

## **Rapid Participatory Health Impact Assessment (HIA) of the Introduction of a National Lung Cancer Screening Programme in Wales**

### **Introduction**

Health Impact Assessment (HIA) is a process which supports organisations to assess the potential consequences of their decisions on people's health and well-being. It provides a systematic yet flexible and practical framework that can be used to consider the wider effects of local and national policies or initiatives and how they, in turn, may affect people's health. It works best when it involves people and organisations who can contribute different kinds of relevant knowledge and insight. The information is then used to build in measures to maximise opportunities for health and to minimise any risks and it can also identify any 'gaps' that can then be filled. HIA can also provide a way of addressing the inequalities in health that continue to persist in Wales by identifying any groups within the population who may be particularly affected by a policy, plan or programme.

In most uses of HIA, 'health' is viewed as holistic and encompasses mental, physical and social well-being. Based on a social determinants framework, HIA recognizes that there are many, often interrelated factors that influence people's health, from personal attributes and individual lifestyle factors to socioeconomic, cultural and environmental considerations (such as housing).

The Lung Cancer Screening Project Team approached the Wales HIA Support Unit (WHIASU) to support them to undertake a HIA so that any potential health and wellbeing impacts or unintended effects could be identified in readiness for the proposed introduction of a lung cancer screening programme in Wales. It would also consider any inequality implications of the proposal.

The Lung Cancer Screening Project Team was established in April 2024. Following a recommendation from the National Screening Committee, Welsh Government has asked Public Health Wales to make recommendations on how a national lung cancer screening programme could be delivered. This work is building on learning from a Lung Health Check pilot which began in Cwm Taf Morgannwg UHB in 2023.<sup>1</sup> The project team are working within the Screening Division of Public Health Wales, who currently run other national screening programmes including Breast Test Wales and Cervical Screening Wales.

WHIASU was established in 2004 to support the development of HIA in Wales and sits within the Policy and International Health Directorate at Public Health Wales. Its remit is to support, train, facilitate and build capacity in HIA and raise awareness of how the process can support and contribute to improving health and wellbeing. A particular focus of WHIASU in recent years has been the use of HIA within traditionally 'non-health' sectors such as mining, regeneration and housing, waste, land-use and transport planning as a method of encouraging a consideration of 'Health in All

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<sup>1</sup> Cwm Taf Morgannwg UHB. <https://ctmuhb.nhs.wales/services/lung-health-checks/>

Policies' (HiAP). The Unit has a strong research function and has published a number of guides, evidence reviews and resources to support the practice of HIA by specialists and non-specialists.<sup>2</sup>

## Background

Lung cancer is the leading cause of cancer death in Wales, accounting for more deaths than breast and colorectal cancer combined. Evidence from randomised controlled trials shows that targeted screening of high-risk individuals with low-dose CT can improve outcomes. The National Lung Screening Trial and NELSON are two large randomised controlled trials demonstrating a 20% or greater relative reduction in lung cancer mortality with low-dose CT screening in high-risk individuals.

In February 2019, the Cancer Implementation Group approved funding to conduct a scoping review exploring the potential for Lung Health Checks (LHCs) in Wales. The scoping report was completed in Autumn 2020 and made recommendations for the next steps for Wales, including:

- National planning work (currently being undertaken by the Lung Cancer Screening Project Team) to determine how lung cancer screening can be delivered at scale across the country.
- Planning a small-scale implementation pilot in Wales.
- Ongoing learning from LHC projects elsewhere in the UK, together with assessment of the impact of the COVID-19 pandemic on LHC activity, and on lung cancer services in Wales.
- Monitoring the progress of the UK National Screening Committee (NSC) review with a view to implementation of a national programme if a positive recommendation is made.
- Undertaking a project to assess, validate and improve smoking status data held at a number of GP practices, to inform the optimal strategy to identify people eligible for lung cancer screening.

The report and its recommendations were presented to the Cancer Implementation Group (CIG) in November 2020, which granted approval for the project team to develop a programme approach for a LHC pilot in Wales. Planning work to deliver the pilot progressed in partnership with Cwm Taf Morgannwg UHB, where the service is being delivered. As an overview, the pilot offers telephone lung health check appointments to eligible participants, aged 60-74 that have ever smoked, from selected GP Practices in the North Rhondda area. During this appointment a series of questions are asked, and participants who are identified as being at a higher risk of developing lung cancer are offered a screening low-dose CT scan of the lungs. Smoking cessation support is offered to all current smokers.

The first invitations were sent in early August 2023 and low dose CT scans took place in late September 2023. The pilot aimed to offer low-dose CT scans to approximately 500 people, with the learning from this being used to inform the planning work for a national programme. The first evaluation of the Lung Health Check pilot took place in September 2024.<sup>3</sup>

In September 2022, the reformed UK National Screening Committee (NSC) made a positive recommendation for targeted lung cancer screening, recommending that the UK nations move towards implementation of targeted lung cancer screening with integrated smoking cessation service provision. Following this recommendation, Welsh Government has asked Public Health Wales to

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<sup>2</sup> Wales HIA Support Unit website. [www.whiasu.wales.nhs.uk](http://www.whiasu.wales.nhs.uk)

<sup>3</sup> NHS Wales Executive. <https://executive.nhs.wales/functions/networks-and-planning/cancer/workstreams/lung-health-check/>

make recommendations on how a national lung cancer screening programme could be delivered. A project team has been working to develop these since April 2024, and will present a final report in September 2025. This HIA was undertaken as one component of the evidence gathering and stakeholder consultation process to inform any decision making.

