Tackling Inequalities:
Lung Cancer

Tenovus Cancer Care
2022

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Foreword (June 2022)

Tackling inequalities is a priority at Tenovus Cancer Care. We recognise that not everyone experiences cancer equally, and this is especially true when it comes to lung cancer.

We are determined to do something to improve outcomes for people with lung cancer in Wales. We fall behind our European counterparts in relation to survival rates and the disease is more deadly than it should be. Despite outcomes improving slightly over the years, sadly lung cancer remains the biggest cancer killer in the country.

Not only are people from deprived areas more likely to develop lung cancer, but they also face a range of barriers in accessing the right treatment. This report highlights the inequality gap, explores the contributing factors, and makes tangible recommendations for consideration.

The benefits of introducing Lung Health Checks (LHC) as part of a wider lung cancer screening programme are overwhelmingly positive. The sooner these checks can be introduced, the more lives will be saved. However, the report demonstrates a one-size-fits-all approach could do more damage in increasing the deprivation gap.

Previous screening programmes have seen lower uptakes amongst the most deprived communities. Therefore, it's essential any future programme is implemented correctly, with targeted campaigns to encourage those from areas with higher levels of deprivation to take part. We can learn from LHC trials in England on how best to engage people from all backgrounds.

As we look towards a future where lung cancer screening is made available in Wales, it's vital to understand and address the causes of inequalities.

Despite the seriousness of a lung cancer diagnosis, it is not a death sentence. Everyone deserves the same chance of survival, and we want to make sure as many people as possible are picked up early, whatever their circumstances.

Judi Rhys MBE
Chief Executive, Tenovus Cancer Care

For the majority of those affected by lung cancer, it is a devastating experience. Lung cancer is the commonest cause of cancer death in Wales, with around 1900 people dying each year. Late diagnosis, poor survival rates, links with deprivation and negativity around its association with tobacco, make this a disease of particular, and unmet, need.

As such, this Report is warmly welcomed. It provides context to the scale of the lung cancer public health problem in Wales and advocates for solutions; through prevention by ensuring properly resourced stop smoking services and through detection at early stage of the disease.

The Report highlights the importance of encouraging those with symptoms to get checked out, ensuring diagnosis at early stage, when potentially curative treatments are available. It also calls for the implementation of a Lung Cancer Screening Programme across Wales, in the form of a Lung Health Check, with a CT scan, targeting those without symptoms but at high risk. Lung Cancer Screening works. It could save many lives each year in Wales. It is time to make it happen.

Dr Jesme Fox
Medical Director, Roy Castle Lung Cancer Foundation

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Executive Summary

Lung cancer kills 1900 people in Wales every year.

Lung cancer in Wales is not experienced equally.

This report highlights the inequalities in lung cancer incidence, diagnosis and mortality in Wales.

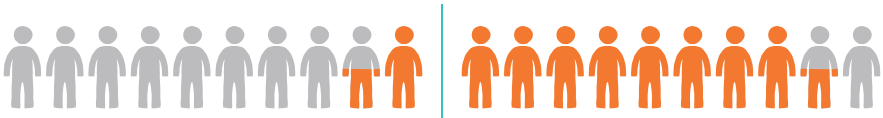
People who live in **deprived areas** are **2.75x more likely** to develop **lung cancer**

26.8% smoking rate amongst **unemployed people**

14.5% smoking rate amongst **those in employment**

Those in **manual jobs** are over **2x more likely** to smoke than those in **managerial** or **professional jobs**

Late diagnosis has a huge impact on mortality.



15% survival rate at stage 4

85% survival rate at stage 1

We want to change the narrative around lung cancer - it does **NOT** have to be a death sentence.

Lung health checks could **prevent more than 20%** of lung cancer deaths amongst those screened and improve outcomes for many more.

Key messages

- Lung cancer is treatable if caught early.
- Lung health checks are aimed at those without symptoms.
- There are no judgements about lifestyle choices or smoking habits when going for a lung health check.
- There are areas in Wales with higher lung cancer mortality which would benefit the most from the introduction of LHCs.

Introduction

In Wales approximately 1900 people a year die from lung cancer[1], making it the biggest cause of cancer death in the country.

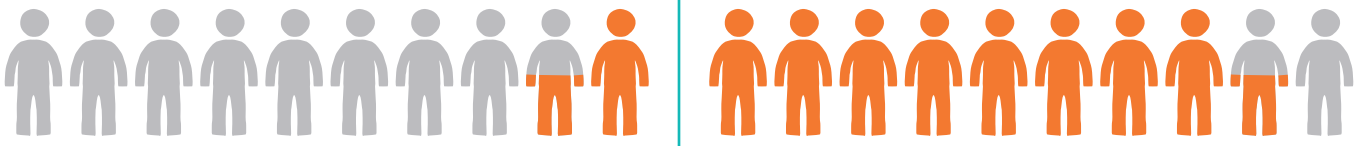
The death rate is high because more than 45% of cases are not diagnosed until stage 4[2], when treatment options are more limited and one year survival rates are low[3].

Lung cancer is often thought of as a death sentence and sadly, there is often a stigma attached to the disease because of lifestyle choices such as smoking. At Tenovus Cancer Care we want to change the way lung cancer is viewed so that more people feel they can seek medical advice as soon as they have concerns, leading to earlier diagnosis.

At the time of writing, the UK Screening Committee is considering making recommendations around the introduction of Lung Cancer Screening Programmes in the UK.

It is predicted that introducing lung screening to those who are at highest risk of developing the disease could save **more than 190 lives a year** in Wales, by diagnosing people before they present with symptoms.

By encouraging people to come forward early and to take part in new interventions such as lung cancer checks, we can start changing the narrative. A lung cancer diagnosis **does not** have to be a death sentence, and there is hope of positive outcomes if caught early.



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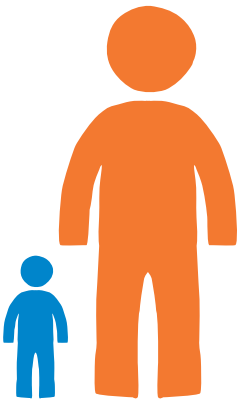
When considering how best to roll out lung health checks through a comprehensive lung cancer screening programme in Wales, it is essential to think about who is at the most risk of lung cancer, and how best to engage with them. To understand these challenges, we need to understand how and why lung cancer is experienced unequally. We know that deprivation is a key factor in lung cancer incidence and mortality and that the relationships between cancer and inequality are complex.

Deprivation

Deprivation does not just refer to someone's financial situation.

The Welsh Index of Multiple Deprivation ranks areas based on the following criteria: income, employment, health, access to services, housing and community safety and physical environment.



People who live in deprived areas are

2.75x more likely

to develop lung cancer

Deprivation and lung cancer

Income
Financial deprivation is a big driver of smoking rates.

Employment
Unemployment increases likelihood of smoking.

Health
Those living with disabilities are more likely to smoke.

Access to Services
Less support to quit, less likely to go forward to GP with symptoms.

Housing and Community Safety
Poor housing can exacerbate mental health conditions which increase smoking rates.

Physical Environment
Air pollution is thought to cause 1 in 10 lung cancers[4].

Education
Smoking rates are significantly higher among those with no formal qualifications[5].

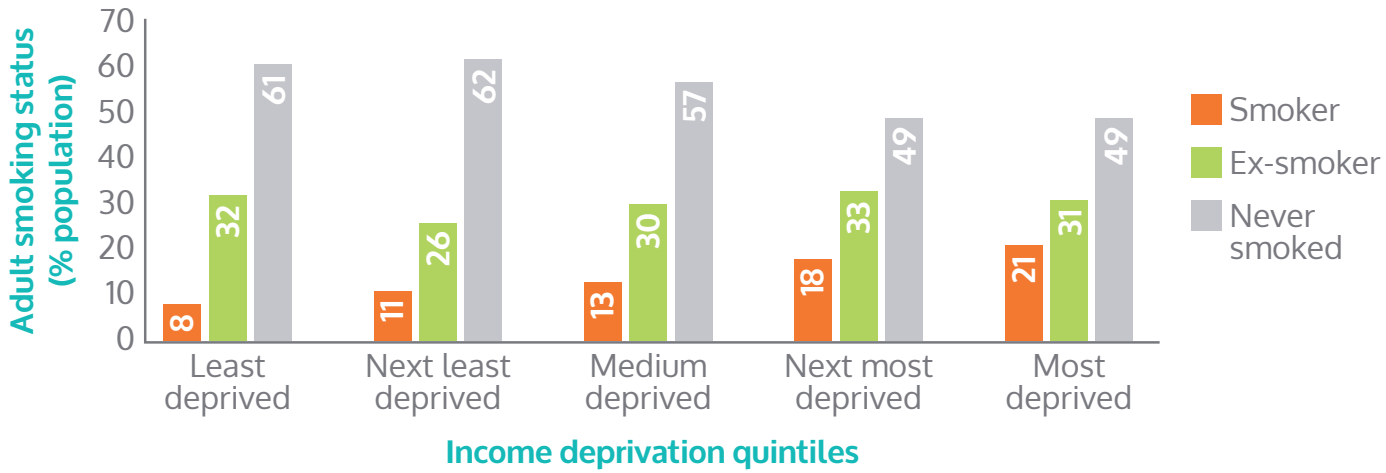
Each of these individual markers of deprivation have an influence on lung cancer incidence and survival, however there are three main reasons why deprivation results in higher incidence of lung cancer and worse outcomes for patients;

