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City of BRADFORD METROPOLITAN DISTRICT COUNCIL

Agenda for a meeting of the Health and Social Care Overview and Scrutiny Committee to be held on Thursday, 4 July 2019 at 4.30 pm in Committee Room 1 - City Hall, Bradford

Members of the Committee – Councillors

LABOUR	CONSERVATIVE	LIBERAL DEMOCRAT	BRADFORD INDEPENDENT GROUP
Greenwood (Ch) Mir (DCh) Godwin Kamran Hussain Shabbir	Goodall Hargreaves	J Sunderland	Khadim Hussain

Alternates:

LABOUR	CONSERVATIVE	LIBERAL DEMOCRAT	BRADFORD INDEPENDENT GROUP
Akhtar Berry Iqbal Jenkins H Khan	Barker Riaz	Griffiths	Sajawal

Notes:

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- If any further information is required about any item on this agenda, please contact the officer named at the foot of that agenda item.

From: **To:**

Parveen Akhtar
City Solicitor
Agenda Contact: Palbinder Sandhu
Phone: 01274 432269
E-Mail: palbinder.sandhu@bradford.gov.uk

A. PROCEDURAL ITEMS

1. ALTERNATE MEMBERS (Standing Order 34)

The City Solicitor will report the names of alternate Members who are attending the meeting in place of appointed Members.

2. DISCLOSURES OF INTEREST

(Members Code of Conduct - Part 4A of the Constitution)

To receive disclosures of interests from members and co-opted members on matters to be considered at the meeting. The disclosure must include the nature of the interest.

An interest must also be disclosed in the meeting when it becomes apparent to the member during the meeting.

Notes:

(1) Members may remain in the meeting and take part fully in discussion and voting unless the interest is a disclosable pecuniary interest or an interest which the Member feels would call into question their compliance with the wider principles set out in the Code of Conduct. Disclosable pecuniary interests relate to the Member concerned or their spouse/partner.

(2) Members in arrears of Council Tax by more than two months must not vote in decisions on, or which might affect, budget calculations, and must disclose at the meeting that this restriction applies to them. A failure to comply with these requirements is a criminal offence under section 106 of the Local Government Finance Act 1992.

(3) Members are also welcome to disclose interests which are not disclosable pecuniary interests but which they consider should be made in the interest of clarity.

(4) Officers must disclose interests in accordance with Council Standing Order 44.

3. MINUTES

Recommended –

That the minutes of the meeting held on 13 June 2019 be signed as a correct record (previously circulated).

(Palbinder Sandhu – 01274 432269)

4. INSPECTION OF REPORTS AND BACKGROUND PAPERS
(Access to Information Procedure Rules – Part 3B of the Constitution)

Reports and background papers for agenda items may be inspected by contacting the person shown after each agenda item. Certain reports and background papers may be restricted.

Any request to remove the restriction on a report or background paper should be made to the relevant Strategic Director or Assistant Director whose name is shown on the front page of the report.

If that request is refused, there is a right of appeal to this meeting.

Please contact the officer shown below in advance of the meeting if you wish to appeal.

(Palbinder Sandhu - 01274 432269)

5. REFERRALS TO THE OVERVIEW AND SCRUTINY COMMITTEE

Any referrals that have been made to this Committee up to and including the date of publication of this agenda will be reported at the meeting.

B. OVERVIEW AND SCRUTINY ACTIVITIES

6. CHALLENGES TO CANCER SERVICES WITH A FOCUS ON LUNG CANCERS AND AN OVERVIEW OF THE TACKLING LUNG CANCER PROGRAMME WITHIN BRADFORD CITY AND DISTRICT 1 - 50

The report of the NHS Bradford District and Craven Clinical Commissioning Groups (**Document "B"**) provides an update on the challenges faced in cancer services in regard to 62-day performance at Bradford Teaching Hospitals Foundation Trust, diagnosing cancers early to achieve better outcomes and quality of life for patients and uptake of the national cancer screening programmes. The report focuses on lung cancers in particular and provides an outline of the Tackling Lung Cancer project currently being developed in Bradford and highlights the number of initiatives and developments in cancer services within primary, community and secondary care.

Recommended –

(1) That members note the importance of and support and influence the smoking cessation service in order to help reduce the incidence of lung cancer in Bradford.

(2) That members note the issues surrounding low uptake to screening services and support and influence the participation with the national screening services programmes.

(Janet Hargreaves – 01274 237349)

7. WEST YORKSHIRE JOINT HEALTH OVERVIEW AND SCRUTINY COMMITTEE

Previous reference: Minute 36 (2015/2016)

At its meeting of 29 October 2015 the Committee considered a report of the Chair and resolved 'That the West Yorkshire Joint Health Overview and Scrutiny be supported'. It also nominated two members from within its membership to sit on the Joint Committee. As the Committee has since been reconstituted, there is now a need to appoint two new members to sit on the Joint Committee.

Recommended –

That the Committee nominates two members from within its membership to sit on the West Yorkshire Joint Health Overview and Scrutiny Committee.

(Caroline Coombes – 01274 432313)

8. CONSULTATION ON VASCULAR SERVICES

NHS England are currently consulting on changes to vascular services across West Yorkshire and parts of North Yorkshire and have requested that a Joint Health Scrutiny Committee undertake this consultation.

However, until that Committee amends its Terms of Reference it is probable that a separate Joint Health Scrutiny Committee will be established to consider vascular services in particular.

A letter and briefing document produced by NHS England have been circulated to Committee members.

When draft Terms of Reference for this Committee have been prepared, the Health and Social Care Overview and Scrutiny Committee will be asked to consider those Terms of Reference.

Recommended –

(1) That the Committee agree that changes to vascular services are a proposal for a substantial variation in service by NHS England.

