



Public Health
England

Protecting and improving the nation's health

National Cancer Registration and Analysis Service

Be Clear on Cancer: Regional and national lung cancer awareness campaigns 2011 to 2014

Final evaluation results – Executive
Headlines

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Public Health England (PHE)
National Cancer Registration and Analysis Service (NCRAS)
Be Clear on Cancer: Regional and national lung cancer awareness campaigns
2011 to 2014 – Executive Headlines

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1. Foreword

It gives me great pleasure to introduce the executive headlines and full evaluation report on the impact of the Be Clear on Cancer lung campaigns which ran from 2011 to 2014. It represents the culmination of a huge amount of work by staff in PHE, the Department of Health (DH) and NHS England (NHSE), together with significant contributions from partner organisations, particularly Cancer Research UK. I would like to thank all involved in making a success of this innovative programme. A complex range of analyses and interpretations of data from a large number of sources provide us with insight into the potential impact of the lung campaigns across the patient pathway, from awareness of symptoms in the general public, through to GP attendance and survival.

The full report examines the evaluation metrics published on the [NCRAS website](#) and takes a close look at the findings in the wider context of what we know about lung cancer and early diagnosis. The results are of great interest, though not straightforward to interpret. However, what is clear is that these campaigns have raised awareness of the symptoms of lung cancer prompting people to see their GPs, triggering increases in referrals for suspected cancer. This has led to a shift in the proportion of patients diagnosed with earlier stage disease, allowing them the possibility of securing more effective treatment. This is balanced against the fact that we have not been able to demonstrate a significant improvement in survival directly as a result of the campaigns.

Be Clear on Cancer is now in its eighth year, and has become a well-established, award-winning brand, working to improve cancer outcomes and reduce health inequalities. The Independent Cancer Taskforce supported our work in the [2015 Strategy for England](#), recognising how Be Clear on Cancer is making a real difference to people's lives by improving outcomes and increasing awareness of the fact that many cancers are treatable if caught early. Early diagnosis is crucial to improving outcomes from cancer and other serious diseases. Be Clear on Cancer is part of the national drive to tackle cancer, contributing towards making earlier diagnosis a reality for the thousands of people diagnosed with cancer each year.

The Be Clear on Cancer programme is run by PHE in partnership with DH and NHSE, working closely with Cancer Research UK, clinical colleagues and the wider academic and charity sectors.

PHE has been responsible for the development, marketing and evaluation of all campaigns run since April 2013. They have carried out careful evaluation, often using bespoke analyses of complex datasets in order to establish as best they can the impact of the campaigns.

**Professor Chris Harrison, National Clinical Director for Cancer, NHS England
Chair of the Be Clear on Cancer Steering Group**

Note: Structure of report

This document summarises the major findings of the Be Clear on Cancer Lung Campaigns. Please refer to the Be Clear on Cancer Lung Report for the full evaluation findings and greater depth of detail on the methodology, evidence and sources.

2. Executive headlines

2.1 The problem

Lung cancer kills more people than any other cancer. In 2015 it accounted for 21% of all cancer deaths in England with 28,565 deaths and 36,637 new patients being diagnosed with the disease. Late presentation is a major problem and in 2015 over 70% of patients had essentially incurable disease by the time they reached specialist care. Patients diagnosed with the earliest stage disease (stage 1A) have a much better prognosis with as many as 90% living to 5 years in some studies. Survival rates in England are worse than many other parts of the developed world and this is, in part at least, because a higher proportion of patients have advanced disease by the time they are diagnosed.

2.2 Aim of the Be Clear on Cancer campaigns

The objective of the Be Clear on Cancer campaigns is to encourage more people to recognise symptoms that might be an early indication of cancer and to see their GP sooner, leading to earlier diagnosis and ultimately improved outcomes.

The ambitions from the Independent Cancer Taskforce are an additional 30,000 patients per year surviving cancer for ten years or more by 2020, of which almost 11,000 will be through earlier diagnosis. Alongside other actions, the Cancer Taskforce's recommendation is that there should be a minimum of two national Be Clear on Cancer campaigns per year to support the overall ambition.

2.3 History of campaigns

A regional pilot of the Be Clear on Cancer campaign to raise public awareness of persistent cough as a symptom of lung cancer ran in the East and West Midlands in 2011. Based on the early findings from the pilot, the first national campaign in 2012 was commissioned, and then two further national campaigns in 2013 and 2014. Campaigns were targeted at people over the age of 50 and people in the lower social class groups known as C2DE. As a result of the initial evaluation of the four 'cough' campaigns discussed in this report, a broader respiratory symptoms campaign was carried out

nationally in 2016 and a reminder campaign launched in May 2017. These use both breathlessness and cough as target symptoms and attempts will be made to assess their impact on the diagnosis of other conditions such as chronic obstructive pulmonary disease (COPD) and heart failure, as well as lung cancer.

