Be Clear on Cancer evaluation update

'The campaigns have involved many partners, demonstrating the great strength of collaboration to achieve huge benefit for patients'

Since Be Clear on Cancer launched in 2010, I have seen the campaigns go from strength to strength. Thorough evaluation is a key part of the programme's growth. We pilot each campaign locally and then regionally, with a view to finally rolling out nationally depending on the evaluation results.

Many complex data sets are reviewed and, in some cases, bespoke analysis is conducted to make sure we have the most robust evaluation possible at every step. This can be extremely challenging and we know that pilots may not always be perfect. But testing campaigns in this way helps to provide an understanding of the impact they have. Cancer Research UK (CRUK) and the National Cancer Intelligence Network (NCIN), working in partnership with many data providers, established the metrics for the programme in 2011. Since then they have coordinated the collection of data. This summary builds on the evaluation results published in May 2013 and provides some of the latest data we have for Be Clear on Cancer.
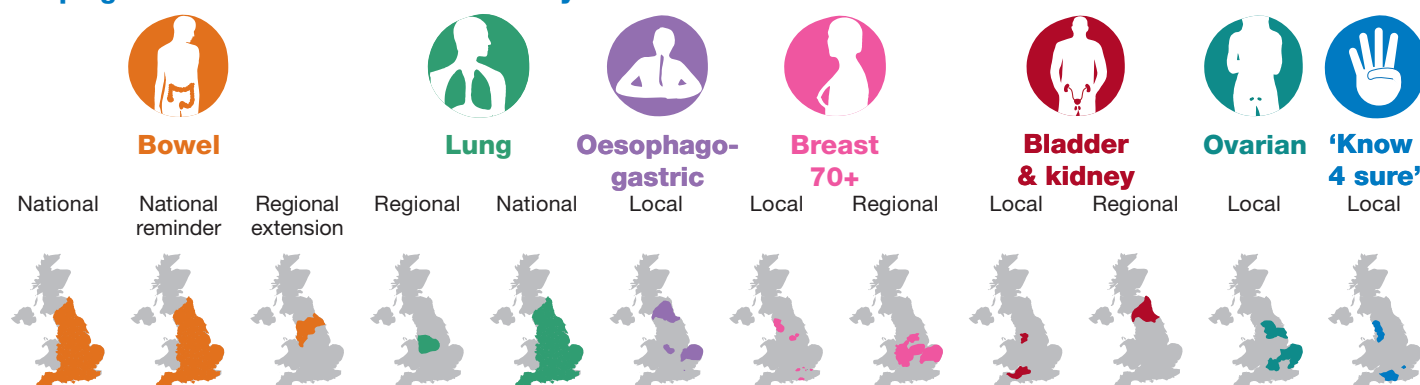
It's fantastic that four Be Clear on Cancer campaigns have been rolled out nationally and some have already been repeated to ensure messages stay in the minds of the public. In 2014 and 2015 other campaigns will be piloted at a local level, with more national campaigns running across England. These campaigns are helping us to reach more people and drive earlier diagnosis of cancer. This will only be possible with your continued support.

The campaigns have involved many partners, demonstrating the great strength of collaboration to achieve huge benefit for patients. Celebrating the success of the campaigns is to celebrate the success of the collective expertise from the Department of Health (DH), Public Health England (PHE), NHS England and the charity sector. It shows how powerful we are when we share a common purpose.

**Mr Sean Duffy,
National Clinical Director
for Cancer at NHS England**

Campaign results included in this summary

Bowel			Lung		Oesophago-gastric	Breast 70+		Bladder & kidney		Ovarian	'Know 4 sure'
National	National reminder	Regional extension	Regional	National	Local	Local	Regional	Local	Regional	Local	Local

All results to February 2014 have been included in the graphics throughout the document. Results not in the <u>May 2013 update</u> are included in the text.

Be Clear on Cancer launched to support the earlier diagnosis of cancer and improve survival rates.

Following the *Cancer Reform Strategy* (2007) and *Improving Outcomes: A Strategy for Cancer* (2011), the Government set it's ambition to save an additional 5,000 lives per year by 2014/15. The aim was to achieve this through earlier diagnosis and better access to treatment. The Department of Health started the awareness raising activity in 2010. Today, Be Clear on Cancer is a PHE programme of activity, but delivered in partnership with NHS England, DH and NHS Improving Quality (NHS IQ).

The campaigns are tested locally and regionally before they are rolled out nationally. The first local pilots started in 2010 for breast, bowel and lung cancers. Bowel cancer was chosen as the first regional pilot in 2011 which included the inaugural TV advert. Evidence is continually reviewed to inform future activity.

Given the importance of contributing to the evidence base for early diagnosis, there is a strong commitment to release information from this programme into the public domain on a regular basis. This evaluation summary is a reflection of this commitment. New data are coming through all the time, but this summary provides the key results for data available up to the end of February 2014.

How are Be Clear on Cancer campaigns evaluated?

For each campaign there is a comprehensive evaluation process, with data collected on a number of metrics, reflecting key points along the patient pathway. These include: symptom awareness, attendances at primary care, urgent referrals and diagnostic investigation activity. Important measures of campaign outcomes include cancers diagnosed and stage distribution. However, data for these metrics inevitably take much longer to come through. Wherever possible, results are compared to control data. Whilst this update uses mainly geographical controls, time controls may also be considered in other circumstances.

Who is responsible for the evaluation?

Cancer Research UK (CRUK) was appointed in 2011 to help develop and establish the evaluation framework and coordinate data for the Be Clear on Cancer evaluation. Reflecting new structures from April 2013, PHE through the NCIN is now responsible for the evaluation and will lead on all the coordination and dissemination of data for the Be Clear on Cancer campaigns.

Over the years, an expert advisory group has helped guide the evaluation and representatives from a wide range of specialist areas contribute to it. Academics, clinicians, statisticians and epidemiologists provide in-depth knowledge and expertise to ensure all aspects of the evaluation are as robust as possible.

