



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**

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## 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.

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>1</sup>. The campaign was aimed at men and women aged 50 years and over – the age group most likely to be diagnosed with the most serious form of skin cancer, malignant melanoma. Its key 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

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<sup>1</sup> Devon, Cornwall and Somerset refers to the area covered by the Devon, Cornwall and Somerset PHE area. It covers these 3 counties as a whole (excluding North Somerset and Bath and North East Somerset).

for instance in bus shelters, leisure centres and on pharmacy bags. Advertising also ran online. A direct mail of a 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 the 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-stage 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 4 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 years 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 advertisements was high. Seven in 10 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 1 in 7 (14%) had seen the online advertisements.

## 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 of the campaign advertisements help 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 advertisements like these are shown (97%) and that the advertisements were clear and easy to understand (95%). Around half agreed that the advertisement 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 1 in 10 (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 advertisements, 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 (for example 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 advertisements (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 GPs 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 3 in 10 (28%) GPs who had heard of the Be Clear on Cancer skin cancer campaign correctly identified that Public Health England (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 and letters) 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 Clinical Commissioning Group
- 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 9 in 10 (93%) agreeing that the advertisements would encourage patients to visit their GP earlier with relevant symptoms. A similar proportion (89%) agreed that the advertisements would help to raise awareness regarding the signs and symptoms of the disease.

## Patients mentioning skin cancer publicity in the 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 3 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 2 months was more, the same as usual or less than they expected for the time of year. Two in 5 (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 advertisements (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 1 in 3 (32%) having watched it compared with a quarter (25%) for the testimonial.

Seven in 10 (69%) said they intended to take some sort of action following their website visit and, encouragingly, this rose to 8 in 10 (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 amongst 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 ‘[Be Clear on Cancer evaluation metrics: methodology](#)’ 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>2</sup>).

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

Period	<ul style="list-style-type: none"><li>- Urgent GP referrals for suspected cancer</li><li>- Cancer diagnoses resulting from an urgent GP referral for suspected cancer</li><li>- Conversion rate</li></ul>	<ul style="list-style-type: none"><li>- Cancer diagnoses recorded in the CWT database</li><li>- Detection rate</li></ul>
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>2</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 Cornwall and Isle of Scilly Sustainability and Transformation Partnership (STP), Devon STP, and Somerset STP. 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 statistically significant increase of 41% in the number of urgent GP referrals for suspected skin cancer between June to August 2013 and June to August 2014 (Table 1). In comparison a statistically significant increase of 19% was seen in the same area previously (between June to August 2012 and June to August 2013, Table 2), and a statistically significant increase of 22% was seen in the control area for the campaign period (between June to August 2013 and June to August 2014, Table 1).

