



Public Health  
England

Protecting and improving the nation's health

# **National Cancer Intelligence Network**

## **Be Clear on Cancer: Skin cancer awareness local pilot campaign**

### **Interim evaluation results**

## About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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# The intelligence networks

Public Health England operates a number of intelligence networks, which work with partners to develop world-class population health intelligence to help improve local, national and international public health systems.

## **National Cancer Intelligence Network**

The National Cancer Intelligence Network (NCIN) is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.

## **National Cardiovascular Intelligence Network**

The National Cardiovascular Intelligence Network (NCVIN) analyses information and data and turns it into meaningful timely health intelligence for commissioners, policy makers, clinicians and health professionals to improve services and outcomes.

## **National Child and Maternal Health Intelligence Network**

The National Child and Maternal Health Intelligence Network provides information and intelligence to improve decision-making for high-quality, cost-effective services. Its work supports policy makers, commissioners, managers, regulators, and other health stakeholders working on children's, young people's and maternal health.

## **National Mental Health, Dementia and Neurology Intelligence Network**

The National Mental Health Intelligence Networks (NMHDNIN) brings together the distinct National Mental Health Intelligence Network, the Dementia Intelligence Network and the Neurology Intelligence Network under a single programme. The Networks work in partnership with key stakeholder organisations. The Networks seeks to put information and intelligence into the hands of decision makers to improve mental health and wellbeing, support the reduction of risk and improve the lives of people living with dementia and improve neurology services.

## **National End of Life Care Intelligence Network**

The National End of Life Care Intelligence Network (NEoLCIN) aims to improve the collection and analysis of information related to the quality, volume and costs of care provided by the NHS, social services and the third sector to adults approaching the end of life. This intelligence will help drive improvements in the quality and productivity of services.

# Contents

About Public Health England	2
The intelligence networks	2
Contents	4
Introduction	5
Public awareness and knowledge	7
Methods	7
Public pre- and post-campaign tracking survey	7
GP survey	9
NHS Choices website evaluation	11
Qualitative research with healthcare practitioners and local authority personnel post-campaign	11
Urgent GP referrals for suspected cancer and related cancer diagnoses	13
Methods	13
Urgent GP referrals for suspected cancer	14
Cancer diagnoses resulting from an urgent GP referral for suspected cancer	16
Conversion rate	17
Cancer diagnoses recorded in the Cancer Waiting Times database	19
Detection rate	21
Conclusion	23

## Introduction

Be Clear on Cancer campaigns aim to achieve earlier diagnosis of cancer by raising awareness of the signs and symptoms and encouraging people with those signs and symptoms to see their GP without delay.

The Be Clear on Cancer brand has been used to promote awareness and early diagnosis of specific cancer types since January 2011. Since 2013 the programme has been led by Public Health England, working in partnership with the Department of Health and NHS England. Each campaign is tested locally, with a view to rolling them out regionally and nationally if they prove to be effective at each stage<sup>1</sup>.

For each Be Clear on Cancer campaign there is a comprehensive evaluation process. Data is collected on a number of metrics to reflect possible campaign impact. These include whether campaigns are raising awareness of signs and symptoms of cancer; more people are being referred urgently for suspected cancer; there is an increase in diagnostic activity; those referred urgently for suspected cancer are diagnosed with cancer; there are increases in the number of cancers diagnosed and if there is evidence of a shift towards earlier stage disease.

Local pilots, such as this campaign, are the first stage in the Be Clear on Cancer evolution. They are used to test whether the proposed approach works, particularly in terms of how the target audience responds to the campaign and if, for example, the key message is being understood. They are also used to start to understand the impact the campaign will have on NHS services.

### Skin cancer awareness local pilot campaign

The Be Clear on Cancer local pilot campaign to raise awareness of the signs of skin cancer ran from 16 June to 27 July 2014 in Devon, Somerset and Cornwall<sup>2</sup>. The campaign was aimed at men and women aged 50 and over; the age group most likely to be diagnosed with the most serious form of skin cancer, malignant melanoma. Its key

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<sup>1</sup> The decision on which Be Clear on Cancer campaigns will run are informed by a steering group, whose members include primary and secondary care clinicians, analysts and key voluntary sector organisations. A number of factors are taken into account, including all available evaluation data

<sup>2</sup> Devon, Cornwall and Somerset refers to the area covered by the Devon, Cornwall and Somerset PHE area. It covers these three counties as a whole (excluding North Somerset and Bath and North East Somerset).

message was ‘A change to a mole isn’t the only sign of skin cancer – if you notice any unusual or persistent changes to your skin, go to your doctor.’

The campaign activity included advertising, direct mail, face to face events and public relations (PR). Advertising ran on local radio, in newspapers and out of home settings for instance in bus shelters, leisure centres and on pharmacy bags. Advertising also ran online. A direct mail letter and leaflet were sent to around 110,000 people in the target audience in the area. PR activity was used to communicate the key messages, with the support of case studies and clinical spokespeople, and face to face events ran in settings such as shopping centres and DIY stores. A campaign website was developed ([nhs.uk/skincancer](http://nhs.uk/skincancer)), and posters and leaflets were displayed in GP surgeries and other venues in the area.



Briefing sheets were developed for healthcare professionals and for local authorities and community groups, to help them prepare for the campaign.

A final evaluation report will be published when the analysis of all metrics is complete. This interim report provides the results available to date.

