West Yorkshire and Harrogate Cancer Alliance

Outline Specification for Tendering of the Lung Health Check

Tackling Lung Cancer Project

Background

National context

In West Yorkshire & Harrogate there are more deaths from Lung Cancer than any other cancer. This is at variance with the figures for England where Lung Cancer is the third most common cause of death for cancer behind breast cancer and prostate cancer. On average there are 1780 cases of Lung Cancer diagnosed every year in West Yorkshire & Harrogate and there have been no significant changes in the level of incidence for the past 10 years. Smoking tobacco is the biggest cause of lung cancer in the UK. Around 7 out of 10 lung cancers are caused by smoking (CRUK). There is also a clear relationship between the incidence of Lung Cancer and deprivation.

Respiratory cancers cause 30% of all respiratory deaths. Pneumonia causes around 29% of all respiratory deaths. Chronic obstructive lung disease, mainly chronic obstructive pulmonary disease (COPD) causes more than one fifth of all respiratory deaths. The remaining fifth are caused by a wide range of respiratory diseases, including tuberculosis, cystic fibrosis, acute respiratory infections, pulmonary circulatory disease, congenital anomalies and pneumoconiosis.

National evidence base

The diagnosis and treatment of lung cancer is supported by comprehensive guidelines from NICE. These show that it is possible to successfully treat lung cancer, especially when diagnosed at an early stage. The national cancer strategy, Improving Outcomes: A Strategy for Cancer 2011 notes better survival rates in some other countries and recognises the importance of diagnosing cancer earlier in the UK. Achieving World-class Cancer Outcomes - A Strategy for England 2015-2020, report of the Independent Cancer Taskforce that has been adopted by NHS England again stresses the importance of earlier diagnosis. It also makes clear the importance of listening to patient views, adopting innovative approaches and making the necessary investments to transform outcomes.

Lung cancer has very poor survival rates. However most lung cancers are diagnosed at a late stage when curative treatments are not available. When diagnosed at an early stage treatment can be successful. A trial in the USA comparing low dose CT scans with chest x-rays found that lung cancers could be detected at an early stage and reported a 20% mortality reduction in the group getting CT scans. Further work has shown that most benefit occurred in people at a higher risk of lung cancer and if only people with a risk of lung cancer

greater than 1 in 66 over the next six years are scanned then mortality benefits may be larger. This evidence indicates that a service that could identify people at high risk of lung cancer and provide them with a low dose CT scan would lead to a reduction in deaths from lung cancer by detecting it earlier.

People at high risk of lung cancer will also be at high risk of COPD and other lung diseases and if they currently smoke would benefit greatly from quitting. Reducing harm from smoking is a national priority, with an aspiration to reach 5% by 2030.

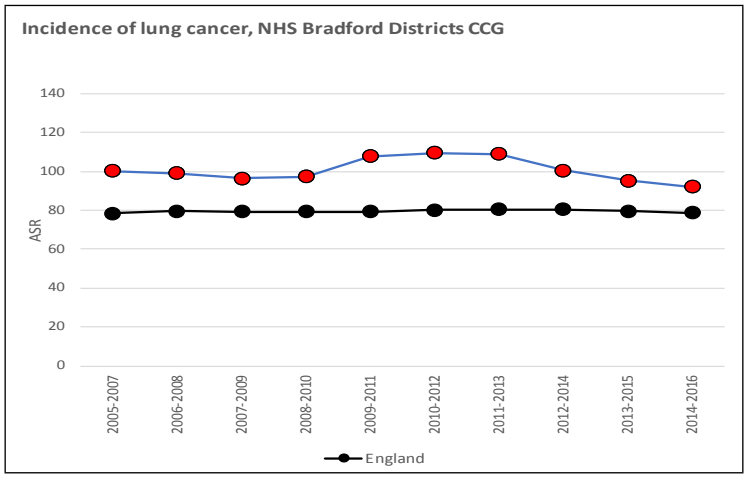
Local context

Each year more than 500 people die from respiratory disease in the Bradford District with an estimated 25% of these deaths preventable. With rates of early death (before the age of 75) from respiratory disease in Bradford amongst the highest in England and the second highest in Yorkshire and Humber respiratory disease is a leading cause of dying early in Bradford District.

Smoking has long been recognised as one of the main causes of preventable illness and early death and is particularly significant in the context of respiratory disease. According to annual population surveys, the proportion of adults smoking in the District at 18.9% is higher than national (14.9%) and regional (17%) averages. With smoking more common in people in routine and manual jobs with smoking prevalence 31.8% compared to 25.7% in England.

Lung cancer incidence

Incidence of lung cancer is significantly higher than the England average in both Bradford City and Bradford Districts CCGs. In Bradford City the rate in 2014-16 was 114 lung cancer diagnoses per 100,000 and in Bradford Districts 92 per 100,000; this compares to 79 per 100,000 in England.

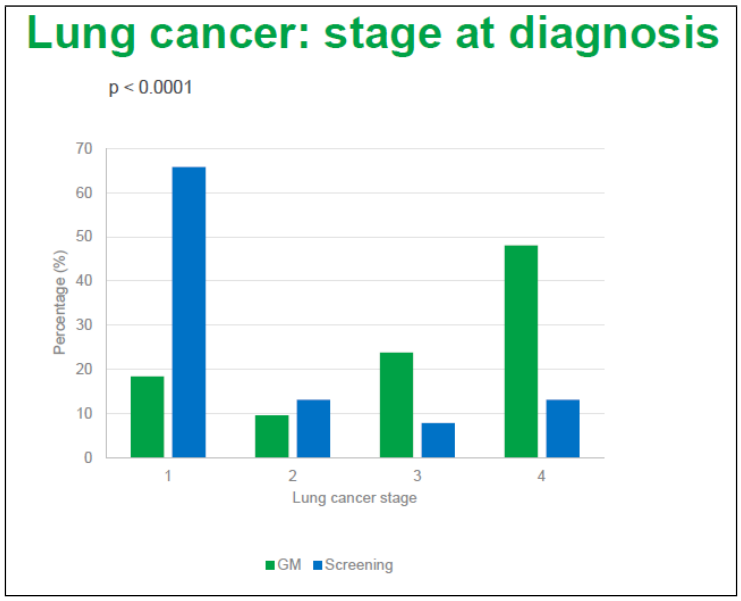


The median age of death from lung cancer is 72 years, and so, as in the studies in Manchester and Nottingham, the proposed age group to offer the lung health check would be 55 to 75 years of age, which is in alignment with the National Targeted Lung Health Check Programme. The ideal outcome of the project would be to effect a stage shift from the current position where only 20.2% of patients are diagnosed at Stages I/II, to a level similar to that achieved by Manchester where more than 75% of patients are diagnosed at Stages I/II

Table 1 **National Average – Stage at Diagnosis for Patients with Lung Cancer**

	Lung Cancer – Current Stage at Diagnosis					
	1	2	3	4	X	Total
England	4846	2615	6867	17430	5070	362828
%	13.16%	7.10%	18.65%	47.33%	13.77%	

Table 2 – Manchester Lung Health Check Pilot – Illustration of Stage Shift Achieved for Lung Cancer Patients at Diagnosis



NHS Outcomes Framework Domains & Indicators

The service being commissioned is a lung health check service. It includes identifying people that will get a low dose CT scan for the earlier detection and treatment of lung cancer and earlier identification of other respiratory disease. The service fits with Domains 1, 2, 4, and 5 of the NHS Outcomes Framework.

Domain 1	Preventing people from dying prematurely	
Domain 2	Enhancing quality of life for people with long-term conditions	
Domain 4	Ensuring people have a positive experience of care	
Domain 5	Treating and caring for people in safe environment and protecting them from avoidable harm	

Locally defined outcomes

The service being commissioned is a crucial part of the West Yorkshire & Harrogate Cancer Alliance Early Diagnosis Project, as the Tackling Lung Cancer Lung Cancer Programme. The main health outcomes for the programme are to increase the:

- proportion of lung cancers diagnosed at an early stage
- proportion of lung cancers that are treated with curative interventions
- number of sustained quits in people that smoke

As a by-product of this work, we expect to find a number of other as yet un-diagnosed lung diseases that may be monitored by existing pathways in primary and secondary care.

The lung health check programme is part of a pilot service and its outcomes will be evaluated to see if the service as a whole is a success. The Practices for the lung health check service will improve health outcomes and quality of life by enabling more people to be identified at an earlier stage for serious respiratory disease, with a better chance of putting in place positive ways to substantially reduce the risk of respiratory disease morbidity, premature death or disability. The lung health check service is not a diagnostic service but is part of a wider process that should ensure that people with respiratory problems gain an accurate diagnosis and appropriate treatment and support, including, if they are smokers, support to help them quit.

The lung health check service being commissioned will run for a period of time to cover the most socially deprived, and heavy smoking areas. The pilot service which will include provision of Low Dose CT scans to those at elevated risk of lung cancer.

Aims and objectives of service

The Practices will provide a lung health check to people that smoke or have been smokers in the past. It is part of a pilot Tackling Lung Cancer Programme that aims to achieve earlier diagnosis of lung cancer and also encourage people at high risk of lung disease, who smoke, to quit. The whole pilot service will be evaluated before a decision about its success is made.