(2) That the Committee agree to form a Joint Health Scrutiny Committee with Calderdale, Kirklees, Leeds, North Yorkshire and Wakefield Councils.

(3) That the Committee agree to appoint two members to sit on the Joint Health Scrutiny Committee and the vascular services Joint Committee when it is formed.

(Caroline Coombes – 01274 432313)

City of BRADFORD METROPOLITAN DISTRICT COUNCIL

Report of the NHS Bradford District and Craven CCGs to the meeting of the Health and Social Care Overview & Scrutiny Committee to be held on 4th July 2019

B

Subject: Challenges to cancer services with a focus on lung cancers and an overview of the Tackling Lung Cancer Programme within Bradford City and District

Summary statement:

- To update on the challenges faced in cancer services in regard to 62-day performance at Bradford Teaching Hospitals Foundation Trust, diagnosing cancers early to achieve better outcomes and quality of life for patients and uptake of the national cancer screening programmes.

- The paper focuses on lung cancers in particular and provides an outline of the Tackling Lung Cancer project currently being developed in Bradford.

- To highlight the number of initiatives and developments in cancer services within primary, community and secondary care.

Portfolio:

Healthy People and Places

Report Contacts:
Janet Hargreaves,
Head of Design and Delivery and Cancer Services for Bradford and Craven CCGs
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Dr Ian Fenwick,
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Bradford City and Districts CCGs
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1. Summary

- To update on the challenges faced in cancer services in regard to 62-day performance at Bradford Teaching Hospitals Foundation Trust, particularly in outpatient capacity and complex diagnostic pathways.

- The paper focuses on lung cancers in particular and provides an outline of the Tackling Lung Cancer project currently being developed in Bradford.

- To update on the uptake of cancer screening services and diagnosing cancers early to achieve better outcomes and quality of life for patients.

- To highlight the number of initiatives and developments in cancer services within primary, community and secondary care.

2. Background

- The NHS Long Term Plan comes with £20.5bn of extra funding for the NHS.

- It includes important commitments for cancer such as:
    - diagnosing more cancers at an early stage
    - more support for smokers to quit
    - a plan to help the NHS to innovate and do more research.

- The headline pledge in the plan is to diagnose 3 in 4 cancers at an early stage by 2028. This is an important and ambitious commitment and is key to improving survival rates.

- People are more likely to survive their cancer for longer when diagnosed early.

- Currently only around 1 in 2 people with cancer in the UK are diagnosed at an early stage. In order to make this improvement the following measures will be introduced:
    - lowering the age range for bowel screening to 50 and introducing a new test;
    - rolling out new Rapid Diagnostic and Assessments Centres across England
    - investing in more CT and MRI scanners to diagnose cancers.
    - improve public awareness of the signs and symptoms of cancer and helping GPs to refer patients for diagnostic tests more easily

3. Report issues

3.1 Cancer targets

Over the financial year 2018/19, Bradford Teaching Hospitals Foundation Trust (BTHFT) have struggled to achieve the national targets for cancer wait times, specifically that 93% of patients referred with suspected cancer by a GP should be seen within 14 days (two week wait) and that 85% of patients diagnosed with cancer should start their treatment within 62 days of an urgent referral.

Nationally, three quarters of NHS Trusts are failing against the 62 day target, so Bradford is not alone. However there have been major local improvements in the pathways for diagnosing particular cancers, particularly dermatology and gastroenterology. All non-urgent referrals for dermatology started being seen by community providers in November, which freed up capacity for the Trust to see patients with suspected cancer. At its worst performing, before these pathway changes were implemented, only 6.5% of dermatology referrals were being seen within two weeks. After the changes, 97% of patients were seen on time.

Financial year 2018/19	2WW performance (all cancers; target 93%)
Q1	47.3
Q2	62.4
Q3	73.0
Q4	94.0

The large numbers of dermatology referrals into BTHFT and the huge improvement in performance has resulted in the all cancer performance hitting the 93% target in the last quarter of the year.

The improvements in two week wait performance will have a knock on improvement on 62 day performance but it is acknowledged that there are further issues within the Trust that require addressing. While a quarter of 62 day breaches last year were due to complex diagnostic pathways that by necessity take time, another quarter of breaches was due to a lack of capacity to see patients within the required timeframe. The Trust is struggling with workforce pressures across the majority of their cancer teams and recruitment is a problem nationally.

3.2 Lung cancer

The overall rates of cancer incidence show that of the four most common cancer sites, lung is the main area of concern, particularly for Bradford City.

Cancer incidence	All cancer (2014)	Lung	Breast	Colorectal	Prostate
NHS Bradford City CCG	578.8	141.9	145.8	42.7	87.1
NHS Bradford Districts CCG	605.7	93.8	182.1	66.0	125.5
England average	608.3	78.3	173.4	70.4	177.6

Around 40% of cancers can be prevented through lifestyle changes and the biggest of these changes is stopping smoking. At least 15 types of cancer can be caused by smoking and a quarter UK cancer deaths are related to tobacco use.

% current smokers	2011		2017	
	Bradford	England	Bradford	England
Male	24%	22.2%	22.5%	16.8%
Female	19.6%	17.6%	15.3%	13%

Source: PHE/JSNA

- Most smokers want to quit and the NHS Long Term Plan states that all patients admitted to hospitals in England who smoke will be given treatment to quit unless they opt out.

- However this plan relies on local Stop Smoking Services being in place once people leave hospital. These services will need enhancing to provide the level of support that will be required.

- Supporting smokers to quit is key to NHS sustainability as tobacco dependence is the main cause of most cancers, it causes 10-20 years premature death for people with mental illness, it is the main cause of the three top reasons for hospital admission of people under 75 years of age (cancer, respiratory disease, cardiovascular disease) and is the most modifiable factor in reducing stillbirth.

