



PCRS Position Statement

National screening for lung cancer

PCRS cautiously welcome the implementation of the pilot phase of the Targeted Lung Health Check Programme in England. Having reviewed the protocol in the context of our work with the diagnostic workstream of the Lung Health Taskforce we suggest that the pathway for people who are found to have non-cancer respiratory symptoms which need investigating, and the implications for workload in general practice will need careful evaluation before a national roll-out. As individuals will also be offered an 'MOT/lung health check for their lungs' which may identify potential cases of COPD or other respiratory illness it will be vital to ensure that the right pathway is in place to support patients who may have a non-cancer respiratory illness. We look forward to seeing a full analysis of the pilots before deciding whether to support a comprehensive roll-out of a national screening programme.

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Background

There is currently no national screening programme for lung cancer in the UK.¹ At the present time, screening for lung cancer is only available in the USA and China as an optional health check.

The conditions for which national screening programmes are available in the UK are selected after evaluation by the National Screening Committee, which advises the Government on which conditions justify having a programme. The Committee uses strict criteria in order to determine whether morbidity and mortality in the UK would benefit from a screening programme, and reviews the evidence based on these criteria. From time to time, the National Screening Committee reviews the conditions for which national screening programmes exist, and explores the merits of adding additional conditions to their list.

The NHS Long Term Plan set out an ambition that 55,000 more people will survive their cancer for 5 years or more, with an ambition to increase the number of cancers diagnosed at potentially curable stages I and II.² There is evidence that screening for lung cancer using computerized tomography (CT) according to risk criteria such as age and ever smoking status has seen potential to identify lung cancers at an early disease stage³ and reduce mortality rates.⁴ The results of the UK Lung Screening Trial (UKLS) published in November 2021, provide confirmation that lung cancer screening using low-dose CT in high risk groups can cut lung cancer mortality rates.⁵ The study randomised 4055 participants aged 50 to 75 years with a high risk of developing lung cancer over 5 years to LDCT or to no screening (usual care) between 2011 and 2013. The risk of lung cancer mortality was reduced by 16% with screening although there was no difference in the all-cause mortality rate. However, it remains to be decided if and how a lung cancer screening program will be introduced in the UK, because although lung cancer diagnosis and survival are improved the overall mortality rate is not. Why this is so remains unclear. The issue of quality of life during the remaining life years has also not yet been considered.

From August 2019, the Targeted Lung Health Check Programme has been available in some areas of England for those between 55 and 75 years of age who have ever smoked.⁶ The programme will run for 4 years and will consist of 14 pilot projects that will deliver screening to around 600,000 people.⁷ Individuals identified in their GP record as having ever smoked will be invited for screening and their risk of lung cancer will be assessed, spirometry conducted and smoking cessation support offered if required. Those identified as at increased risk for lung cancer are offered a CT scan. The programme has the potential to detect approximately 3,400 cancers and save hundreds of lives across the country. The result of these pilot projects will be used to inform the appropriate level of risk on which to base an offer of a CT scan for use in a National screening programme.⁸ Early data and experience from the pilot studies is encouraging with high attendance rates and improvements

¹ Cancer Research UK. Screening. Available at: <https://www.cancerresearchuk.org/about-cancer/lung-cancer/getting-diagnosed/screening>. Accessed November 2021.

² NHS. NHS Long Term Plan. Available at: <https://www.longtermplan.nhs.uk/>. Accessed November 2021.

³ Field JK, et al. The UK Lung Cancer Screening Trial: a pilot randomised controlled trial of low-dose computed tomography screening for the early detection of lung cancer. *Health Technol Assess* 2016;20:1-146.

⁴ De Koning HJ, et al. Reduced lung cancer mortality with volume CT screening in a randomized trial. *NEJM* 2020;382:503-513.

⁵ Field JK, et al. Lung cancer mortality reduction by LDCT screening UKLS randomised trial results and international meta-analysis. *Lancet Regional Health Europe* 2021;10:100179. Available at: [https://www.thelancet.com/journals/lanep/article/PIIS2666-7762\(21\)00156-3/fulltext](https://www.thelancet.com/journals/lanep/article/PIIS2666-7762(21)00156-3/fulltext). Accessed November 2021.