Will evaluation reports be produced?

CRUK will provide reports on individual streams of local, regional and national activity, which took place up to 31 of March 2013. NCIN will lead on reporting activities from April 2013. Updates on Be Clear on Cancer activity have also been detailed in the annual reports for *Improving Outcomes: a Strategy for Cancer*. Considerations such as data governance and release are important factors which may impact on timings and distribution of the evaluation data.

Are people seeing the campaign and is it raising awareness of the signs and symptoms of cancer?

'Following each of the campaigns, people's knowledge of signs and symptoms of cancer have increased, along with confidence in that knowledge. Public awareness of the signs and symptoms of cancer are crucial to understanding the impact of the campaigns. We have seen incremental increases in this knowledge with each wave of the bowel cancer campaign. This shows the lasting effects of the campaigns which we hope will continue.'
Helen Angle – TNS-BMRB (market research agency)

Where does this information come from?

Each Be Clear on Cancer campaign collects information through pre- and post-campaign surveys, which are conducted face to face with a representative sample of the target population. These are carried out by a specially commissioned market research agency (TNS-BMRB) and questionnaires are tailored to extract information about each specific campaign. A range of topics are covered including awareness of cancer advertising and symptoms, beliefs and attitudes towards cancer and early diagnosis and knowledge and recognition of the relevant campaign material.

The aim of the evaluation is to look at changes in campaign recognition and knowledge between pre- and post-stage interviews. Where possible, a test and control approach has been used to allow for comparisons between areas with and without campaign activity.

What are the results saying?

Regional bowel extension (Oct 2012 – Mar 2013)

- Spontaneous awareness of key symptoms related to the campaign (blood in stools/loose stools/change in bowel habits) for both the TV and community engagement extensions[1] rose from 61% to 74% (SS*), in those aged 55 and over.

Local oesophago-gastric (Apr – Jul 2012)[2]

- Statistically significant increase in spontaneous awareness of the symptom 'difficulty swallowing' in those aged 55 and over (7% to 14%).

Regional breast in women over 70 (Jan – Mar 2013)

- 7% of women aged 40 and over at the pre-campaign stage believed that women in their 70s are more likely to develop breast cancer, with a statistically significant rise to 25% post-campaign.
- Recall of a direct mail sent to an individual at home, was significantly higher in the pilot areas (43%) than the control areas (31%).

Regional 'blood in pee' (Jan – Mar 2013)

- Statistically significant increase in knowledge that blood in pee is a definite warning sign of kidney/bladder cancer, from 41% pre-campaign to 65% post-campaign, in those aged 55 and over.
- Statistically significant increase in people aged 55 and over saying they would see their GP the same day if they noticed a change in their bladder habits, from 18% pre-campaign to 27% post-campaign.[3]
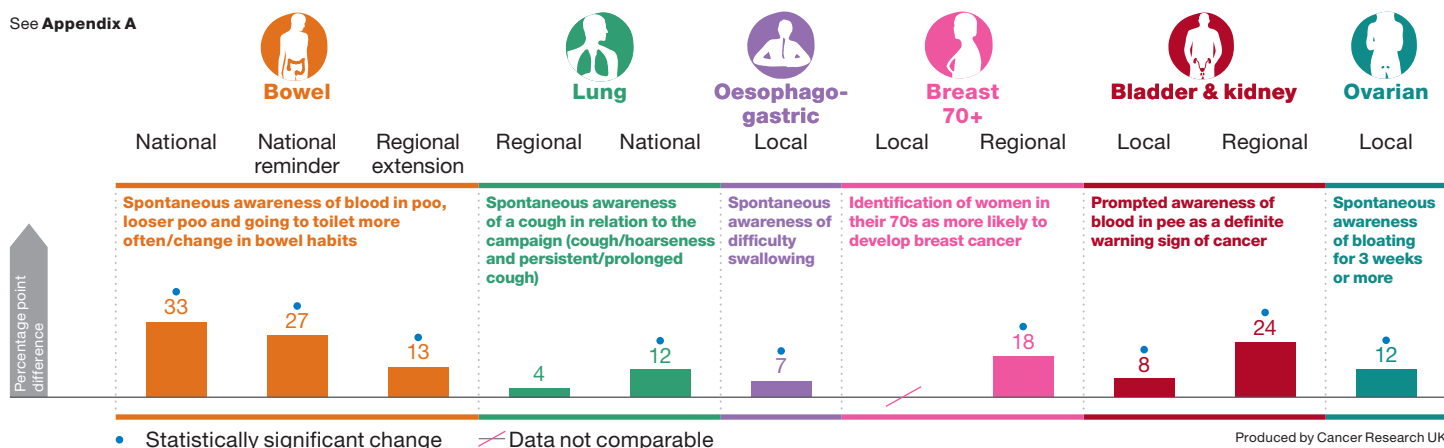
Local ovarian (Jan – Mar 2013)

- 57% of women aged 55 and over agreed that the advertising campaign had told them some thing new, the highest level recorded to date for Be Clear on Cancer campaigns.
- Statistically significant increase in recall of 'bloating for 3 weeks or more', from 16% to 28% in women aged 55 and over.

Local 'Know 4 sure' (Jan – Mar 2013)

- Increase in prompted knowledge of unexplained bleeding from 81% to 91% (SS*). No statistically significant changes were seen for knowledge of unexplained lumps, weight loss or pain.[4]

Awareness of a key campaign message pre- and post-campaign evaluation surveys

See **Appendix A**

	Bowel			Lung		Oesophago-gastric	Breast 70+		Bladder & kidney		Ovarian
	National	National reminder	Regional extension	Regional	National	Local	Local	Regional	Local	Regional	Local
	Spontaneous awareness of blood in poo, looser poo and going to toilet more often/change in bowel habits			Spontaneous awareness of a cough in relation to the campaign (cough/hoarseness and persistent/prolonged cough)		Spontaneous awareness of difficulty swallowing	Identification of women in their 70s as more likely to develop breast cancer		Prompted awareness of blood in pee as a definite warning sign of cancer		Spontaneous awareness of bloating for 3 weeks or more
Percentage point difference	33	27	13	4	12	7		18	8	24	12

● Statistically significant change   ╱ Data not comparable

Produced by Cancer Research UK

> **Are more people going to their GP with the symptoms promoted by the campaign, and is there any shift in the profile of the patients presenting?**

> *'Analysis of GP attendances during the campaigns shows that more people visit their GP with symptoms highlighted in the media. At a GP practice level these equate to small but manageable increases that do not put an undue burden on GPs, but the cumulative effect can be quite significant.'*
> Chris May, Mayden (Healthcare system development company)

Where does the information come from?