- **Increased smoking rates**
  Smoking is thought to be responsible for more than 70% of lung cancer cases[6], and smoking rates are significantly higher in deprived areas of Wales[7].
- **Later diagnosis**
  It has been shown that there is less awareness of certain cancer symptoms among people from lower socio-economic groups[8] and members of these groups are less likely to come forward to their GPs because of practical and emotional barriers.
- **Fewer treatment options**
  As socio-economic deprivation is so tightly linked to other health indicators, the likelihood of co-morbidities which limit treatment options is higher amongst these groups, and specialist cancer treatment may not be available locally. These factors all combine to mean that the most deprived in our society are less likely to receive any type of treatment for their lung cancer[9,10]

Smoking Rates

Smoking is the most common driver of lung cancer, and smoking rates in Wales are higher than the UK average.

Within Wales, those living in the most deprived areas are more than twice as likely to be smokers than those living in the least deprived areas[6].



The Welsh Government has outlined a strategy for Wales to become smoke-free by 2030, aiming to reduce smoking rates from the current levels of 18%[11] of the population to less than 5%[12]. Whilst smoking rates are declining, the relationship between deprivation and smoking must be understood in order to reach this ambitious target.

There are number of reasons why smoking rates are higher in more deprived areas:

- Smoking used as a coping mechanism for increased socio-economic stress
- Adolescents are more likely to start smoking if they see a parent smoking
- Smoking is often normalised in these areas
- Unemployed people are more likely to smoke than those in regular employment
- Smokers are less likely to be employed than non-smokers
- Less engagement with Help Me Quit Services[10]

Those in **manual jobs** are over

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26.8%

smoking rate amongst **unemployed people**

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Cessation Services

Lung cancer inequalities in Wales can best be mitigated by targeting the unequal smoking rates, and there are a number of cessation services available. However, it is clear that different groups have different motivations for smoking, as well as different levels of access to these services.

6 in 10 smokers in Wales want to stop smoking[14] and supporting these people through appropriate, accessible services is essential in tackling lung cancer inequalities.

In Wales, all NHS smoking cessation services fall within the **Help Me Quit** brand.

Help Me Quit offer free smoking cessation support and help people choose the right services for them within their local area. The different cessation services are "Help Me Quit – community", "Help Me Quit – pharmacy level 3", "Help Me Quit- hospital services", "Help Me Quit For Baby" and additional in-house GP based services.

Help Me Quit offers support in different formats either in group meetings or one to one support, in person or over the phone. Additionally Help Me Quit enables free access to nicotine replacement medication and takes place in a variety of settings including community venues, pharmacies and hospitals.

Despite availability of smoking cessation services in Wales, there are vast differences between how they are utilised between health boards. In the year 2019-2020, despite ambitious targets, Cardiff and Vale UHB reported less than 1.5% of current smokers engaged with their Help Me Quit services[15]. This is substantially lower than 4% engagement reported by Aneurin Bevan and Betsi Cadwaladr UHBs.

Wales wide it is apparent that the most successful Help Me Quit service is "Pharmacy level 3", which involves regular consultations with the person who is trying to stop smoking. In order to ensure that these services are accessible to all, regardless of deprivation level, flexible appointments must be available, and holistically signposted through services such as financial support.

Help Me Quit for Baby, a programme targeted at pregnant women, has been massively underutilised, both in uptake numbers and success rates. In 2019/2020 no successful attempts were recorded for this service in the Cardiff and Vale UHB[15]. This indicates either a lack of awareness of the service available or that the service is not fit for purpose.

Why are people in deprived areas less likely to quit?

Although they make the same number of cessation attempts, those experiencing financial difficulties are less likely to be successful for a number of reasons;

- Other unmet needs make quitting a lower priority
- Smoking is normalised, and there is less peer support
- Increased socio-economic stress can lead to using smoking as a coping mechanism
- Decreased access to pharmacies or GP surgeries due to distance, time or transport issues

These barriers must be taken into account to prevent an increase in health inequalities.

