The impact of public awareness campaigns for cancer symptoms on visits to the GP

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BACKGROUND
Background

Cancer survival is worse in the UK than in many other comparable countries (Coleman et al, 2011)

Around 133,000 deaths from cancer in England in 2012

Suggested this could be due to:
  • Differences in treatment
  • Later diagnosis (Coleman et al, 2011)
Background

• Be Clear on Cancer developed by Department of Health and Public Health England

• Aim to increase public awareness of symptoms of cancer and to encourage people to visit GP if concerned

• Generally targeted at people aged 50+ and lower SEG

• CRUK commissioned to lead the evaluation of campaigns up to March 2013

Lots of campaigns run to date. Today will focus on.......
Background

Regional

If you notice blood in your pee, even if it’s ‘just the once’, tell your doctor.

1 in 3 women who get breast cancer are over 70, so don’t assume you’re past it.

Regional ‘blood in pee’ [BiP] (14th Jan – 17th March 2013)
Regional breast in women over 70 (14th Jan – 17th March 2013)

National

Let’s be clear. If for the last 3 weeks you’ve had blood in your poo or it’s been looser, tell your doctor.

Been coughing for 3 weeks? Tell your doctor.

National bowel (30th Jan- 31st March 2012)
National lung (8th May – 30th June 2012)

• Regional ‘blood in pee’ campaign ran in the former North of England Cancer Network.
• Regional breast in women over 70 ran in the former Greater Midlands, Pan Birmingham, Arden and 3 Counties Cancer Networks.
METHODS
Methods

Public awareness

GP presentations

Two week wait (2WW) referrals

Diagnostics

Diagnosis

Stage

Treatment

Survival
Methods

− Data collection:

<table>
<thead>
<tr>
<th>Metric</th>
<th>Data provider</th>
<th>Type of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patients presenting with key symptoms</td>
<td>Mayden (Healthcare IT specialists)</td>
<td>Sample of GP practices</td>
</tr>
<tr>
<td>• Two week wait (2WW) referrals for suspected cancer</td>
<td>East Midlands KIT from the Cancer Waiting Times database <em>(NHS England)</em></td>
<td>National dataset</td>
</tr>
<tr>
<td>• Diagnoses</td>
<td>East Midlands KIT from the Cancer Waiting Times database <em>(NHS England)</em></td>
<td>National dataset</td>
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− Data analysis: differences in metrics between campaign months & a pre-campaign period were analysed
− Compared to controls when possible
− Chi-squared tests and poisson regression models used
Key results: GP presentations

<table>
<thead>
<tr>
<th></th>
<th>Year before campaign</th>
<th>Year of campaign</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional BiP</td>
<td>0.9</td>
<td>1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Regional breast 70+</td>
<td>0.5</td>
<td>0.3</td>
<td>-0.2</td>
</tr>
<tr>
<td>National lung</td>
<td>4.8</td>
<td>7.8</td>
<td>3.0</td>
</tr>
<tr>
<td>National bowel</td>
<td>1.3</td>
<td>1.7</td>
<td>0.4</td>
</tr>
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- Largest increase seen for lung campaign, translating into an average of around 3 additional visits per practice per week.

- Changes during campaign weeks greater than during control weeks for all campaigns.

- Visits for control symptoms decreased during all campaigns except lung: 2% increase.

Statistically significant change pre to post campaign: $p<0.05$

Statistically significant difference between change in campaign and control weeks: $p<0.05$
Key results: 2WW referrals

- All campaigns: statistically significant increase in 2WW referrals for suspected cancer

- Increases for regional BiP, national lung and national bowel were significantly larger than increases seen in controls. There was no difference between pilot and control areas for regional breast 70+

*Statistically significant change pre to post campaign: p<0.05

**Statistically significant difference between change in campaign and control: p<0.05
Key results: cases diagnosed following a 2WW referral and conversion rates

Conversion rates dropped for all campaigns, with a statistically significant change for lung and bowel.

**Additional cases diagnosed following a 2WW referral:**
- BiP (110)
- Lung (450)
- Bowel (297)

**Conversion rates dropped for all campaigns, with a statistically significant change for lung and bowel.**

- BiP: -2.0%
- Lung: -2.4%
- Bowel: -1.1%

**Percentage change in cases diagnosed:**
- BiP: +11.5%
- Lung: +29.5%
- Bowel: +17.8%

**Percentage point change in conversion rate:**
- BiP: +0.8%
- Lung: -1.3%
- Bowel: -1.6%

Statistically significant change pre to post campaign: p<0.05
Statistically significant difference between change in campaign and control: p<0.05
Further results

Lung campaign

2.3pp increase in surgical resections

3.1pp increase in stage 1 diagnoses

3.5pp decrease in stage 4 diagnoses
CONCLUSIONS
Conclusions

• Indicates that the campaigns are influencing public behaviour

• Following the campaigns we have seen increases in GP visits for campaign symptoms, an uplift in 2WW referrals and encouragingly an uplift in diagnoses
Limitations

– No strict control available
– Not all data available to look at whole picture
– Not central data set for GP attendance
Further work

• Staging
• Clinical outcomes (surgical resection)
• 1-year survival

• Emergency presentations
• Breast screening data
• Long term survival and mortality
• Trend analysis
• Longevity of the impact
• Effect of scaling up and repeating campaigns
• Cost effectiveness
• Unintended consequences (positive and negative)
Acknowledgments

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- Department of Health
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- Mayden
- NHS England
- Public Health England
Since this presentation, the results relating to the national lung campaign have been published in the British Journal of Cancer: