KIRKLEES HEALTH & WELLBEING BOARD	
MEETING DATE:	**31st January 2019**
TITLE OF PAPER:	**Tackling Lung Cancer - West Yorkshire & Harrogate Cancer Alliance**

1. Purpose of paper

With smoking rates above the national average (15%) at 17%, lung cancer is the most common cancer in West Yorkshire and its incidence is directly related to smoking. Therefore, tobacco use is the most important preventable cause of lung cancer in the UK.

This paper sets out the case for change and proposal for lung cancer, our 'biggest killer' to become the focus of the health and social care system, in a whole system pathway, systematic approach. In addition, there is evidence that there are likely to be wider health gains in general as well as for other cancers. The WY&H Cancer Alliance is setting outcomes as the key driver for change.

We ask the Board to consider the case for change identified in this paper to help plan a phased programme to deliver earlier diagnosis and improve outcomes for lung cancer in West Yorkshire and Harrogate Cancer Alliance with particular relevance and deployment for the population of Kirklees.

3. Proposal

The attached paper describes a system wide approach to tackling lung cancer and asks the Health and Wellbeing Board if this approach would benefit the population of Kirklees.

4. Financial Implications

As a system wide approach partner organisations would need to commit their expertise and resource into the development and delivery of the proposed interventions.

The Cancer Alliance will identify funding to support the development of these plans including programme and project management support.

5. Sign off

Professor Sean Duffy, West Yorkshire and Harrogate Cancer Alliance, Programme Clinical Director and Alliance Lead

6. Next Steps

Next steps would be to identify an appropriate funding source and confirm the funding envelope.

7. Recommendations

1. Provide advice on whether the proposed targeted approach (using outcomes to identify where to invest to make the greatest gains) would form the basis of an effective programme to improve outcomes for the population of Kirklees
2. Advise on the proposed approach to target ALL four interventions in Kirklees;
    a. Optimising Smoking Cessation Support
    b. ''Push & Pull" Symptom Awareness Campaigns and Community Engagement
    c. Risk identification in Primary Care with direct to Low Dose CT scanning
    d. Optimising the Lung Cancer Pathway.
3. Support the next stage process in establishing this programme with senior executive support.

8. Contact Officer

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West Yorkshire and Harrogate Cancer Alliance
Tackling Lung Cancer

1. 'The case for change' - What does the data tell us?

Cancer in West Yorkshire and Harrogate (WY&H) Alliance is a major contributor to premature death. Many CCGs in WY&H have higher Age Standardised Rates than the England national average in both incidence and mortality. This means that given the population size for each CCG, a higher number of people than expected are either being diagnosed with, or dying from cancer compared to the national average.

Lung cancer is the most common cancer in West Yorkshire, in contrast, data for England identifies lung cancer as being the third most common behind breast and prostate cancer.

Table 1: Cancer incidence and deaths (2014) WY&H CCGs

	No cases	Incidence	No deaths	Mortality
England	37436	78.4	28847	60.6
WY&H	1919	94.7	1435	72.3
Airedale	93	57.3	93	55.3
Bradford City	46	135.3	32	99.1
Bradford District	232	93.7	168	70.1
Calderdale	165	89.8	147	79.6
Gt Huddersfield	170	82.6	116	57.2
Harrogate	108	63.3	91	52.4
Leeds North	172	88.8	120	64.9
Leeds S&E	230	130.4	165	93.4
Leeds West	239	102.9	169	71.8
North Kirklees	136	90.5	118	78.7
Wakefield	328	108.1	219	72.7

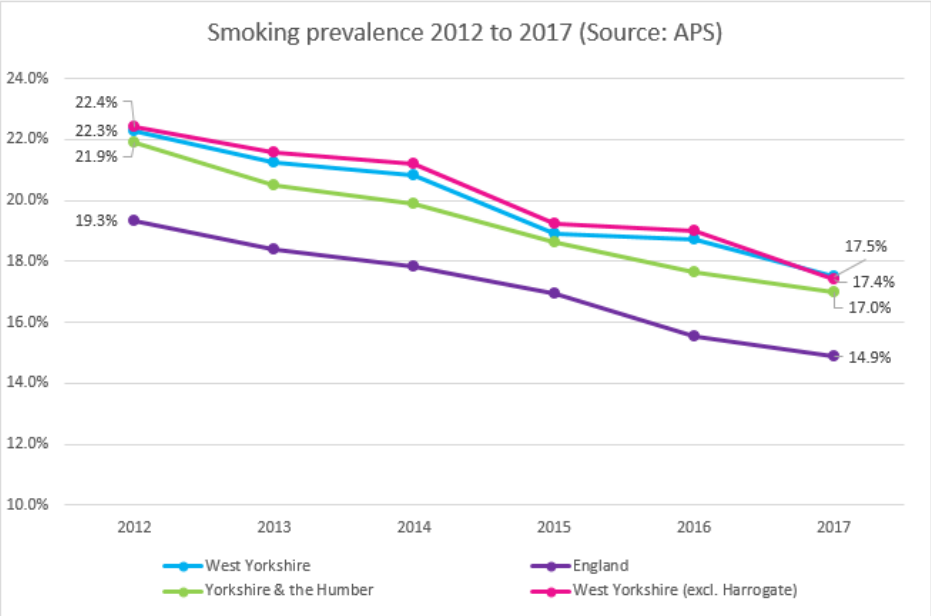
Lung cancer in WY&H is our biggest killer and with variation in route to diagnosis, stage at diagnosis and one year survival. Table 2 summarises our respective outcomes by "place" and shows how our outcomes vary. One year survival is as good as the England "average" but could be much better if all 'places' had 1 year survival similar to that of Harrogate (Table 2).

Table 2: Outcomes for lung cancer in West Yorkshire and Harrogate for each acute trust (2016)

%	Emergency presentation	Curable stage (%)	Surgery rate (5)	1 year survival crude rate (%)	Smoking prevalence in CCG(%) (2017)
Bradford	36	30	16	37	21
Harrogate	27	37	24	38	13
Airedale	41	24	13	38	15
Leeds	39	37	15	46	19
C and H	39	31	16	36	19
MYT	40	30	14	36	20
West Yorkshire	37	31	17	38	17
England	37	26	17	37	15

Lung cancer incidence is directly related to smoking and therefore tobacco use is the most important preventable cause of lung cancer in the UK. Prevention of lung cancer is likely to make the biggest impact on greater survival from this disease. In WY&H, it is estimated that tobacco addiction caused over 2,300 cancers in 2010. Smoking rates are above the national average of 15% in WY&H at 17% meaning there are around 350,982 smokers in the WY&H Cancer Alliance. However, smoking rates are falling and have decreased significantly over the last few years (Figure 1) - a change largely driven by further tobacco control measures and the increased uptake of e-cigarettes which current evidence indicates are at least 95% safer than tobacco cigarettes. Harrogate is the only place in West Yorkshire where smoking rates are below the national average (Table 2).

Figure 1: Smoking prevalence in West Yorkshire



2. Earlier diagnosis - referral to diagnosis and treatment

In the lung cancer pathways delays can mean a change from treatable cancer to palliative management – time matters. For some patients, it is a complex pathway and so can be difficult to establish a definitive histological diagnosis but there is a price to pay if the delays are not tackled. In terms of system performance on key cancer waiting time operational standards, if the lung cancer pathway was to perform optimally (85% patients treated within 62 days), this would translate to an overall system wide improvement in 62 days of 13%.

There is now good evidence that earlier diagnosis can be effectively encouraged, through a combination of targeted risk assessment & low dose CT, public awareness, clinician education and better access to diagnostics. In terms of patient outcomes there is no doubt that early diagnosis increases the number of people who can receive curative treatment, in short earlier diagnosis saves lives.

However, the financial implications of achieving earlier diagnosis are less well understood. In patients with early stage lung cancer there are cost associated with potential recurrence and monitoring lung nodules. It should therefore be acknowledged that driving earlier stage diagnosis of lung cancer may incur costs rather than reduce them. The focus of this programme is about improving patient outcomes in an area where more patients die from lung cancer than any other cancer.

3. Proposal for an integrated sequence of interventions – lung health check

Traditionally individual and separate activities aimed at improving outcomes in lung cancer have been undertaken, whether symptom awareness raising or optimisation of pathways of care. In addition, there have been, and continues to be, investment in interventions to improve lung cancer outcomes. This is more relevant in places of greater deprivation and higher smoking prevalence and so may not be as high a priority in some communities.

Each part of the pathway in lung cancer has an evidence base in support of interventions to improve outcomes:

- Prevention – The Ottawa Model for Smoking Cessation, NICE Guidance and Public Health England's evidence on smoking cessation interventions suggest that supporting smoking cessation has the greatest return on investment in terms of health gain and the prevention of cancer.
- Awareness raising – the national Be Clear On Cancer campaigns on lung cancer have demonstrated that more patients are offered curative surgery. The local campaign in South Leeds has demonstrated a reduction in lung cancers diagnosed as an emergency presentation.
- Risk identification – the city of Manchester Cancer Improvement Partnership, have delivered a community based 'Lung Health Check' cancer risk identification pilot, which combines identification of the risk population, an invitation to a lung heath check and the deployment of local community based Low Dose CT scanning for those found to be at high risk of lung cancer. This has demonstrated both stage shift and more patients being able to access curative surgery. A research programme has recently started delivery on a similar model in Leeds.
- Optimising pathways – lead to more timely diagnosis and potentially removing the risk of stage shift away from cure as a result of treatment delays.