## **The Health Impact Assessment**

While some impacts on health determinants may be direct, obvious, and/or intentional, others may be indirect, difficult to identify, and unintentional. An HIA can identify health inequalities in not only the general population but in 'vulnerable groups' (e.g. children, young people or older individuals) as well. The main output of any HIA is an evidence-based set of recommendations that should lead to the minimization of risks or unintended consequences and maximization of potential benefits. It can provide opportunities for health improvement and to fill in any identified 'gaps' in service provision or delivery.

HIAs can vary in terms of their timing and depth. They can be undertaken prior to implementation of a proposal (prospectively), during implementation (concurrently) and post implementation (retrospectively). Prospective HIAs give the greatest opportunity for influencing change while concurrent and retrospective HIAs are more monitoring and evaluation exercises, respectively. The scope of an HIA will be determined by a number of factors, including the nature and complexity of the proposal being assessed, the availability of resources, the type of data that would be needed, and the decision-making timescales.

HIAs generally take one of two forms –rapid participatory or comprehensive. A rapid HIA may take a few days to a few months to complete, and a comprehensive HIA is more in-depth/time and resource intensive and can take many months to complete. The most appropriate type to conduct can be decided through a short scoping meeting and discussion of timeframes and resources and levels of stakeholder involvement.

This HIA was prospective and rapid participatory. It built on a variety of evidence that had already been collated by the Lung Cancer Screening Project Team, and from discussions with Public Health colleagues in Wales, including those involved with the Lung Health Check pilot in Cwm Taf Morgannwg. This HIA concentrated on gathering Welsh stakeholder knowledge and insight into the proposed introduction of a national lung cancer screening programme from both service users and those involved with delivery of the service.

## **HIA workshop**

The Head of Screening Engagement, Heather Ramessur-Marsden, approached WHIASU to discuss the provision of support to undertake a HIA, so that any health and wellbeing impacts or unintended effects could be identified and also consider any inequality implications of the proposed introduction of a lung cancer screening programme in Wales.

The participatory workshop took place on October 15<sup>th</sup> 2024. A number of key stakeholders were invited to participate and contribute to the discussion. In total, 20 representatives from different organisations participated in the workshop. They included Lung Health Check pilot staff, Local Health Board representatives, PHW officers, and service user group representatives. Tenovus and Cancer Research UK also participated. The agenda is included in Appendix One.

As statistical evidence and other robust research on uptake, and potential barriers and enablers to engagement, had been considered already, the aim of this workshop was primarily to gather professional and community knowledge and evidence about the potential impacts of introducing a national lung cancer screening programme. It assessed the proposal against the current national population and policy context, and the information gathered will be complementary to other evidence gathered to inform any decisions around the introduction of a national programme in Wales.

The HIA workshop was facilitated by Professor Liz Green, Programme Director for WHIASU, and was qualitative in nature. It followed the systematic methodology described in the Welsh HIA guidance of 'Health Impact Assessment: A Practical Guide'.<sup>4</sup>

At the outset, the group identified the main population groups who would be affected by the proposed screening programme using the WHIASU Population Groups Checklist (Appendix Two). A lively discussion followed, and a wide-ranging number of groups were highlighted as being directly affected by the introduction of a national lung cancer screening programme.

These were (in no particular order):

### **Gender**

- **Females** – there may be a preference for a female practitioner, this can be linked to cultural preferences.
- **LGBTQ+ people** – less likely to access services, will need to ensure that referrals take place in this population.

### **Age Group**

- **Older people** - People don't understand the age parameters of different screening programmes - communication needs to be clear that there is a scientific basis for this. Older people are the most diverse population group – need to recognise this. Digital inclusion and exclusion - older people are online, but lots of those aged 75+ won't go online. There is a great lack of Wales-specific granular age banded data for older people – need to increase this. The age range targeted (older population) have been identified from the workshop as potentially more vulnerable, even if they have never been smokers due to the culture of smoking in public spaces when they were younger and the potential exposure to 'second-hand smoke'.
- **Carers of any age** – appointment accessibility may be difficult if there are full time caring responsibilities.

### **Ethnic minorities**

- **People who have been victim of racism** – screening could take place in a trusted and safe space, for example, previous screening initiatives have involved mobile units being placed in mosques to reach this portion of the community.
- **Asylum seekers** – for this population, screening may not be a priority as they navigate other pressures that come with transitioning into a new way of life in Wales.

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<sup>4</sup> Wales Health Impact Assessment Support Unit (2012). 'Health Impact Assessment: A Practical Guide'.