The aims of the lung health check component of the service are:

- Help increase the number of people diagnosed with lung cancer at an early stage by accurately identifying people at an elevated risk of lung cancer who would benefit from having a low dose CT scan
- Help to reduce smoking in people aged 55-75

Objectives of lung health check service are to:

- Correctly inform participants about the lung health check process and the need for a CT scan if lung cancer risk is equal to or above the set risk threshold
- Accurately calculate the 6 year lung cancer risk score of all participants
- Provide a high quality baseline Spirometry test to people at high risk of lung health problems
- Correctly assess people's lung health and correctly refer those with important lung health problems to their GP practice or other health service
- Provide support and advice about lung health, in particular, the importance of not smoking and encourage people that express any interest in quitting by referring them to a Specialist Smoking Cessation Service by giving very brief advice or referring them directly to a smoking cessation advisor available on the day
- Provide a user friendly service to a diverse population of smokers and ex-smokers aged 55-75 that results in high levels of customer satisfaction
- Produce a schedule of appointment slots for the period of operation spread over the length of the project and covering all targeted GP practices.
- Work with the booking appointment team to help ensure high levels of attendance

Proposal

We would like to engage with the three GP practices in the previously identified target area in Bradford to deliver a Lung Health Check (LHC), followed by a Low Dose CT (LDCT) examination where indicated by the LHC outcome – all delivered within the community target area to encourage participation in the target population.

Age Group and Profile

The target age profile is 55 to 75 years inclusive, in line with the national Lung Cancer Targeted Lung Health Check Programme, and are registered with a specified Bradford GP practice.
This matches with the age profile of patients presenting with lung cancer symptoms to GPs, and the median lung cancer presentation age of 72 years.

Using practice records each GP Practice will identify patients in the target age group, exclusion criteria apply. A letter is then sent to the patient offering them a Lung Health Check on the basis of being a smoker or ex-smoker, providing details of how to book an appointment.

Example letter – See **Appendix A**

The Practices will deliver a lung health check to each participant that has four main parts:

1. calculation of lung cancer risk score
2. quality assured spirometry
3. lung function and lung symptom questions
4. brief consultation with respiratory nurse to discuss findings and next steps.

Examples of above – See **Appendix B**

Non-responders should have a second follow up invitation letter, and then a further telephone call to seek engagement, or capture the reason for not taking up the LHC via the questionnaire below:

https://www.smartsurvey.co.uk/s/VEVYZ/

Patients should be followed up after engagement with the LHC and again after LDCT process using similar surveys.

The Following Exclusion criteria should be applied:

Exclusion criteria for a lung health check:

- On the palliative care register (to be removed at source before letter using GP records)
- People that have never smoked (self-selection on receipt of an invitation letter)
- People with a diagnosis of "Lung Cancer" (to be removed at source before letter using GP records)
- Participant does not have the ability to give informed consent (standard criteria for assessing capacity apply)

Exclusion criteria for having Spirometry as part of the lung health check:

- Active infection e.g. AFB positive TB until treated for 2 weeks
- Conditions that may be cause serious consequences if aggravated by forced expiration e.g. dissecting /unstable aortic aneurysm, current pneumothorax, recent surgery including ophthalmic, thoracic abdominal or neurosurgery

See **Appendix C** for patient flowchart.

Information for participants

Written and/or video information should be provided at all stages, with specific information on what is involved. This should be followed by a discussion between the individual and the clinician to facilitate informed decision-making and subsequent acceptance/decline of the test.

- Participant information leaflets should clearly state the risks and benefits of screening. Such information should have participant contributors as part of any team compiling it – not just healthcare professionals

- The focus should be on informed choice.
- Information should be available at all relevant points throughout the pathway, including the provision of translation services if English is not their first language.
- A trained interpreter should be available during appointments where the functional language is not English.
- People with learning disabilities should be provided with appropriate support to enable them to understand all processes and results

Both eligible and ineligible people who smoke should be offered Very Brief Advice (VBA) on smoking cessation and an opportunity to be referred to a specialist smoking cessation advisor.

Smoking cessation advice should be incorporated into all written correspondence and should be face-to-face where people attend. Enhanced smoking cessation interventions are also encouraged including the use of pharmacotherapy, via referral to the local Smoking Cessation service. Smoking Cessation advisors, funded by Yorkshire Cancer Research should be available at the point of the Lung Health Check.

Service description/care pathway

This service specification is for the lung health check only. It is a component part of a pilot early detection of lung disease service. The lung health check service will run alongside provision of low dose CT scans and smoking cessation services. An administration team that books people into the lung health check appointments is part of this specification. The Practices providing the lung health checks will also be expected to work closely with the provider of the LDCT service (where appropriate), that will be separately procured.

The lung health check letters will be delivered initially to approximately 7, 363 patients registered at the three GP practices in Bradford listed below;

Table 3 – Bradford Practices

Practice	**No of Patients (aged 55-75)**
The Ridge	3, 511
Bowling Hall/Highfield	2, 430
Rooley Lane	1, 422

The LHC programme will be delivered with the 3 practices working in collaboration with a minimum of 1,000 LHCs at a schedule to be agreed with the Programme Manager/Project Manager to ensure 200 patients per month are referred to LDCT and a manageable flow of patients to secondary care after LDCT. The LHC service will work within the time frames of Low Dose CT scans and be delivered in GP Practice locations.