# Public awareness and knowledge

This chapter considers whether the skin cancer awareness local pilot campaign had an impact on public awareness and knowledge of skin cancer.

## Methods

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-campaign interviews. Where possible, a test and control approach has been used to allow for comparisons between areas with and without campaign activity.

For the skin cancer awareness local pilot campaign, the research was conducted through pre and post-campaign surveys in the pilot and control areas. The test area was Devon, Cornwall and Somerset for the local skin cancer campaign. The control area was Anglia and Essex.

This campaign was evaluated using four separate pieces of research:

- pre and post-campaign tracking among the age 50 and over population
- a survey of GPs before and after the campaign
- a pop up survey on the [nhs.uk/skincancer](https://www.nhs.uk/skincancer) website
- qualitative research with healthcare practitioners and local authority personnel post-campaign

Summaries and details of each survey are included below.

## Public pre- and post-campaign tracking survey

The survey was a face-to-face survey among a representative sample of adults aged 50 and over in both the test and control regions. Samples of approximately 220 adults aged 50 and over were interviewed in the pilot and control areas at both pre and post-campaign stages.

## Campaign awareness and recognition

Awareness of general cancer advertising was high in the pilot region at both stages (73% pre and 75% post) of the research. Skin cancer was the most frequently recalled cancer publicity among those in the pilot region at the post stage, with recall increasing substantially pre to post-campaign (from 27% to 48% of those who had seen recent cancer publicity). The same effect was not seen in the control region, suggesting that the campaign was instrumental in raising awareness.

Recognition of the campaign adverts was high. Seven in ten people in the pilot region (70%) had seen one or more forms of campaign activity and this was driven predominantly by recognition of the radio (49%) and press/out of home advertising (43%). Around one quarter of people (23%) had seen the Be Clear on Cancer skin cancer leaflet and around one in seven (14%) had seen the online adverts.

## Campaign communication

After being shown the campaign adverts, the call-to-action message to go to the doctor or get checked was most frequently described among both the pilot (68%) and control (39%) samples. Interestingly, people in the pilot region were more likely to pick up on a number of key messages than those in the control region such as skin changes (27% compared with 13%) or acting early (22% compared with 13%), indicating that viewing the campaign adverts helps to reinforce these messages.

As seen with previous Be Clear on Cancer campaigns, almost all respondents in the pilot region agreed that it is important that adverts like these are shown (97%) and that the adverts were clear and easy to understand (95%). Around half agreed that the adverts told them something new (52%) with those in the control region more likely to say this was the case (67%), reflecting the high level of cancer publicity in the pilot region.

Encouragingly, less than one in ten (8%) people in the pilot region said that they were fed up with seeing this kind of cancer advertising, indicating that the advertising format is not yet approaching the stage where it wears out.

## Knowledge of signs/symptoms of skin cancer

Knowledge of mole-related symptoms as a sign of skin cancer stayed static after the campaign (63% to 66% in the pilot region), however, it is encouraging that knowledge of non-mole-related symptoms increased in the pilot region (from 36% to 47%), while remaining static among those in the control (36% pre and 35% post). This indicates that the campaign was successful in raising awareness of signs and symptoms of skin cancer that do not involve moles.



Among the half of people in the pilot region who mentioned non-mole related signs (47%), changes in skin colour or changes in the skin's appearance were the most frequently mentioned symptoms.

A direct question was asked to ascertain whether people knew about other signs and symptoms of skin cancer apart from moles changing. In the pilot area awareness rose statistically significantly from 68% at the pre-campaign stage to 81% at the post-campaign stage. In the control area 69% claimed to be aware of this fact and this remained stable at the post-campaign stage.

Confidence in knowledge of signs and symptoms of skin cancer increased statistically significantly in the pilot area pre-campaign to post-campaign, from 56% to 69% (very/fairly confident). There was no similar upward movement recorded in the control area.

### Campaign impact

Among those who recognised the campaign adverts, the most common action taken as a result was to make an appointment with a GP (8%), with a similar proportion of people talking to friends or family to advise them (7%) or about symptoms of their own (6%). It is encouraging that the most frequently taken actions involved taking steps towards diagnosis (eg making an appointment with a GP) rather than only *thinking* about doing this.

In total, one quarter of people who recognised one or more campaign adverts (24%) said that they had taken some form of action as a result of seeing them. Again, this is a positive result and conforms to the average result expected among comparable local pilot campaigns (25%).

### GP survey

A survey was conducted among a sample of GPs both before and after the campaign in order to assess the impact of the campaign on the levels of patients presenting with signs and symptoms of skin cancer, as well as on the level of awareness of the campaign among GPs. A test versus control area approach was also undertaken for this strand of the research to give an indication of the level of presentations to be expected if there had been no campaign activity, and to serve as a comparison for the level of presentations observed in the pilot area following activity.

This survey was conducted by TNS-BMRB by telephone among a sample of approximately 100 GPs in both the pilot and control regions at both pre and post-campaign stages.

## Awareness of the campaign

Awareness of the campaign was also high among GPs. Encouragingly, three quarters (75%) of GP's in the pilot region said that they had seen or heard the skin cancer campaign – a substantially higher figure than that seen among the control region (19%). Almost three in ten (28%) GPs who had heard of the Be Clear on Cancer skin cancer campaign correctly identified that PHE was responsible for it.