### Transient populations (including travellers)

A potential barrier to uptake, if there is no fixed abode, or frequent movement across Wales. This includes asylum seekers, refugees and travellers. It is worth noting that transient communities or populations are less likely to be registered with a local GP, so may not show up in datasets called for screening.

### Disabilities

- **Deaf people who use British Sign Language (BSL) as a first language** – May not be able to respond to information given in English and may not be aware of the health implications of behaviours as information is not widely available in BSL. It is hard to get interpreters for appointments and these individuals often miss appointments as information not available in BSL.
- **People with a communication and/or learning disability** - Whilst easy-read versions are a great addition to information packs, some individuals who experience a learning disability are unable to read at all, meaning they rely heavily on video resources. All communication to this group should be focusing on the individuals understanding the information and not just being presented with it. When reaching this portion of the population, there needs to be a sensitivity to the fact that individuals may not want to admit to ever smoking in front of a parent or carer.
- **People with sensory difficulties / autism** – Would need additional support on the day of the appointment in terms of estimated waiting times, layout of waiting rooms and knowledge of what the screening entails.
- **People with comorbidities** – When booking screening appointments, could these coincide with other routine healthcare appointments to increase accessibility, reduce the amount of commitments places on the individual, and to avoid potential impacts on employment.
- **People who are blind or partially sighted** - If they are not automatically and routinely communicated with in their required format (e.g. braille, large print, audio file), there is a risk that they could miss appointments or not understand medical advice and guidance. Negative experiences at appointments (for example if information is displayed on a screen without audio announcements, individuals cannot see this so miss their name and marked as 'did not attend') – visually impaired people are worried/stressed. Staff need to be trained to understand sight loss, and their duties to communicate with people in a way that meets their needs (e.g. recording their required format on the patient record, guiding them to the waiting room/consultation room, explaining/describing what they're doing during appointments).
- **People who require assistance dogs** – Procedures in place to accommodate assistance dogs at the appointment.
- **People with dementia** - Pathway standards for care need to be plugged into the screening programme.

### Location

- **People living in areas with low socio-economic backgrounds** – accessibility of the mobile screening unit works well in these communities when placed in the centre of the population group.
- **People living in rural areas** - as bus services have been cut, local public transport in these areas can be difficult, especially for those community members who are unable to drive.
- **People in long stay hospitals (individuals with a learning disability or mental health**

**condition(s) for example)** – typically don't have access to a lot of services such as screening, and potentially those at high risk could be missed.

- **People living in care homes/supported living/shared accommodation** – there can be privacy issues relating to shared accommodation and completing the telephone triage appointments as part of the screening process.
- **People who are homeless/hidden homeless/sofa surfing** - Lack of privacy for telephone appointments and/or may not have a phone. There are difficulties in gauging the extent of this population group. May not be included in data sets if not registered with a GP.
- **Nightshift workers** – Mobile units will need to have longer 'opening times' to account for members of the population who work antisocial hours.

### Language

- **People who don't speak English as a first language.**
- **People who speak Welsh as a first language.**
- **Religious groups** - Potentially a lack of understanding of what screening is (may not understand language, culture). Should be offered access to language line to help accessibility to the screening service.

### **Appraisal**

After agreement on the above, the group then worked systematically through the health and wellbeing determinants of health checklists in turn (Appendix Three) and assessed the health and wellbeing impacts of the proposed introduction of the Lung Cancer Screening programme in Wales.<sup>5</sup>

Positive or negative impacts were identified as were any gaps or unintended consequences. Suggestions were made for mitigation and actions documented.

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<sup>5</sup> Wales Health Impact Assessment Support Unit. (2020). 'Population Groups Checklist'; 'Health and Wellbeing Determinants Checklist'.

Behaviours affecting health		Population Groups Affected
Positive Impacts	Negative Impacts	
<ul style="list-style-type: none"> <li>• An opportunity for family encouragement – younger generation of family members can seek to influence older generations to get screened.</li> <li>• Connections – making every contact count (can relate this to social prescribing).</li> <li>• Social media – can be a channel to reduce fear, encourage people to attend screening and spread factual information about the screening process and the benefits of taking up screening.</li> <li>• Links to other services – if people who potentially have unhealthy behaviours, by attending screening, it may highlight other areas of their lifestyle where they can make positive changes such as drinking, diet and accessing healthier food.</li> <li>• Promotion channels – during COVID-19 more people with a learning disability were able to get online, increased access to health information in this group. Promotional videos are easier to engage with for this group.</li> </ul>	<ul style="list-style-type: none"> <li>• BSL community – learning from breast and bowel screening, there needs to be BSL link for accessible services/communications. Promotion campaigns need to meet the needs of the community – videos in BSL. By catering for the community, there will be factual information spread amongst individuals rather than potentially false information that has been lost in translation.</li> <li>• Generational smoking environments – thought should be given to the potentially negative impacts associated with passive smoking. Current screening of ‘ever’ smokers will miss a portion of the population that have not smoked but are at risk because they lived in homes where others did or attended public spaces when smoking in these spaces was legal. This can also involve being in work environments where it was the norm to be around others who smoke in the presence of non-smokers. Individuals who have been subjected to passive smoke would not appear in GP datasets.</li> <li>• Anxiety/fear - Anxiety that a screening appointment can bring to an individual.</li> <li>• Disability community -</li> </ul>	<ul style="list-style-type: none"> <li>• Deaf people (BSL as a first language)</li> <li>• Family members</li> <li>• Those with learning disabilities</li> <li>• Smokers and passive-smokers</li> <li>• Those who drink alcohol</li> <li>• Migrants and asylum seekers</li> <li>• Minority ethnic groups</li> </ul>