West Yorkshire and Harrogate Cancer Alliance

Overview of how the lung health check fits into the pilot service being tested.

The lung health check is a crucial part of service delivery. Only those people that have a lung health check will get access to the low dose CT scan service. (The CT scan service will scan people for lung cancer and any other findings). The lung health check is an opportunity for people to consider their lung health, and make positive lifestyle choices/changes to improve their lung health. Each person getting a lung health check will have a basic examination focusing on lung health, baseline spirometry and have their risk of lung cancer calculated. Those calculated to have a risk of lung cancer above or equal to a set threshold (currently 1.51%) will be eligible to enter the low dose CT scan service. A nurse will interpret the results of the lung health check and use clinical judgment to decide whether or not the participant should visit their GP practice. The nurse will give reassurance and advice as needed. Results from the lung health check are to be fed back to a person's GP practice to be added to their clinical notes. The success of the pilot service will mainly depend upon attendance at the lung health check, correct assessment of lung health, correct referral to GPs and the CT scan provider and the CT scans detecting lung cancer earlier when curative treatment is possible.

Set up at community locations

Approximately three GP practices will participate in the pilot and will work in collaboration delivering the LHC service in the agreed practice locations. The service is expected to be delivered at GP Practice locations, identified by Primary Care during the programme, with sufficient time to cover the population selected. The locations for service delivery will be selected so that they are convenient for the GP practice's patients to attend. The Practices will work with the commissioner, GPs and in partnership with the CT scan service provider to agree suitable locations. The final locations at which the service will be delivered will be agreed with providers at least six weeks before commencement of the service.

The Practices will make all necessary assessments to ensure that a high quality lung health check service can be delivered safely and securely at the agreed locations. The Practices will work with the commissioner to agree the schedule of service delivery and ensure that the service is ready to begin service delivery at the agreed locations, agreed times and on the agreed dates within the timeframes of the Low Dose CT scans.

The Practices will work with the commissioner to agree the times and days that the lung health check service will operate. It is expected that the lung health checks will be provided over five days per week Monday to Friday. An operational day is expected to be at least eight hours of operation. Subject to agreement the service can be provided over a longer working day for example 9am to 7pm. If possible, the service will include some early evening and at least one full Saturday at each location so that people that work can book a convenient time to attend.

The Practices will agree a process with the provider of the low dose CT scans to ensure that participants eligible for a low dose CT scan can easily and promptly book access to the CT scan facility directly from the lung health check attendance.

For all people eligible for a low dose CT scan the Practices will agree a process so that the result of the lung health check and the participant details, which will be captured on a standardized template, are safely transferred to the provider of the low dose CT scan.

Expected length of each lung health check should take upto 20-30 minutes to complete. To generate 200 patients for the Low Dose CT scans, the allocation would be 400 Lung health checks per month.

On each day the service is being provided the Practices' booking administration team will have booked a list of patients into the Practice's appointment slots. For each participant booked into an appointment slot, this should include the patient's name, date of birth, NHS number, GP practice and address as appearing on their GP record.

The schedule of timed appointment slots at the locations will be developed in advance of the start of the programme. It will be provided to the commissioner at least 40 days prior to the agreed start date of operation. This will then be used by the Practice administration team that will send out invitations and book people into all the available slots. Access to patient demographic data will be via a link to the GP practice system. The aim will be to have one person attending for each available slot. The Practices will be expected to work closely with the booking administration team and the commissioner as necessary to help ensure high attendance. (It is recognised that some people that book an appointment will not attend – but all should work to keep this to a minimum). The booking administration team will send out pre prepared letters inviting patients to attend, follow up with a second letter if needed, and then a phone call (if this data is on the GP system). During the phonecall the patient will be asked to complete an e-survey with the operator as to their reasons for not wishing an appointment. Text reminders would be beneficial to increase attendance – please state if these can be provided.

<u>On Arrival</u>

The Practices will offer a friendly non-judgemental service to all participants. They will take into consideration that attendees will be drawn from a diverse multi-cultural population, will be smokers and ex-smokers, may have some disabilities and will be aged between 55 and 75.

The Practices will ensure that all people attending are greeted in a friendly way on arrival. The Practices will check the name and date of birth of a person attending against the expected attendees list and confirm the time of the appointment. They should only offer the service to those with an appointment, and who are on the list of a participating GP practice.

A person asking for a lung health check who does not have an appointment but is eligible should be signposted to the Pracctices' booking service to make an appointment.

Unfortunately those not registered at one of the agreed GP practices, are ineligible to participate in the pilot at this time.

The Practices will ensure that staffing levels and cover for any absence are sufficient to ensure that all booked lung health checks can take place on time and that waiting times are kept to a minimum. People will wait for their appointment in an appropriate comfortable waiting area.

