

NORTHERN IRELAND BLUEPRINT FOR LUNG CANCER

**Recommendations
from the Northern Ireland
Lung Cancer Conference,
20 - 21 November 2025,
Belfast.**

Developed by the Northern Ireland Lung Cancer Community on behalf of the NICaN Lung Cancer Clinical Reference Group (CRG).

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EXECUTIVE SUMMARY

Situation

- 1** Lung cancer kills over 1,360 people per year in Northern Ireland (NICR, 2022). Despite major progress in reducing smoking and improving treatment outcomes, demographic shifts—most notably an ageing population—are now driving a rise in lung cancer deaths.
- 2** Specialist services for diagnosis and treatment are unable to keep up with the rising demand, with out-patient waiting times for tests and clinical appointments becoming longer. Treatment services, including those that deliver thoracic surgical and oncological treatments are often not timely, reducing the quality and benefits of interventions thereby impacting long term survival. Specifically, surgical resection is less likely to happen in Northern Ireland than in England; 12% (NI patients diagnosed in 2023) vs 20% (NLCA 2025 report for the same period) and is often delayed due to lack of surgical list capacity. This is a key determinant of long-term survivors.
- 3** Northern Ireland is lagging England and Wales in auditing outcomes. We are unable to contribute to a national audit because of issues around the legality of sharing of data. It is unclear if recent changes in legislation allow Northern Ireland to contribute to a national audit, and new data entry processes under Encompass (Northern Ireland's digital care patient record) are not yet embedded. Successful audit in England and Wales has driven the quality of their services.
- 4** Lung cancer screening has been shown to reduce deaths by 20% (US NLST and NELSON Study). Targeted screening has since been introduced in England (2022) with commitment to full roll out to the target population by 2030 in the National Cancer Plan for England (2026). National screening projects are progressing in Wales and Scotland - and the Republic of Ireland.

Regional lung cancer teams and stakeholders met with national lung cancer experts to develop plans to enhance quality and efficiency in lung cancer care in Northern Ireland.

Key considerations for the NICaN Lung Cancer Clinical Reference Group:

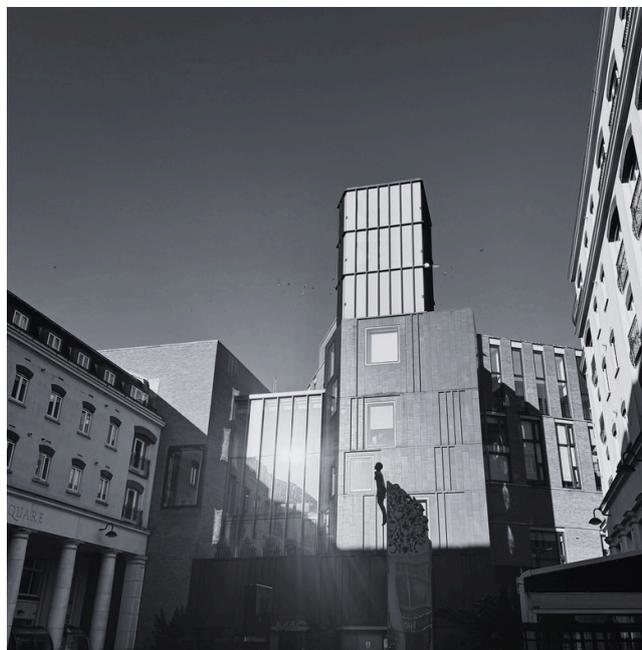
1. Encourage radiologists to engage in additional CT screening related Continuing Professional Development (CPD) to improve quality of chest CT reports, reduce double reporting and reduce false positive reports.
2. Encourage GPs to keep smoking status information up to date ahead of lung cancer screening implementation. Patient selection is dependent on this data.
3. Develop pulmonary nodule management pathways.

