RM Partners
NW & SW London Cancer Alliance

NHS

Targeted Lung Health Checks– information for GPs

Overview

Targeted lung health checks (TLHC) are now being offered to support with the early detection and treatment of lung cancer. The service is being delivered through a partnership between InHealth (an external TLHC provider), and local NHS Trusts.

The TLHC team will invite eligible patients from participating practices on behalf of GPs:

- **Letters** will be sent to your patients aged 55-74 who have any of the SNOMED smoking codes on their record. These patients will then be contacted within 14 days to complete an assessment over the telephone.
- **Open letters** will be sent to your patients aged 55-74 without a recorded smoking status, with information on how to book an assessment if they have a smoking history.

The telephone assessment uses two validated questionnaires to review patient risk of developing lung cancer. This takes approximately 15 minutes. Patients who meet the risk threshold will be invited for a low dose chest CT scan at a mobile scanning unit at a local community venue.

The results should be available within 4 weeks, and patients should receive a letter or phone call from the lung health check team. A results letter will also be sent to GPs. Each letter will outline any findings and next steps as well as including a tabulated report form of the radiological findings (see Appendix 1). Please note the reports are brief as this is a screening scan, but all relevant findings are reported in full.

Patients with normal/no significant CT findings on the first scan will be invited every 2 years for an interval scan until they 'age out' of the programme at age 75 as per the national protocol. Please see from page 3 below for more information on the referral routes for patients with findings on their scans.

Rationale and Background

TLHCs help detect cancer at an early stage when curative treatment is more likely to be possible. Lung cancer often goes undetected during its early stages, as there are often no signs or symptoms. Less than 20% of people diagnosed with lung cancer survive for 5 years or more due to late-stage diagnosis.

To date, approx. 80% of lung cancers found by the West London TLHC programme have been stage 1 or stage 2, compared to 30% of lung cancers diagnosed through other established routes. Lung screening is proven to reduce lung cancer deaths, so TLHCs are an important opportunity to help more patients to access treatment.

The TLHC programme targets those most at risk of lung cancer based on their age and smoking history. It is initially being made available in areas that have some of the highest recorded rates of smoking. This means TLHCs can help to reduce inequity as they can be particularly effective in underserved groups.

The programme is now on a trajectory to full roll-out across England by 2030. The UK National Screening Committee has recommended it become a national cancer screening programme.

How you can support the programme

We need your help to raise awareness of the programme and educate the public on the importance of detecting lung cancer early. Primary care colleagues have been key to the success of TLHC across RM Partners and other cancer alliances across England.

Data collected from the local programme's non-attendee survey shows the most common reasons given for non-attendance is people felt they '**did not need or see the benefit of a lung health check'** or had been '**invited by mistake'**.

You can help **support** this programme by:

- Having **opportunistic discussions** with eligible patients, to help them make an informed decision about having a lung health check when invited.
- **Coding** the smoking status of patients if not already done. A correct smoking status is key for invitations to be sent out to eligible patients.
- Directing those eligible for a check to more information on our **lung health check website** https://lunghealthchecks-westlondon.nhs.uk
- Adding information about lung health checks to your **practice website.**
- **Displaying** posters, flyers and leaflets in your practice waiting room. You can view and download this material here.
- **Displaying** a digital slide about the programme on waiting room screens. You can download digital slides here.
- More info about the programme can be found here.

Please note: eligible patients can make an appointment for a lung health check by calling the Booking Office on 020 3835 1600.

Further information

West London Lung Health Checks	lunghealthchecks-westlondon.nhs.uk
NHS England Lung Health Checks	www.nhs.uk/conditions/lung-health-checks
InHealth	inhealthgroup.com/lung-health-checks
Lung Health Checks Resources	rmpartners.nhs.uk/publications-and-resources/targeted-lung-health-check-resources

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Patient outcomes - Advice for primary care

Practices will receive clear details from the TLHC team by letter with regards to onwards management of patients who have been part of the TLHC programme. Where referrals are needed, many of these will occur directly within secondary and tertiary care but some incidental findings need to be managed through primary care. If practices are unsure of how to manage the findings, the TLHC programme team are on hand to answer any questions. Patients will also receive a letter with information about their findings and next steps.

All significant abnormal CT results will be reviewed by a screening review meeting (SRM), which acts as a triage service. These are held weekly at St George's, Imperial and Harefield hospitals and are led by consultant thoracic radiologists and physicians.

In line with the national protocols of the TLHC programme, SRMs will action all confirmed significant abnormal CT findings, including onward referral for lung cancer and other respiratory/non respiratory conditions.

The only CT findings to be passed back to GP practices to act upon will be **non-urgent incidental** CT scan findings, and SRM clinicians will provide advice in the results letter. The West London programme is part of the national programme, but locally RM Partners is monitoring the volume of incidental findings that may be sent to primary care. We have worked with our GP cancer clinical leads to ensure that only findings that are suitable and appropriate are sent to primary care, and that in all cases appropriate advice is given with such findings.

Please note that the LDCT is not a diagnostic scan. It is specifically designed to detect lung nodules and lung cancer and isn't optimised to detect and assess other findings. Similarly, the lung screening reporters and SRM teams are specialised in diagnosing lung cancer and not other conditions. Therefore, where there are incidental findings the team will refer on for further investigation and can provide the low dose images to support this. Please contact the team on westlondon.lunghealthcheck@nhs.net if you require more information or support on the scan outcomes.

Please see below for advice to primary care on findings that are actioned by the TLHC team and findings that routinely return to primary care for management.

Findings actioned by TLHC team. No action needed by general practice

Lung cancer
A small number of initial CT chest scans will present findings suggestive of lung cancer. The TLHC team will automatically refer these patients to the local lung cancer teams and will contact the patient by telephone to discuss the findings and next steps. You will also receive notification by letter.

Patients will be given a contact number if they need any further information or support following the referral by the team. The results letter that practices receive will state where the patient has been referred and an email address to contact if GPs need more information.

Lung nodules
A larger number of CT chest scans will present a potentially significant nodule. Though the majority will be benign, some can become malignant over time and surveillance will be arranged. The TLHC team will automatically provide appointments for follow up scans (3 or 12-month repeats) and will contact the patient about this by letter, including an information leaflet on lung nodules.

Where patients have a lung nodule finding they do not require a referral from primary care to secondary care as they are monitored by the programme and will be referred on if needed after their follow up scans.

In some instances, reports may include details of nodules that have a clearly benign morphology and do not require follow up (e.g. intrapulmonary lymph node). Radiologists are obliged to note these in accordance with the national reporting template, but they will not require any further action from the programme or primary care.

Other cancers
Occasionally, a CT scan can present incidental findings suggestive of other cancers, such as liver, neck, and breast. If any are found, they require investigation and treatment via the local urgent cancer pathways.

The TLHC team will arrange the appropriate upgrade/referral for these findings and will contact the patient by telephone to discuss the finding and next steps. You will also receive notification by letter. Patients will be given a contact number if they need any further information or support following the referral by the team. The results letter that practices receive will state where the patient has been referred and an email address to contact if GPs need more information.

Other respiratory findings
As TLHC participants don't usually have symptoms, the LDCT scan can detect some mild respiratory pathologies, such as interstitial lung disease, that are not necessarily clinically significant – that is they may not cause the patient harm, nor need immediate action. The TLHC team will arrange the appropriate respiratory referral if required. If the changes are very minor, the patient will be referred to primary care for appropriate routine onward referral (there may be instances where no action is required – you will have a copy of the summary report for your record. If any action is required this will be specified).

Bone disease
Malignant, lytic, or sclerotic disease will be referred by the TLHC team for onward management.

Cardiovascular
Thoracic aortic aneurysms/dilatation of aortic root **more than 5cm** will be referred by the TLHC team to the appropriate vascular/cardiothoracic teams and the patient will be informed by telephone.

Abdominal aortic aneurysm **more than 5cm** will be referred by the TLHC team to appropriate vascular teams and the patient will be informed by telephone.

If either type is less than 5cm, the patient will be referred back to primary care to arrange appropriate onward routine referral for surveillance.

Liver, Pancreas, Adrenal, Renal, Thyroid
Incidental cysts and nodule findings are common, and these will be characterised as far as possible radiologically as benign or requiring further assessment. These findings will be discussed in the TLHC SRM to determine whether further action is required. If there is a required further urgent action, this will be undertaken by the TLHC team. If more routine, the patient will be referred back to primary care to arrange appropriate surveillance.

Findings requiring primary care action

Below is specific advice for the findings requiring action from primary care:

Emphysema

Evidence of emphysema is a common finding and will be characterised as far as possible as requiring further action or not requiring action at this time.

- Mild emphysema. Patient's scan confirms evidence of mild emphysema. No further action required at this time.
- Moderate or severe emphysema that is known to primary care. The scan revealed significant emphysema. As the patient is already known to have COPD, no further specific action is required at this time.
- Moderate or severe emphysema that is NOT known to primary care. It is suggested you refer the patient for community lung function test/COPD review. We have asked the patient to contact you to discuss this.

Lung consolidation

In some patients, there will be findings of consolidation or infection. The TLHC team will write to GPs with guidance to provide antibiotics if required.

Cardiovascular

Coronary artery calcification is seen on CT scans and is a common finding in this patient cohort. The national reporting protocol is not designed to undertake accurate calcium scoring for evaluation and will only state whether it was observed as mild, moderate or severe. Our approach to reporting and advice follows the national protocol, is in line with other programmes and has been approved by local cardiologists (see Appendix 2 for more detail on the approach and Appendix 3 for the patient and GP letter text). It is present in the majority of people over 50 years of age, particularly those who have smoked. It correlates very poorly with symptomatic ischemic heart disease, which depends on the site the calcium deposit.

Coronary artery calcification, unless symptomatic, does not require secondary care referral. However, you may wish to consider a risk assessment as per NICE guidance and a Q risk score.

If these are new findings, we would suggest formal CVD risk review, including recent cholesterol, HbA1c, blood pressure and Q risk.

Cardiomegaly and aortic valve calcifications are also common findings, and these patients should be referred for an echocardiogram as per NICE guidance, unless already known to you.

Bronchiectasis

Some patient's scans show evidence of bronchiectasis, which may require further assessment. If the patient is unaware of their condition, we recommend that they make a routine appointment to discuss this with their GP. If the patient is symptomatic on assessment, we advise a referral to their local respiratory service.

Bone disease

With new findings of osteoporotic disease, we recommend primary care teams arrange a bone assessment and DEXA scan. Your patient will have been informed that an incidental finding has been found and that they may require to see you about this. If osteoporotic disease is already known to primary care, no action is needed.

If you have any further queries, or need more information about a letter received, please contact the TLHC team at westlondon.lunghealthcheck@nhs.net

Appendix 1 – Example of InHealth report attached to GP results letter

Emphysema extent:		Emphysema type:	
Number of nodules:		Highest brock score:	
Nodule recommendation			
Urgent finding			
Refer to other cancer MDT:			
Refer to non-cancer MDT:			
Refer to Chest Clinic:			
Refer to Tuberculosis service:			
GP action required:			
Incidental Pulmonary Findings:			
Bronchiectasis:		Respiratory Bronchiolitis:	
Interstitial Lung Abnormalities:			
Infective Consolidation:		Active Tuberculosis:	
Incidental Intrathoracic Findings:			
Mediastinal mass:			
Coronary arterial calcification:		Aortic valve calcium:	
Thoracic aortic aneurysm:			
Pleural effusion/thickening or mass:			
Incidental extrathoracic findings:			
Suspicious breast lesion			
Suspicious thyroid lesion:			
Suspicious esophageal lesion:			
Liver or splenic lesion:			
Renal lesion:			
Adrenal lesion			
Abdominal aortic aneurysm:			
Bones			

Appendix 2 – Further information on incidental coronary artery calcification findings management

- The level of coronary artery calcification (CAC) is mandated to be reported by the programme reporting radiologist and graded as none/mild/ moderate/ severe.

- The presence of calcification is indicative of atheroma and therefore does increase the risk of heart attack. This is the case even in those with no other identified risk factors.

Mild CAC is associated with a 2 fold increase risk of a MI event over the next 10 years.
Moderate CAC is associated with a 5.4 fold increase risk of a MI event over the next 10 years.
Severe CAC is associated with a 7 fold increase risk of a MI event over the next 10 years.
For further information see link below:
https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/217101?resultClick=1

- CAC in the population eligible for TLHC is very common by virtue of their age and smoking history (43% of initial Croydon cohort had mild CAC, 23% had moderate/ severe CAC). However, these patients would also be expected to have a QRISK of >10%.