- Patients now and in the future will benefit if the NHS can carry out more research into the diagnosis and treatment of cancer. The plan sets out some important changes to make it easier to carry out more research in the NHS. One such initiative is the Yorkshire Lung Screening Trial, led by a Respiratory Consultant and GP/Professor at Leeds. This four year project is focusing on the cost effectiveness of lung cancer screening.

- In May 2018 a paper was taken to the Bradford Health and Wellbeing Board by the West Yorkshire and Harrogate Cancer Alliance setting out the case for change in the approach to tackling the high levels of lung cancer mortality in West Yorkshire and specifically in the Bradford area. Lung Cancer is our 'biggest killer' with more people dying from lung cancer than any other cancer in the West Yorkshire and Harrogate Cancer Alliance area. This is at variance to the national average where lung cancer is the third cancer highest of mortality form cancer.

One year survival – Lung cancer (2013)	
NHS Bradford City CCG	36.6%
NHS Bradford Districts CCG	39.3%
England average	35.5%

2ww lung cancer – 2018/19	
NHS Bradford City CCG	98.8% (84/85)
NHS Bradford Districts CCG	97.8% (395/404)
Target	93%

62 day lung cancer – 2018/19	
NHS Bradford City CCG	73% (8/11)
NHS Bradford Districts CCG	46% (32/69)
Target	85%

The paper put forward a systematic approach with four areas of intervention overseen by a programme management team. A summary of these four interventions is provided below:

1. Optimising smoking cessation support particularly in the acute trust environment

   a. **Impact** reduction in: smoking prevalence, re-admission rates and hospital mortality (Ottawa data)
2. "Push and pull" symptom awareness campaigns and community engagement events
   a. **Impact** Reduction in cancers diagnosed as an emergency presentation, more cancer diagnosed overall and more people offered curative surgery (earlier stage diagnosis)
3. Risk identification in primary care to promote direct to Low Dose CT (LDCT) scanning
   a. **Impact** More lung cancers diagnosed overall and at an earlier stage offering surgical treatment
4. Optimising the lung cancer pathway
   a. **Impact** improvement in 62-day pathway overall

More detailed information on the Tackling Lung Cancer project can be found in the appendices but the service will go live for the identified trial practices on the 29th July 2019.

3.3 Screening and early diagnosis

Increasing early detection of cancers when they are easier to treat is at the heart of the NHS's Long Term Plan to upgrade services and make sure patients benefit from new technologies and treatments. Our screening programmes have led the world and save around 9,000 lives every year.

There is broad agreement that screening programmes prevent cancers and lead to earlier diagnosis, thereby saving lives.

The table below presents the latest uptake rates to the national cancer screening programmes and clearly outlines areas where interventions should be targeted.

Bowel cancer screening	Cervical screening	Breast screening
Men and women aged 60-74, every two years	Women 25-49, every three years. Women 50-64, every five years.	Women aged 50-70, every three years
Current uptake (September 2018; target – 60%) • Bradford Districts – 54.08% • Bradford City – 34.26%	Current uptake (January 2019; target – 70%) • Bradford Districts – 69.54% • Bradford City – 57.24%	Current uptake (August 2018; target 80%) • Bradford Districts – 69.64% • Bradford City -56.5%

Bradford District and Craven CCGs, together with providers, continually develop and enhance cancer services with a focus on attempting to detect cancers early, early presentation which leads to improving survival rates and quality of life. Local developments include:

- Yorkshire Cancer Research & Enable2 pilot project using interpreters to phone non-responders on behalf of GPs and encourage participation with the national bowel screening programme. The pilot of the bowel screening project took place in January 2019 with the Lister Practice.
    - Total Non-responders from this particular surgery - 155
    - Total answered calls - 136 (87.74%)
    - Total "re-order kits“ - 94 (69% of answered calls, 61% of all non-responders)

  The full roll out of the project is underway and the positive results are being seen across all practices engaged.

- Talk Cancer sessions are being run by Cancer Research UK and offered to partner organisations, practice staff and community groups with the aim of raising awareness of cancer, lifestyle factors, symptom spotting and giving skills to have possibly difficult conversations. 24 sessions (including a Train the Trainer session) were delivered over 12 months with very positive feedback.

- GP practice “league tables” to encourage primary care ownership.

- Contacting first time invitees to screening in order to give more information and encourage participation.

- Community engagement through VCS groups

- Sharing good practice across the Alliance

- Implementation of Faecal Immunochemical Test (FIT) from June 2019 to replace the Faecal Occult Blood (FOB) test for bowel screening, making the process much simpler and hopefully meaning that more people will participate.

4. Options

N/A

5. Contribution to corporate priorities

6. Recommendations

6.1 That members note the importance of and support and influence the smoking cessation service in order to help reduce the incidence of lung cancer in Bradford.

6.2 That members note the issues surrounding low uptake to screening services and support and influence the participation with the national screening services programmes.