In order to assess the impact of the Be Clear on Cancer campaigns on public behaviour and subsequent consultations in primary care, information is collected on the number of people presenting to their GP with the relevant symptoms before, during and after the campaign using READ codes recorded in GP practice systems. These data are compared with data from the same period in the previous year, to assess whether any effects can be attributed to the campaign. Information on other symptoms not related to cancer (control symptom codes) are also recorded to exclude any general changes in coding.[5]

What are the results saying?

National lung (May – Jun 2012)

- Analysis from 486 GP practices showed a statistically significant 62% increase in attendances for a persistent cough in the over 50s during the campaign period when compared with the same period in the previous year, equating to an additional 2.99 visits per practice, per week (adjusted for bank holidays).

Local oesophago-gastric (Apr – Jul 2012)[6]

- Analysis of data from the Mount Vernon Cancer Network[7] shows that during the campaign, there was a 17% statistically significant increase in GP visits for the symptom difficulty swallowing in the over 55s compared with the same period in 2011.

Regional 'blood in pee' (Jan – Mar 2013)

- Analysis of 54 GP practices shows that GP attendances for visible blood in urine (macroscopic haematuria) in those aged 50 and over saw a statistically significant increase of 32% during the campaign when compared with the same period in the previous year. This is equivalent to an additional 0.29 visits per practice, per week.

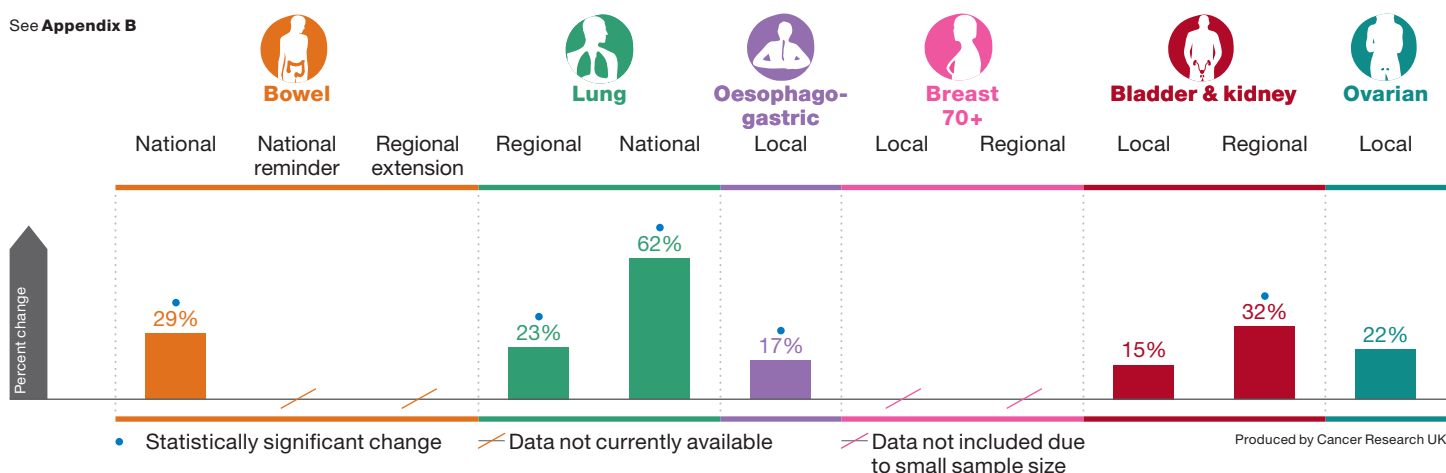### Local ovarian (Jan – Mar 2013)[7]

- During the campaign, there was a 22% increase in GP visits within the target area for patients aged 50 and over with the key symptom highlighted in the radio campaign, unexplained bloating, compared with the same period in the previous year (NSS**). The increase in activity was equivalent to 0.04 additional visits per practice, per week (adjusted for bank holidays).

+62% increase in GP visits for persistent cough (National lung)

+32% increase in GP visits for blood in pee (Regional 'blood in pee')

GP attendance Number of GP attendances during the campaign period, compared to the same period in the previous year

See **Appendix B**

	Bowel			Lung		Oesophago-gastric	Breast 70+		Bladder & kidney		Ovarian
	National	National reminder	Regional extension	Regional	National	Local	Local	Regional	Local	Regional	Local
Percent change	29%			23%	62%	17%			15%	32%	22%

- Statistically significant change
- Data not currently available
- Data not included due to small sample size

Produced by Cancer Research UK

Are more people being referred urgently for suspected cancer?

> 'The campaigns do appear to affect the number of 2WW referrals, with an increased number of referrals recorded during each campaign period, within the relevant area. The increases in GP referrals may result from improved GP awareness of the signs and symptoms of the specific cancer.'
> Carolynn Gildea – East Midlands Knowledge and Intelligence Team, Public Health England.

Where does this information come from?

As part of PHE, the East Midlands Knowledge and Intelligence Team analyses data from the National Cancer Waiting Times Monitoring Dataset (provided by NHS England) for each former Cancer Network.[8] This is then used to assess the impact of the campaigns on urgent (Two Week Wait (2WW)) referrals for suspected cancer, including age and gender profiles.

Analysis can be complex due to a variety of factors, including:
- the number of urgent referral routes potentially impacted on
- the geographical spread
- the variable history of awareness campaigns and the existence of other activities which may also affect urgent referrals.