	<p>People with a learning disability can experience barriers to access. Screening can be difficult as they might need 2:1 support.</p> <ul style="list-style-type: none"> <li>• Cultural norms - Individuals from ethnic minorities groups lean towards getting their information from trusted sources within their country of origin and community, how can we spread information amongst this community to ensure its correct and safe?</li> </ul>	
<p><b>Recommendations:</b></p> <ul style="list-style-type: none"> <li>• Ensure clear communication around the programme, for all communities within the targeted population.</li> <li>• Consider social media, ensuring this is accessible and includes a variety of formats.</li> <li>• Consider risk factors/eligibility – are GP records up to date? Are there high-risk individuals who will not be captured within target cohort?</li> </ul>		



Social and community conditions affecting health		Population Groups Affected
Positive Impacts	Negative Impacts	
<ul style="list-style-type: none"> <li>• Every contact counts - Opportunity to create a safe and trusting and environment – increasing trust in healthcare services and potentially allowing individuals to disclose concerns, e.g. domestic violence, abuse. People will only disclose information if it is a trusted environment.</li> <li>• User experience - Opportunity to communicate/share your experiences of undertaking your screening appointments.</li> <li>• Align services - Opportunity to link with the smoking cessation services. E.g., AAA screening, encouragement, a big opportunity for the messaging.</li> <li>• Community champions - Trying to get training setup to encourage leaders within clubs or networks. Identify community leaders to spread positive messaging. 'Champions' for this.</li> <li>• Social Return on Investment - Opportunity to measure the social value of the screening programme, to look at the wider, social and community impacts. Scope to use this in the future if there is buy in.</li> </ul>	<ul style="list-style-type: none"> <li>• Stigma - How do we manage the peer pressure/stigma around smoking / being a smoker when attending an appointment.</li> <li>• Co-morbidities - People with multiple health conditions (e.g. carers, support workers) - screening may be low down on their priority list.</li> <li>• Zero abuse tolerance - Mobile units, sometimes individuals receive verbal abuse when going to certain parts of their community. Safeguarding policies should be in place for the patients and staff to prevent abusive situations.</li> </ul>	<ul style="list-style-type: none"> <li>• Local communities</li> <li>• People with multiple health conditions</li> <li>• Smokers</li> <li>• Those who have experienced violence or abuse</li> </ul>
<b>Recommendations:</b> <ul style="list-style-type: none"> <li>• Consider the stigma around smoking – and generally, how to encourage a safe space/non-judgemental environment.</li> <li>• Utilise community leaders and champions to support programme/encourage uptake.</li> <li>• Consider safety of area/environment as a factor in the location of appointments.</li> </ul>		

Mental health and well-being		Population Groups Affected
Positive Impacts	Negative Impacts	
<ul style="list-style-type: none"> <li>• Direct opportunity to improve people's lives - Opportunity to improve people's health and well-being from this screening programme both in the short and long term. e.g. where smoking cessation services linked to screening there is an opportunity for people to give up smoking and feel a sense of success, achievement.</li> <li>• Encouraging a sense of control and having a positive impact on your health and the potential to have more control over your health and well-being.</li> <li>• Alignment with other services - A heavy smoker will think that lung cancer is an 'elephant in the room'. Combining services may allow individuals to feel more at ease rather than focus on one condition screening.</li> <li>• Opportunity to refer to the More than just words strategy (7 Categories of people) - if people can communicate in Welsh if this is their preferred language then they feel more comfortable.</li> </ul>	<ul style="list-style-type: none"> <li>• Identification - Welsh Government's Mental Health Strategy did not recognise deaf people as a population group impacted, i.e., depression, anxiety, suicide. There are no mental health services in Wales that are delivered in BSL. Potential negative of this screening service is that it creates anxiety for deaf community, if no BSL available.</li> <li>• Clear pathway/follow on - If there isn't a clear pathway for care so people know what to expect after a screening appointment, this could create anxiety.</li> <li>• Trauma informed practice and approach - Potential for re-traumatisation by intervention without correct service provision e.g. female staff, information about the procedure etc.</li> <li>• Neurodivergence - There needs to be support there for people who are neurodivergent for example if there is something found in the screening and also additional support/explanation during the CT scan.</li> <li>• If someone has a learning disability, sometimes more problems are created from cumulative issues.</li> <li>• Safety of information sharing - Refugees/asylum seekers may worry that any information provided to screening services will be sent to the home office and impact them – people need to feel safe and secure.</li> </ul>	<ul style="list-style-type: none"> <li>• Smokers</li> <li>• Deaf people, those who use BSL as a first language</li> <li>• People who are neurodivergent</li> <li>• Those with learning disabilities</li> <li>• Refugees/asylum seekers</li> <li>• Those who have experienced trauma</li> </ul>