On their own these interventions can be of benefit to patients but if combined in a systematic way, together, there may well be a greater synergistic impact on improving outcomes overall.

Therefore, instead of a single intervention we have designed a programme around the four interventions described below. These interventions will be delivered across a single health and social care economy;

1. **Optimising smoking cessation support**, using the acute sector to promote smoking cessation through Every Contact Count for example, signposting in the acute sector, carbon monoxide monitoring for every elective admission and initiating nicotine replacement prescribing (the Ottawa model)
   Impact: Reduction in smoking prevalence, reduction on re-admission rates and hospital mortality (Ottawa data).

2. **"Push and pull" symptom awareness campaigns and community engagement events**. The nationally developed Be Clear on Cancer campaign material could be used through social media (expertise already developed through the recent national respiratory symptoms

campaign). In addition, the approach used for the "Cough Campaign" material which was successfully employed in South East Leeds could be considered.
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**, using the Manchester Cancer Improvement Partnership community based 'Lung Health Check' model. This combines identification of the risk population, invitation to a lung heath check and the deployment of local community based LDCT scanning. There is an added benefit of detecting significant other non-cancer diagnoses. It also allows the deployment of the mobile CT resource as part of the CTF fund allocation.
Impact: More lung cancers diagnosed overall and at an earlier stage offering surgical treatment.

4. **Optimising the lung cancer pathway** to ensure patients are speedily and optimally managed, in tandem with the system wide approach across the whole Alliance.
Impact: Improvement in 62 day pathway overall.

4. Where to act – using outcomes to identify where to invest to make greatest gains

The WY&H Cancer Alliance is setting outcomes as the key driver for change. As a health and social care system it makes sense to concentrate on our biggest killer in a whole pathway systematic approach to diagnose cancers earlier and release the potential wider health gains in general as well as for other cancers.

Table 1, which shows the incidence and mortality from lung cancer by CCG, clearly identifies the health systems where there is most to be gained as Bradford and Wakefield. In addition to high rates of mortality these areas also have high rates of deprivation and smoking. These three factors are being used to identify target populations where Lung Health checks and Low Dose CT scans will be delivered. Patients between the ages of 55 and 80 at three GP Practice in both Bradford and Wakefield will be offered Lung Health Checks in 2019/20. These services will be benchmarked against the outcomes of similar schemes in Manchester and Nottingham and the impact will be evaluated and will help to inform the national programme.

The Cancer Alliance wants to ensure that all areas with high levels of mortality from lung cancer will have an opportunity to access this developing programme.

5. A collaborative and integrated approach

In order to deliver the four intervention described above a whole system approach is required with a health and social care partnership between local authority, primary care, acute care and health commissioners developing a locally agreed plan to deliver this systematised programme. This will require the following resources;

- Project management function
- Campaign costs over and above planned activity, if required
- Setup costs, for example carbon monoxide monitoring
- Risk identification costs in primary care
- Low Dose CT in the community, including reporting and diagnostic MDT

- Administrative costs
- ROI evaluation

6. Funding

Following the publication of the NHS Long Term Plan, early diagnosis of Lung Cancer through risk assessment and low dose CT scanning has been identified as a national priority. The Cancer Alliance is required to develop a five year plan for cancer improvement, and as part of this is looking to widen the areas where Lung Health Checks and Low Dose CT scanning are available, recognising that there are many parts of West Yorkshire with populations of high deprivation, high prevalence of smoking and high levels of lung cancer mortality. West Yorkshire & Harrogate Cancer Alliance will work with the national programme to identify appropriate funding to support a next phase with Kirklees.

7. Implementation and timescale

The development of a five year Cancer Plan for West Yorkshire provides an opportunity to identify a timeline for expansion of the lung cancer programme to other areas. The national team will be leading on the planning for programmes outlined in the NHS Plan but work is likely to commence in 2019/20.

8. Recommendations and request for advice

1. Provide advice on whether the proposed targeted approach (using outcomes to identify where to invest to make the greatest gains) would form the basis of an effective programme to improve outcomes for the population of Kirklees
2. Advise on the proposed approach to target ALL four interventions in Kirklees;

    a. Optimising Smoking Cessation Support
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