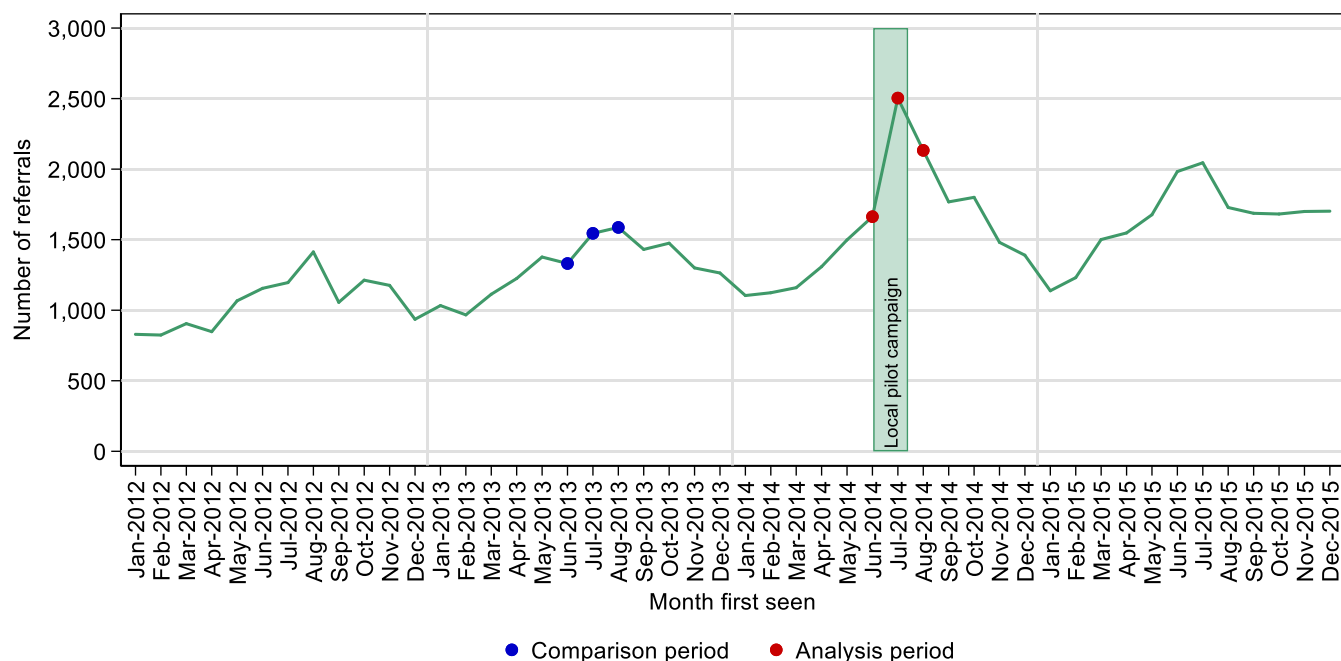
An increasing trend with seasonal variation can be seen across the time period for both the local pilot area and the control area (Figure 1). In the local pilot area there is a clear peak in July 2014 above the long-term trend. A peak seen in July 2014 for the control area is in line with the long-term trend.

The local pilot campaign appears to have had an impact on the number of urgent GP referrals for suspected skin cancer in the local pilot area.

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

Region	Year	June-August				
		Referrals	% change in number	P-Value	Referral Rate	
					Estimate	95% CI
Local pilot area	2013	4,463	41.2	<0.001	757.5	(735.1, 780.4)
	2014	6,300			1,057.9	(1,031.5, 1,084.8)
Control area	2013	64,651	22.4	<0.001	535.5	(531.4, 539.7)
	2014	79,141			646.6	(642.1, 651.2)

**Figure 1: Monthly number of urgent GP referrals for suspected skin cancers from January 2012 to December 2015, 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 to August 2012 and June to August 2013, local pilot area and control area**

Region	Year	June-August				
		Referrals	% change in number	P-Value	Referral Rate	
					Estimate	95% CI
Local pilot area	2012	3,764	18.6	<0.001	653.0	(632.0, 674.6)
	2013	4,463			757.5	(735.1, 780.4)
Control area	2012	55,220	17.1	<0.001	468.3	(464.3, 472.2)
	2013	64,651			535.5	(531.4, 539.7)

Statistically significant increases in the number of referrals were seen for all age groups. The largest increase of 53% was seen for those aged 40-49 and the smallest increase of 26% was seen for those aged 80 and over (both  $p < 0.001$ ), with the largest impact in those aged 40-79.

Similar statistically significant increases of 43% and 40% were seen in the number of urgent GP referrals for males and females respectively (both  $p < 0.001$ ).

## 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.

Statistically significant increases of 33% and 17% were seen in the, respective, number of melanoma and NMSC diagnoses resulting from an urgent GP referral for suspected skin cancer in the local pilot area between June to August 2013 and June to August 2014 (Table 3). In comparison, for the control area, there were smaller but still statistically significant increases of 11% for melanoma and 7% for NMSC diagnoses resulting from an urgent GP referral for suspected skin cancer.