7. Background documents

None

8. Not for publication documents

None

9. **Appendices**

9.1 West Yorkshire and Harrogate Cancer Alliance Tackling Cancer Programme
9.2 Outline Specification for Tendering of the Lung Health Check Tackling Lung Cancer Project

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West Yorkshire and Harrogate Cancer Alliance
Tackling Cancer Programme

1. Introduction

In May 2018 a paper was taken to the Bradford Health and Wellbeing Board by the West Yorkshire and Harrogate Cancer Alliance setting out the case for change in the approach to tackling the high levels of lung cancer mortality in West Yorkshire and specifically in the Bradford area. Lung Cancer is our 'biggest killer' with more people dying from lung cancer than any other cancer in the West Yorkshire and Harrogate Cancer Alliance area. This is at variance to the national average where lung cancer is the third cancer highest of mortality form cancer. The paper put forward a systematic approach with four areas of intervention overseen by a programme management team. A summary of these four interventions is provided below;

1. Optimising smoking cessation support particularly in the acute trust environment
    a. **Impact** reduction in: smoking prevalence, re-admission rates and hospital mortality (Ottawa data)
2. "Push and pull" symptom awareness campaigns and community engagement events
    a. **Impact** Reduction in cancers diagnosed as an emergency presentation, more cancer diagnosed overall and more people offered curative surgery (earlier stage diagnosis)
3. Risk identification in primary care to promote direct to Low Dose CT (LDCT) scanning
    a. **Impact** More lung cancers diagnosed overall and at an earlier stage offering surgical treatment
4. Optimising the lung cancer pathway
    a. **Impact** improvement in 62-day pathway overall

The purpose of this paper is to update the Bradford Health and Social Care Overview and Scrutiny Committee on progress made to date by the Tackling Lung Cancer Programme.

2. Establishing the Programme

The regional programme manager came in to post in May 2018. Working with stakeholders has been key to establishing the programme and started with a visit to the Bradford Health and Wellbeing Committee in May 2018 swiftly followed by a regional stakeholder meeting at the beginning of June other key meetings have included;

- 23rd May 2018 – Initial meeting with MYT Cancer Manager and Lead Respiratory Consultant
- September 2018 – Project Manager for Bradford in post
- 10th October WY&H Cancer Alliance Early Diagnosis Group approved funding for EBUS equipment for BTHFT
- 10th October – Meeting with Thoracic Management Team at Leeds
- 17th October – 1st Bradford Place Meeting (start of monthly meetings)

A programme plan was developed and put in place with regular highlight reports being provided to the Cancer Alliance Board, Cancer Alliance Early Diagnosis Group and Bradford Place Meeting.

The programme team also explored and gathered the evidence base and materials from other areas to inform the programme. This work included the development of an outcomes calculation tool which has helped to estimate the potential demand on service across the system.

3. Plans for Delivery in Bradford

The Bradford Place Meeting quickly reviewed the local GP Practices with the populations at most risk and agreed on three GP Practices as the pilot delivery group. These are, The Ridge, Bowling Hall Medical Practice and Rooley Lane Medical Centre. A local plan was developed against the four interventions, which was reviewed and approved by the WY&H Early Diagnosis Group in February 2019.

Intervention	Plan for Delivery
Optimising Smoking Cessation Support	2 Smoking Cessation Advisors to provide an in house service within Bradford Hospital
Push & Pull Symptom Awareness Campaign	Direct input in to the communities where the service will be delivered to encourage up take Wider messaging to raise awareness both of the symptoms of lung cancer and benefits gained by quitting smoking
Risk Identification in Primary Care & Low Dose CT Scanning	Primary Care Lung Health Check Service delivered by 3 GP Practices working in collaboration Mobile CT Scanning Service procured from the NHS Procurement Framework via BTHFT Procurement Team. Cobalt/Siemens have been awarded the contract. BTHFT to provide reporting service and diagnostic MDT. To include communication of results to the GP and patient where appropriate.
Optimising Lung Cancer Pathway	Purchase of additional EBUS scope to improve the flow of patients on the 2WW pathway

The Bradford Place group considered the workforce options for the delivery of the Lung Health Check and agreed that this could be delivered by a primary care nurse workforce, using existing GP IT systems. A primary care specification had already been developed with reference to the work already completed in Manchester and Nottingham. The CCG has used this as the basis of a single contractual offer to the 3 GP Practices.

Work also commenced on the options for the Low Dose CT service. Evidence from other pilot areas agrees that local delivery is key. Advice from the NHS Procurement Team highlighted that service could be procured off the national framework, but this needed to be led by an acute trust. Timing of the procurement was therefore linked to the capacity and demand work which had already commenced for the Lung Health Checks. These two services are totally interdependent. Cobalt, working with Siemens, was the successful bidder both on price and quality of their offer.

A Table detailing the work completed and in progress has been provided in Appendix A.

4. Communications and Patient & Public Engagement

The programme management team has been working closely with the Cancer Alliance Communications and Engagement Manager to develop and Communications and Engagement Plan. The following engagement activities have been completed;

a. Presentation and Workshop with the West Yorkshire & Harrogate Patient Panel. This included the review of patient information and distance and timing of the Low Dose CT offer
b. Engagement sessions are planned in July with each PPG for the three GP Practices
c. Bradford CCG Engagement Team are commissioning some direct engagement within the communities served by the three GP Practices

5. Expected Outcomes

West Yorkshire and Harrogate Cancer Alliance

NHS

Outcomes - Based on data provided by existing pilots

Bradford

GP Practice	Estimate of Outcomes from Health Checks									
	Total Selected Practice Population	Patients Aged 55 to 80	Invitations Sent to Patients Aged 55 to 80 less exclusions @2% (1)	Lung Health Checks Completed @30% Uptake (2)	Total Number of LD CT Scans @ 55%	Total Cancers detected by LD CT @ 5% (3)	Grades I/II @ 4%	Grade III/IV @ 1%	Nodules @ 9% (4)	Nodules doubling at 2 months @2.3% (NELSON)
Bowling Hall/Highfield	14899	2857	2800	840	462	23	18	5	42	1.0
The Ridge	23118	3975	3896	1169	643	32	26	6	58	1.3
Rooley Lane	7614	1655	1622	487	268	13	11	3	24	0.6
Totals	**45631**	**8487**	**8317**	**2495**	**1372**	**69**	**55**	**14**	**124**	**3**

Lives Saved	58

(1) Exclusion criteria anyone on the Palliative Care Register or anyone with a diagnosis of Lung Cancer

(2) Patient Cohort - Self Selecting Ever smokers aged 55 to 79

(3) Patient enters the 2WW pathway via direct referral

(4) Patient managed on the Lung Nodule Pathway

(5) NELSON - Number of patients with Nodules who convert to 2WW Pathway after first LD CT review

6. Future Sustainability

The initial funding will support a one year pilot in both Wakefield and Bradford. In recognition that this will only serve approximately 10% of the population living in deprived areas, additional funding to sustain the programme is currently being sought.

