Improving Lung Cancer Diagnosis in Primary Care

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@DryBreadnRadio

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CanTest (CRUK) & University of Leeds
Premature mortality due to Lung Cancer


https://healthierlives.phe.org.uk/topic/mortality
One-Year Net Survival (%) by Stage, Adults Aged 15-99, England

Cancer Research UK, cruk.org.uk/cancerstats
https://doi.org/10.1007/s12325-018-0843-5
Primary Care Interval (Days)

- Stomach
- Renal
- Rectal
- Prostate
- Pancreatic
- Ovarian
- Other
- Oral/pharangeal
- Oesophageal
- Myeloma
- Melanoma
- Lymphoma
- Lung
- Liver
- Leukaemia
- Endometrial
- Colon
- Unknown Primary
- Breast
- Brain
- Bladder

National Cancer Diagnosis Audit, Br J Gen Pract 2018; 68 (666): e63-e72
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National Cancer Diagnosis Audit, Br J Gen Pract 2018; 68 (666): e63-e72
% ≥ 3 consultations

- Breast
- Melanoma
- Endometria
- Bladder
- Brain
- Oropharangeal
- Leukaemia
- Colorectal
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Breast

% ≥ 3 consultations

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<th>Positive Predictive Value (%)</th>
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PPV as a single symptom

Cough

Fatigue

Dyspnoea

Chest pain

Loss of weight

Loss of appetite

Thrombocytosis

Abnormal spirometry

Haemoptysis

Hamilton, Br J Cancer (2009) 101, S80 – S86
People who are at high risk...

- feel stigmatised\(^1\)
- are less likely to attend\(^2\)
- are less likely to recognise symptoms\(^3\)
- may have competing priorities
- may have fatalistic views about cancer\(^3\)

\(^1\) Chapple A, et al. Stigma, shame, and blame experienced by patients with lung cancer. BMJ. 2004, 328
\(^2\) Friedemann Smith C et. al. Smokers are less likely than non-smokers to seek help for a lung cancer ‘alarm’ symptom Thorax 2016;71
\(^3\) McCutchan, G. et al. Influences of cancer symptom knowledge, beliefs and barriers on cancer symptom presentation in relation to socioeconomic deprivation, BMC Cancer, 15(1)
Some delays in lung cancer diagnosis are avoidable
May 21, 2019

Support to implement simple improvements could mean faster lung cancer diagnosis

At the UK Lung Cancer Coalition's annual meeting last year, patients and clinicians gathered to achieve prompter diagnosis. Some factors, such as profound staffing shortages and barriers at high risk, [1] have no easy solutions. Surprisingly, one frustration that resonated with doctors was a simple but widespread logistical problem that could be remedied with some common sense leadership: assessment of renal function prior to administration of intravenous contrast for computed tomography—the first crucial test for suspected lung cancer.

Arranging a blood test to assess renal function doesn't sound hard but obtaining urgent blood samples can be problematic. The point of care creatinine test was developed to address some of these challenges. The test is available in the community and takes around 15 minutes to perform. However, it's not widely used and there is a need to make it available in primary care settings.

https://blogs.bmj.com/bmj/2019/05/21/some-delays-in-lung-cancer-diagnosis-are-avoidable/

Bhopal, Lung cancer in never-smokers: a hidden disease, Journal of the Royal Society of Medicine, 2019, 112(7):269-71

“chest X-ray findings that suggest lung cancer or are aged 40 and over with unexplained haemoptysis. [new 2015]”
Sensitivity of chest X-ray for detecting lung cancer in people presenting with symptoms: a systematic review

77-80%

Symptoms strongly suggestive of lung cancer

No symptoms suggestive of lung cancer

Symptoms mildly suggestive of lung cancer

Symptoms strongly suggestive of lung cancer

CXR threshold

CXR not done

CXR done
88% increase in CXR rates
126,519 extra CXRs 2011-18

Kennedy et al, Lung cancer stage-shift following a symptom awareness campaign, Thorax, 2018, 73
Patients with stage I/II lung cancer as a proportion of all those with TNM-staged cancer

- **Leeds Early Diagnosis Campaign**

Proportion of patients with stage I/II lung cancer (%)


- LTH (2016 data from NLCA only)
- NLCA
- NCRAS

9% stage shift to stage I/II

Kennedy et al, Lung cancer stage-shift following a symptom awareness campaign, Thorax, 2018, 73
• 9% reduction lung cancer deaths 2014-2017 vs 2000-2010
• 42 fewer deaths per year

Kennedy et al, Lung cancer stage-shift following a symptom awareness campaign, Thorax, 2018, 73
Views And Reviews  ▸ NoHoldsBarred

Margaret McCartney: Why ask, if you

**BMJ** 2017; 357 doi: [https://doi.org/10.1136/bmj.j1824](https://doi.org/10.1136/bmj.j1824)

Cite this as: BMJ 2017;357:j1824

**Margaret McCartney, general practitioner**

#RCGPcouncil member has motioned to stop debate on the position statement on screening by organisations not approved by the UK NSC to move straight to a vote...the position has overwhelmingly been passed

6:59 AM - 20 Sep 2019

On the identify cancers early enough to cure them.

There is evidence, mainly from North America, compared three annual CT scans with x ray (al lung cancer was 320.

My views about lung cancer (any) screening are well known.

https://blogs.bmj.com/bmjebmspotlight/2019/02/15/understanding-lung-cancer-screening/
http://www.pulsetoday.co.uk/views/analysis/overdiagnosis-how-ministers-and-the-nhs-are-fuelling-a-rising-epidemic/20038317.article
https://gregfellpublichealth.wordpress.com/2018/03/04/lung-cancer-screening/
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