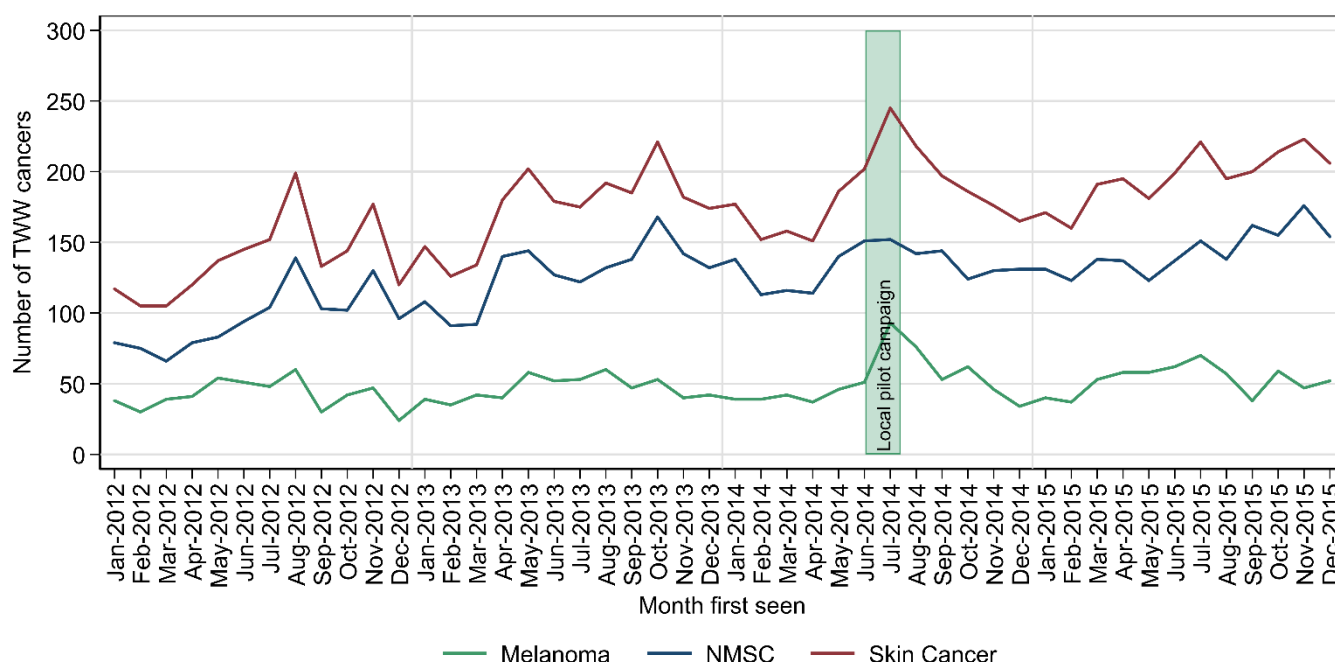
A peak in July 2014 above the long-term trend can be seen in the number of melanoma diagnoses resulting from an urgent GP referral for suspected skin cancer in the local pilot area (Figure 2). The number of NMSC diagnoses showed a long, flatter peak from May to September 2014.

The local pilot campaign appears to have had an impact on the number of melanoma diagnoses resulting from an urgent GP referral for suspected skin cancer and may have had an impact on the number of NMSC diagnoses, although the increase may have started prior to the campaign.

**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 to August 2013 and June to August 2014, local pilot area and control area**

Cancer	Region	June-August			
		TWW Cancers		% change in number	P-Value
		2013	2014		
Melanoma	Local pilot area	165	220	33.3	0.005
	Control area	2117	2346	10.8	<0.001
NMSC	Local pilot area	381	445	16.8	0.026
	Control area	2948	3153	7.0	0.009
Skin Cancer	Local pilot area	546	665	21.8	<0.001
	Control area	5065	5499	8.6	<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 to December 2015, local pilot area**



A statistically significant increase of 95% was seen in the number of melanoma diagnoses resulting from an urgent GP referral for those aged 50-59 ( $p=0.015$ ), an increase of 50% approaching statistical significance for those aged under 50 ( $p=0.057$ ). For NMSC, a statistically significant increase of 35% in the number of diagnoses resulting from an urgent GP referral for suspected skin cancer was seen for those aged 70-79 ( $p=0.015$ ).

For men a statistically significant increase of 35% in the number of melanoma diagnoses resulting from an urgent GP referral was seen ( $p=0.040$ ); for women an increase of 31% approaching statistical significance ( $p=0.055$ ). No statistically significant changes in the number of NMSC diagnoses resulting from an urgent GP referral were seen for men or women.