What are the results saying?

National bowel reminder (Aug – Sept 2012)
- Statistically significant 29% increase in urgent referrals for suspected lower GI cancer in September – October 2012, when compared with the same period in 2011.

Regional bowel extension (Oct 2012 – Mar 2013)
- During November 2012 to April 2013, urgent GP referrals for suspected lower GI cancer in TV extension areas saw a statistically significant 8% increase when compared to the same period in the previous year.
- During the same time, there was a statistically significant 7% decrease for the community engagement extension areas.

Regional lung (Oct – Nov 2011)
- Pilot areas saw a statistically significant 30% increase in urgent referrals for suspected lung cancer during October – December 2011 when compared to the same period in the previous year. A 10% increase was seen in control areas (SS*).

National lung (May – Jun 2012)
- Urgent referrals for suspected lung cancer saw a statistically significant increase of 32% in May – July 2012 when compared to the same period in the previous year.

Regional breast in women over 70 (Jan – Mar 2013)
- Combined urgent referrals for suspected breast cancer and breast symptoms with cancer not initially suspected saw a statistically significant increase of 11% for women aged 70 and over in the pilot areas.[9] A 5% increase was seen in control areas (SS*).

Regional 'blood in pee' (Jan – Mar 2013)
- During the campaign, pilot areas saw a statistically significant 28% increase in urgent referrals for suspected urological cancers (excluding testicular), compared to a 9% increase in control areas (SS*).[10]

Local oesophago-gastric (Apr 2012 – Jul 2012)
- There was a 26% statistically significant increase in urgent referrals for suspected upper GI cancer in pilot areas, compared with 16% increase in control areas (SS*).
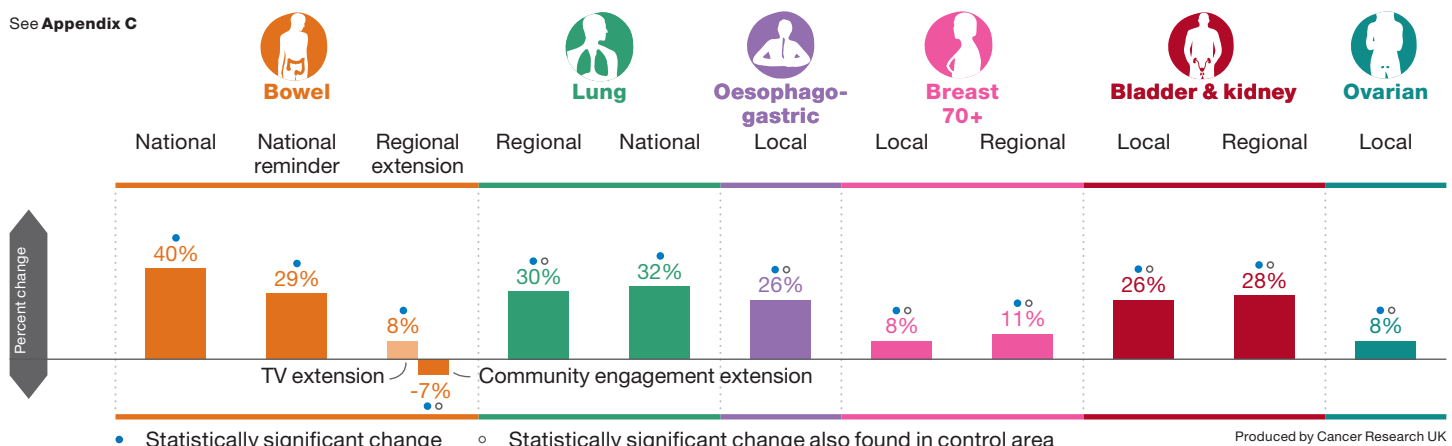
Local ovarian (Jan – Mar 2013)
- The number of urgent referrals for suspected gynaecological cancers saw a statistically significant increase of 8% across all pilot sites, with the increase being highest in the Mount Vernon Cancer Network (14%).
- Referrals also increased by 9% in control areas (SS*).

Local 'Know 4 sure' (Jan – Mar 2013)
- There was a greater increase in urgent referrals for suspected cancer seen in pilot areas compared to control areas for four types of cancer: urological (14% vs 9%), lung (23% vs 10%), upper GI (14% vs 5%) and head and neck (18% vs 9%).

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2 Week Wait (2WW) Number of 2WW referrals during the campaign period, compared to the same period in the previous year

See **Appendix C**

	Bowel			Lung		Oesophago-gastric	Breast 70+		Bladder & kidney		Ovarian
	National	National reminder	Regional extension	Regional	National	Local	Local	Regional	Local	Regional	Local
	40%	29%	8% / -7%	30%	32%	26%	8%	11%	26%	28%	8%

TV extension / Community engagement extension

• Statistically significant change   ◦ Statistically significant change also found in control area

Produced by Cancer Research UK

'While, in most cases, there are increases during the campaign period in the number of cancers diagnosed following a 2WW referral, we often see decreases in the conversion rates (of the 2WW referrals into diagnosed cancers), since more people are referred during a campaign. However, it is important to remember that there may be a relatively small number of cancers diagnosed each month in the campaign areas, and not all cancers that are diagnosed are referred in this way.'
Carolynn Gildea – East Midlands Knowledge and Intelligence Team, Public Health England

Where does this information come from?

The National Cancer Waiting Times Monitoring Dataset (provided by NHS England) is used by the East Midlands Knowledge and Intelligence Team, as part of PHE, to analyse data on conversion and detection rates[11] for each former Cancer Network[12], including age and gender profiles. There was an expectation that more people may come into the system, referral thresholds for specialist consultations may be lowered and that the conversion rates, therefore, might go down.

What are the results saying?

National bowel reminder (Aug–Sept 2012)

- There was a 7% increase in the number[13] of lower gastrointestinal cancers diagnosed following a 2WW referral (NSS**), but a statistically significant decrease in the conversion rate, from 5.6% to 4.6%.