## Receipt of skin cancer communications

Thirty two per cent of GPs in the pilot area recalled receiving some sort of communication (emails, factsheets, letters etc.) about skin cancer in the last month. This had risen from 20% at the pre-campaign stage.

In the pilot area, the breakdown was:

- 13% from public health colleagues
- 12% from CCG
- 11% from central body
- 9% from a charity
- 8% from professional body
- 8% from Be Clear on Cancer programme

In the control area 26% of GPs recalled receiving skin cancer communications and this remained stable at both pre-campaign and post-campaign stages.

GPs were also positive about the skin cancer campaign, with over nine in ten (93%) agreeing that the adverts would encourage patients to visit their GP earlier with relevant symptoms. A similar proportion (89%) agreed that the adverts would help to raise awareness regarding the signs and symptoms of the disease.

## Patients mentioning skin cancer publicity in last month

In the pilot area there was a statistically significant increase in GPs reporting a rise in the proportion of patients mentioning the campaign with 44% of GPs reporting they had at least one occasion of patients mentioning the recent publicity (this had risen from 13% from the pre-campaign stage). Within this figure, 21% of GPs claimed that they had experienced at least three or more occasions of patients mentioning the campaign (up from 3% at the post stage). There was no increase in the control area.

## Estimated patient presentations/referrals

GPs were asked to indicate whether the number of patients presenting with possible skin cancer symptoms over the last two months was more, the same as usual or less than they expected for the time of year. Two in five (41%) GPs in the pilot region thought that they had seen more patients than usual and this was higher than the comparable result in the control region. This is encouraging news and suggests that the campaign was effective in persuading people to visit their GP with symptoms.

## NHS Choices website evaluation

A pop up survey was conducted on the [nhs.uk/skincancer](http://nhs.uk/skincancer) website during the campaign and for a week after to evaluate reactions to the website and video content. In total 357 questionnaires were completed.

Two thirds (66%) said they had been directed to the website from a campaign source, primarily by the online adverts (47%) with most visitors using the website for personal use (85%).

The overall reaction to the website was extremely positive, with the vast majority of people agreeing that it was clear, relevant, gave them new information and made them more confident that they would spot changes to their skin.

The response was similar for the animation and testimonial videos. There was high agreement that the videos were important, clear, relevant, provided them with new news and made them more likely to go to the doctor with symptoms. The animation had slightly higher uptake, with one in three (32%) having watched it compared with a quarter (25%) for the testimonial.

Seven in ten (69%) said they intended to take some sort of action following their website visit and, encouragingly, this rose to eight in ten (78%) for those aged 50 or more in the pilot region. The most common intended action was to make an appointment to talk to the GP or doctor (27%), supported by the higher numbers of presentations at GPs in the pilot region (see section 1.6) This demonstrates the website did not distract from the main call to action (to go to your GP).

## Qualitative research with healthcare practitioners and local authority personnel post-campaign

After the skin cancer awareness local pilot campaign had finished PHE commissioned Research Works to conduct a qualitative research project to evaluate the impact of the campaign among local healthcare professionals (HCPs) and local authority representatives. The fieldwork took place in September 2014.

## Sample

Twenty in-depth interviews were conducted with GPs, community pharmacists, consultant dermatologists and local authority contacts.

## Summary Findings

The majority of GPs, dermatologists, pharmacists and local authority personnel were aware of the skin cancer awareness campaign. GPs, pharmacists and dermatologists had noted campaign materials displayed in their local areas. Dermatologists had noted patients referring to the campaign in consultations. Local authorities had been briefed by the Regional PHE Lead.

Both GPs and dermatologists reported that the campaign had had a significant impact on public behaviour during the campaign period. GPs and dermatologists described an increase in patient enquiries, and subsequent referrals to secondary care. These referrals were considered both legitimate and unlikely to have occurred without patients being prompted by seeing the campaign materials.

More generally, responses to the campaign were very positive:

- the core campaign message was perceived as both helpful (comprising a number of different skin cancer symptoms) and tonally appropriate (conveying a balance between reassuring and motivating)
- campaign materials and challenges were seen as well-chosen for the target audience, offering an effective combination of traditional (leaflets and posters) and more modern options (online hub) – the radio was considered to be particularly effective

## Urgent GP referrals for suspected cancer and related cancer diagnoses

This chapter considers whether the skin cancer awareness local pilot campaign had an impact on the number of urgent GP referrals for suspected skin cancers or on cancer waiting times (CWT) recorded information on skin cancer diagnoses.

### Methods

Full methodology details are provided in 'Interim evaluation reports for Be Clear on Cancer campaigns: Methodology' (NCIN 2016), with the following campaign-specific notes:

Analysis considers urgent GP referrals for suspected skin cancers, and diagnoses of melanoma (ICD10 C43), non-melanoma skin cancer (NMSC, ICD10 C44, including squamous cell carcinoma, rarer types of skin cancer and possibly a small number of basal cell carcinomas) and all skin cancers recorded in the CWT database (ICD10 C43, C44<sup>3</sup>).

