterborough LA area shows that;

- 24 of the 25 practices in the Peterborough LA area achieved coverage rates less than the 80% national target in the period reviewed to Q1 (2014/15)<sup>5</sup>.
- 15 practices are below the CCG average
- 10 practices are below the LA average

To contextualise this issue, as well as quantify the variation in performance and understand how many more screening needs to be done to bring performance up to the nationally set target of 80%, an analysis was undertaken and revealed;

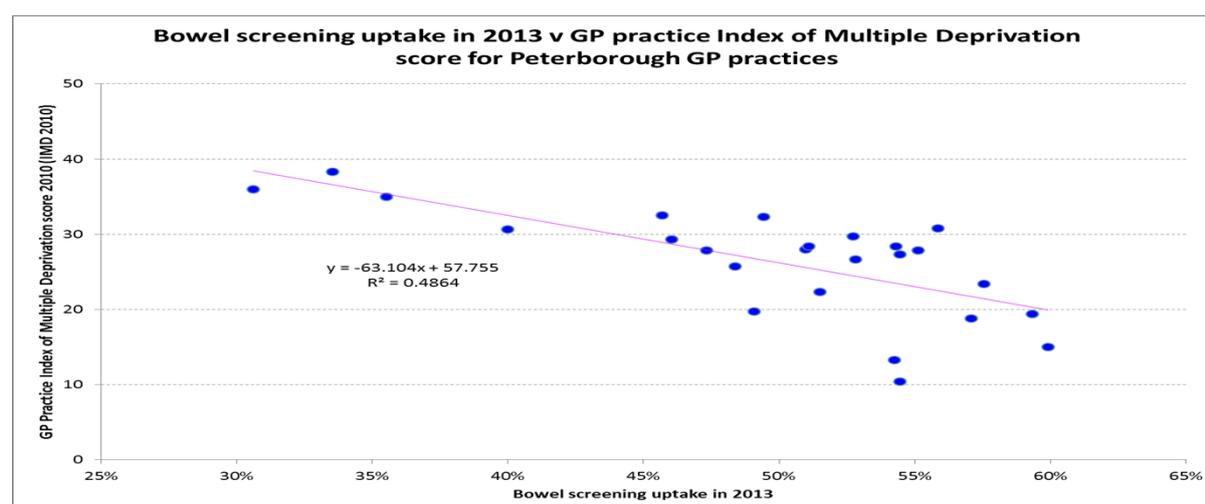
<sup>5</sup> Data were only available to quarter 1 2014/15 at the time of the analysis, with trend data being from April 2011

- Peterborough needs just over 4,300 more cervical screens to reach the national target
- For practices within Peterborough City Council that fall below the CCG average (73.2%) they need to do a further 1,000 screens

## Bowel Cancer Screening

The average uptake for the Peterborough and Hinchingsbrooke Bowel Screening Centre for the period January to December 2014 was 57.1% against the target uptake of 52%<sup>6</sup>. Whilst this cumulative performance indicates that the centre, on whole, is meeting the target. Again, overall performance appears to mask the considerable variation in performance across the 25 practices in Peterborough; with 56% (n=14) of practices performing markedly below the 52% standard and uptake rates ranging from between 30% to 66%. Additionally, uptake has also been shown to display some seasonal variation; with performance dipping in some summer months. It also has to be noted that uptake in Peterborough is comparatively lower than neighbouring areas.