2.4 Campaign recognition and public awareness

Three out of four of the Be Clear on Cancer lung cancer campaigns were evaluated by tracking surveys among the general public before and after the campaigns. The three campaigns achieved a high level of public recognition of persistent cough as a possible symptom of lung cancer. Across the campaigns almost one in five people surveyed said they had taken action as a result of the campaign.

2.5 Attendance at GP practices

There were significant increases in the number of people seeing their GP for cough as a result of the regional and first national campaigns, but the numbers involved were not generally overwhelming for GPs, the typical impact being around three additional attendances per practice per week. No GP practice attendance data was available for the second and third national campaigns.

2.6 Urgent GP referrals for suspected lung cancer

Between 2011 and 2015 the number of urgent GP referrals (also known as two week wait referrals) for suspected lung cancer doubled. There were short-term faster rates of increase after each of the campaigns, the increases were largest after the first national campaign (32%) and became less in subsequent campaigns.

2.7 Lung cancer diagnosis information from the Cancer Waiting Times (CWT) data

The number of lung cancers diagnosed after an urgent GP referral for suspected lung cancer and the total number of lung cancers recorded in the CWT database both increased after the first national campaign, with no evidence of an increase after the second and third campaigns. There were no significant changes in detection rates or conversion rates.

2.8 Numbers of new lung cancers

The numbers of new lung cancers detected overall increased significantly in the periods following the regional and first national campaign. No significant increases were seen after the second and third campaigns except for a modest increase in numbers of female cases after the third campaign.

2.9 Emergency presentation rates

There was a long-term decreasing trend in the proportion of patients diagnosed as a result of an emergency presentation. This was paralleled by an increase in the proportion referred electively from GPs over the time period of the campaigns, making it difficult to interpret any specific impact of the campaigns.

2.10 Stage at diagnosis

There is evidence of a significant and positive stage shift (towards earlier stage disease) in patients diagnosed after all three of the national campaigns, and a trend towards such a shift after the regional campaign.

2.11 Performance status

Performance status is a measure of how the cancer is affecting the daily living abilities of the patient, overall fitness and if impaired, impacts on suitability for treatment. Since it can deteriorate over a period of delay in diagnosis, it is of relevance when considering treatment rates. It was only available for the regional pilot and first national campaign.

2.12 Treatment rates

The proportion of patients undergoing surgery increased after the regional and first national campaign. These two campaigns were also followed by an increase in the overall proportion of patients receiving any active anticancer treatment and a fall in the proportion receiving only palliative care.

2.13 Diagnostic imaging

Following the first national campaign there were significant increases in requests for chest X-rays and CT scans both by GPs and consultants. The impact was less clear for the second and third campaigns though overall use of thoracic imaging increased over

the period. There was evidence of an increase in requests for chest X-rays by GPs over the period of the third national campaign.

2.14 Survival

No statistically significant increases were observed in proportions of patients surviving to 1 year post diagnosis in the first, second or third national campaigns.

2.15 Changes in impact over time

The greatest changes in most of the variables evaluated were seen after the regional and first national campaigns, with evidence to suggest a lesser effect after the second and third national campaigns. However, the baseline levels of many indicators (especially urgent GP referrals for suspected cancer and emergency presentation rates) had also changed over the period of observation, making assessment difficult. The regional and first national campaigns were delivered with a heavier weight of media coverage, meaning that the campaign messages will have been more visible to the target audience. It is likely that the lower weight of media coverage may have had some bearing on the impact of the later campaigns.

2.16 Overall conclusions

There is evidence of what might best be described as a 'whole system response'. This response starts with increased public recognition of the messages, to increases in attendance at GP practices, then increases in urgent suspected cancer referrals from GPs to secondary care. Following on from that, there is some evidence of an increased number of cases and more use of diagnostic tests, a shift to earlier stage disease with better performance status at the time of diagnosis and increased numbers of patients undergoing surgery; but no evidence of a statistically significant improvement in 1-year survival directly related to the campaigns.

All of these results have been studied against a background of general improvements in many of the process and outcome indicators relating to lung cancer in England over the last 10-12 years. These improvements are almost certainly a result of a wide variety of changes in how lung cancer is managed in the English NHS and how it is perceived as a disease both by the public and healthcare professionals. The Be Clear on Cancer lung cancer campaigns have been one part of this environmental change and ascribing

direct cause and effect is not possible. Whilst the marketing impact appears to have been sustained over the three campaigns in which it was measured, there is evidence of a progressive fall in indicators of clinical impact and outcome over the course of the four campaigns. This may, in part, be related to reduced levels of spend on marketing or diminishing returns against continuing background improvement. However, the overall short-term evaluation of these campaigns presented in this document suggests that they appear to have had a significant and positive impact on outcomes for lung cancer patients in this country.