	<ul style="list-style-type: none"> <li>• Language - Fear of the word cancer, negatively impacts engagement and participation. Is there something to consider around the culture and education, to work with communities to break down barriers.</li> </ul>	
<p><b>Recommendations:</b></p> <ul style="list-style-type: none"> <li>• Consider referencing other conditions besides cancer, and how to best address this/positive framing around smoking cessation.</li> <li>• Clear communication and support for participants both during and after the screening appointment.</li> </ul>		

Living and environmental conditions affecting health		Population Groups Affected
Positive Impacts	Negative Impacts	
<ul style="list-style-type: none"> <li>Community appointments – Members from BSL, neurodivergent, learning disabilities, ethnic minorities would benefit from grouped appointments together. Can act a mutual support for one another.</li> <li>Transport - An opportunity for support with getting to your appointments, especially in rural areas.</li> <li>Accessibility - Physical access for wheelchair users, and those in electric wheelchairs. Can have difficulties accessing buildings. Often spaces are designed for manual wheelchairs and not electric wheelchairs which are bigger. Opportunity to ensure accessibility for both types of wheelchairs.</li> </ul>	<ul style="list-style-type: none"> <li>Waiting times at appointments - People with learning disabilities can find waiting overwhelming. Could certain groups that cannot wait in a shared space be prioritised for appointments? Could a quiet room be provided for individuals to wait, or people advised they can wait in their cars?</li> <li>Comfort at appointments – people would feel more comfortable attending appointments knowing that public toilets are accessibility and nearby. Lack of public toilets could be a barrier to attendance.</li> <li>Waiting areas – Some mobile units do not have waiting areas, or shelter to wait under. This is a problem for those who have not travelled to the appointment via car.</li> </ul>	<ul style="list-style-type: none"> <li>People with learning disabilities</li> <li>Deaf people, those who use BSL as a first language</li> <li>Those who live in rural areas</li> <li>Wheelchair users</li> </ul>
<b>Recommendations:</b> <ul style="list-style-type: none"> <li>Consider the possibility of grouping appointments where possible, e.g. for BSL users to attend together.</li> <li>Consider support for travel to appointments, especially in rural areas.</li> <li>Ensure access requirements to appointments are met, including for both manual and electric wheelchairs.</li> <li>Consider waiting facilities – warm/sheltered, toilet facilities, consideration for those unable to wait in busy waiting rooms.</li> </ul>		

Economic conditions affecting health		Population Groups Affected
Positive Impacts	Negative Impacts	
<ul style="list-style-type: none"> <li>• Appointment times - People who work might require evening/weekend appointments. Range of appointment times provided during pilot – continue to do this.</li> <li>• Align with non- health services - Opportunity to signpost people onto other services that can help them, i.e., debt.</li> <li>• Align with health services - Opportunity to signpost individuals to cessation services, can be promoting this service.</li> </ul>	<ul style="list-style-type: none"> <li>• Transport - Travel costs to the appointments. Rural/urban perspective, community transport has been cut in certain areas.</li> <li>• Financial cost of appointments - older people losing their winter fuel allowances, therefore their income is reduced.</li> </ul>	<ul style="list-style-type: none"> <li>• Those of working age</li> <li>• Those who live in rural areas</li> <li>• Older people</li> <li>• Those experiencing debt</li> <li>• Smokers</li> </ul>
<b>Recommendations:</b> <ul style="list-style-type: none"> <li>• Importance of MECC – both for smoking cessation/health improvement, and potentially other services e.g. debt.</li> <li>• Recognise the cost of living crisis/financial impact – travel cost, time off work, etc.</li> <li>• Ensure availability of a range of appointment times for those who work.</li> </ul>		

Access and quality of services		Population Groups Affected
Positive Impacts	Negative Impacts	
<ul style="list-style-type: none"> <li>• Use of digital tools for triage - With regards to digital inclusion, can a virtual/hybrid approach be utilised to further enhance the accessibility of the service?</li> <li>• Training - An opportunity to provide training to staff. Services cannot do this by themselves, opportunity to work collaboratively with partners, community outreach to get the messaging right, and working with people who are trusted, work with partners who can do that. How to get the language right when you approach the conversation.</li> <li>• Community champions – linking up community networks so people are aware of what is available, when and how to access. Information available from one key team/person.</li> <li>• Technology usage - Opportunity to use IT and Artificial Intelligence (AI), how can that be utilised to help health services, reduce stress for workforce? Workload, staffing etc.</li> <li>• Follow up investment - Investment in the services that are treating the cancers, ensure that people can have the treatment that they need.</li> <li>• Communication - A need to tailor communication - Different levels of education, important for individuals to be able to know that they can make an informed decision themselves regardless of their level of education. How can we help people to make an informed decision on whether to attend a screening appointment or not? Often people think it is a health professionals' decision whether an individual should attend appointment or not, rather than their own decision.</li> </ul>	<ul style="list-style-type: none"> <li>• Appointment arrangements – Can be challenges with certain population groups attending appointments such as carers who have responsibilities. Can there be provision for people who have caring responsibilities, so that they can attend with minimal disruption to the people they support.</li> <li>• Technology usage - Is the data that AI is based on for both males and females, any bias? Risk reduction model, predicts a risk over a certain number of years, how to reduce bias to predict the results.</li> </ul>	<ul style="list-style-type: none"> <li>• Carers</li> <li>• Staff delivering the screening programme</li> </ul>