## Conversion rate

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

A gradual downward trend can be seen in the conversion rate of urgent GP referrals to both melanoma and NMSC in the local pilot area and the control area (Figure 3). There was no statistically significant change in the conversion rate for melanoma between June to August 2013 and June to August 2014 but a statistically significant decrease of



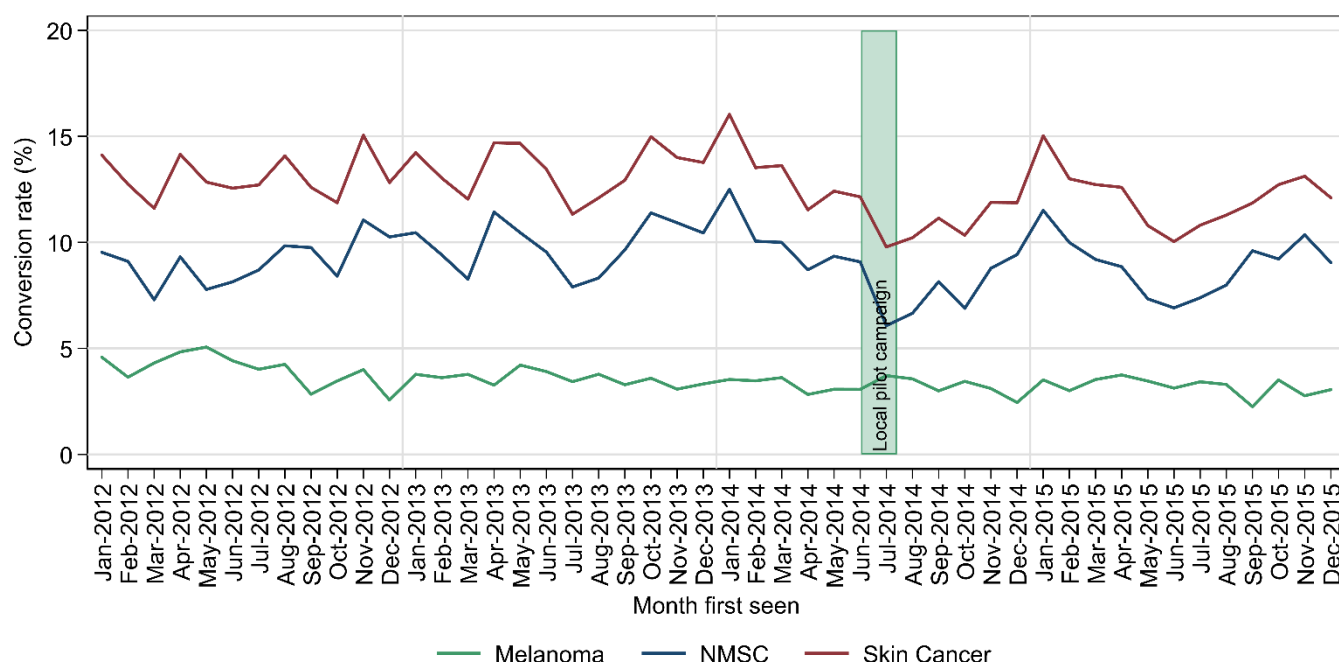
1.5% was seen in the conversion rate for NMSC (Table 4). In the control area a statistically significant decrease of 0.6% was seen in the conversion rate for NMSC.

The local pilot campaign does not appear to have impacted the conversion rate for melanoma in the local pilot area. The local pilot campaign may have impacted the conversion rate for NMSC in the local pilot area.