Content of the Lung Health Check

The Practice will deliver a lung health check to each participant that has four main parts:

1) calculation of lung cancer risk score;

2) quality assured spirometry;

3) lung function and lung symptom questions

4) brief consultation with respiratory nurse to discuss findings and next steps.

At the beginnning of each lung health check, the Practices will provide the participant with clear information about what is going to happen and gain confirmation from the participant that they understand what is going to happen. The Practices will only give written information materials to participants that have been approved or provided by the commissioner.

Once a participant has been informed about the content of the lung health check, the Practices will ask them to sign a consent form to allow their data to be shared with health care professionals in connection with the LHC, and the commissioning CCGs and used for evaluation and research to improve NHS lung health services. The consent forms will be provided by the commissioner. A person that does not consent to their data being used for evaluation purposes is still eligible to have a lung health check but their decision for their data not to be shared must be clearly recorded. The consent forms must be stored securely and provided to the commsissioner on request.

Calculation of lung cancer risk score

The Practices will use the structured data collection template provided by the commissioner to collect data from the lung health check. The format and data fields will be agreed with the commissioner prior to commencement of the service. (The aim is to have a template that allows easy accurate data input both at the lung health check and when the data template is provided to GP practices.)

Each persons BMI will be calculated Kg/M^2. The Practices will use accurate weighing scales and height measuring equipment. A participant will be measured in their clothes but will be asked to remove any coats or shoes. The height will be recorded in Metres and weight in Kilograms.

The Practices will use a lung cancer risk score calculator provided by the commissioner. The calculator will be provided as an excel spread sheet and will be suitable to go on a laptop computer. To complete the risk score calculator the following data needs to be collected and inputted from each participant:

- BMI
- Level of education
- Age
- ethnicity
- Past diagnosis of COPD, emphysema or chronic bronchitis
- Personal history of cancer
- Family history of lung cancer
- Smoking history
- Years since quit smoking

The Practices will be supplied as part of the template format, with a standard list of questions and a coding table to enable them to collect and code data items about level of education, smoking history, diagnosis of lung disease and history of cancer (personal and familial) that will be used in the risk calculator.

For each participant, the Practices will input the data items into the lung cancer risk calculator. The calculator will then immediately calculate a person's lung cancer risk. This will be expressed as a percentage and represents **the probability of developing lung cancer during the next six years**. Inputting the data items needed by the calculator should take less than one minute. Before commencement of the service the commissioner will provide a training session to ensure that the Practices a familiar with the risk score calculator and how to interpret the risk scores.

A participant that has a risk score that is 1.51% or greater is eligible to have a low dose CT scan. No participant with a risk score below this threshold will have a CT scan.

Quality Assured Spirometry

As part of the lung health check, the Practices shall undertake a quality assured base-line Spirometry test. The Practices will provide the test so that it complies with the recommendations of the Primary Care Commissioner - A Guide to Performing Quality-Assured Diagnostic Spirometry 2013.

http://cdn.pcc-cic.org.uk/sites/default/files/articles/attachments/spirometry_e-guide_1-5-13_0.pdf

The test must be performed by health-care staff with the appropriate training (with update/refresher training within the last 2 years (24 months).

The Practices shall assess the patient for contraindications to Spirometry:

Exclusion criteria for having Spirometry as part of the lung health check:

- Active infection e.g. AFB positive TB until treated for 2 weeks
- Conditions that may cause serious consequences if aggravated by forced expiration e.g. dissecting /unstable aortic aneurysm, current pneumothorax, recent surgery including ophthalmic, thoracic abdominal or neurosurgery

The Practices will perform baseline oxygen saturation prior to the Spirometry test using a pulse oximeter. The result will be recorded on the data collection template provided by the commissioner. The Practices will use their clinical judgement to decide whether or not to proceed with the Spirometry test on a "patient by patient" basis. The criteria for exclusions are described in Primary Care Commissioner - A Guide to Performing Quality-Assured Diagnostic Spirometry 2013.

The Practices shall explain and demonstrate to the patient what will happen during the test and ensure that the patient understands what is required of them, and why it is important to perform each manoeuvre as best they can. The Practices shall explain to the patient:

- The nature of the test
- The type of blow required
- That a minimum of three acceptable and a maximum of 8 test results are needed.

The Practices shall make sure that there is no more than 0.1L (100ml) variation ideally (and certainly no more than 150mls in the occasional highly variable patient) between each blow.

The Practices will record baseline Spirometry results in electronic template, using the largest FEV1 and FVC (performed to standard) to determine the FEV1/FVC ratio, together with their respective predictive values. The results will be recorded on the data collection template provided by the commissioner. The Practices will determine the presence or absence of airflow obstruction – this is defined as a reduced FEV1/FVC ratio (where FEV1 is forced expired volume in 1 second and FVC is forced vital capacity), such that FEV1/FVC ratio is less than 0.7.