National lung (May – Jun 2012)

- The number[13] of lung cancer cases (excluding mesothelioma) diagnosed during the campaign months (May – July 2012), following a 2WW referral, saw a statistically significant 18% increase when compared to May – July 2011. There was a decrease in the conversion rate, from 24% to 21.5% (SS*).

Local oesophago-gastric (Apr – Jul 2012)

- There was a 20% increase in the number[13] of oesophageal cancers diagnosed following a 2WW referral for suspected upper GI cancer following the campaign (NSS**), with little change seen in the conversion rate; 2.7% to 2.6% (NSS**).

Regional breast in women over 70 (Jan – Mar 2013)

- During January–April 2013 there was a 7% increase in the number[13] of breast cancer cases diagnosed following a 2WW referral for suspected breast cancer or breast symptoms with cancer not initially suspected in women over 70 when compared to the same period in the previous year (NSS**). There was a decrease in the conversion rate, from 24% to 23% (NSS**).

Local ovarian (Jan–Mar 2013)

- Between pre- and post-campaign periods, there was a 4% decrease in the number[13] of cases of gynaecological cancers diagnosed following a 2WW referral (NSS**), and a statistically significant decrease in conversion rate, from 7% to 6.2%. No statistically significant changes were seen in the control areas.
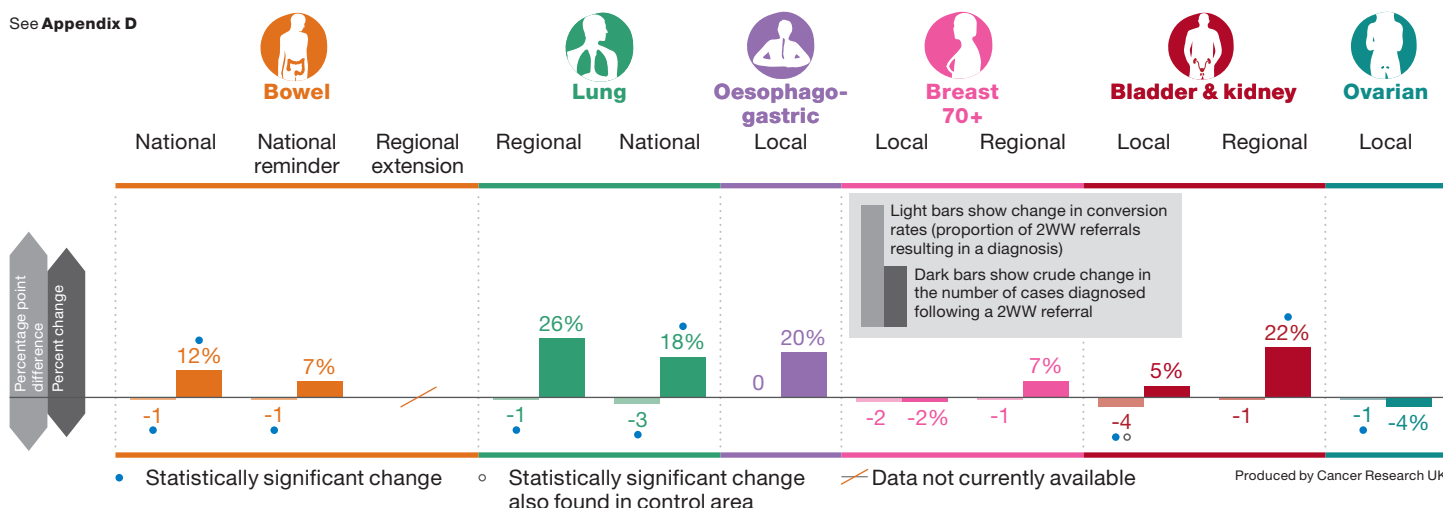
Regional 'blood in pee' (Jan – Mar 2013)

- Pilot areas saw a 22% statistically significant increase in the number[13] of urological cancers (excluding testicular) diagnosed following a 2WW referral in January – April 2013 when compared to the same period in the previous year. The conversion rate remained around the same; 15.6% to 14.9% (NSS**).

+18% increase in lung cancers diagnosed following a 2WW referral (National lung)

Conversion rates/number of cases diagnosed
Cases diagnosed following a 2WW referral during/post campaign period, compared to the same period in the previous year

See **Appendix D**

Light bars show change in conversion rates (proportion of 2WW referrals resulting in a diagnosis)

Dark bars show crude change in the number of cases diagnosed following a 2WW referral

Percentage point difference / Percent change

	Bowel			Lung		Oesophago-gastric	Breast 70+		Bladder & kidney		Ovarian
	National	National reminder	Regional extension	Regional	National	Local	Local	Regional	Local	Regional	Local
	12%	7%		26%	18%	20% / 0	-2 / -2%	7%	5%	22%	
	-1	-1		-1	-3		-1		-4	-1	-1 / -4%

- Statistically significant change
- Statistically significant change also found in control area
- Data not currently available

Produced by Cancer Research UK

Are we seeing an increase in diagnostic investigation activity?

'Results show an impact on requests for diagnostic services during the relevant Be Clear on Cancer campaigns. Increased demand during the campaigns implies more people presenting at their GP with relevant symptoms, which will, hopefully, lead to earlier diagnosis. So far, the increases have been manageable. Modelling is carried out locally and nationally to ensure services can be in a strong position to meet growing demand and be prepared for the campaigns.'
Sheila Dixon – Analytical Service (Operations), NHS England

Where does this information come from?

Diagnostic imaging data currently come from a variety of sources. The Diagnostics Waiting Times and Activity Data Set (DM01) is used to collect endoscopy data (where applicable). This is a key tool to monitor waits from referral to treatment. Some of the dataset groups within DM01 are broad, such as non-obstetric ultrasound which includes ultrasounds conducted across different sites in the body, and so, where possible, we assess any impact on specific diagnostic tests which are directly applicable to a campaign. The Diagnostic Imaging Database (DID) is a source of such information. DID is a monthly data collection, covering diagnostic imaging tests on NHS patients in England, with data back to April 2012. Hospital Episode Statistics (HES) datasets also hold information about specific diagnostic investigations and can be linked to cancer registry records.