Yorkshire Cancer Research has indicated that they are very interested in forming a partnership with the West Yorkshire & Harrogate Cancer Alliance. They have already agreed to provide some additional funding for the current programme, to provide smoking cessation advisors at the point of the Lung Health Checks and fund analytical support for the evaluation. An invitation has been extended to apply for full funding for both Wakefield and Bradford to allow an offer of Lung Health Checks to be made to all areas with high levels of deprivation, smoking and lung cancer.

7. Appendix

Appendix A – Table of work completed and in progress for Bradford Pilot

Planned Intervention	Outcomes Delivered or In Progress
Optimising Smoking Cessation Support	• Working with Bradford Council Tobacco Lead • Working with BTHFT and funded 2 smoking specialist advisers on site • BTHFT removed smoking shelters in Dec 2018 • Supported CO monitoring in OPD at BTHFT • Provided funding for a Smoking Service Pop up screen for the Trust
Push & Pull Symptom Awareness Campaign	• Agreed to use PHE materials Be Clear On Cancer • Working with Bradford CCG Engagement lead and Comms lead to work with 2 local Community Anchors around the wider Community Engagement with the Practices and localities • Budget allocated to Bradford CCG for the wider Community Engagement
Identification of Lung Cancer Risk in Primary Care & Low Dose CT	• Held successful launch meeting for the programme • Developed modelling tools for patient numbers based on Manchester/Nottingham outcomes • Worked with PH to select target practices based on social deprivation, smoking levels, lung cancer rates & deaths. • Set up local steering group/place meetings attended by stakeholders • Worked with target practice clinical, management and patient groups to ensure understanding • Agreed a primary care specification for LHC and contract in progress for pilot in 2019/20 • Procurement of Low Dose CT via NHS Supply Chain and led by BTHFT for both Bradford and Wakefield • Working with BTHFT Respiratory and Radiology Teams to develop a delivery plan for LDCT reporting and respiratory outcomes
Optimising Lung Cancer Pathway	• Supported the Regional Lung Cancer Respiratory Meetings • Developed and updated the local pathways in compliance with National Optimal Lung Cancer Pathways • Supported the development of local guidelines for the treatment & management of Lung Cancer • Made these available on the Cancer Alliance website, and access via OSCAR link • Supported the development of IPT pathway by day 38 – to be published • Funded additional EBUS equipment at BTHFT to support improvement to 62 day performance and increase capacity

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.

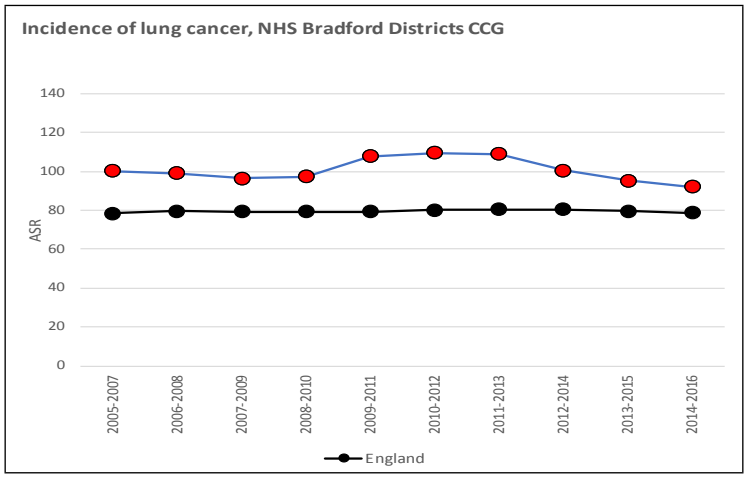
Local context

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.

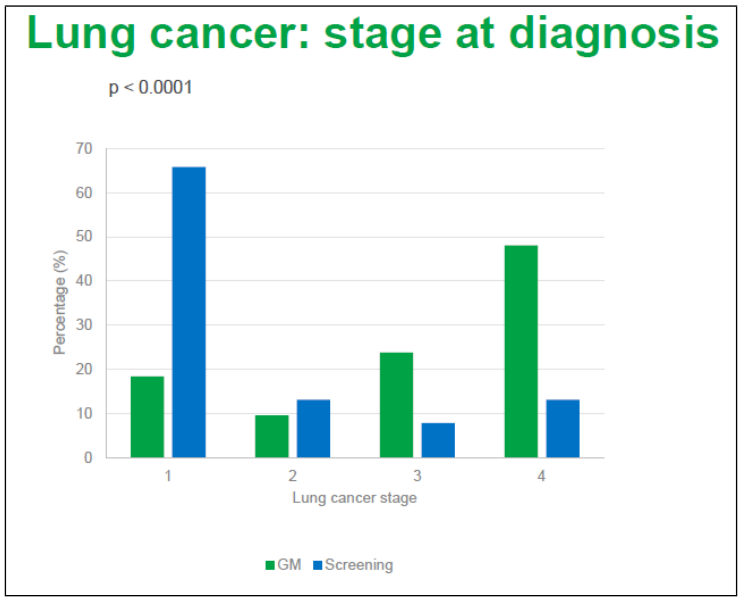


The median age of death from lung cancer is 72 years, and so, as in the studies in Manchester and Nottingham, the proposed age group to offer the lung health check would be 55 to 75 years of age, which is in alignment with the National Targeted Lung Health Check Programme. The ideal outcome of the project 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.