As the campaign ran from 16 June to 27 July 2014, the campaign and comparison periods were defined as follows:

Period	- Urgent GP referrals for suspected cancer - Cancer diagnoses resulting from an urgent GP referral for suspected cancer - Conversion rate	- Cancer diagnoses recorded in the CWT-Db - Detection rate
Campaign	June – August 2014	July - September 2014
Comparison	June – August 2013	July - September 2013

The number of urgent GP referrals for suspected cancer has continued to increase year-on-year, and so it is likely that some changes in the number of referrals will be due to this underlying trend. The number of urgent GP referrals for suspected skin cancers also demonstrate a clear seasonal pattern, but this is not generally seen for other referral types, or only to a much lesser extent. Therefore, as an alternative to an 'other referrals' comparator, a comparison was made to the previous year-on-year increase in skin referrals for the campaign months, that is the increase from June-August 2012 to

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<sup>3</sup> Basal cell carcinomas are excluded from the monitoring of Cancer Waiting Times. Therefore, the C44 diagnoses recorded in the Cancer Waiting Times data will mainly be squamous cell carcinomas and other rarer types of non-melanoma skin cancer, possibly with a small number of basal cell carcinomas.

June-August 2013. This should still provide some indication of the general (non campaign related) increase in skin referrals.

The local pilot campaign ran in Devon, Cornwall and Somerset. For the purposes of analysis, this local pilot area was defined using the South West Strategic Clinical Network. The control area was defined as England excluding the local pilot area.

## Urgent GP referrals for suspected cancer

(Urgent GP referrals for suspected skin cancers, presented by month first seen.)

In the local pilot area of Devon, Cornwall and Somerset, there was a 32% increase in the number of referrals, from 7,923 in June-August 2013 to 10,490 in June-August 2014 (Table 1). This was larger than the 22% increase in the control area, from 61,163 referrals to 74,779 referrals, and larger than the increases observed in both the local pilot area and the control area when comparing June-August 2013 with June-August 2012 (Table 2).

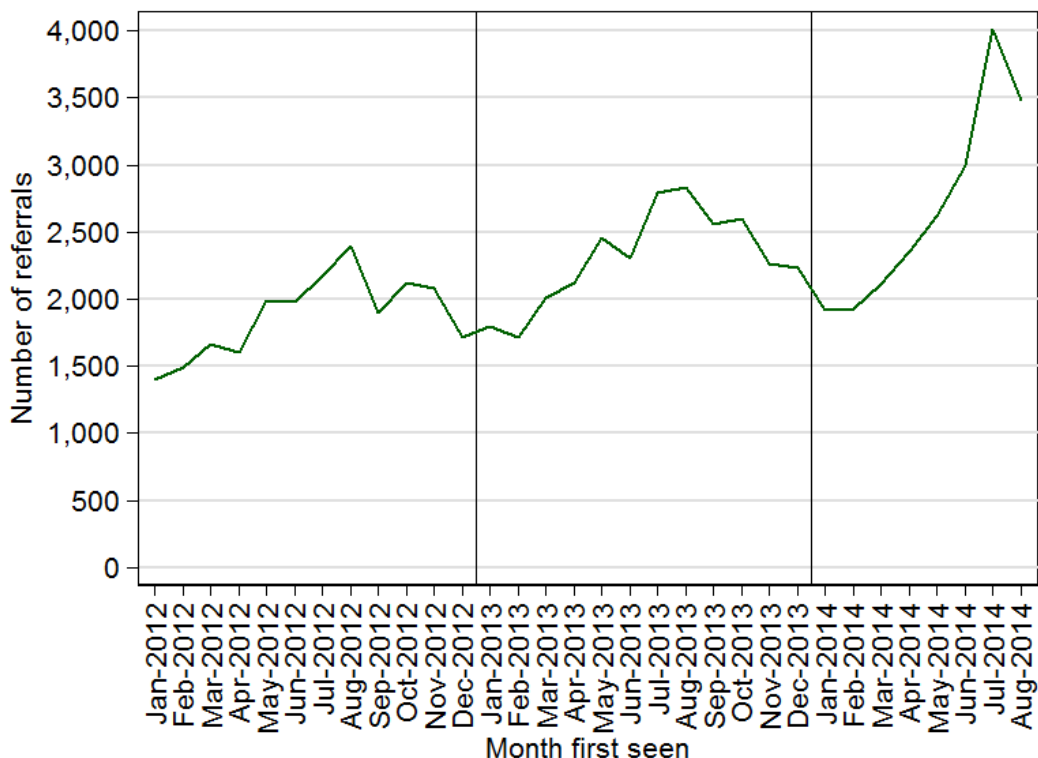
There was a clear spike in the number of urgent GP referrals for suspected skin cancers in the local pilot area in July 2014 (Figure 1), and while a similar spike was observable in the control area it was much less pronounced.

There was a general, large year-on-year increase in the number of urgent GP referrals for suspected skin cancers with a lot of seasonal variation. It is likely that the number of skin cancer referrals is affected by many environmental and seasonal factors which were not considered in this analysis, however, the large size of the increase in referrals in the pilot area compared with previous year-on-year changes and the smaller change in the control area provides evidence that the local pilot skin cancer awareness campaign increased the number of urgent GP referrals for suspected skin cancers.

