Your guide to diagnosing lung cancer early

Information for GPs in Scotland
The chances of someone surviving lung cancer is highly dependent on stage of diagnosis – acting sooner on indications of lung cancer can lead to more treatment options and better outcomes for patients.

Patients are around 20 times more likely to survive for at least 5 years when diagnosed with lung cancer at the earliest stage compared to the latest stage.

Diagnosing lung cancer can be challenging. Research into the management of suspected cancer in primary care has found that over 30% of patients subsequently diagnosed with lung cancer have had 3 or more consultations before referral. Patients often experience non-specific symptoms such as weight loss, fatigue and cough, which can easily be attributed to common respiratory conditions particularly in patients who smoke. The red flag symptom of haemoptysis is a relatively rare presenting symptom reported in less than a quarter of lung cancer patients.

In addition, co-morbidities such as asthma and COPD can make it difficult for patients and GPs to differentiate between new and potentially malignant symptoms, and those related to an underlying condition.

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### Lung cancer survival by stage at diagnosis

<table>
<thead>
<tr>
<th>Proportion of people surviving their cancer for five years or more</th>
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<tr>
<td><strong>Diagnosed at earliest stage</strong></td>
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<td>Almost 6 in 10</td>
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| **Diagnosed at latest stage** |
| Less than 1 in 10 |

**Earliest stage = stage 1; latest stage = stage 4.**


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### Why is early diagnosis of lung cancer so important?

In the UK, only around 1 in 5 lung cancers are diagnosed at the earliest stage.

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### Your involvement is key

GPs play a vital role in quickly identifying signs and symptoms of suspected lung cancer and referring patients promptly for tests.

#### Act sooner

Be aware of national and local guidance and pathways. The Scottish Referral Guidelines for Suspected Cancer were refreshed in 2019. Recommendations for GPs when presented with suspected lung cancer include:

- referral onto an urgent suspected lung cancer pathway
- offering an urgent chest X-ray

Guidance aims to support decision making but should not override a GP’s clinical judgment, formed through history taking, elicitation of symptoms and examination. Guidelines can vary locally so it is also important to be aware of specific local guidance.

Remember a chest X-ray is inexpensive, at approximately £20–£25 per test, and health risks from the low level of radiation are usually outweighed by the benefits of getting the right diagnosis.

Take advantage of direct access to chest X-ray if you have this. Most test reporting takes place on the same day or within a week.

The Guidelines now also highlight an additional good practice point for referrers to consider taking bloods including full blood count and assessment of renal function if not done in preceding three months in order to expedite further imaging.

#### Safety netting

Evidence suggests that a chest X-ray does not detect lung cancer in about 20% of cases. Prompt ordering of a chest X-ray should be accompanied by safety netting for potentially false negative results. To prevent you and your patients being over reassured by a negative chest X-ray result ensure you:

- encourage patients to book another appointment with you if their symptoms don’t resolve, they worsen or if new symptoms develop at any time
- repeat examinations and history taking at subsequent appointments
- follow up with patients until their symptoms are explained or resolved

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Visit cruk.org/safetynetting for tools to support safety netting practices.
Case study

Jane is 72 years old and has never smoked. Jane presents to her GP with a dry persistent cough that she has had for at least a month. The GP examines her and takes a thorough history and discovers that she has noticed some weight loss too.

Would you order an urgent chest X-ray?

An urgent chest X-ray could be ordered, as per the SCRG, as Jane has had a persistent cough for over 3 weeks. If there was no cough, and the weight loss was unexplained and persistent (more than 3 weeks) an urgent chest X-ray could still be ordered.

The chest X-ray result is normal. What are your next steps?

Jane is advised to return if the symptoms don’t resolve after 4–6 weeks. Jane presents again in 2 months with the same symptoms. The GP notices a full blood count has been ordered in the last 3 months, which noted thrombocytosis. The GP also asks about any other symptoms, which reveals Jane is also increasingly tired and isn’t eating very much. Jane wonders if an inhaler might help?

What could you do next?

Jane should be referred on to an urgent suspected cancer pathway as symptoms have been persisting for longer than 6 weeks despite a normal chest X-ray.

Lung cancer in never smokers:

Smoking is still the largest modifiable risk factor for lung cancer, accounting for around 70% of lung cancers\(^\text{10}\). However, 10–25% of lung cancers occur in people who have never smoked\(^\text{11,12}\). Lung cancer in people who have never smoked is under recognised and can raise a diagnostic challenge for healthcare professionals\(^\text{11,12}\).

The importance of safety netting is key in Jane’s case.

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1 Based on lung cancers with a known stage at diagnosis: between 2017-18 in Scotland (source: ISD Scotland); between 2013-17 in Northern Ireland (source: Queen’s University Belfast); between 2014–2016 in Wales (source: NHS Wales); and between 2013-2017 in England (source: NCRAS)
2 Office for National Statistics (ONS), 5-year age standardised survival by stage, England 2012-2016
3 Mendonca et al. Pre-referral GP consultations in patients subsequently diagnosed with rarer cancers: a study of patient-reported data. BJGP 2016
4 Lyatzopoulos et al. Measures of promptness of cancer diagnosis in primary care: secondary analysis of national audit data on patients with 18 common and rarer cancers. BJCG 2013
7 Mitchell et al. Understanding diagnosis of lung cancer in primary care: qualitative synthesis of significant event audit reports. BJGP 2013
9 Bradley et al. Sensitivity of chest X-ray for detecting lung cancer in people presenting with symptoms: a systematic review. BJGP 2019
10 Calculated by the Statistical Information Team at Cancer Research UK, 2018

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