⁶ Cancer Research UK. Lung Health Checks. Available at: <https://www.cancerresearchuk.org/about-cancer/lung-cancer/getting-diagnosed/lung-health-checks>. Accessed November 2021.

⁷ NHS. Evaluation of the Targeted Lung Health Check Programme. Available at: <https://www.england.nhs.uk/contact-us/privacy-notice/how-we-use-your-information/our-services/evaluation-of-the-targeted-lung-health-check-programme/>. Accessed November 2021.

⁸ Cancer Research UK. Lung Cancer Screening. Available at: <https://www.cancerresearchuk.org/health-professional/screening/lung-cancer-screening#lungscreening1>. Accessed November 2021.

in the stage of disease at diagnosis.⁹ This service will not address the most common cause of death among smokers – cardiovascular disease and no formal process for referral of patients whose CT results raise a suspicion for other respiratory diseases such as chronic obstructive pulmonary disease (COPD).

There are currently no Lung Health Checks taking place in Scotland, Wales or Northern Ireland.

Lung cancer and COVID-19

Estimates suggest that 26% fewer patients were urgently referred with suspected lung cancer between March 2020 and August 2021 – the height of the COVID-19 pandemic – compared with the same months in 2019.¹⁰ However, there are anecdotal reports for missed or delayed diagnoses of lung cancer as a consequence of the COVID-19 pandemic, although there are no data to suggest that these anecdotal reports are more common than during pre-pandemic years. There may be many reasons for this including symptom overlap between COVID-19 and lung cancer (notably persistent cough), changes in patient behaviour and increased use of remote consultations in primary care making holistic assessment more challenging. Reassuringly, the number of patients starting treatment for lung cancer in August 2021 was similar to the number that would have been expected in the absence of the pandemic. The reasons for this sustained rate of treatment initiation in the context of fewer urgent referrals is as yet unclear but it will be important to understand and may suggest that despite the challenges, appropriate urgent referrals were still made. It is essential that clinicians maintain a high degree of suspicion for potential cases being disguised by COVID-19 symptoms, including safety-netting of patients with long-COVID symptoms.¹¹

⁹ Grover H, et al. Implementation of targeted screening for lung cancer in a high-risk population within routine NHS practice using low-dose computed tomography. *Thorax* 2020;75:348-350.

¹⁰ https://www.cancerresearchuk.org/health-professional/diagnosis/hp-covid-19-and-cancer-hub#HP_COVID-191. Accessed November 2021.

¹¹ https://www.cancerresearchuk.org/health-professional/diagnosis/hp-covid-19-and-cancer-hub#HP_COVID-195. Accessed November 2021.

PCRS position

- PCRS gives a cautious welcome to the Targeted Lung Health Check Programme. It is good that the pilots are being extended from the perspective of implementation research to generate more evidence, and before it is confirmed as a national programme. It is clear that the National Screening Committee's stance is that more evidence is needed.
- However, there appears to have been minimal primary care input into the protocol while it was in development in 2018.
 - We have reviewed the finished protocol in the context of our work with the diagnostic workstream of the Taskforce for Lung Health, and will be actively seeking to clarify the detail of the investigations undertaken, the pathway for people who are found to have non-cancer respiratory symptoms which need investigating, and the implications for workload in general practice.
 - While CT scanning will be the main intervention, individuals will also be offered an 'MOT/lung health check for their lungs' which may identify potential cases of COPD or other respiratory illness. It will be vital to ensure that the right pathway is in place to support patients who may have a non-cancer respiratory illness. However, we should also ensure that our patients, especially those who smoke, are screened for the most common cause of death in this group – cardiovascular disease.
- PCRS would need to see a full analysis of the pilots before deciding whether to support a comprehensive roll-out of a national screening programme.
- In the absence of a national screening program, we applaud our primary and secondary care colleagues whose efforts during the COVID-19 pandemic have ensured no decline in the number of patients initiating treatment for lung cancer despite the challenges they have faced. This is in the context of an apparent marked reduction in urgent referrals for suspected lung cancer and moving forward it will be important to determine whether these observations are supported by longer-term data and what lessons can be learnt.

Approved by PCRS Executive policy lead on committee: 2 March 2022