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

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{GP Practice Header}

Dear {Name},

We are pleased to invite you to a new free NHS service to check your lung health.

This service has been designed to improve health locally and is like an MOT for your lungs.

Our GP practice has been selected to take part in this pilot service and an invitation is being sent to people aged 55-75.

Are you currently, or have you ever been a regular smoker? Are you aged between 55-75 years?

If you have answered yes to both these questions you can have a free Lung Health Check.

Appointments are available from {date of appointments}

The Lung Health Check will take place in {location of LHC}

Places are limited so call {Provider Booking Centre Number} as soon as possible to book your appointment and don't miss out.

Please take the time to read the enclosed *'Lung Health Check'* leaflet.

If you have any queries about whether to take part or have any other unanswered questions about the service please call **{Provider Booking Centre Number}**.

Yours sincerely,

{GP Practice Senior/Lead Partner}

**Booking provider to include GP partners and GP practice address/contact telephone number and letter head*

If you would like this information provided in another language or alternative format, such as large print or coloured background, please call 0161 947 1673.

Jeżeli pragniesz, aby ta informacja była przedstawiona Tobie w innym języku lub w alternatywnym formacie, jak np. duży druk lub z kolorowanym tłem, proszę zadzwoń pod numer 0161 947 1673.

اگر آپ کو یہ معلومات کسی دوسری زبان یا شکل جیسے موٹی لکھائی یا رنگین پس منظر میں چاہیے تو براہ کرم 0161 947 1673 پر فون کریں

আপনি যদি এই তথ্য অন্য কোনো ভাষায় বা ফরম্যাটে চান,
যেমন বড় অক্ষরে বা রঙ্গীন ব্যাকগ্রাউন্ডে, তাহলে দয়া করে
টেলিফোন করুন 0161 947 1673 এই নম্বরে।

如果你希望這資料可以用另一種語言或另一種格式來提供，如大字印刷或彩色背景，請致電 0161 947 1673 查詢。

Si vous voulez ces informations fournies dans une autre langue, ou format, tel que les gros caractères ou un fond de couleur, prière d'appeler le numéro 0161 947 1673.

اذا أردت هذه المعلومات بلغة أو شكل آخر مثل الحروف الكبيرة أو خلفية ملونة، الرجاء الاتصال برقم الهاتف 0161 947 1673.

Content of the Lung Health Check – Manchester next phase work

The lung health check has six key parts:

- Heart & lung symptom questionnaire
- Calculation of lung cancer risk score
- Calculation of Qrisk2 score
- Quality assured spirometry
- Brief consultation with respiratory nurse (including smoking cessation advice) to discuss findings and next steps.
- Referral to a smoking cessation counsellor on the mobile unit or an appointment will be made prior to leaving.

Calculation of lung cancer risk score

The provider will use a structured data collection template to collect data from the lung health check. This used a lung cancer risk score calculator (PLCOm2012). The calculator will be an excel spread sheet and will be available on a laptop computer. To complete the risk score calculator the following data needs to be collected and inputted:

- 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 participant will be provided with a standard list of questions to enable the LHC nurse to collect and use data items about level of education, smoking history, and diagnosis of lung disease and history of cancer that will be used in the calculation of risk.

For each participant the LHC nurse 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 eleven data items needed by the calculator should take less than one minute. The accuracy of the data entered into the risk calculator must be checked by a second registered practitioner.

Before commencement of the service the provider will undertake training sessions for the LHC nurses to ensure accuracy of the calculation, compliance with IRMER regulations, and how to interpret the risk scores.

A participant that has a risk score that is 1.51% or above 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 provider will undertake quality assured spirometry. The provider will deliver pre-bronchodilator spirometry to ARTP standard following appropriate certified training.

Respiratory Health Questions

The provider will ask each participant about their lung health. The provider will use a symptom questionnaire

Consultation with Respiratory Nurse

As part of the lung health check each participant will talk to a respiratory nurse. The nurse must be UK NMC 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 brief intervention to encourage people to quit smoking.

Going on to a low-dose CT scan

The provider should ensure that only those with a lung cancer risk score of 1.51% or above are offered a low dose CT scan. The provider should work with the low dose CT scan provider so that people eligible for a scan are able to access this service easily and are guided or escorted from the lung health check to the CT provider service as necessary.

The LD-CT provider will ensure radiation exposures are compliant with IRMER regulations and that low dose exposures are delivered.

Acceptance and exclusion criteria and thresholds

Exclusion criteria for a lung health check:

- On the palliative care register
- People that have never smoked
- A diagnosis of lung cancer in the last 5 years

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. current pneumothorax, recent surgery including ophthalmic, thoracic abdominal or neurosurgery

Thresholds for referral for a low dose CT scan:

- All people advised to have a low-dose Ct scan will have a lung cancer risk of or above 1.51% as calculated using the lung risk calculator PLCOm2012.

Proposed Lung Health Checks Model - Bradford

Document Required | **Pathway** | **Comments/Notes**

GP Practice Identifies patient cohort by age

Patient Cohort
Aged >55 to <75 years
Exclude;
- Diagnosis Lung Ca
- Palliative Register

Letters sent to patient with offer of a Lung Health Check if they are smokers or have ever smoked

Invitation Letter and Lung Health Check Patient Leaflet

Phased in to manageable batches. Either sent out by GP Practice or by Lung Health Check Service but should be on GP Practice Headed Paper

Lung Health Check Service conducts follow up phone calls to patients who have been sent a letter

Must be appropriate data sharing arrangements in place. If Community service these may already exist.

