



How are Be Clear on Cancer campaigns evaluated?

In order to support earlier diagnosis of cancer and improve survival rates, Be Clear on Cancer launched in 2011. Campaigns are tested locally and regionally before they are rolled out nationally. We continue to review evidence 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 of work into the public domain on a regular basis. This evaluation summary is a reflection of this commitment. This will be updated as more information becomes available and aims to provide a consistent method of sharing the key evaluation data and insight with those that have contributed to the campaigns' development and success.

Does Be Clear on Cancer look at a number of metrics?

The individual campaigns are subject to comprehensive evaluation, with data collected on metrics reflecting key points along the patient pathway. This includes symptom awareness, attendances at primary care, urgent referrals and diagnostic investigation activity. Cancers diagnosed and stage distribution are critical outcome measures but data for these inevitably take much longer to come through.

In addition to looking at each of these elements individually, an integral part of the evaluation is to look at how these metrics relate to each other and, in turn, provide a broader view of the impact the campaigns are having across the pathway as a whole. Due to the number and range of activities undertaken to promote earlier diagnosis of cancer, which include those funded centrally and locally, we acknowledge that there are other contributing factors that may impact on the results. This should be considered in all evaluation.

Results from the 2013 regional 'blood in pee' and breast cancer in women over 70 pilots and the local ovarian and Know 4 sure pilots will start to be received in June 2013. Following analysis and interpretation, top line results will be made available as soon as possible.

Who is responsible for the evaluation?

The Department of Health, NHS England and Public Health England are working in partnership to deliver Be Clear on Cancer. Cancer Research UK (CR-UK) was appointed in 2011 to help develop the evaluation framework and coordinate the data flows for evaluations. CR-UK is leading on the evaluation of all Be Clear on Cancer activities up until March 2013. For campaign activity after this date, reflecting new structures, Public Health England will lead on the evaluation through the National Cancer Intelligence Network.

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

Why don't we release data straight away?

In order to ensure the most robust evaluation, over 40 complex data sets are reviewed and bespoke analysis conducted. This can be extremely challenging but it is important in order to provide an accurate understanding of the awareness and impact of the campaigns. We wait until we have gathered as much information as possible in order to provide the clearest overall picture for each campaign. The most up to date results for each campaign are included within this summary.

Will evaluation reports be produced?

Reports are prepared on individual streams of local, regional and national activity, to guide the future direction of Be Clear on Cancer and to provide feedback on the extent to which the ambition of saving lives is being met. On average, a full report on all agreed datasets will be available approximately 12 months after the end of the activity. Considerations such as data governance and release are also important factors which may impact on timings and distribution. Wherever possible, completed reports are published on the GOV.UK website.

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

**BE CLEAR
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YES!

Where does this information come from?

For each Be Clear on Cancer campaign a market research agency is commissioned to conduct pre- and post-campaign tracking (face-to-face) surveys with a representative sample of the target audience. The questionnaire is tailored to reflect the specific campaign. This research covers awareness of cancer advertising; beliefs and attitudes towards cancer and early diagnosis; knowledge and awareness of cancer symptoms; and recognition of the relevant campaign material.

While the evaluation will focus on shifts in campaign recognition and knowledge pre- and post-activity, where possible a test and control approach has been used, so that results can be compared across regions with and without activity.

What are the results saying?

National bowel (Jan – Mar 2012)

- Statistically significant increase in spontaneous awareness of blood in stools (27% to 42%) and loose bowel motions (10% to 23%)

Repeat national bowel (Aug – Sep 2012)

- Statistically significant increase in spontaneous awareness of blood in stools (32% to 44%) and loose bowel motions (14% to 25%)
- Prompted recognition of Be Clear on Cancer brand higher than in previous surveys

National lung (May – Jun 2012)

- Statistically significant increase in spontaneous awareness of cough/hoarseness (41% to 50%) and persistent/prolonged cough (12% to 15%)

Local oesophago-gastric (Apr – Jul 2012)¹

- Four out of five projects showed a statistically significant increase in the recall of the symptom difficulty swallowing, from 2% pre-campaign to 7% post-campaign²
- Statistically significant increase in prompted awareness of difficulty swallowing (54% to 70%)

Local breast over 70 (Jan – Mar 2012)¹

- Based on five pilots – no shift in unprompted awareness of breast symptoms
- Two pilots observed statistically significant increases in prompted awareness of non-lump breast symptoms