What are the results saying?

National bowel (Jan – Mar 2012)

- A review of January to April 2012 DM01 activity showed that, nationally, there were around 250 additional colonoscopies and more than 120 additional flexible sigmoidoscopies per working day compared with the same period in 2011. This equates to a statistically significant increase in diagnostic tests of 19%.

National bowel reminder (Aug – Sept 2012)

- During August to October 2012, DM01 data show that there was an 11% statistically significant increase in endoscopy tests performed when compared to the same period in 2011. This equates to more than 160 additional colonoscopies and 66 additional flexible sigmoidoscopies per working day. Demand was therefore sustained following the first national campaign.

National lung (May – Jun 2012)

- Data from the DID shows that, in May 2012, there was a statistically significant 20% increase in GP-referred chest x-rays (adjusted for working days) when compared to April 2012, before the campaign began.
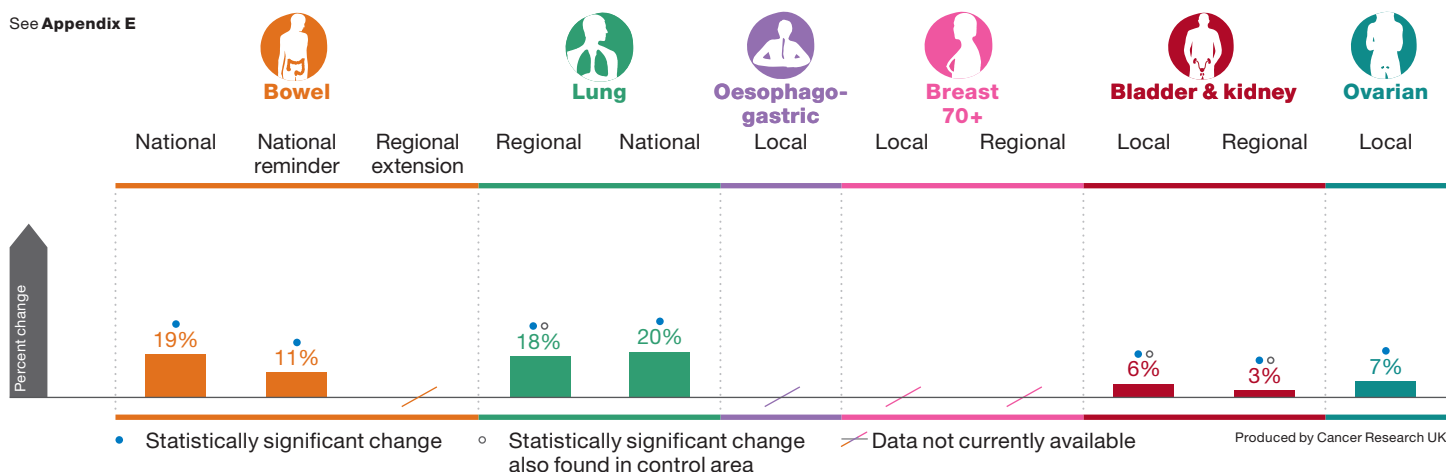
Regional 'blood in pee' (Jan – Mar 2013)

- HES data show a statistically significant rise in cystoscopy activity in the pilot areas between January to March 2013 compared to the same period in 2012 (3% after adjusting for working days). This compares to a 1% increase in control areas (SS*).

Local ovarian (Jan – Mar 2013)

- DM01 data show that in January to June 2013, there was a statistically significant 7% increase in total non-obstetric ultrasound activity, compared to the same period in 2012. Visible impacts for data collected at a national level are expected to be limited because pilot areas are local and small numbers are involved. Data were also collected under broad categories.

Diagnostic tests Number of diagnostic tests during/post the campaign period, compared to the pre-campaign period

See **Appendix E**

	Bowel			Lung		Oesophago-gastric	Breast 70+		Bladder & kidney		Ovarian
	National	National reminder	Regional extension	Regional	National	Local	Local	Regional	Local	Regional	Local
Percent change	19%	11%		18%	20%				6%	3%	7%

- Statistically significant change
- Statistically significant change also found in control area
- Data not currently available

Produced by Cancer Research UK

Are we seeing a shift towards earlier stage disease?

'*The National Lung Cancer Audit (NLCA) data is a key component in assessing the impact of both the national and regional Be Clear on Cancer lung campaigns. The data shows there has been a shift towards earlier stage disease, which is widely recognised as indicating better outcomes for patients. Information is a powerful tool in understanding diagnosis and outcomes for patients and whether there have been improvements over time'* – Health and Social Care Information Centre

Where does this information come from?

National audit data are available for some campaigns (eg regional and national lung campaign). However, collection of these data can be restricted by data quality and delays in availability.

Information about the stage of disease is also available from National Cancer Registry Service records. National staging data will be available from 2014. All the data on this page are taken from the National Lung Cancer Audit (NLCA).

What are the results saying?
Regional lung (Oct – Nov 2011)

- There was a statistically significant increase in the percentage of small cell lung cancers diagnosed as "limited" in October – December 2011 in the pilot trusts (25.9%) compared with the same period in the previous year (36.6%).
- The percentage of late stage non-small cell lung cancers decreased significantly in Oct–Dec 2011 from the same period in the previous year in the pilot trusts, whilst no significant change was seen in control areas.
- The percentage of carcinoid tumours detected increased significantly in the pilot trusts from 0.4% to 1.3% between October – December 2010 and October – December 2011.
- Pilot trusts also saw a statistically significant increase in surgical resections which was not replicated in the non-pilot trusts.[14]

National lung (May – Jun 2012)

- Statistically significant increase (9%) in lung cancer cases diagnosed (equating to 700 additional cases) in patients first seen for lung cancer during the campaign months when compared to the same period in previous year. No significant increase was seen over the control months.
- Statistically significant increase, from 23.4% to 26.9%, in the proportion of non small cell lung cancers diagnosed at early stage (approximately 400 more cancers) across the campaign months when compared to the same months in the previous year. This is matched by a corresponding statistically significant decrease in the proportion diagnosed as late stage. No significant change was seen in the control months.
- Statistically significant increase in the proportion of patients receiving surgical resection as a first definitive treatment (from 13.7% to 16.0%, equating to around 300 more patients) during the campaign months when compared to the same period in 2011. No significant change in surgical resections was seen across the control months.[14]

Are we seeing an increase in survival?

