In May 2012 a centrally funded National Lung Cancer Awareness Campaign was initiated. This campaign was influenced by encouraging results from local pilot studies, and featured news items and public health awareness adverts in national and local media, including nationwide television and radio exposure, accompanied by celebrity involvement and endorsements. The cost of this initiative has not been disclosed.

Liverpool has the highest lung cancer incidence and mortality in England, and our Lung Cancer Unit, providing a service for patients in South Liverpool, is the largest in the Cancer Network and amongst the largest in the country.

To assess the impact of the national campaign we have reviewed referrals to our Rapid Access Lung Cancer Service from General Practise via the 14 day suspected cancer pathway, during the months of April, May and June 2012; we have also reviewed referrals during the same months in 2011 and 2010.

The total number of referrals from General Practise was 20 in April 2012, 30 in May 2012 and 27 in June 2012. The proportion of patients who had lung cancer was 8/20, 15/30 and 11/27 respectively. The percentage of patients with a diagnosis of lung cancer who underwent potentially curative surgical resection was 25% in April, 30% in May and 27% in June. Comparison with corresponding figures from 2011 and 2010 shows no significant difference in lung cancer referral or diagnosis rates, with a small but not statistically significant increase in surgical resection rates year on year.

Our conclusion is that the national awareness campaign initiated in May 2012 has had no significant early effect on lung cancer referral, diagnostic and treatment patterns in our area.

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## VARIABILITY IN GP REFERRAL RATES FOR CHEST X-RAY DOES NOT APPEAR TO AFFECT STAGE OR PERFORMANCE STATUS OF PATIENTS DIAGNOSED WITH LUNG CANCER

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**Background** Delays in referral of symptomatic patients for chest X-ray (CXR) has been proposed as one explanation for poorer survival from lung cancer in UK compared to other developed nations. Such delays may reflect patients not seeking medical advice for persistent respiratory symptoms, or not being referred for CXR following presentation to primary care. We sought to determine the relationship between GP CXR referral rates and patient characteristics at the time of lung cancer diagnosis.

**Methods** Data was collected for the number of CXRs ordered by GP practises in Leeds between 2008 and 2010 (corrected for list size). Patient characteristics at presentation with lung cancer (stage and performance status), treatment and outcome (one year survival) were compared over the same three year period. GP practises were grouped into quintiles by CXR referral rate (according to population served), and lung cancer outcomes compared between quintiles.

Results CXR referral rates varied from 6.7 to 62.3 CXRs per 1,000 population per year. Data was collected for 1,394 patients diagnosed with lung cancer. The number of lung cancer diagnoses per CXR quintile were 230, 276, 258, 322, 308 from lowest to highest CXR quintile respectively. The proportion of patients with early stage disease at presentation (stage I and II) did not vary by CXR quintile (29.6%, 26.1%, 28.7%, 26.7%, 25.6% from lowest to highest CXR rates). Similarly there were no differences in the distribution of performance status, the proportion of patients undergoing any anticancer treatment and one year survival between the quintile groups. When the cohort was split into 2 groups by CXR rates, no differences in lung cancer outcomes were seen between GP practises

(number of lung cancers 660 for low CXR group vs. 734 for high CXR group).

**Conclusion** Despite demonstrating large variability in CXR rates, our small single-centre study does not show a link between referral rates and lung cancer outcomes. This study is underpowered to detect small changes in survival or stage shift, but suggests large differences in outcome are unlikely to result from this variability in practise at primary care level.

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## REVIEW OF CXRS REQUESTED IN THE COMMUNITY: CAN WE IMPROVE CANCER DETECTION?

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**Introduction** In our trust all patients with a CXR suggestive of cancer have their CXR reviewed in the lung MDT. Following a serious incident investigation in our trust the question was raised as to whether this practise should be extended to all patients with "red flag symptoms" but not necessarily an abnormal CXR, in an attempt to improve early detection of lung cancer.

## Aims

- To determine frequency of red flag symptoms (i.e. hoarseness/ haemoptysis) in patients undergoing community chest radiography
- 2. To determine frequency of subsequent lung cancer diagnosis in such patients
- 3. To determine if routine MDT review of such patients would improve time to lung cancer diagnosis.

**Method** Review of community CXR request forms and images over a 1 month period (January 2010) was performed. Any CXR requested for a red flag symptom and reported as "normal", was rereviewed by a radiologist. Review of medical records over the succeeding 27 months to determine if there was any subsequent detection of lung cancer.

**Results** 549 community CXR's were requested in the review period. A random sample of 229 requests were reviewed. 8 requests included haemoptysis in clinical details and none included hoarseness. 5/8 CXR's were reported as normal. 3/8 were reported as abnormal, with one suggestive of cancer (subsequently diagnosed) and discussed at MDT anyway. The remaining 2 patients with abnormal CXR's had subsequent unremarkable imaging. None of the remaining 5 patients with haemoptysis and a normal CXR had any subsequent presentation with lung cancer.

**Conclusion** The prevalence of red flag symptoms in patients being referred for community CXR's is low. In those with red flag symptoms and a CXR that does not suggest cancer, subsequent presentation with cancer is at worst highly unlikely. The practise of routinely reviewing images of such patients in a lung cancer MDT is unlikely to improve detection rate or time to diagnosis of lung cancer.

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## INCREASE IN LUNG CANCER SURGICAL RESECTION RATES FOLLOWING A REGIONAL MEDIA BASED PUBLIC AWARENESS CAMPAIGN

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**Introduction** Lung cancer prognosis depends on staging at time of diagnosis and delayed presentation contributes significantly to poor survival rates. The Doncaster public awareness cough campaign resulted in a significant increase in lung cancer diagnoses but not stage at presentation. The effect of early awareness campaigns on

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