Local 'blood in pee' (Jan – Mar 2012)¹

- Two out of three pilots observed statistically significant increases in unprompted awareness of blood in pee
- All three pilots saw statistically significant increases in prompted awareness of blood in pee as a sign of kidney/bladder cancer

Qualitative Research

Public

- Campaigns are seen as targeted, sensible, easy to understand and action-orientated
- Overall, Be Clear on Cancer is viewed as a valuable campaign which 'tells us what to do' and normalises seeing a GP with worrying symptoms

GPs

- All GPs surveyed and interviewed were aware of Be Clear on Cancer and were essentially positive – the 'tidal wave of worried well' that some anticipated has not happened. All reported increases in presentations from the Be Clear on Cancer target audiences (50+ lower socioeconomic groups)
- Some GPs reported earlier diagnoses of cancer (especially for bowel) as a result of campaigns

¹ 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.

² Only five out of seven projects collected evaluation data

+15%

increase in
spontaneous
awareness of
blood in stools

National bowel

+16%

increase in prompted
awareness of the
symptom difficulty
swallowing

Local oesophago
-gastric

+9%

increase in
spontaneous
awareness of
cough/hoarseness

National lung

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

**BE CLEAR
ON CANCER**

YES!

Where does this information come from?

Assessing the impact of the Be Clear on Cancer campaigns on public behaviour and subsequent consultations in primary care is an important part of the programme's evaluation. This is achieved by analysing the volume of patients attending their GP practice before, during or after each campaign, with symptoms relevant to that campaign. The attendance data are captured from READ codes recorded in GP practice systems. To ensure that any effect seen can be attributed to the campaign the attendance data are compared with the same period in the previous year. Control symptom codes (i.e. symptoms not related to cancer) are also captured to exclude the effects of any general changes in coding.³ (Source: Mayden)

What are the results saying?

National bowel (Jan – Mar 2012)

Comparing the nine weeks from the start of the campaign in 2012 with the same period in 2011 – analysis of 355 practices showed:

- 29% increase in attendances amongst patients over 50 reporting key campaign-related symptoms
- This translates into an average of 0.4 additional attendances per practice per week
- The number of GP visits during the nine weeks that the campaign was live and for the subsequent three weeks was higher than the previous 12 months and reached a maximum of 1.88 visits per practice per week at the peak of the campaign
- The increase in the number of attendances by men reporting campaign-related symptoms during the campaign period increased by 37.3%, compared with 21.9% for women
- Higher increases in attendance in practices in areas of high deprivation (46%) than those in areas of low deprivation (24%)

Regional lung (Oct – Nov 2011)

Feasibility study – 35 practices

- 23% increase in the number of people who visited their GP with relevant symptoms

Local 'blood in pee' (Jan – Mar 2012)⁴

Avon, Somerset and Wiltshire Cancer Network⁵

- Analysis of GP data shows that overall there was a higher level of attendances in 2012 compared with 2011, but no clear increase to correspond with the start of the campaign
- Week by week, the difference between visits during 2012 compared with 2011 varied from a 24.3% decrease to a 59.1% increase, consistent with a high level of variance in activity prior to the campaign

Local oesophago-gastric (Apr – Jul 2012)⁴

Mount Vernon Cancer Network⁵

- During the campaign, there was little change from 2011, with a 1.3% increase in visits per week (445 visits per week in 2012 compared with 441 in 2011) for people aged 55+ with the symptoms directly linked to the campaign
- This increase is driven by a 43.5% difference in visits during weeks four to six of the campaign, however 2011 appears to decrease during this period, rather than the 2012 activity increasing

³ 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.

⁴ As the local campaigns do not include television advertising, it is not anticipated that these campaigns will see as significant an impact on GP attendance as the regional and national campaigns.
⁵ There were a number of local projects, however not all conducted an analysis of GP attendance.

+37.3%
increase in
attendances
by men
reporting
campaign-
related
symptoms

National bowel

+21.9%
increase in
attendances
by women
reporting
campaign-
related
symptoms

National bowel

Are we seeing more people referred urgently for suspected cancer, and is there any shift in the profile of these patients?

**BE CLEAR
ON CANCER**

YES!

Where does this information come from?