**Table 1. Number of urgent GP referrals for suspected skin cancers, with referral rate and percentage change in number of referrals, from June-August 2013 and June-August 2014, local pilot area and control area**

Overall		June-August				
		Referrals	% Change in number	P-value	Referral rate Estimate	Referral rate 95% CI
Local pilot area	2013	7,923	32.4	<0.001	683.0	(667.9, 698.3)
	2014	10,490			905.8	(888.4, 923.5)
Control area	2013	61,163	22.3	<0.001	531.9	(527.7, 536.2)
	2014	74,779			651.3	(646.5, 656.0)

**Figure 1. Monthly number of urgent GP referrals for suspected skin cancers from January 2012-August 2014, local pilot area**



**Table 2. Number of urgent GP referrals for suspected skin cancers, with referral rate and percentage change in number of referrals, from June-August 2012 and June-August 2013, local pilot area and control area**

Overall	June-August				
	Referrals	% Change in number	P-value	Referral rate	
				Estimate	95% CI
Local pilot area	2012	6,560	20.8	<0.001	577.7 (563.7, 592.0)
	2013	7,923			
Control area	2012	52,422	16.7	<0.001	466.7 (462.7, 470.8)
	2013	61,163			

Large increases in the number of referrals were seen for each age group in the local pilot area. The largest increase was for the 60-69 age group, with an increase of 38% from 1,467 to 2,029 referrals. The smallest increase was for the <40 age group, with an increase of 22% from 1,520 to 1,855 referrals.

Comparing men and women, the increase in the local pilot area was the same, 32%, for both sexes.

## Cancer diagnoses resulting from an urgent GP referral for suspected cancer

(Those skin cancer diagnoses (ICD10 C43-C44) resulting from an urgent GP referral for suspected skin cancers, presented by month first seen.)

The change in the number of melanoma diagnoses resulting from an urgent GP referral for suspected skin cancers was similar in both areas (13% in local pilot area compared to a statistically significant 12% in control area) when comparing June to August 2014 with June to August 2013 (Table 3; Figure 2). The increase in the local pilot area was not statistically significant due to the small number of melanoma diagnoses.

There was a larger increase in the number of NMSC diagnoses resulting from an urgent GP referral for suspected skin cancers in the local pilot area (16%) than in the control area (6%).

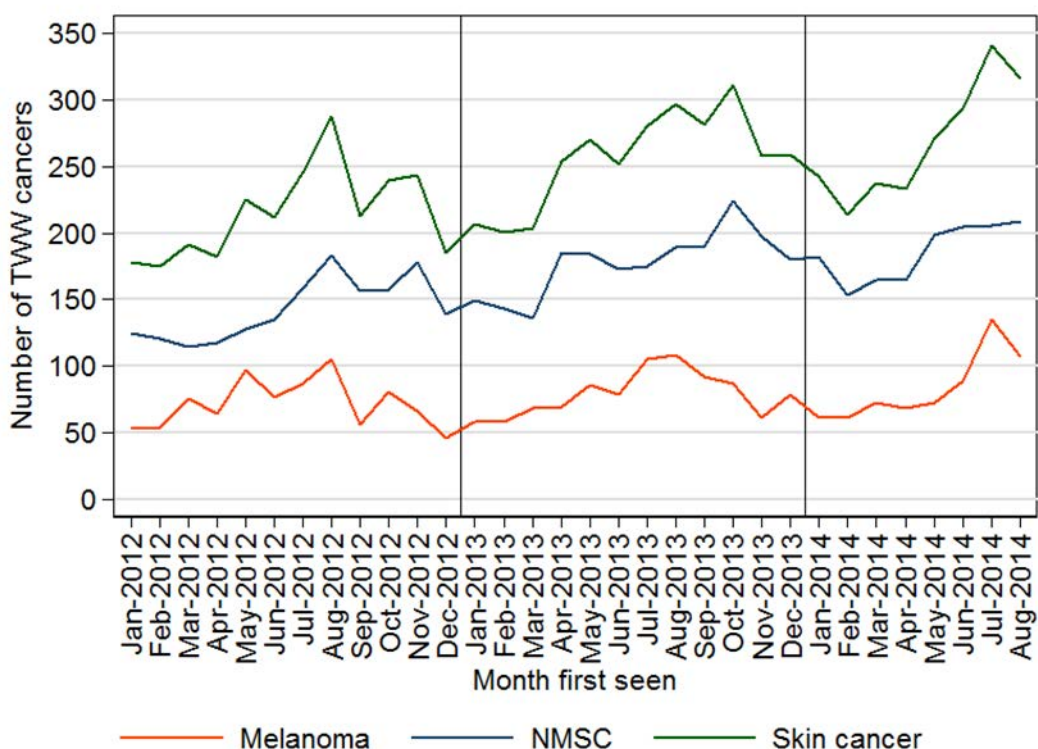
This large increase in NMSC diagnoses caused the larger increase in combined skin cancer diagnoses resulting from an urgent GP referral for suspected skin cancers in the local pilot area than in the control area.

**Table 3. Number of melanoma, NMSC and skin cancer diagnoses resulting from an urgent GP referral for suspected skin cancers, with percentage change in number of cancers, from June-August 2013 and June-August 2014, local pilot area and control area**

Site	Region	June-August			
		TWW Cancers		% Change in number	P-value
		2013	2014		
Melanoma	Local pilot area	292	331	13.4	0.118
	Control area	1,978	2,218	12.1	<0.001
NMSC	Local pilot area	537	620	15.5	0.015
	Control area	2,772	2,944	6.2	0.023
Skin cancer	Local pilot area	829	951	14.7	0.004
	Control area	4,750	5,162	8.7	<0.001



**Figure 2. Monthly number of melanoma, NMSC and skin cancer diagnoses resulting from an urgent GP referral for suspected skin cancers from January 2012-August 2014, local pilot area**



There was some evidence of a larger increase in the number of NMSC diagnoses resulting from an urgent GP referral for suspected skin cancers for men (23% increase) than for women (5% increase) in the local pilot area.