Respiratory Health Questions

The Practices will ask each participant about their lung health. The Practices will use a symptom questionnaire provided by the commissioner (see **Appendix D**) with each participant. The Practices will record the answers to each question on the structured data collection template provided by the commissioner.

The Practices will use the WHO performance status tool with each participant. The Practices will assist participants as necessary, for example by reading the statements as questions. The Practices will record each participant's performance status on the template.

The WHO performance status classification categorises patients as in **Appendix E**:

Consultation with Respiratory Nurse

As part of the lung health check, each participant will discuss their LHC results with a respiratory nurse. The nurse must be UK registered and have appropriate respiratory experience and qualifications. The nurse will answer any questions that may arise and provide reassurance and guidance. The nurse will discuss smoking with anyone that is a current smoker and provide a VBA intervention to encourage people to quit smoking. Any participant that expresses an interest in quitting smoking will have an appointment booked with the local smoking cessation service, and be given an information sheet provided by them containing details about how to get support to quit (or be referred directly to them by the on-site Smoking Cessation Support officer funded by the Yorkshire Cancer Research funding). The nurse will record the expression of interest in quitting smoking on the data collection template.

When discussing the outcome of the lung health check the respiratory nurse should **not make a diagnosis**. All participants with a lung cancer risk above the threshold for a CT scan should be provided with advice about the low dose CT scan using accurate information about the risks and benefits of low dose CT scans provided by the commissioner. If a participant decides not to have a scan this should be recorded.

Due to their smoking history many participants are likely to have some lung health issues and it is important that only those with **indications of important respiratory disease** are encouraged to attend their GP practice. The respiratory nurse should use the results of the lung health check and their clinical judgement to decide which of the following options is best suited to the participant. The options are:

Options	Action	Indications
1. Reassure the patient that their lung health check does not indicate the need for further follow-up at this time and that their risk of lung cancer is below the threshold needed for more tests – score <1.51%	Patient leaves reassured but aware of the importance of not smoking and does not have a CT scan No Further Action	Risk score below the threshold, no indications of important respiratory disease, ex-smoker or no interest in smoking cessation support
2. Reassure the patient that their lung health check results do **not** indicate a need to see their GP but that they would benefit from a low dose CT scan because their risk of developing lung cancer is above the threshold for the scan	Patient goes on to have a CT scan but is **not** encouraged to visit their GP practice	Risk score is above the risk threshold - 1.51% or greater. The lung health check does not indicate important respiratory disease. Ex-smoker or no interest in smoking cessation support.
3.Recommend that the patient contact their GP practice to make an appointment to discuss their lung health and that they also have a low dose CT scan because their risk of developing lung cancer is above the threshold for more tests	Patient goes on to have a CT scan and is encouraged to book an appointment with their GP practice when they can. The patient is provided with details about how best to contact their practice.	Lung cancer risk score is above the risk threshold 1.51% or greater. Spirometry result or answers to questions indicates a new diagnosis of important lung disease e.g. COPD. Or the patient reports that they have a lung disease but have not visited their GP in the last three months and results of the test suggest they should book an appointment with their own GP practice
4.Recommend that the patient book an appointment with their GP practice to discuss their lung health but they do not need a low dose CT scan	Patient does not have a low dose CT scan and is encouraged to book an appointment with their GP practice when they can. The patient is provided with details about how best to contact their practice.	Lung cancer risk score is below the risk threshold of 1.51%. Spirometry result or answers to questions indicates a new diagnosis of a lung disease e.g. COPD. Or the patient reports that they have a lung disease but have not visited their GP in the last three months and results of tests suggest they should book an appointment with their GP practice.
5.Refer the patient to urgently see their GP and use the threshold score and clinical judgement about whether they should have a low dose CT scan	The respiratory nurse will telephone the patient's GP practice and inform the practice of the need to make an urgent appointment for them. The patient will be strongly encouraged to attend their GP practice. The patient may have a low dose CT scan if their risk score is above the threshold.	In exceptional circumstances when the results of the lung health check strongly indicate important undiagnosed disease and urgent action is indicated.
6. Book patient an appointment with Specialist smoking cessation adviser for quitting advice and support. A smoking cessation advisor will be available on the day of the lung health check clinic	With option 6 other options may also apply. Depending upon which of the above Options also applies the patient may also have a CT scan or be advised to book an appointment with their GP practice because of indications of important respiratory disease.	The patient is a current smoker and has expressed an interest in getting support to quit smoking.

Going on to a low-dose CT scan

The Practices should ensure that only those with a lung cancer risk score of 1.51% or above are encouraged to get a low dose CT scan. The Practices should work with the low dose CT scan provider so that patients eligible for a scan are able to access this service easily and are booked into an available slot with the LDCT provider.