In order to examine the impact on urgent (or two week wait (2WW)) referrals for suspected cancer (and the associated conversion and detection rates) the Public Health England National Cancer Registration Service (Trent) collects and analyses data through the National Cancer Waiting Times Monitoring Dataset for each (former) Cancer Network separately, including age and gender profiles.⁶

This analysis is complex due to 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 impact on urgent referrals.

What are the results saying?

National bowel (Jan – Mar 2012)

- All England – 40% increase in 2WW referrals (43,690 in 2011 to 61,004 in 2012) for suspected lower GI cancer coinciding with the time of the campaign, compared with same period in previous year
- Higher increases for men compared with women
- Referral numbers sustained after the campaign

National lung (May – Jun 2012)

- All England – 32% increase in 2WW referrals (10,504 in 2011 to 13,849 in 2012) for suspected lung cancer during campaign period, with the greatest increase in July (46%)
- Referral numbers after the campaign (Aug – Nov) were 21% higher when compared with the same period in 2011
- Referral rates higher in men than women

Local breast over 70 (Jan – Mar 2012)

- 8% increase in 2WW (2,002 to 2,154) referrals for both non-suspected breast cancer symptoms and suspected breast cancer in over 70s in pilot area compared with 5% increase (14,062 to 14,695) in control area

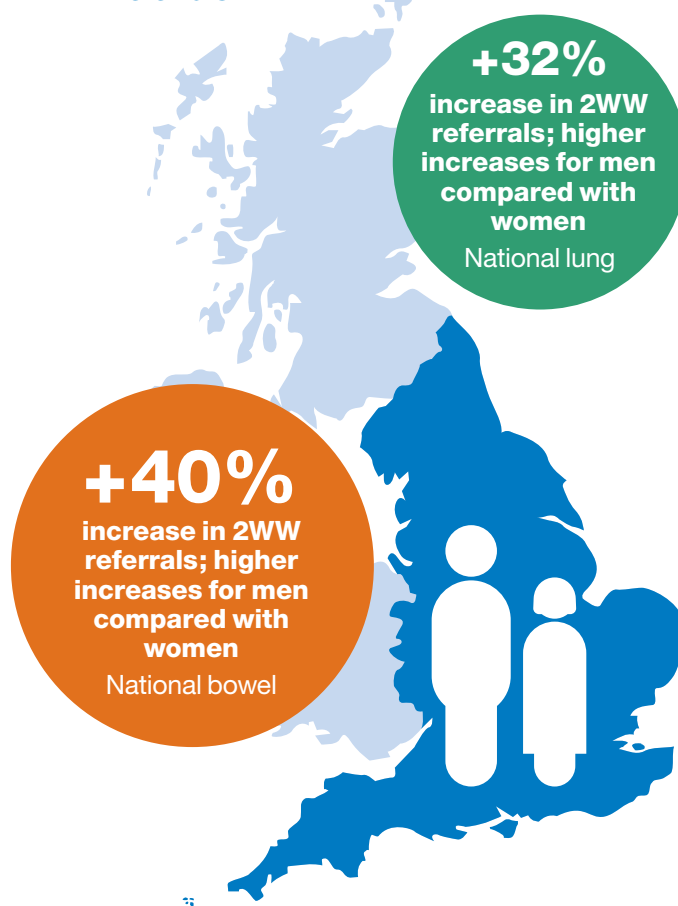
Local 'blood in pee' (Jan – Mar 2012)

- 23% increase in 2WW referrals (2,752 to 3,378) for suspected urological cancer in the pilot area compared with 16% increase (24,403 to 28,263) in control area⁷