Lung Health Checks

Lung Health Checks (LHCs) are a targeted health intervention which includes low-dose computed tomography (LDCT) screening for participants identified as "high risk".

The introduction of targeted LHCs with LDCT screening within Wales could prevent more than 20% of lung cancer deaths amongst those screened and improve outcomes for many more patients. By targeting smokers between the ages of 55 and 77, it is predicted that many lung cancers could be identified at a much earlier stage. However, other cancer screening programmes such as bowel cancer screening have encountered difficulties in low uptake, particularly amongst people from low socio-economic backgrounds[16].

The success of a lung screening programme depends entirely on uptake.

As LDCT screening would require a clinical appointment, there are a number of practical and emotional barriers to uptake, which could disproportionately impact deprived areas.

Potential barriers to screening uptake in deprived areas:

- Transport
- Time off from work
- Believing themselves too old to benefit
- Fear of lung cancer as a death sentence
- Discomfort with medical professionals/a medical environment
- Carer responsibilities
- Fear of judgement
- Belief that screening is for those with symptoms

Trials have shown that smokers who attend Lung Health Checks are more likely to successfully stop smoking, especially if they were identified for LDCT screening.

A recent CRUK report has found that 90% of people would attend an appointment if invited. However, those who are most worried about getting lung cancer are actually least likely to agree to lung cancer screening[17].

"The evidence that targeted LDCT screening for lung cancer is both clinically-effective and cost-effective is now overwhelming. Development of a targeted lung cancer screening programme is the single most important change Wales could make to affect cancer mortality in the coming years."

Dr Sinan Eccles
Consultant Respiratory Physician, Royal Glamorgan Hospital

Changing the Narrative

At Tenovus Cancer Care we believe that LHCs which include LDCT for high-risk participants will only be successful if we can change the narrative surrounding lung cancer.

With high survival rates when caught at stage 1, it is important that **lung cancer is not regarded as a death sentence.** Additionally, many people believe that screening for health conditions is important only if you are symptomatic, this must be addressed as a matter of urgency. Screening can catch cancers before they are symptomatic and drastically improve outcomes for patients and costs to the NHS.

Key messages

- Lung cancer is treatable if caught early.
- Lung health checks are aimed at those without symptoms.
- There are no judgements about lifestyle choices or smoking habits when going for a lung health check.
- There are areas in Wales with higher lung cancer mortality which would benefit the most from the introduction of LHCs.

"The evidence shows that participation in lung cancer screening can be limited by a number of factors, including fear and stigma. It is important that people are shown how survivable lung cancer can be to encourage them to consider taking part in targeted lung health checks when they are offered.

Trusted community organisations like Tenovus Cancer Care have an important role in delivering consistent public health messaging to engage the eligible population in targeted lung health checks.

The Welsh Government and Public Health Wales should exploit the wide body of knowledge into how to best engage with more deprived groups to ensure that the roll out of targeted lung health checks is able to fulfil its potential in reducing health inequalities."

Prof Kate Brain
Professor of Health Psychology Cardiff University

Recommendations

for the Welsh Government

- Support the delivery of the Lung Health Check pilot proposed for Cwm Taf Morgannwg Health Board.
- Utilise learning from this pilot to inform the ongoing development and delivery of screening proposals as per any new recommendations from the UK Lung Screening Committee.
- Work alongside statutory NHS partners to support the necessary increase in workforce and infrastructure to ensure any new screening programme is effective.
- Make funding available for a comprehensive screening programme to ensure Wales is able to make the necessary step changes needed for lung cancer survival over the next decade.

for Public Health Wales and Local Public Health Teams

- Work at pace with partners to deliver any new recommendations and guidance around lung cancer screening in Wales.
- Utilise best practice learnt from trials and evidence from the Cwm Taf Morgannwg UHB pilot, England and other nations as to how best to target higher risk groups, especially those from more deprived communities
- Make appointments local and flexible where possible to account for working patterns and caring responsibilities
- Promote positive stories and personal experience of lung cancer patients caught at an earlier stage in order to reassure people that if lung cancer is caught early then outcomes are more positive
- Ensure that information regarding LHCs promotes the idea that screening is not for symptomatic patients
- Establish holistic signposting to Help Me Quit services through other support pathways
- Recognise that barriers to utilisation of smoking cessation services and screening services are different for people living with higher levels of deprivation, and must be adapted accordingly

Acknowledgements

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https://www.tenovuscancercare.org.uk/media/vyad1xiw/lung-cancer-inequalities-in-wales-emily-heath.pdf

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