### Conversion rate

(Percentage of urgent GP referrals for suspected skin cancers resulting in a diagnosis of skin cancer, presented by month first seen.)

There have been gradual downward trends in the conversion rate of urgent GP referrals to both melanoma and NMSC, and skin cancers overall, for some time (Figure 3). Historically, the conversion rate for urgent GP referrals for suspected skin cancers has been higher in the local pilot area than in the control area, particularly for NMSC.

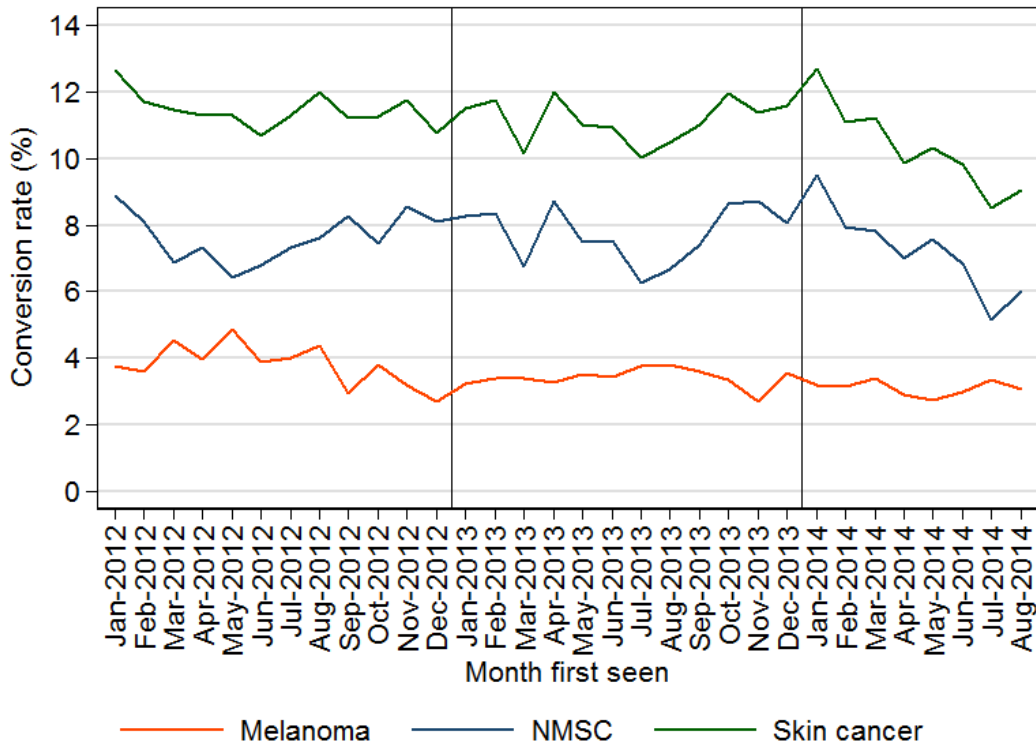
For melanoma, the campaign does not appear to have affected the conversion rate more than the long-term trend (Table 4; Figure 3), with similar decreases in both the local pilot area and the control area when comparing June to August 2014 and June to August 2013.

For NMSC, the decreases in the conversion rate were similar in the local pilot area and the control area. The decrease in the local pilot area was slightly larger (0.9 percentage points, from 6.8% to 5.9%) than in the control area (0.6 percentage points, from 4.5% to 3.9%), which may at least in part have been due to the higher initial conversion rate in the local pilot area.

**Table 4. Melanoma, NMSC and skin cancer conversion rates for urgent GP referrals for suspected skin cancers, with change, from June – August 2013 and June – August 2014, local pilot area and control area**

Site	Region	June-August					
		2013		2014		%Point Change	P-value
Conv. Rate (%)	95% CI	Conv. Rate (%)	95% CI				
Melanoma	Local pilot area	3.7	(3.3, 4.4)	3.2	(2.8, 3.5)	-0.5	0.049
	Control area	3.2	(3.1, 3.4)	3.0	(2.8, 3.1)	-0.3	0.004
NMSC	Local pilot area	6.8	(6.2, 7.4)	5.9	(5.5, 6.4)	-0.9	0.016
	Control area	4.5	(4.4, 4.7)	3.9	(3.8, 4.1)	-0.6	<0.001
Skin cancer	Local pilot area	10.5	(9.8, 11.2)	9.1	(8.5, 9.6)	-1.4	0.001
	Control area	7.8	(7.6, 8.0)	6.9	(6.1, 7.1)	-0.9	<0.001

**Figure 3. Monthly melanoma, NMSC and skin cancer conversion rates for urgent GP referrals for suspected skin cancers from January 2012-August 2014, local pilot area**



By age and sex, changes in the conversion rates to melanoma, NMSC and skin cancer diagnoses all appeared consistent with the long-term trend.

### Cancer diagnoses recorded in the Cancer Waiting Times database

(All skin cancer diagnoses recorded in the CWT database (CWT-Db), presented by month of first treatment.)