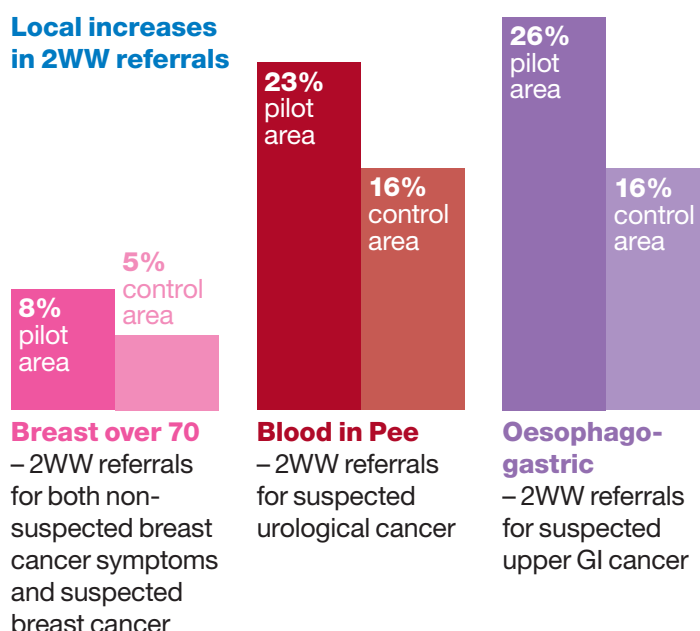
Local oesophago-gastric (Apr 2012 – Jul 2012)

- 26% increase in 2WW referrals (6,489 to 8,190) for suspected upper GI cancer in pilot area compared with 16% increase (28,127 to 32,761) in control area

All England increases in 2WW referrals



Local increases in 2WW referrals



⁶ With the exception of North Central and North East London which are looked at together (where applicable).

⁷ Pathway covers several cancer types in addition to kidney and bladder.

Of those referred urgently for suspected cancer, how many actually turn out to have that cancer?



Where does this information come from?

Conversion and detection rates⁸ are collected and analysed by the Public Health England National Cancer Registration Service (Trent) with analysis carried out using the National Cancer Waiting Times Monitoring Dataset for each (former) Cancer Network separately, including age and gender profiles.⁹

There was an expectation that referral thresholds for investigations would be lowered and that conversion rates might go down correspondingly.

What are the results saying?

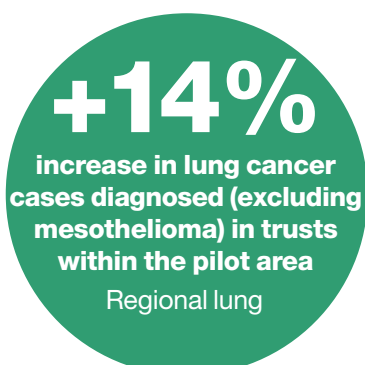
National bowel (Jan – Mar 2012)

- Drop in GP conversion rates from 5.9% (2,580 of the 43,690 referrals were subsequently diagnosed with bowel cancer) to 4.7% (2,877 of the 61,004 referrals were subsequently diagnosed with bowel cancer)
- Small increase in detection rates from 36% (2,639 of the 7,366 cancers diagnosed were for patients who had been urgently (2WW) referred for suspected lower GI cancer) to 38% (3,030 of the 7,938 cancers diagnosed were for patients who had been urgently (2WW) referred for suspected lower GI cancer)

Regional lung (Oct – Nov 2011)

Analysis of national lung cancer audit data following the regional lung cancer awareness campaign piloted in the Midlands region at the end of 2011 has shown some encouraging results.

- Trusts within the campaign area saw a 14.0% increase in lung cancer cases (excluding mesothelioma) diagnosed between the periods Oct – Dec 2010 and Oct – Dec 2011 compared with a 4.7% increase in trusts outside the pilot area (Source: LUCADA)



+4.7%

Compared with a 4.7% increase in trusts outside the pilot area

Local oesophago-gastric (Apr 2012 – Jul 2012)

- 20% increase in oesophageal cancers (177 to 212) diagnosed following a 2WW referral for suspected upper GI cancer in the pilot area compared with a 3% increase (827 to 853) in the control area

Local breast over 70 (Jan – Mar 2012)

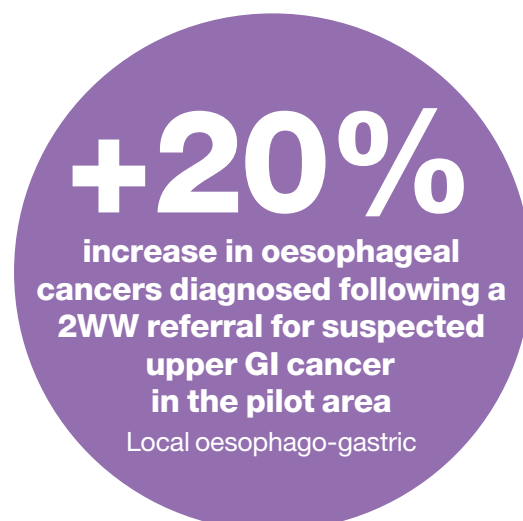
- 4% increase in number of breast cancers diagnosed following a 2WW referral for non-suspected cancer symptoms in women over 70 in the pilot area compared with 2% increase in control area
- 3% decrease in number of breast cancers diagnosed following a 2WW referral for suspected malignant breast cancer in women over 70 in the pilot area compared with a 2% increase in the control area