**Recommendations:**

- Consider digital/tech solutions throughout the pathway – both for patients and staff.
- Utilise community leaders and champions to support programme/encourage uptake.
- Ensure patients can make informed decisions about their participation – importance of clear communication, tailored where appropriate.
- Consideration of/advocacy for carers.

Macro-economic, environmental and sustainability Factors		Population Groups Affected
Positive Impacts	Negative Impacts	
<ul style="list-style-type: none"> <li>Maximizing data usage - Opportunity to correlate the data that comes out of the screening programme with other conditions as well as for this pilot.</li> <li>Local amenity usage - If there is a mobile unit setup in a community, it might encourage people to go to a shop or something similar near there and it could have a benefit for the local community.</li> <li>Social cohesion.</li> </ul>	<ul style="list-style-type: none"> <li>Missing data - Impacts of non-smoking factors on lung cancer? Those who are not recorded as smokers can be missed in the data set.</li> <li>Resource sharing - If rolling out as a national programme without the funding, could there be the potential for longer waiting lists if it isn't funded and prioritizing other areas. Is there provision to cope with demand?</li> </ul>	All
<b>Recommendations:</b> <ul style="list-style-type: none"> <li>Consider risk factors/eligibility – are GP records up to date? Are there high-risk individuals who will not be captured within target cohort?</li> <li>Ensure the pathway is fully funded/planned to ensure individuals are not disadvantaged through participation.</li> </ul>		



There were also a number of key discussions and points raised throughout the session by the participants. These included:

#### **Communication**

- Health promotion information needs to be mutually effective, with the two elements including: 1) how the service communicates with patients, and 2) how people communicate with the service.
- Promotional information needs to be accessible to all groups - e.g. ethnic minorities, BSL, learning disabilities.
- Learn from other campaigns - Welsh Government used BSL translators during COVID-19 campaigns.
- Tailoring communications - there are different levels of health literacy, literacy and education throughout the population. Communications should help people make informed decisions.
- Messaging needs to be clear, make sure the process of screening is made simple and clear in communications.
- How people with communications requirements communicate with this service should be built in from the beginning.
- Communication tailored for the diversity within communities.

#### **Alignment with services**

- Combining appointments with others, beneficial to individuals with co-morbidities.
- MECC - signpost to other services which can promote healthy behaviours.

#### **Accurate GP datasets**

- Smoking history is not always correct with the GP, work with Primary Care so that smoker data is accurately coded. From a patient interaction perspective, there is a need to make sure smoking questions are asked.

#### **Follow up support**

- Support needs to be in place after the during and after the initial screening.
- Support for those individuals who may have incidental findings.

#### **Recommendations and suggestions for the introduction of a national lung cancer screening programme from the participants**

The NSC recommendation for lung cancer screening is for “people aged 55 to 74 identified as being at high risk of lung cancer”<sup>6</sup>. Based on the available evidence, the eligible population considered at high risk of lung cancer will be defined as those who are current or ex-smokers. Those identified as eligible via GP records will be invited for an initial appointment to assess their overall risk, and high-risk participants will be referred for a low dose CT scan.

An initial literature review carried out by the Screening Engagement Team included evaluation and feedback from the Lung Health Check pilot in Cwm Taf Morgannwg UHB, as well as from similar projects in England and Scotland, and studies on lung cancer screening engagement from further afield.<sup>7</sup> This research underlined the importance of engagement with local communities as an intervention to support screening uptake, and highlighted the barriers to lung screening - and

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<sup>6</sup> UK National Screening Committee (2022) <https://view-health-screening-recommendations.service.gov.uk/lung-cancer/>

<sup>7</sup> Screening Engagement Team (2024) SBAR: Lung Cancer Screening Programme - Engagement

healthcare access more generally – which are often experienced by several groups in Wales. The most common barriers identified by researchers include:

- Geographic access
- Low health literacy
- High social deprivation
- Language and cultural barriers
- Distrust of health services
- Stigma around smoking/fear of judgement

Several studies, such as the work undertaken by the UK Lung Cancer Coalition, have also highlighted key population groups which experience significant barriers to healthcare access, and/or are at higher risk of lung cancer:<sup>8</sup>

These include:

- LGBTQ+ people
- Refugees and migrants
- Disabled people
- Ethnic minority groups
- People who are HIV positive
- Roma, Gypsy and Travellers
- Older adults
- Homeless adults

Representatives from these communities, and others considered potentially high risk by the project team, were invited to participate in the HIA process.