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

Cancer	Region	June to August					
		2013		2014		% point change	P-Value
		Conv. Rate (%)	95% CI	Conv. Rate (%)	95% CI		
Melanoma	Local pilot area	3.7	(3.2, 4.3)	3.5	(3.1, 4.0)	-0.2	0.573
	Control area	3.3	(3.1, 3.4)	3.0	(2.8, 3.1)	-0.3	<0.001
NMSC	Local pilot area	8.5	(7.8, 9.4)	7.1	(6.5, 7.7)	-1.5	0.005
	Control area	4.6	(4.4, 4.7)	4.0	(3.8, 4.1)	-0.6	<0.001
Skin Cancer	Local pilot area	12.2	(11.3,13.2)	10.6	(9.8,11.3)	-1.7	0.007
	Control area	7.8	(7.6, 8.0)	6.9	(6.8, 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 to December 2015, local pilot area**



Statistically significant decreases were seen in those aged 60-69 for melanoma (1.9 percentage points,  $p=0.046$ ) and NMSC (2.9 percentage points,  $p=0.004$ ) in the conversion rates for urgent GP referrals for suspected skin cancer. No other statistically significant changes were seen by age.

For men there was a statistically significant decrease of 2.1 percentage points in the conversion rate for NMSC ( $p=0.017$ ), while for women there was a statistically non-significant decrease of 1.0 percentage point ( $p=0.105$ ). For melanoma no statistically significant changes were seen by sex.

## Cancer diagnoses recorded in the Cancer Waiting Times database

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

Statistically significant increases of 23% and 13% were seen in the number of melanoma and NMSC diagnoses recorded in the Cancer Waiting Times database in the local pilot area, between July to September 2013 and July to September 2014 (Table 5). In comparison, for the control area, there was a statistically significant increase for NMSC diagnoses only, of 4%.

A gradual increasing trend in the number of melanoma and NMSC diagnoses recorded in the Cancer Waiting Times database can be seen in both the local pilot area and the

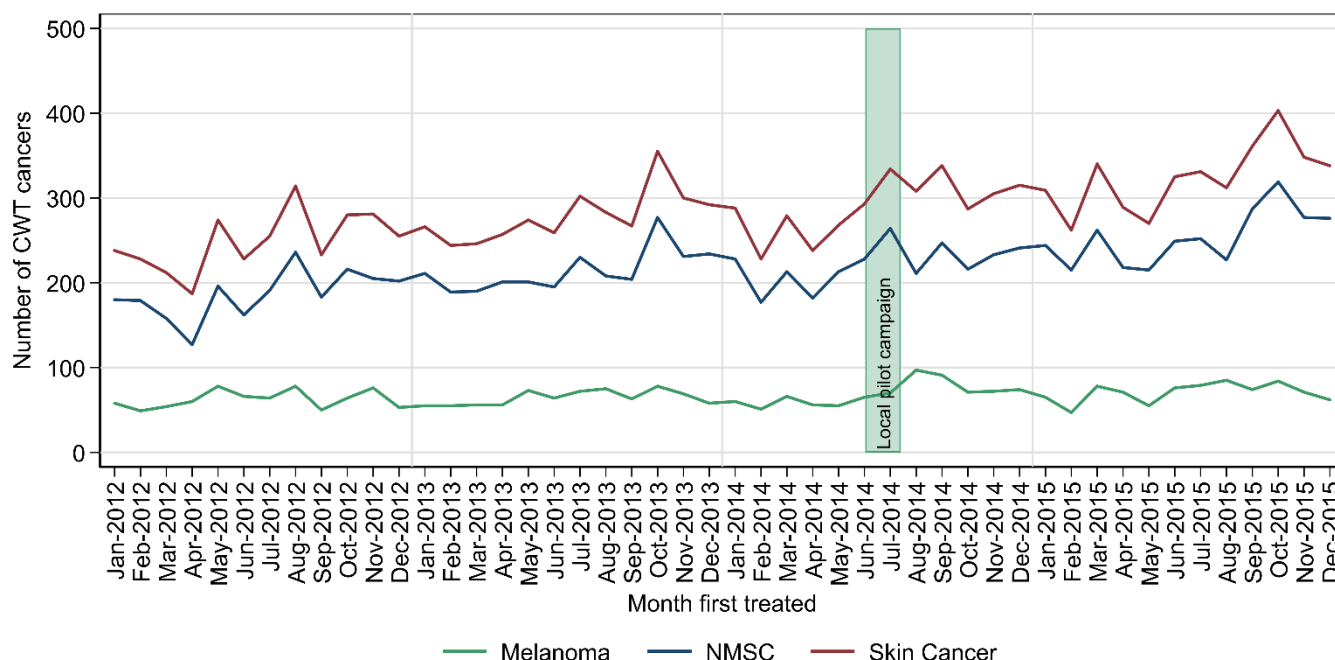
control area, with changes for the local pilot area around the time of the campaign appearing to be in line with long-term trends (Figure 4).