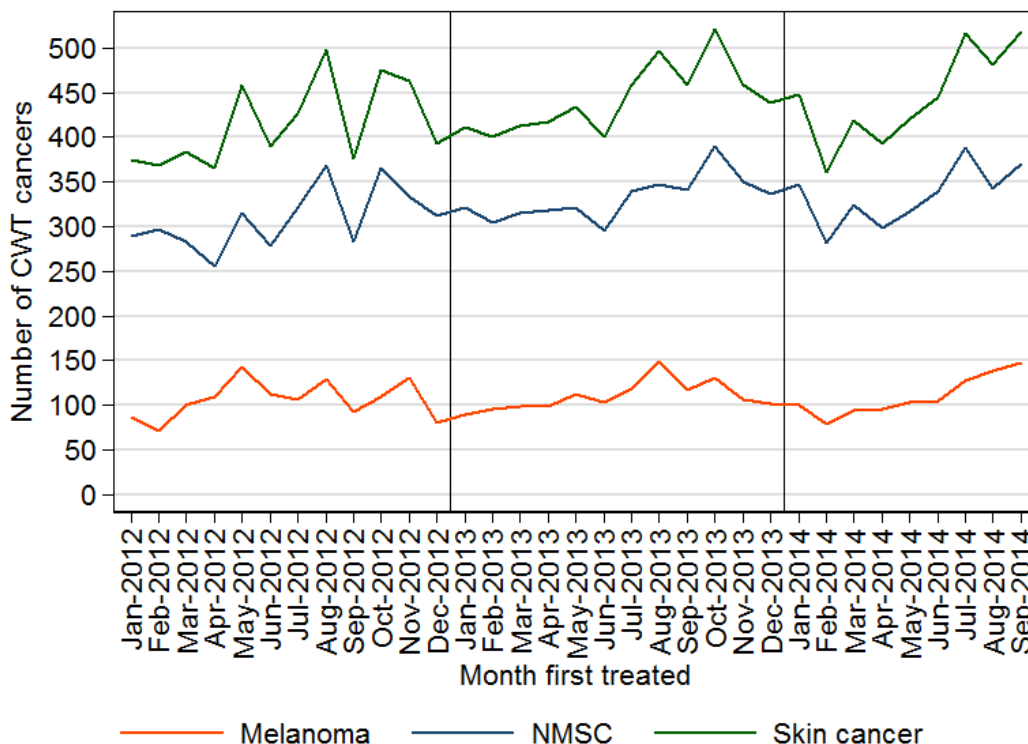
The number of melanoma and NMSC diagnoses was little changed between July to September 2014 and July to September 2013. There were small increases in the number of such diagnoses in both the local pilot area and the control area, although the only statistically significant changes were the 4% increase in NMSC diagnoses in the control area, and the 4% increase in total skin cancers in the same area (Table 5).

The apparent increases in the local pilot area appeared to be a little larger than in the control area, with for example a 7% increase in the number of NMSC diagnoses from 1,030 to 1,103 diagnoses, although these differences were not statistically significant. There was no clear evidence of a change related to the campaign.

**Table 5. Number of melanoma, NMSC and skin cancer diagnoses recorded in the Cancer Waiting Times database, with percentage change in number of cancers, from July-September 2013 and July-September 2014, local pilot area and control area**

Site	Region	July-September			
		CWT Cancers 2013	CWT Cancers 2014	% Change in number	P-value
Melanoma	Local pilot area	385	413	7.3	0.322
	Control area	2,718	2,836	4.3	0.113
NMSC	Local pilot area	1,030	1,103	7.1	0.114
	Control area	5,812	6,048	4.1	0.030
Skin cancer	Local pilot area	1,415	1,516	7.1	0.062
	Control area	8,530	8,884	4.2	0.007

**Figure 4. Monthly number of melanoma, NMSC and skin cancer diagnoses recorded in the Cancer Waiting Times database, from January 2012- September 2014, local pilot area**



There was a large increase in the number of NMSC diagnoses recorded for men, with a 20% rise from 620 diagnoses to 741 diagnoses. In comparison, there appeared to be a reduction in the number of NMSC diagnoses recorded for women, from 410 to 362, although this was not a statistically significant change.

## Detection rate

(Percentage of CWT-Db recorded skin cancer diagnoses which resulted from an urgent GP referral for suspected skin cancers, presented by month of first treatment.)

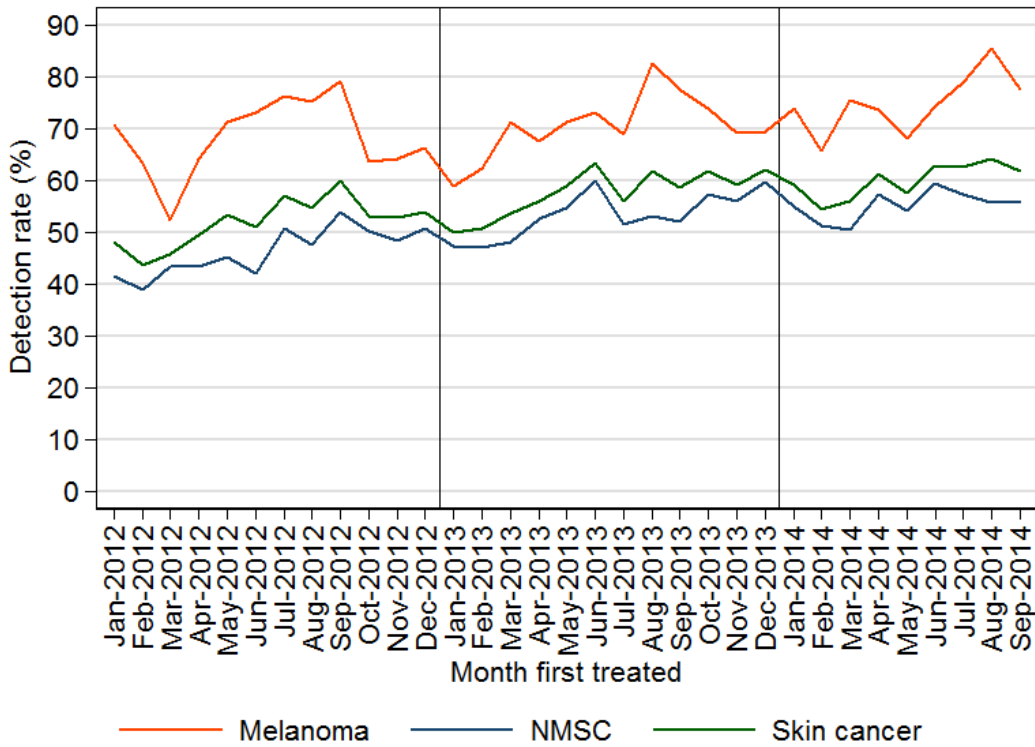
There has been a gradual upward trend in the detection rate of melanoma, NMSC and skin cancer diagnoses for several years, in both the local pilot area and control area (Figure 5). From July-September 2013 to July-September 2014, there were small increases in detection rates, although the only statistically significant change was the four percentage point increase, from 59% to 63%, in combined skin cancer detection rate for the local pilot area. While the detection rate increases for melanoma, NMSC and skin cancer diagnoses appeared a little larger in the local pilot area than in the control area, no exceptional increases were evident with the changes appearing consistent with the long-term trend (Figure 5).

Overall, there was no clear evidence of a campaign impact on the detection rate.

**Table 6. Detection rates for melanoma, NMSC and skin cancer diagnoses, with change, from July-September 2013 and July-September 2014, local pilot area and control area**

Site	Region	July-September				%Point Change	P-value
		2013		2014			
		Det. Rate (%)	95% CI	Det. Rate (%)	95% CI		
Melanoma	Local pilot area	76.9	(72.4, 80.8)	80.6	(76.5, 84.2)	3.7	0.196
	Control area	73.9	(72.2, 75.5)	74.0	(72.3, 75.6)	0.1	0.933
NMSC	Local pilot area	52.2	(49.2, 55.3)	56.3	(53.4, 59.2)	4.1	0.059
	Control area	48.3	(47.1, 49.6)	50.0	(48.7, 51.2)	1.6	0.078
Skin cancer	Local pilot area	58.9	(56.4, 61.5)	62.9	(60.5, 65.3)	4.0	0.027
	Control area	56.5	(55.5, 57.6)	57.6	(56.6, 58.7)	1.1	0.130

**Figure 5. Monthly detection rate for melanoma, NMSC and skin cancer diagnoses, from January 2012-September 2014, local pilot area**



By age the detection rates were highly variable, with the few statistically significant changes appearing to reflect this natural variation and the long-term trend.

For women, there was a statistically significant increase of eight percentage points in the skin cancer detection rate, from 62% to 69%, although this may reflect some notable natural variability in the detection rate

## Conclusion

The skin cancer awareness local pilot campaign appears to have been successful in terms of raising public awareness of the signs of skin cancer. The message around non-mole signs was successful, with an encouraging increase in the knowledge of these signs in the pilot region. There were also good levels of action taken as a result of the campaign.

The campaign also appears to have had some impact on the number of urgent GP referrals for suspected skin cancers. The campaign, which focused on those aged over 50, had a strong impact on referrals for those aged 40 to 79. There may also have been a positive impact on the number of non-melanoma skin cancer diagnoses, with an overall increase in non-melanoma diagnoses resulting from urgent GP referrals for suspected skin cancer. The impact on non-melanoma skin cancers was seen particularly for men, with increases both in diagnoses resulting from an urgent GP referral for suspected cancer and also in all non-melanoma skin cancers recorded in the Cancer Waiting Times database. It is important to note that basal cell carcinoma, which is the main type of non-melanoma skin cancer, are not recorded in the Cancer Waiting Times database and therefore the current analysis cannot take into account any potential increase in the number of basal cell carcinoma diagnoses. The campaign did not appear to have an impact on melanoma diagnoses.

Interpretation of the data was more challenging because skin cancer referrals are often affected by seasonal variation (as illustrated by some of the results shown) and because there has been a gradual upward trend in skin cancer incidence.

It is also important to note that skin cancer awareness activities are fairly frequent in the South West of England due to the high incidence of skin cancer in the area. This may have raised the awareness baseline, particularly for GPs, potentially leading to a smaller effect from the campaign than might have been seen in other parts of the country.

The increase in public awareness and the number of non-melanoma skin cancer cases (mainly squamous cell carcinoma) diagnosed specifically in men are two positive aspects of the pilot. The latter is particularly encouraging as the incidence of skin cancer is increasing faster in men than in women and men tend to present with thicker tumours.

Evaluation of this campaign will continue as data becomes available for further metrics, including cancer registration data, and a final evaluation report will be published when the analysis of all metrics is complete.