- Detecting and managing cardiovascular risk is one of the ways that TLHC saves lives therefore it is important to manage this appropriately.

- National protocol dictates that the CAC is reported but the management, currently, is decided at local level. New more prescriptive guidelines are expected soon. We have reviewed other alliances across the country in order to inform our suggested approach. We have also discussed with local cardiologists and GPs.

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Appendix 3: Example of West London Programme GP and patient letters for managing Coronary Artery Calcification

CAC	Letter to patient	Letter to GP
Mild – known risk	Your scan has shown some mild hardening of the blood vessels of your heart. This is a common finding, but it highlights the need for you to make healthy lifestyle choices. These include : Not smoking: This is the best way to reduce your risk. Having a healthy diet Maintaining a healthy weight Keeping active Monitoring your blood pressure You can find out more about healthy lifestyle choices at https://www.bhf.org.uk If you are already on medication for your heart, blood pressure or cholesterol then it is important to keep taking them and your GP practice will be keeping you under review.	Your patient's scan showed mild coronary artery calcification and our records suggests that this patient is already recognised as being at risk of CVD (ie the patient is on a statin or has disclosed known CVD). We would suggest ongoing regular review in line with standard practice. CAC can be coded as Snomed code 445512009
Mild – new	As above	Your patient's scan showed mild coronary artery calcification and our records suggest that this is a new finding (ie the patient is not on a statin and has not disclosed known CVD). This is known to increase the risk of cardiac events. Therefore we have advised the patient of this and directed them towards healthy lifestyle advice resources. The majority of patients eligible for the TLHC will have a QRISK score of >10%. Therefore you may want to consider reviewing this with them and considering formal CVD risk review including recent cholesterol, HbA1c and blood pressure. CAC can be coded as Snomed code 445512009
Mod/ Severe – known risk	Your scan has shown some hardening of the blood vessels of your heart. This is a common finding and our records suggest that you are already under the care of the GP, therefore there is no further action to take at this time. It also highlights the need for you to make healthy lifestyle choices. These include : Not smoking : This is the best way to reduce your risk. Having a healthy diet Maintaining a healthy weight Keeping active Monitoring your blood pressure You can find out more about healthy lifestyle choices at https://www.bhf.org.uk If you are already on medication for your heart, blood pressure or cholesterol then it is important to keep taking them and you should GP practice will be keeping you under review. We would routinely advise patients that if you are having symptoms that you are worried might be related to your heart, for example chest pain or tightness you should seek urgent medical attention.	Your patient's scan showed moderate or severe coronary artery calcification and our records suggests that this patient is already recognised as being at risk of CVD (i.e. the patient is on a statin or has disclosed known CVD). We would suggest ongoing regular review in line with standard practice. CAC can be coded as Snomed code 445512009
Mod/ Severe - new	Your scan has shown some hardening of the blood vessels of your heart. This is a common finding, but it can be related to high blood pressure or high cholesterol. Therefore we would suggest that you make an appointment with your GP to discuss this. It also highlights the need for you to make healthy lifestyle choices. These include : Not smoking : This is the best way to reduce your risk. Having a healthy diet Maintaining a healthy weight Keeping active Monitoring your blood pressure You can find out more about healthy lifestyle choices at https://www.bhf.org.uk If you are already on medication for your heart, blood pressure or cholesterol then it is important to keep taking them and your GP practice will be keeping you under review. If you feel generally well, please make a routine appointment with your practice. However we would routinely advise patients that if you are having symptoms that you are worried might be related to your heart, for example chest pain or tightness you should seek urgent medical attention.	Your patient's scan showed moderate or severe coronary artery calcification and our records suggest that this is a new finding (i.e. the patient is not on a statin and has not disclosed known CVD). This is known to significantly increase the risk of cardiac events. Therefore we have advised the patient to contact you for review of their CVD risk and we have directed them towards healthy lifestyle advice resources. The majority of patients eligible for the TLHC will have a QRISK score of >10%. Therefore we would suggest formal CVD risk review, including recent cholesterol, HbA1c and blood pressure. CAC can be coded as Snomed code 445512009