The local pilot campaign may have had an impact on the number of melanoma and NMSC diagnoses recorded in the Cancer Waiting Times database.

**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 to September 2013 and July to September 2014, local pilot area and control area**

Cancer	Region	July to September			
		CWT Cancers		% change in number	P-value
		2013	2014		
Melanoma	Local pilot area	210	258	22.9	0.026
	Control area	2895	2999	3.6	0.176
NMSC	Local pilot area	642	722	12.5	0.030
	Control area	6206	6442	3.8	0.036
Skin Cancer	Local pilot area	852	980	15.0	0.003
	Control area	9101	9441	3.7	0.013

**Figure 4: Monthly number of melanoma, NMSC and skin cancer diagnoses recorded in the Cancer Waiting Times database, from January 2012 to December 2015, local pilot area**



A statistically significant increase of 18% in the number of NMSC diagnoses recorded in the Cancer Waiting Times database was seen for those aged 80 and over ( $p=0.038$ ), and an increase of 20% for those aged 70-79 approached statistical significance ( $p=0.054$ ). No statistically significant changes were seen in the number of melanoma

diagnoses recorded in the Cancer Waiting Times database, although there were some large percentage increases based on small numbers.

There was a statistically significant increase of 24% in the number of NMSC diagnoses for men ( $p=0.002$ ), in comparison to a statistically non-significant decrease of 3% for women ( $p=0.692$ ). No statistically significant changes were seen for melanoma in men or women.

## Detection rate

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

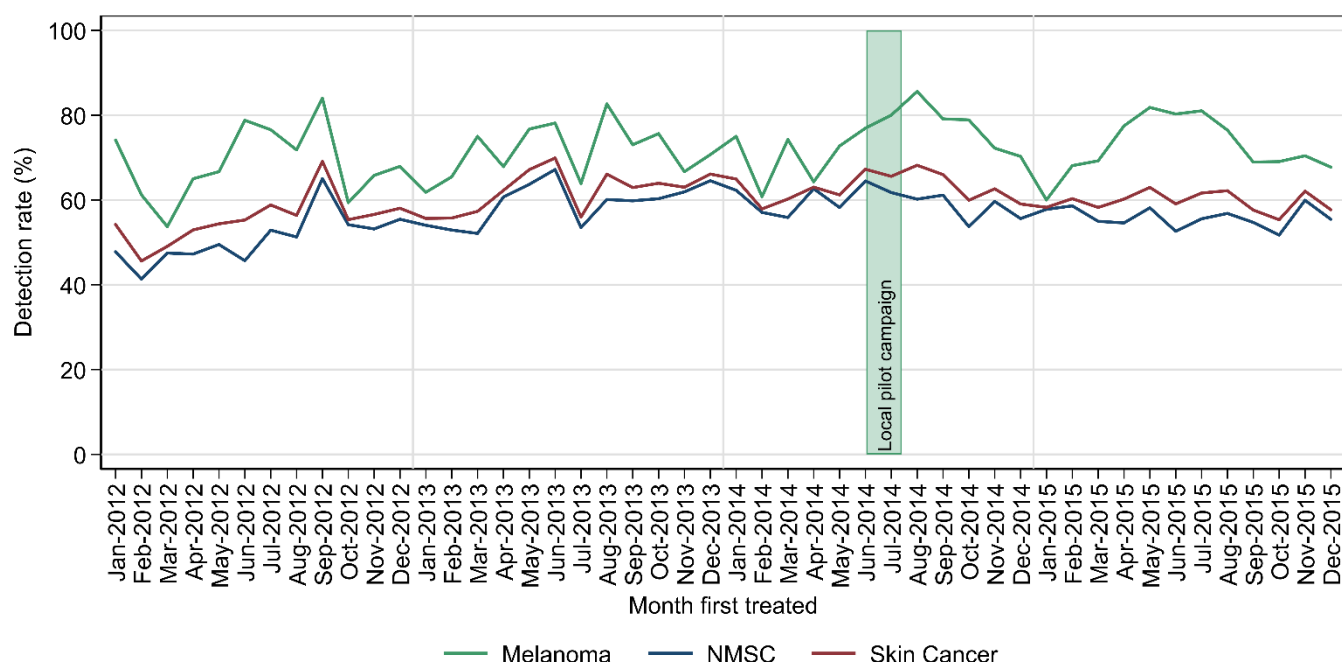
A gradual upward trend in the detection rate for melanoma and NMSC was seen for the local pilot area (Figure 5). There was a statistically significant increase of 8 percentage points in the detection rate for melanoma in the local pilot area between July to September 2013 and July to September 2014; no statistically significant change was seen for NMSC (Table 6). For the control area, there was no statistically significant change in the detection rate for melanoma, but there was a statistically significant increase of 2 percentage points in the detection rate for NMSC.

