

Update on the evaluation of the 53 local NAEDI projects targeting the earlier diagnosis of breast, bowel and lung cancers

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Background

- ▶ The National Awareness and Early Diagnosis Initiative (NAEDI) aims to co-ordinate and support activities and research to promote the earlier diagnosis of cancer.
- ▶ In 2010/11, 53 local projects across 109 PCTs in England were funded by the Department of Health and the National Cancer Action Team to promote early diagnosis of breast, bowel and/or lung cancers under this initiative.
- ▶ A previous report has presented the association between bowel and lung cancer project activities and two-week wait (2WW) referrals and diagnoses (following these referrals) at a PCT level, but further analyses have since been undertaken.¹

Objectives

- ▶ **Objective 1:** To update previous analyses, now also including breast cancer projects.
- ▶ **Objective 2:** To conduct further analyses looking at 2WW referrals and diagnoses at a sub-PCT (e.g. Ward) level to more accurately assess the impact of projects.

Methods

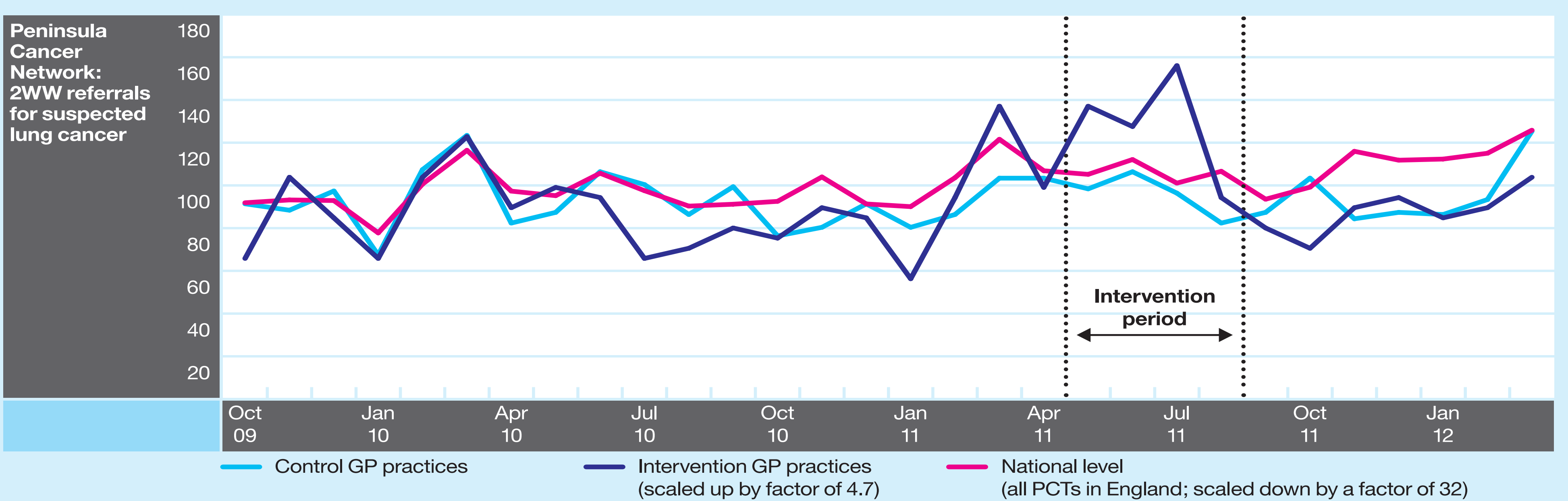
- ▶ **Objective 1:** Two-week wait (2WW) referrals for suspected lower GI/breast/lung cancers, and diagnoses made following these referrals (both provided by Trent Cancer Registry) during months of public facing activity were compared with the same months in the previous year (when no centrally-funded activity occurred).
 - ▶ 2WW referrals and diagnoses were at PCT level. Changes were tested for significance across all projects using a paired t-test.
 - ▶ Conversion rates (referrals for a suspected cancer which resulted in a diagnosis of that cancer) were also calculated.
- ▶ **Objective 2:** Projects targeting sub-PCT level areas (e.g. certain wards, GP practices) were identified.
 - ▶ 2WW referrals and diagnoses at sub-PCT level were graphed against time and assessed for sustained increases.

Results

Table 1: 2WW referrals, diagnoses and conversion rates for lung, bowel and breast cancers

	Lung (39 projects)				Bowel (36 projects)				Breast (23 projects)			
	Total in the 'Pre' period	Total in the 'Post' period	% change	p-value	Total in the 'Pre' period	Total in the 'Post' period	% change	p-value	Total in the 'Pre' period	Total in the 'Post' period	% change	p-value
Number of 2WW referrals	7,924	8,655	+9%	0.005	31,473	35,458	+13%	<0.001	29,553	29,545	-0.03%	0.99
Number of diagnoses following a 2WW referral	2,022	2,194	+9%	0.04	1,817	1,898	+4%	0.19	2,749	2,817	+2%	0.22
	'Pre' period	'Post' period	% point change	p-value	'Pre' period	'Post' period	% point change	p-value	'Pre' period	'Post' period	% point change	p-value
Percentage of 2WW referrals for suspected cancer which resulted in a diagnosis of that cancer	25.5%	25.3%	-0.2	0.80	5.8%	5.4%	-0.4	0.02	9.3%	9.5%	+0.2	0.33

Figure 1: Example of a project showing a sustained increase in 2WW referrals during the months of public facing activity when analysed at GP level



Key Findings

- ▶ **Objective 1 (Table 1)**
 - ▶ At a PCT level, for lung and bowel projects, there was evidence of a significant increase in 2WW referrals during project months (compared with the same months in the previous year)
 - ▶ However, control areas also saw a similar increase in 2WW referrals.
 - ▶ With the inclusion of all 39 lung projects, there was a significant ($p=0.04$) increase in the number of diagnoses of lung cancer following a 2WW referral for suspected lung cancer. Conversion rates remained the same (~25%).
 - ▶ There was no evidence ($p=0.19$) of a change in the number of bowel cancers diagnosed following a 2WW referral for suspected bowel cancer, although there was a significant decrease in the conversion rate to bowel cancer – from 5.8% to 5.4%.
 - ▶ For breast projects, there was no statistically significant difference in referrals, diagnoses or conversions rates.

Objective 2

- ▶ Assessing trends at a sub-PCT level was difficult, especially for trends in diagnoses, as the numbers were small.
- ▶ Only a small number of projects showed any increases in referrals around the project months (example shown in **Figure 1**).

Conclusions

Interpreting the impact of pilot project activities on 2WW referrals at a PCT level was challenging due to variable project timings, difficulties in accounting for the impact of other activities going on, and the general upward trend in referrals. At sub-PCT level, numbers of referrals and diagnoses were small, and graphs difficult to interpret. Case studies for projects exhibiting sustained increases in 2WW referrals during public-facing activity are being developed to help understand possible reasons behind the increases.

Acknowledgements:

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References:

- ¹ Cancer Research UK, Promoting early diagnosis of breast, bowel and lung cancers, June 2012 <http://www.dh.gov.uk/health/2012/06/evaluation-cancer-pilot/>

For more information about the NAEDI programme of work, email projectsupport@cancer.org.uk

NAEDI is a public sector/third sector partnership which is led by the Department of Health, Public Health England, NHS England and Cancer Research UK, working with partners from other public and voluntary organisations, to support and drive forward work on early diagnosis.