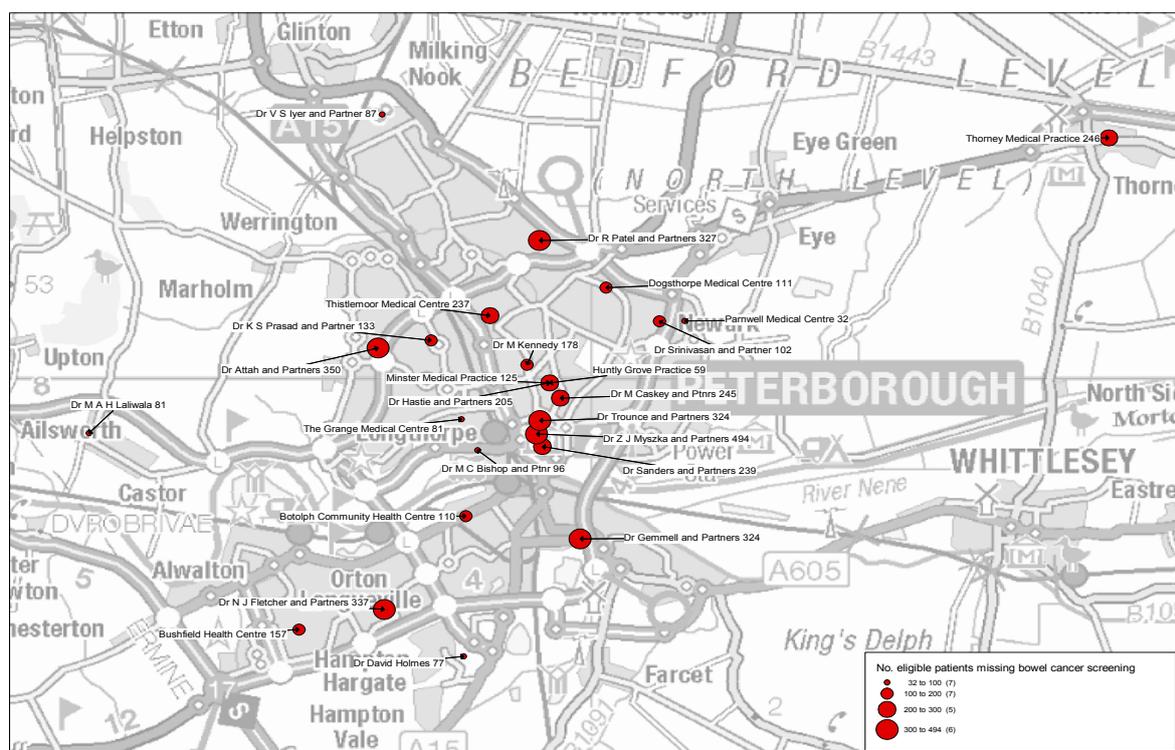
Correlation between bowel cancer screening uptake and deprivation shows a fairly strong correlation ( $R^2 = 0.49$ ); suggesting that the practices with the more deprived populations also have the lowest bowel uptake for Peterborough.



**Figure 6: Bowel Cancer Screening Coverage data correlated to Index of Multiple Deprivation 2010 (Peterborough)**

<sup>6</sup> Uptake target was recently reduced from 60% to 52%

A mapping of the uptake data indicates that the area from the North West of Peterborough City covering areas around the A15 and Lincoln road has the poorest uptakes and this is the same area with the highest deprivation scores in Peterborough. This unfortunately replicates the cervical screening coverage distribution in the unitary authority.



**Figure 7: Bowel Cancer Screening Coverage mapped on the Peterborough City map**

### Survey Outcome

A survey of the practices was undertaken to investigate the issues and get a primary care perspective on the reasons for the low uptake in cervical and bowel screening. The survey had two primary aims which were to;

- a) Explore and better understand issues relating to access, demography, deprivation, ethnicity, cultural beliefs and any other barriers to taking up screening and,

- b) Understand current capacity and engagement levels within primary care to support any proposed initiatives to improve uptake.

All 25 practices were surveyed including those who achieving the national target to try and understand why they are better performing. Of these, there was a 32% response rate (n=8).

The summary of findings from the survey on reasons for low uptake includes;

- Culturally influenced health beliefs- for example Asian women are reportedly more reluctant to have a smear done before their first pregnancy.
- High migrant population so language is considered to be a barrier
- Lack of cultural acceptance of testing procedure for the bowel test.
- Lack of awareness of screening programmes and the benefits
- Transient nature of some Eastern European groups means that patient held information is not always up to date.
- The undignified procedure of cervical smear sample taking

### **National Evidence Review**

An evidence review into reasons for variation in uptake was conducted by the UK National Screening Committee and identified a number of factors as well as groups of people more likely to have low bowel screening uptake. They include;

- Men;
- The younger cohort;
- Those living in a deprived area;
- Black and minority ethnic (BME) groups;
- Those living in an urban area;
- People with a lower socioeconomic status.

The barriers to uptake identified through literature research include;

- Practical issues such as ease of completing the test kit<sup>7</sup> which were found to be an important determinant of uptake among the Asian community;

---

<sup>7</sup> There are plans to replace the current FOB test kit with a more user friendly test kit and it is hoped that this

- Other potential reasons for lower uptake in Asian communities relate to lower levels of knowledge and awareness of bowel cancer and screening;
- Fear of confirmed cancer diagnosis has also been blamed;
- Language difficulties;
- Failure to meet religious sensitivities;

### **National evidence on possible interventions:**

A couple of reviews at a national level <sup>8</sup> examined the evidence of the effectiveness of interventions aimed at reducing inequalities in screening uptake rates. The evidence, although found to be somewhat limited and often contradictory reveals:

- Interventions which actively engage the target audience (e.g. in-person education, telephone calls to patient) were more likely to succeed than reminder letters.
- Practical help with booking and attending screening appointments (e.g. through patient navigators) were generally helpful and were successful in improving uptake rates amongst BME groups.
- Written information and media messages have limited impact on screening rates.
- Service provider audit and feedback helped increase uptake rates.
- The effectiveness of one-to-one education and structural interventions in bowel screening specifically is unclear, but such interventions have been shown to be effective in other programmes.
- A combination of interventions was usually more successful than single interventions.