The local pilot campaign may have had an impact on the detection rate of melanoma in the local pilot area.

**Table 6: Detection rates of melanoma, NMSC and skin cancer diagnoses, with percentage point change, from July to September 2013 and July to September 2014, local pilot area and control area**

Cancer	Region	July to September					
		2013		2014		% point change	P-Value
		Det. Rate (%)	95% CI	Det. Rate (%)	95% CI		
Melanoma	Local pilot area	73.3	(67.0,78.9)	81.8	(76.6,86.0)	8.4	0.028
	Control area	74.3	(72.7,75.9)	74.2	(72.6,75.7)	-0.1	0.901
NMSC	Local pilot area	57.6	(53.8,61.4)	61.1	(57.5,64.6)	3.4	0.195
	Control area	48.0	(46.8,49.2)	49.8	(48.6,51.0)	1.8	0.045
Skin Cancer	Local pilot area	61.5	(58.2,64.7)	66.5	(63.5,69.4)	5.0	0.025
	Control area	56.4	(55.4,57.4)	57.5	(56.5,58.5)	1.1	0.115

**Figure 5: Monthly detection rate of melanoma, NMSC and skin cancer diagnoses, from January 2012 to December 2015, local pilot area**



A statistically significant increase of 21 percentage points in the detection rate for melanoma was seen for those aged 50-59 between July to September 2013 and July to September 2014 ( $p=0.034$ ). No statistically significant changes were seen for other age groups.

A statistically significant increase of 11 percentage points was also seen in the detection rate of melanoma for women ( $p=0.04$ ). In comparison, for men a statistically non-significant increase of 6 percentage points was seen ( $p=0.298$ ). No statistically significant changes were seen in the detection rate for NMSC for men or women.

## Conclusion

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

The campaign appears to have had an impact on the number of urgent GP referrals for suspected skin cancers. The campaign, which focused on those aged 50 years and over, had a larger impact on referrals for those aged 40 to 79.

The campaign also appears to have had an impact on the number of melanoma diagnoses, with an overall statistically significant increase in the number of diagnoses resulting from urgent GP referrals for suspected skin cancer, and in the number of melanoma diagnoses recorded in the Cancer Waiting Times database. Statistically significant increases in the number of diagnoses resulting from urgent GP referrals for suspected skin cancer were also seen for those aged 50-59 and for men.

An impact may also have been seen for the number of non-melanoma skin cancers, with an overall statistically significant increase in diagnoses resulting from an urgent GP referral for suspected skin cancer, and in the number of non-melanoma skin cancers recorded in the Cancer Waiting Times database. Statistically significant increases were also seen in the number of non-melanoma skin cancers resulting from an urgent GP referral for suspected skin cancer for those aged 70-79 and in the number of non-melanoma skin cancer diagnoses recorded in the Cancer Waiting Times database for those aged 80 and over and for men. It is important to note that basal cell carcinomas, which are the main type of non-melanoma skin cancer, are not recorded in the Cancer Waiting Times database. Therefore, the current analysis cannot take into account any potential increase in the number of basal cell carcinoma 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 demonstrable 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) and melanoma cases diagnosed specifically in men are 2 positive aspects of the pilot.

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.