Transfer of data

The results of the lung health check will be captured on a data collection template provided by the commissioner. For those getting a CT scan this data must be transferred to the provider of the CT scan in a secure format so that an electronic copy of the person's lung health check results can be attached to the CT scan result and stored in NHS image systems.

The Practices will agree a method to ensure data is transferred accurately and safely between the Practice and the CT scan provider. Any data transfer must comply with NHS governance and legislation, and ensure that data can be used with NHS systems.

The Practices will ensure that the data collection template containing the results of the health check is electronically transferred to the participants GP practice using a secure method (prevent manual exchange of data). The data will be coded to a specification to be provided by the commissioner. It is expected that during each day of service operation participants from the identified GP practices may attend. Data will be transferred securely to GP practices using for example NHS net. The Practices will agree a method with the commissioner to send the data templates in a single batch to a named contact at each GP practice. It is expected that the GP practice will then update their records for patient's that attended a lung health check.

Administrative Follow-up

The Practices will work with the commissioner to ensure that a robust record of attendance and outcomes is maintained for all people receiving a lung health check. The Practices should keep a secure database that enables them to produce reports about attendance and a participant's lung health check. For oversight the commissioner will require two data sets to be provided by the Practices:

1. A brief activity report covering each day's activity as a routine data return as requested. This return will include the number of lung health checks provided, non-attendance and the outcome Option or Options of the health check decided by the nurse for each participant.
2. A copy of each participants lung health check data collection template which has been amended in an agreed way to replace patient identifiable data with a single patient number

3. All patients should be informed in writing of the outcome of their Low Dose CT scans by the Practices. In case of an urgent referral, this must be followed up by a telephone call by a clinician.

The Practices will provide this information to the commissioner using in an agreed electronic format.

NHS Patient Experience and Satisfaction Survey

To identify and commission a Provider to undertake the work to collect feedback from patients to measure their level of satisfaction with their LHC and Low Dose CT scans. The Provider will ensure that an appropriate Patient Satisfaction Survey is given to all patients to complete.

Patient Number Modelling Data

See **Appendix F** for needs comparator - Bradford

See **Appendix G** for Excel LHC tool to be used to record data.

All patients who smoke should be offered help with quitting either via the Yorkshire Smokefree service – telephone or electronic order made during LHC. All patients receive Very Brief Advice (VBA) on smoking and offer of referral to the Specialist Smoking Cessation Adviser service.

Patients selected for LDCT will have an appointment booked by the LHC provider (Practices) with the LDCT provider to arrange a convenient time to attend for LDCT scan, immediately after their results de-brief with a respiratory nurse.

Applicable national standards (e.g. NICE)

The Practices will deliver a lung health check to the selected adult population of Bradford in accordance with the requirements as set out in this Specification and current guidelines and legislation.

Good Practice Standards

The Practices will comply with:

a) Good clinical industry practice which will include but is not limited to: standards for better health, relevant NICE guidance, for example guidance supporting interventions to help people stop smoking and the baseline Spirometry will be undertaken in accordance with the guidance in Primary Care Commissioner - A Guide to Performing Quality-Assured Diagnostic Spirometry 2013.

http://cdn.pcc-cic.org.uk/sites/default/files/articles/attachments/spirometry_e-guide_1-5-13_0.pdf

Time Standards

The Practices will:

a) Ensure that for all people arriving before or on time for their appointment the lung health check begins within 30 minutes of the scheduled appointment time.
b) Provide details of the daily attendance at the lung health check service to the commissioner's administration team within two working days.
c) Provide the data collection template recording the findings of the lung health check to the participant's GP within two working days of the persons lung health check.

Information Management & Technology (IM&T) Requirements

a) The Practices will enable referral information and reports to be received and delivered in electronic format, as outlined by the commissioner.
b) Comply with the Information Governance requirements of the Bradford CCG and the NHS for personal identifiable data.

Clinical Safety and Medical Emergency Measures

a) The Practices will ensure that they operate within a clinically safe environment ensuring safe practice and adequate levels of equipment to deal effectively with medical emergencies.
b) The Practices will ensure that all staff are appropriately trained and accredited including having a Basic Life Support certificate which meets the standards set out by the Resuscitation Council (www.resus.org.uk) and at least one member of staff being qualified to Intermediate Life Support (ILS) level.

Quality Requirements of Activity Outputs

a) The Practices will ensure the participant's GP receive the data collection template recording the result of the lung health check to agreed or mandated timescales or in line with clinical appropriateness.
b) The Practices will communicate any unusual, unexpected, urgent, or clinically significant findings that may require immediate or urgent clinical decisions in accordance with the locally agreed protocol.