### **Summary**

This report has reviewed uptake levels for bowel and cervical screening and shows generally poorer uptake when compared to its statistical neighbours. The data analysed

---

would minimise the reservation that some service users have expressed about the current sample collection procedure.

<sup>8</sup> Porter (2008) and the recent UK National Screening Committee literature review (Wallace, 2013)

also shows variation in performance across practices, with a fairly strong correlation between uptake and deprivation for both cervical and bowel screening.

The evidence gathered from literature, local intelligence and survey, overall, suggests cultural acceptance and health beliefs, language barrier, lack of awareness of screening or its benefits and the transient nature of the population are primarily to blame for the low uptake. To address this, a targeted community engagement, health education and awareness approach is needed as well as undertaking a patient data validation exercise to ensure patient lists are accurate.

The key recommendations and indicative costs are set out tables 1 and 2 below;

Table 1: The key recommendations to be considered and implemented.

Themes	Recommendations
Community Engagement and screening awareness campaigns	<ol style="list-style-type: none"> <li data-bbox="504 925 1422 1070">1. Running focus groups targeted at ethnic minority groups to better understand the reasons for particularly low uptake amongst this group and seek their views on how best to engage them.</li> <li data-bbox="504 1160 1422 1417">2. Outcome of the focus groups to inform the programme of work to be developed which will incorporate an educational training package, awareness raising campaigns on the importance of screening with particular focus on cervical and bowel screening, as well as face to face health promotion events.</li> <li data-bbox="504 1485 1422 1630">3. Offer education and raise awareness of screening at places of worship especially for the Asian women and appointing a Health Champion or Community connectors to facilitate engagement.</li> <li data-bbox="504 1664 1422 1742">4. Offer educational sessions to better raise awareness of screening services among primary care staff.</li> <li data-bbox="504 1776 1422 1921">5. Promote engagement through the use of existing Housing Officers, Cohesion Managers and Communication Connectors to bridge access to services for the vulnerable and hard to reach groups.</li> <li data-bbox="504 1955 1422 1989">6. As part of the wider health campaign, develop and deliver a</li> </ol>

Themes	Recommendations
	<p>programme of public facing health promotion events through the use of public stalls/stands so that there a culture and understanding of screening at a young age.</p> <p>7. Develop language-specific posters to put up in specific shops and Saturday Language Schools local to migrant groups and advertise screening in their local newsletters.</p>
Primary care-focused initiative	<ol style="list-style-type: none"> <li>1. Integrate screening uptake promotional work into other programmes, such as the health check programmes.</li> <li>2. Opportunistic reminders by GPs when in consultation with patients who have missed their screening appointment.</li> <li>3. A Did Not Attend (DNA) analysis exercise to be undertaken for a pilot practice, 1:1 contacts to be made with the patients who have not attended screening to understand , as well as validate their continued residence in the area. The outcome of this exercise will inform plans to roll out to other practices and help understand resource implications - both human and financial - for undertaking a wider roll out.</li> <li>4. Primary care to ensure resource is committed to the regular and systematic validation and submission of the Prior Notification Lists for cervical screening, which will ensure the invites go out to the eligible women.</li> </ol>
Integrated and collaborative initiatives	<ol style="list-style-type: none"> <li>1. An integrated and opportunistic approach to delivering screening which will see eligible individuals offered screening not just in primary or community care settings but equally in secondary care</li> <li>2. Formalise the commissioning opportunistic cervical smear screening in sexual health clinics.</li> </ol>

Table 2: Indicative costs and responsible partners identified for the different proposed projects.

Work Areas	Indicative costs	Responsible Partners
Health Promotion campaign and engagement work for raising awareness of childhood vaccinations, prenatal pertussis for pregnant women and cancer screening programmes	£10,000	Peterborough Public Health Team
DNA Analysis/Database validation exercise	TBC	General practices and Call/Recall Services
Training and education on screening for primary and community care staff	TBC	Bowel Cancer UK.
Dedicated Project for immunisations exploring in more depth barriers for some Eastern European / traveller families	TBC	Peterborough local authority PH team
Total	TBC	

**Embedded documents:**



TERMS OF  
REFERENCE Cancer S

**1. Terms of reference**

This page is intentionally left blank