Where does this information come from?

One year survival data are available for some campaigns (regional lung) via the NLCA. However, collection of these data can be restricted by timescales of data extraction. It is also important to consider the time period (years) over which data are compared and time lags in data collection. We hope to receive one year survival data for the national lung campaign at the end of 2014.

What are the results saying?
Regional lung (Oct – Nov 2011)

- In the pilot areas, there was a statistically significant increase in age-standardised one year survival (the number of patients alive one year after diagnosis) from 35.2% to 39.2% during October – December 2011, compared to the same period in the previous year. A small increase was also seen in control areas (SS*).

Increase seen in surgical resection rate

(National lung)

Shift towards earlier stage distribution of lung cancers diagnosed

(Regional and national lung)

Do we look at other data sources?

Yes!

In conclusion…

The evaluation of Be Clear on Cancer is made up of quantitative, qualitative and bespoke research. Other metrics and data sources are considered and used, where appropriate, for the campaign. For example, as part of the local and regional breast cancer in women over 70 campaigns, breast screening data are being collected and analysed. As part of the local ovarian pilot, a bespoke collection of CA125 data was carried out.

The national cancer registration system underwent the final phases of its comprehensive modernisation programme in November 2013. The migration and live running of the English National Cancer Online Registration Environment (EnCORE) means relevant data for multiple tumour stages can be collected at all points along the care pathway. This will improve access to data collection for the continued evaluation of Be Clear on Cancer.

DH, PHE and NHS England have worked with colleagues from the University of York and University of Sheffield to estimate the cost effectiveness of the Be Clear on Cancer lung and bowel awareness campaigns.

This research helps measure unintentional consequences and contributes to the overall picture of the Be Clear on Cancer campaigns.
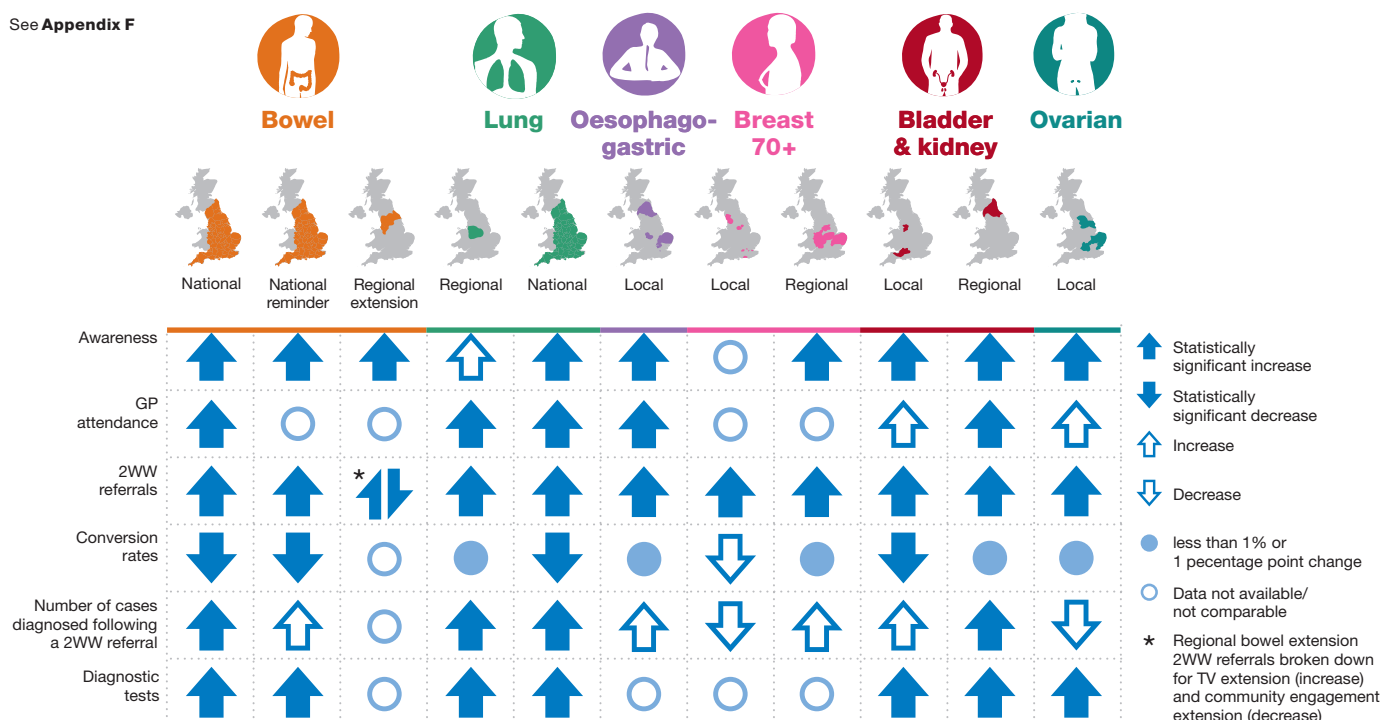
The Be Clear on Cancer programme of activity has developed and grown over the past four years. As much as possible, the activity is based on the latest evidence and learning from the ongoing evaluation of the campaigns. Evaluation has been central to the programme and has shown a positive impact for a range of metrics across the different streams of activity. Close collaboration with key stakeholders and data owners continues to ensure that evaluation is as robust as possible and that results, alongside new evidence from other areas of early diagnosis activity, are used to inform future plans.