Local blood in pee (Jan – Mar 2012)

- 5.3% increase in the number of bladder or kidney cancers diagnosed following a 2WW referral for suspected urological cancer within the pilot area compared with an 11.9% increase in the control area

⁸ 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.

⁹ With the exception of North Central and North East London which are looked at together (where applicable).



+3%

Compared with a 3% increase in the control area

Are we seeing an increase in diagnostic investigation activity?

YES!

Where does this information come from?

The national cancer registration system will undergo the final phases of its comprehensive modernisation programme in 2013. The migration and live running of a single national system (ENCORE) will improve access to data collection for the continued evaluation of Be Clear on Cancer.

Hospital Episode Statistics (HES) data are linked to cancer registry records and are also collected and analysed by the National Intelligence Network (NCIN).

Where relevant we assess any impact on specific diagnostic tests which are directly applicable to a campaign. For example, we hope to gather CA125 requests as part of the local ovarian pilot.¹⁰

Gathering data in a consistent format can be challenging due to variations across the country.

What are the results saying?

National bowel (Jan–Mar 2012)

- A review of March 2012 activity showed that, nationally, there were around 7,000 additional colonoscopies and around 2,500 additional flexible-sigmoidoscopies compared with March 2011
- At a national level no impact on waiting times but variation at a local level

National lung (May – Jun 2012)

- Initial analysis of the Diagnostic Imaging Dataset suggests that the number of chest X-rays requested by a GP via direct access increased significantly from April to May 2012 (21%), was sustained in June and fell back towards the April baseline in July. This may reflect the impact of the lung cancer awareness campaign, but since this is a new data set it is not possible to rule out, or adjust for, normal or seasonal fluctuation

¹⁰ This data may come from a national data set or in some circumstances be obtained via local trusts. This can have a significant impact on the timescales for obtaining this data.

Are we seeing a shift towards earlier stage disease?

YES!

Where does this information come from?

National audit data are available for some campaigns (e.g. regional lung campaign). However, collection of these data can be restricted by timescales of data extraction.

Stage of disease is also analysed through Hospital Episode Statistics (HES) data which linked to cancer registry records and collected and analysed by the National Cancer Intelligence Network (NCIN).

What are the results saying?

Regional lung (Oct – Nov 2011)

- Statically significant increase in the proportion of small cell lung cancers staged as “limited” and positive trend towards earlier stage of diagnosis of non-small cell lung cancers in pilot trusts. Neither of these findings were seen in control trusts
- Pilot trusts also saw a statistically significant increase in surgical resections which was not replicated in the non-pilot trusts (Source: LUCADA)¹¹

¹¹ 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.

Do we look at other data sources?

YES!

The evaluation of Be Clear on Cancer campaigns is made up of quantitative, qualitative and bespoke elements. Other data sources are considered and utilised where appropriate, for the campaign. For example, as part of the national bowel campaign, bowel screening uptake was collected and analysed. A bespoke polyp pilot (examining detection and referral of benign and malignant polyps during the campaign period) was carried out.

Colleagues at the University of York and University of Sheffield are supporting the Department of Health, Public Health England and NHS England to estimate the cost effectiveness of the Be Clear on Cancer lung and bowel awareness campaigns.

These additional data help measure unintentional consequences as well as contribute to the overall picture of the Be Clear on Cancer campaigns.

For more information visit the Be Clear on Cancer section of the [NAEDI website](#) or for further details on the Be Clear on Cancer evaluation please contact Laura McGuinness at Cancer Research UK on laura.mcguinness@cancer.org.uk

May 2013

In conclusion ...

Be Clear on Cancer raises awareness of symptoms	✓
Be Clear on Cancer reaches the target audience	✓
The NHS copes with the increased demand	✓
More cancers are being diagnosed	✓
Starting to see a shift in stage for some cancers	✓

Dr Alison Wint



Dr David Isaac