Throughout discussion in the participatory workshop, a number of key themes emerged. These were identified by participants as:

- Communication
- Inclusion/ equity
- Engagement with communities beforehand
- Accessibility: location, language etc.
- Trauma-informed
- Person-centered – focus on lives saved through screening

Themes emerging from both the literature review conducted by the screening team and the participatory HIA workshop have highlighted the need to:

- Recognise population group barriers to screening programmes.
- Include these population groups within health impact workshops to better understand their collective and individual needs.
- Identify modifications to screening programmes which may aid screening uptake amongst certain groups.

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<sup>8</sup> UK Lung Cancer Coalition (2022) <https://www.uklcc.org.uk/sites/default/files/2022-11/UKLCC%20Bridging%20the%20Gap%20Report%202022%20FINAL.pdf>

Several suggestions were proposed during the discussions in respect of strengthening the delivery of a national programme. These are summarised below:

- **Communication**
  - Ensuring this is clear and accessible, including easily available in alternative formats and tailored where appropriate.
  - Consideration of social media, provided it is in a variety of formats. Screening awareness and screening information spread using a variety of mediums such as videos and audio descriptions.
  - Participants need to be able to make informed decisions.
  - Ensure participants are supported through and after appointments.
- **Risk factors/eligibility**
  - Are GP records up to date? Are GPs and other HCPs making use of MECC to identify smokers?
  - Are there high-risk individuals who will not be captured within target cohort?
- **Importance of creating a safe and non-judgemental space, including for smokers**
  - Use of language, use positive framing as best as possible, minimize the use of the term cancer.
  - Positive framing around smoking cessation.
- **Integration of smoking cessation services**
  - Also, general health improvement support, and potentially other services e.g. debt.
- **Utilisation of community leaders and champions** to support programme/encourage uptake.
- **Consider possibility of grouping appointments** for vulnerable community groups e.g. ethnic minorities, BSL.
- **Access to appointments**
  - Ensure accessibility, including for both manual and electric wheelchairs.
  - Waiting facilities – warm/sheltered, toilets, consideration for those unable to wait in busy waiting rooms.
  - Safety of area/environment.
  - Support for travel to appointments, especially in rural areas.
  - Recognise cost of living crisis/financial impact – travel cost/time off work.
  - Ensure availability of a range of appointment times for those who work. Flexibility, where possible, with times for those who are shift workers.
- **Integration of digital/tech solutions** – both for patients and staff.
- **Consideration of/advocacy for carers**
- **Ensure funding/full pathway is planned** to ensure participants are not disadvantaged.

## Summary

The HIA workshop followed a systematic process, provoked a lively and thought-provoking discussion, and highlighted a wide range of issues for consideration. Overall, it was agreed that a national lung cancer screening programme has the potential to be highly beneficial to the population of Wales, by identifying lung cancers early and through the integrated promotion of smoking cessation services. However, it also highlighted the range, and importance, of work necessary to ensure an accessible and equitable screening programme is delivered. This has reinforced other research work carried out by the Screening Engagement Team, as well as raising questions not previously considered. It will provide a basis and focus for the next stages of the engagement work within the lung cancer screening project.

As part of the HIA, an evaluation form for the workshop was distributed and participants were asked to leave anonymous feedback (Appendix Four). The comments provided were highly positive. The information and evidence gathered as part of the HIA will be now used to inform further engagement work within the lung cancer screening project, as well as forming part of all the collated evidence to inform recommendations around the introduction of a national lung cancer screening programme in Wales.

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## Appendix One – Agenda

**Workshop Chair** – Chris Coslett, Lung Health Check Programme Manager

**Workshop Facilitator** – Dr Liz Green, Director of Wales Health Impact Assessment Support Unit (WHIASU), Public Health Wales

1.30pm	Registration	
1.45pm	Introductions	Chris Coslett
1.55pm	An outline of the Lung Cancer Screening project	Chris Coslett
2.05pm	Outline of Health Impact Assessment and the afternoon	Liz Green
2.15pm	Introduction to the ' <i>Population groups and wider determinants of health</i> ' checklist	Liz Green
2.20pm	Discussion – use the ' <i>Population groups and wider determinants of health</i> ' to identify key health impacts of the proposal and population groups most likely to be affected.	ALL (facilitated by Liz Green)
3.15pm	Comfort break	
3.30pm	Discussion - continued	ALL (facilitated by Liz Green)
4.00pm	Feedback and recommendations	Liz Green
4.25pm	Finish and next steps	Chris Coslett

## **Appendix Two – WHIASU Population Groups Checklist**

The groups listed below have been identified as more susceptible to poorer health and wellbeing outcomes (health inequalities) and therefore it is important to consider them in a HIA Screening and Appraisal. In a HIA, the groups identified as more sensitive to potential impacts will depend on the characteristics of the local population, the context, and the nature of the proposal itself.

This list is therefore just a guide and is not exhaustive. It may be appropriate to focus on groups that have multiple disadvantages. Please also note that terminology can change over time/ publication.