The figure below includes a summary of the results for each campaign that ran between October 2011 and March 2013. Where possible, the most recent and relevant results have been included in this evaluation update. Results from earlier campaigns are available in the evaluation summary published in May 2013.

For additional information about the campaigns, please visit the Be Clear on Cancer section of the NAEDI website or email BeClearOnCancer@NHSIQ.nhs.uk

Campaign snapshot: activity between October 2011 and March 2013

See **Appendix F**

	Bowel			Lung		Oesophago-gastric	Breast 70+		Bladder & kidney		Ovarian
	National	National reminder	Regional extension	Regional	National	Local	Local	Regional	Local	Regional	Local
Awareness	⬆	⬆	⬆	⇧	⬆	⬆	◯	⬆	⬆	⬆	⬆
GP attendance	⬆	◯	◯	⬆	⬆	⬆	◯	◯	⇧	⬆	⇧
2WW referrals	⬆	⬆	* ⬆⬇	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
Conversion rates	⬇	⬇	◯	●	⬇	●	⇩	●	⬇	●	●
Number of cases diagnosed following a 2WW referral	⬆	⇧	◯	⬆	⬆	⇧	⇩	⇧	⇧	⬆	⇩
Diagnostic tests	⬆	⬆	◯	⬆	⬆	◯	◯	◯	⬆	⬆	⬆

Legend:
- ⬆ Statistically significant increase
- ⬇ Statistically significant decrease
- ⇧ Increase
- ⇩ Decrease
- ● less than 1% or 1 pecentage point change
- ◯ Data not available/ not comparable
- * Regional bowel extension 2WW referrals broken down for TV extension (increase) and community engagement extension (decrease)

Produced by Cancer Research UK

Footnotes

1 Two bowel pilots were conducted to ascertain the type of activity that would provide the greatest chance of sustaining the campaign message. They are referred to as the 'regional bowel extension pilots' within this document. One pilot continued advertising at a reduced frequency and intensity. The second pilot consisted of community outreach initiatives

2 Data on public awareness of cancer signs and symptoms were collected locally by the projects so there is some variation as it is not always possible to aggregate results. Only four out of seven projects collected comparable awareness data, with one area conducting surveys in those who were aware of the advertising and those who were not, rather than pre- and post-campaign. Further analysis has led to a slight change in the statistical data from the May 2013 update

3 Calculated based on respondents who recalled seeing general cancer advertising

4 The 'Know 4 sure' campaign looked at four common symptoms: unexplained bleeding, unexplained pain, unexplained weight loss and unexplained lumps

5 In some campaigns it is also important to exclude the impact of seasonal variations. For example, the increase in cough symptoms over the winter period would be a normal phenomenon and must not be confused with increased attendances due to a lung cancer awareness campaign

6 As the local campaigns do not include television advertising, it is not anticipated that they will have as significant an impact on GP attendance as the regional and national campaigns

7 There were a number of local projects (seven). However, not all conducted an analysis of GP attendance

8 With the exception of North Central and North East London, which are looked at together (where applicable)

9 Results have been aggregated for both malignant and non-suspected breast cancer referrals

10 This pathway covers several cancer types, in addition to kidney and bladder

11 Conversion rate is the proportion of 2WW referrals which result in a cancer diagnosis. Detection rate is the proportion of cancers treated which were 2WW referrals

12 With the exception of North Central and North East London, which are looked at together (where applicable)

13 Crude change in the number of cancers diagnosed is calculated as the number of diagnoses during the campaign period minus the number of diagnoses during the same period in the previous year. It does not take into account the change in the number of referrals, as per the conversion rate

14 Increased resection rates of lung cancer patients in England could result in improved survival. Carefully designed prospective research into the possible benefit of increasing resection rates is required to confirm this

* Statistically significant (SS): $p < 0.05$

** Not statistically significant (NSS)

Appendices

Appendix A – Awareness
- Regional bowel extension data have been aggregated for TV and community engagement extension activity
- Local breast data are not comparable to regional breast data and have therefore not been included
- Know 4 sure campaign data are not comparable to other campaigns and have therefore not been included
- Control data are not available for awareness

Appendix B – GP attendance
- Breast campaigns excluded due to small sample sizes (GP visits for symptoms in women over 70)
- GP attendance data collected once for national bowel campaign, therefore no data will be available for the national bowel reminder or regional bowel extension campaigns
- Local 'blood in pee' campaign shows data from one project area: Avon, Somerset and Wiltshire
- No control area data available for national campaigns, local oesophago-gastric, local 'blood in pee' and local ovarian campaigns

Appendix C – 2WW
- Regional bowel extension data have been aggregated for the full six month period during which the two bursts of campaign activity occurred
- Breast campaigns look at combined referrals for suspected cancer and breast symptoms with cancer not initially suspected pathways in the over 70s
- Control data not available for national campaigns. Regional bowel extension control data showed a decrease in 2WW referrals

Appendix D – Conversion rates and cases diagnosed
- Bowel campaigns looked at diagnoses of lower GI cancers; oesophago-gastric campaign at oesophageal cancers; 'blood in pee' campaigns at all urological cancers, excluding testicular, and ovarian campaign at all gynaecological cancers
- No control data available for national campaigns

Appendix E – Diagnostic tests
- Different datasets used for lung campaigns (trust returns for regional and Diagnostic Imaging Dataset for national), so they are not directly comparable. National lung looks at GP referred chest x-rays
- 'Blood in pee' campaigns used different datasets, therefore are not directly comparable (DM01 for local and HES for regional)
- All results adjusted for working days
- No control data available for national campaigns and local ovarian pilot

Appendix F – Campaign snapshot
- As the 'Know 4 sure' campaign was focused on general cancer symptoms, it was not easily comparable to the other campaigns and has therefore not been included in the graphics throughout the document
- Currently, staging and survival data are only available for the lung campaigns, so these have also been excluded from the graphics