Clinical Contract Specification - Standards and Equipment

a) The Practices will ensure that equipment is provided and maintained to an adequate minimum level to fulfil the standards outlined within this Specification.
b) The Practices will carry out daily quality assurance and quality control checks on equipment to ensure minimum standards of operations are maintained in line with legal, professional, industry and manufacturers specifications.
c) The Practices should use:
    - A spirometer which meets the ISO standard 267823
    - One-way mouthpieces and nose clips
    - Bacterial and viral filters (as indicated in selected patients)

- Height measure and weighing scales – calibrated according to manufacturer's instructions.

Training and Education

The Practices will provide education and training for all staff to attain competence and maintain those standards including the provision of professional registration requirements.

Quality Assurance

a) Undertake quality assurance of the Spirometry equipment in line with that recommended in Primary Care Commissioner - A Guide to Performing Quality-Assured Diagnostic Spirometry 2013.
http://cdn.pcc-cic.org.uk/sites/default/files/articles/attachments/spirometry_e-guide_1-5-13_0.pdf

b) This will include quality control checks at least weekly to ensure reliability and reproducibility of results.

Operating Manual

The Practices will have and adhere to an Operating Manual that contains effective policies and procedures covering service specific standards and any regulatory and legislative requirements.

Performance Monitoring

KPI	Measurement Definition	Threshold	Numerator	Denominator	Data Collection	Action
Patient Safety	Participants with an accurate lung cancer risk score	100%	People with a correctly inputted and calculated lung cancer risk score	Total number of people getting a lung health check	Review 20% sample of risk scores. Provide weekly	Remedial action and investigation
Practice cancellation	Proportion of hours when service is not delivered due to equipment failures or staffing issues	<5%	Total hours scheduled service not provided	Total Scheduled hours of delivery	Provide weekly	Take immediate remedial action to ensure consistent service delivery
Spirometry	All participants should have Spirometry	100%			Provide weekly	

	test unless there is a valid clinical reason					
Spirometry	Number of people that have a Spirometry test	>95%	Total number of people having a Spirometry test	Total number of people getting a lung health check	Provide weekly	Investigate and provide reasons why people are not getting this test

KPI	Measurement Definition	Threshold	Numerator	Denominator	Data Collection	Action
Spirometry	Number of people that have a Spirometry test that is technically acceptable	>98%	Total number with technically acceptable results	Total number of people having a Spirometry test	Provide weekly	Investigate to reassure that Spirometry is being done correctly and failures are for genuine reasons
Procedure waiting time	Percentage of patients whose lung health check commenced within 20mins of its scheduled time	90%	Number of lung health checks within 20mins of scheduled time	Total number of health checks	Provide weekly	Work with booking in service and commissioner to improve waiting times consider increasing staffing
Reporting Requirements	Accurate use of structured report as per the format provided by the commissioner	100%	All parts of data collection template correctly presented	All lung health checks reported	Provide weekly	Take action to ensure reports follow the structure described by the commissioner
Reporting Requirements	Completed Structured Report	2 working days after previous week finish			Provide weekly	Remedial action plan

Response Requirement from Bidder

Please could you give a detailed response as to how and where you would propose to deliver the LHC, including at least the following headings:

- Workforce Type and Capacity to deliver X number of LHC per week/session

- Previous experience of delivering health checks
- Proposed days/times of delivery in your offer
- Satisfaction metrics with previous delivery of health checks
- What might the Primary Care Delivery Model look like
- Experience/confidence of adding LHC to SystmOne as an “automated check template”
- Potential training requirements – and how these would be met
- Indicative mobilisation timetable
- Predicted cost per LHC based on the predicted population to be covered, on the assumption that the payment was based on delivery of the predicted number of patient invitations in the model, and >95% of the predicted LHC in the model.
- Indicate the willingness to extend provision, should the contract be extended to cover further practices in the Wakefield CCG area, at the agreed price.

Nasim Aslam Tackling Lung Cancer Project Manager for Bradford

March 2019

Appendix A – GP Invitation letter proforma

Appendix B – Content of the Lung Health Check

Appendix C – Lung Health Checks Flow Chart

Appendix D – Symptom questionnaire

Appendix E – WHO Performance Status questionnaire

Appendix F – Needs comparator - Bradford

Appendix G – Lung Health Check questionnaire

Appendix H – Instructions for completing the lung health questionnaire

References:

1. Summary report: Cancer In West Yorkshire, Yorkshire Cancer Research 2016
2. Bradford JSNA, 2018
3. PHE, National General Practice Profiles – Practice Summary, http://fingertips.phe.org.uk/profile/general-practice/data
4. Parkin, Boyd and Walker, The fraction of cancer attributable to lifestyle and environmental factors in the UK in 2010, *British Journal of Cancer* 2011, **105**: S1-S81.
5. Cancer Commissioning Toolkit (CCT): Staging by Cancer site (2013), https://www.cancertoolkit.co.uk/ExtractsReports/StagingByCancerSitePublic?downloadPackage=False
6. Lung Health Check Tool courtesy of Brock University, 1812 Sir Isaac Brock Way, St. Catherine's, ON L2S 3A1, Canada