### **Sex/Gender related groups**

- Female
- Male
- Transgender
- Other (please specify)

### **Age related groups (could specify age range for special consideration)**

- Children and young people
- Early years (including pregnancy and first year of life)
- General adult population
- Older people

### **Groups at higher risk of discrimination or other social disadvantage**

- Black and minority ethnic groups (please specify)
- Carers
- Ex-offenders
- Gypsies and Travellers
- Homeless
- Language/culture (please specify)
- Lesbian, gay and bisexual people
- Looked after children
- People seeking asylum
- People with long term health conditions
- People with mental health conditions
- People with physical, sensory or learning disabilities/difficulties
- Refugee groups
- Religious groups (please specify)
- Lone parent families
- Veterans

### **Income related groups**

- Economically inactive
- People on low income
- People who are unable to work due to ill health
- Unemployed/workless

### **Geographical groups and/or settings (note – can be a combination of factors)**

- People in key settings: workplaces/schools/hospitals/care homes/ prisons
- People living in areas which exhibit poor economic and/or health indicators
- People living in rural, isolated or over-populated areas
- People unable to access services and facilities

## **Appendix Three - WHIASU Health and Wellbeing Determinants Checklist**

### **1. Behaviours affecting health**

- Diet / Nutrition / Breastfeeding
- Physical activity
- Risk-taking activity i.e. addictive behaviour, gambling
- Social media use
- Use of alcohol, cigarettes, Electronic Nicotine Delivery Systems (i.e. e-cigarettes)
- Sexual activity
- Use of substances, non-prescribed medication, and abuse of prescription medication

### **2. Social and community influences on health**

- Adverse childhood experiences i.e. physical, emotional or sexual abuse.
- Community cohesion, identity, local pride
- Community resilience
- Divisions in community
- Family relationships, organisation and roles
- Domestic violence
- Language
- Cultural and spiritual ethos
- Neighbourliness
- Other social exclusion i.e. homelessness, incarceration
- Parenting and infant attachment (strong early bond between infant and primary caregiver)
- Peer pressure
- Racism
- Sense of belonging
- Social isolation/loneliness
- Social capital, support and networks
- Third Sector and Volunteering
- Citizen power and influence

### **3. Mental Health and Wellbeing**

#### **Could there be potential impacts on:**

- Emotional wellbeing, life satisfaction or resilience?
- A sense of control?
- Feeling worthwhile, valued or having a sense of purpose?
- Uncertainty or anxiety?
- Feeling safe and secure?
- Participation in community and economic life

### **4. Living and environmental conditions affecting health**

- Air Quality
- Attractiveness of area
- Community safety
- Access, availability and quality of green and blue natural spaces
- Housing quality and tenure • Indoor environment
- Health and safety
- Light pollution
- Noise
- Quality and safety of play areas (formal and informal)
- Road safety

- Odours
- Urban/Rural built and natural environment and neighbourhood design
- Waste disposal, recycling
- Water quality i.e. sea water

#### **5. Economic conditions affecting health**

- Unemployment
- Poverty including food and fuel poverty
- Income
- Personal and household debt
- Economic inactivity
- Type of employment i.e. permanent/temporary, full /part time
- Working conditions i.e., bullying, health and safety, environment

#### **6. Access and quality of services**

- Careers advice
- Education and training
- Information technology, internet access, digital services
- Leisure services
- Medical and health services
- Welfare and legal advice
- Other caring services i.e. social care; Third Sector, youth services, child care
- Public amenities i.e. village halls, libraries, community hub
- Shops and commercial services
- Transport including parking, public transport, active travel

#### **7. Macro-economic, environmental and sustainability factors**

- Biodiversity
- Climate change i.e. flooding, heatwave
- Cost of living i.e. food, rent, transport and house prices
- Economic development including trade and trade agreements
- Gross Domestic Product
- Regeneration
- Government policies i.e. Sustainable Development principle (integration; collaboration; involvement; long term thinking; and prevention)



## **Appendix Four – Evaluation form (HIA workshop)**

### **Health Impact Assessment Workshop**

1.

a. To what extent do you agree with the following statement? 'I learnt a lot of new information from this workshop.' Please rate where 1= Fully Disagree and 10= Fully Agree

b. Any additional comments on what you have learnt during the workshop?

2.

a. How useful did you find the workshop? Please rate where 1= Not at all Useful and 10= Very Useful

b. Any additional comments on the most or least useful parts of the workshop?

3.

a. Were you satisfied with the format of the workshop? Please rate where 1= Very Unsatisfied and 10= Very Satisfied

b. Any additional comments relating to what do you think worked and what didn't?

4.

a. To what extent do you feel that your expectations prior to the session have been met? Please rate where 1= Did not Meet my Expectations and 10= Fully Met my Expectations

b. Any additional comments on your expectations of the workshop?

5.

a. How likely are you to recommend the Wales Health Impact Assessment Support Unit (WHIASU) to a colleague? Please rate from 1-10 where 1 is not at all likely, and 10 is definitely

b. Any additional comments on your recommendation of WHIASU?

6.

a. Any other comments you wish to make?

Date.....