Patients are booked in to a Lung Health Check Clinic either via them calling the Service Provider or via follow up phone call

Clinic Dates and capacity to be pre-set. Must be located close to or in the GP Practice.

Lung Health Check Clinics – 20 minute appointment

Patients have the opportunity to be referred to smoking cessation or for a Health Check

Lung Health Check Risk Assessment Form

Every Contact Counts – also offer on the day access to Smoking Cessation and Health Checks.

Smoking Cessation Provider and GP Practice invited to participate.

Ensure that there is a protocol for informing the patient's registered GP.

All providers to have access to GP Systems?

Remuneration via normal GP Enhanced Service for Health Checks and Smoking Cessation activity rates

Low Risk

Discharge or refer to GP if required

High Risk

Referred straight to LDCT with patients consent – Needs a safety check against patient history?

Patient Leaflet LDCT Scan

LDCT should be delivered via a mobile service within the community. Decision on whether to run on the same day as the Health Check or at an appointment provided on the day for a future date.

Clear Pathways and protocols need to be agreed in advance for the CT safety checks and post CT for any outcome including incidental findings. May require special MDTs.

Refer to relevant MDT

Positive Scan for another significant condition

Low Dose CT

Negative Scan

Patient Informed by phone

GP informed by letter/electronically

No action required

Positive Scan – Lung Cancer

Referred directly in to Lung Ca Pathway – GP informed NO 2WW referral required

Positive Scan – Lung Nodules

Directly referred to Lung Nodules Pathway

GP Informed

Patient Leaflet

Nodule Pathway Required

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Symptom questionnaire

1. Do you usually get short of breath? Can you circle the number in the table below that best describes you?

Grade	Degree of breathlessness related to activities
1	Not troubled by breathlessness except on strenuous exercise
2	Short of breath when hurrying on the level or walking up a slight hill
3	Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace
4	Stops for breath after walking about 100 yds or after a few minutes on level ground
5	Too breathless to leave the house, or breathless when undressing

2. Do you have a cough on most days (or nights)? Yes / No
3. How long have you had this cough? days/weeks/months/years
4. Do you wheeze? Yes / No
5. Do you usually produce phlegm (mucous) from your chest? Yes / No
6. Do you produce a teaspoon or more of phlegm (mucous) from your chest most days? Yes / No
7. Have you taken antibiotics or steroid tablets for your chest, on more than on occasion, in the last year? Yes / No
8. Have you coughed up blood in the last year? Yes / No
    a. If yes, when was the last time:……
9. Have you lost weight in the last few months, without wanting to? Yes / No
    a. If yes, how much weight have you lost?.....
10. In the last 3 months have you had an angina type pain in your chest? Yes / No

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

The WHO performance status classification categorises patients as:

0	able to carry out all normal activity without restriction
1	restricted in strenuous activity but ambulatory and able to carry out light work
2	ambulatory and capable of all self-care but unable to carry out any work activities; up and about more than 50% of waking hours
3	symptomatic and in a chair or in bed for greater than 50% of the day but not bedridden
4	completely disabled; cannot carry out any self-care; totally confined to bed or chair

WHO Performance Status Questionnaire

0	able to carry out all normal activity without restriction
1	restricted in strenuous activity but ambulatory and able to carry out light work
2	ambulatory and capable of all self-care but unable to carry out any work activities; up and about more than 50% of waking hours
3	symptomatic and in a chair or in bed for greater than 50% of the day but not bedridden
4	completely disabled; cannot carry out any self-care; totally confined to bed or chair

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Choice of Location for LHC

(Based on Manchester Data)

Nasim Aslam, West Yorkshire & Harrogate Cancer Alliance

	Deprivation Score	Practices	Expected Attendance for LHC	Expected LDCT Number	Expected Referrals to 2ww - suspected cancer (5% of LDCT)	Expected Referrals to 2ww - suspected cancer per week	Expected number of cancers detected (1/33 LDCT)	Expected number of Nodules - for Nodule Pathway	Expected Referrals to GP with Other Lung Issues (some will be already known)
Cohort 1		The Ridge	1,053	579	29	7	17	42	316
		Sub Total	**1053**	**579**	**29**		**17**	**42**	**316**
Cohort 2		Bowling Hall	347	191	10	2	6	14	104
		Highfield	382	210	10	3	6	15	114
		Rooley Lane	427	235	12	3	7	17	128
		Sub Total	**1156**	**636**	**32**		**19**	**46**	**347**
		Totals	**2209**	**1215**	**61**		**36**	**88**	**663**

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Lung Health Check Questionnaire Page 1 / 2		
WY&H CA Unique identifier		
Consent		Yes/No
Research Consent Given?		
Data Sharing Consent Given?		
Time (24h)	**Appointment Time**	
	Arrival Time	
	Time LHC Commenced	
	Time of CT scan	
GP	**Name**	
	Practice	
	Postcode	
Patient demographics	**Forename**	
	Last name	
	NHS Number	
	Postcode	
	DOB	
	Ethnicity	
	Age	
Education (select number)	**1** = Less than GCSE / O level **2** = GCSE / O level **3** = A level **4** = Some university / college **5** = University degree **6** = Postgrad / professional	
Measures	**Weight (kg)**	0.0
	Height (m)	0.00
	BMI	
	FEV1 (litres)	0.00
	% Predicted (FEV1)	0.00
	FVC (litres)	0.00
	% Predicted (FVC)	0.00
	FEV1/FVC	
	Saturations (%)	0
Do you have COPD/emphysema/bronchitis? (yes=1, no=0)		0
Have you ever been diagnosed with cancer? (yes=1, no=0)		0
Detail previous cancer(s)		
Has a first degree relative ever had lung cancer? (yes=1, no=0)		0
If yes - were they aged above or below 60? (below 60 = 1, 60 or above = 0)		
Smoking	**Smoking status** (former = 0, current = 1)	
	Age start	0
	Age stop (enter current age if still smoking)	0
	Smoking duration (years)	0
	Years since stopping smoking	0

	Cigs/day on average	0
	Pack years	0.0

Lung Health Check Questionnaire		Page 2 / 2
WY&H CA Unique identifier		0
Lung cancer risk score		% (request CT if more than 1.5%)
CT requested		yes = 1 no = 0
Notes		

Symptoms	**yes = 1 no = 0**
Are you short of breath? (use MRC dyspnoea scale below)	
Do you cough most days/nights?	
How long has the cough been present? (weeks)	
Do you wheeze?	
Do you usually produce phlegm (mucous) from your chest?	
Do you produce a teaspoon or more phlegm (mucous) from your chest most days?	
Have you taken antibiotics or steroid tablets for your chest on more than 1 occasion in the last year?	
Have you coughed up blood in the last year?	
If yes when did you last cough up blood? (weeks ago)	
Have you lost weight in the last few months without wanting to?	
If yes, how much weight have you lost? (kg)	
In the last 3 months have you had angina like chest pain?	
What is your WHO Performance Status? (See scale below)	
Can you recall any job or activity in which you were exposed to asbestos?	
Have you ever been diagnosed with : Pneumonia	
Have you ever been diagnosed with : TB	

Notes	
	Smoking Cessation Offered? (Y/N)
	Specialist Nurse Name & Signature:

MRC dyspnoea scale
1 = Not troubled by breathless except on strenuous exercise
2 = Short of breath when hurrying on a level or when walking up a slight hill
3 = Walks slower than most people on the level, stops after a mile or so, or stops after 15 minutes walking at own pace
4 = Stops for breath after walking 100 yards, or after a few minutes on level ground
5 = Too breathless to leave the house, or breathless when dressing/undressing

WHO Performance Status
0 = Asymptomatic (Fully active, able to carry on all predisease activities without restriction)
1 = Symptomatic but completely ambulatory (Restricted in strenuous activity but ambulatory/able to carry out light work)
2 = Symptomatic, <50% in bed/day (Ambulatory/capable self care, unable to work/up and about more than 50% of day)
3 = Symptomatic, >50% in bed, not bedbound (Only limited self-care, confined to bed/chair 50% or more of waking hours)
4 = Bedbound (Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair)
5 = Death

Instructions for Completing the Lung Health Check Questionnaire

Do not alter or enter data in red shaded areas – they will self-populate from the calculator

Data Item	How to complete
WY&H CA Unique Identifier	Enter SystmOne Patient ID number
Research Consent	Ask the patient if they are happy for anonymised data to be shared with other healthcare professionals for research and analysis purposes? Answer: Enter Y or N
Data sharing consent	Ask the patient if they are happy for their data to be shared with other healthcare professionals connected with the lung health screening programme? Answer: Enter Y or N
Time	Enter Appointment time in the format HH:MM (24 hour clock) Enter Arrival time in the format HH:MM (24 hour clock) Enter Start time of the LHC in the format HH:MM (24 hour clock)
Patient demographics	Enter the patient demographics from SystmOne, and check them with the patient. Note any inaccuracies to be amended in SystmOne.
Education	Ask the patient the highest level to which they were educated? Enter the appropriate numerical code in the result box from the table on the LHC.
Measures	Measure the weight in Kg to 1 decimal place, and enter into the LHC spreadsheet. Measure the height in m to 2 decimal places, and enter into the spreadsheet. The BMI will be calculated automatically, and self-populate the spreadsheet. Perform the spirometry as per the separate instructions. Enter the FEV1 in litres to 2 decimal places on the spreadsheet. Enter the % predicted FEV1 in litres to 2 decimal places on the spreadsheet. Enter the FVC in litres to 2 decimal places on the spreadsheet. Enter the % predicted FVC in litres to 2 decimal places on the spreadsheet. The FEV1/FVC ratio will be calculated automatically, and self-populate the spreadsheet. Ask the patient if they have been diagnosed with COPD/emphysema/bronchitis – if they answer Yes, enter 1 in the calculator. Ask the patient if they have ever been diagnosed with cancer – if they answer Yes, enter 1 in the calculator and note the site/severity in the “Detail previous cancers” boxes. Ask the patient if a first degree (mother/father/brother/sister) relative has ever had lung cancer. If the answer is Yes, enter 1 in the calculator. If Yes to the last question – were they above or below 60 – if below, enter 1 in the calculator.

Smoking	Is the patient a current tobacco smoker – if Yes, enter 1 in the calculator. What age did they start smoking – enter the age as a number. What age did they stop smoking – enter the age as a number, or the current age if still smoking. The spreadsheet will auto calculate the smoking duration. The spreadsheet will auto calculate the years since stopping Ask the patient the number of cigarettes per day that they smoke (average) – enter a numerical value. The spreadsheet will auto calculate the Pack Years
Lung Cancer Risk Score	The spreadsheet will auto calculate the six year lung cancer risk score based on the data entered. If this is 1.51 or higher – the patient should be offered a low dose lung CT appointment, and given the patient leaflet. If a CT is booked – please enter 1 in the spreadsheet.
Symptoms & Performance Status	Ask the question on the symptom sheet, and populate the spreadsheet with the appropriate code number for the answer given.
Smoking Cessation	All patients MUST be offered smoking cessation from Yorkshire Smokefree – and appointment booked if they agree.