Key considerations for the NICaN Lung Cancer Clinical Reference Group requiring support of other services including IT or the Rapid Diagnostic Centres (RDCs):

1. Set up a working group to address Red Flag (suspected lung cancer) demand, defining alternative pathways and potential use of capacity within RDCs.

Key considerations for Health and Social Care Trusts:

1. Address issues around the use of Encompass for data entry and extraction to facilitate participation in the National Lung Cancer Audit.
2. Ensure alignment with smoking cessation services and Red Flag referral and nodule services.



Key considerations for Northern Ireland:

1. To ensure the sustained delivery of tertiary surgical services—particularly thoracic oncology procedures that are exclusively provided within the Belfast Health and Social Care Trust—it is necessary to secure dedicated surgical list capacity. This should be achieved through both an expansion of the thoracic surgical workforce and an increase in the number of theatre lists allocated per consultant surgeon.
2. Continued implementation and strengthening of public health interventions aimed at promoting smoking cessation and preventing smoking initiation are required to reduce the population burden of tobacco-related disease and support long-term improvements in respiratory health outcomes.
3. Establish a dedicated Lung Cancer Screening Planning Group to oversee the strategic design, coordination, and phased implementation of a Northern Ireland lung cancer screening programme.
4. Enhance the quality and completeness of lung cancer data collection by working closely with the Encompass programme to optimise data entry processes and ensure robust, efficient data extraction to support service planning, performance monitoring, and clinical decision-making.
5. To enhance the quality, sustainability, and efficiency of lung cancer care in Northern Ireland, ongoing optimisation of workforce skill-mix must remain a regional priority. Evidence demonstrates that specialist roles—including Lung Clinical Nurse Specialists, Advanced Nurse Practitioners, and Allied Health Professionals—deliver significant improvements in patient outcomes, support timely access to care, and strengthen multidisciplinary service delivery.

Key considerations for Northern Ireland requiring significant investment:

1. Enable access to AI-powered tools to support the reporting of chest CT scans. This will enhance the safety and efficiency of radiology services and position our systems to ensure a seamless implementation of lung cancer screening.
2. Ensure thoracic surgeons have consistent access to robotic surgical systems. This will enhance the proportion of patients receiving minimally invasive procedures, support greater lung preservation, and strengthen recruitment and training opportunities for surgeons.
3. Agree a definitive timeline for the rollout of lung cancer screening in Northern Ireland. To begin implementation in 2028, it is essential to immediately establish a clinician-led working group comprising all key stakeholders, including the Public Health Agency (PHA) and the Department of Health (DoH).



Secretary of State for NI, Hilary Benn MP, with lung cancer campaigner, Cathy Brokenshire and Dr Wendy Anderson, Interim Chair of NICaL Lung Clinical Reference Group

BACKGROUND

Lung cancer remains the leading cause of cancer-related death in Northern Ireland, with the greatest impact seen in our most deprived communities. Over the past two decades, the number of people diagnosed with lung cancer has risen sharply, creating increasing pressure on diagnostic and treatment services. While smoking rates have declined and age-adjusted prevalence has fallen, the absolute number of cases has doubled in some areas due to an ageing population. This trend is particularly pronounced in rural and coastal regions. The patient profile has also shifted, with a higher proportion of non-smokers and changes in tumour histology, including more adenocarcinomas and fewer squamous cell and small cell carcinomas.

Opportunities to reduce lung cancer mortality and morbidity have evolved significantly. Advances in surgical techniques and radiotherapy now offer improved chances of long-term survival, while modern drug therapies have become more targeted, less toxic, and more effective than previous treatments. The National Lung Cancer Audit (NLCA) in England and Wales has strengthened evidence-based standards, driving improvements in care. The introduction of targeted lung cancer screening presents a further opportunity for earlier diagnosis and better outcomes particularly in deprived communities where the burden is greatest. However, demographic changes are increasing demand not only for lung cancer services but for healthcare overall, against a backdrop of considerable financial constraints.

Two major factors are driving changes in the number and nature of lung cancer patients. First, reductions in smoking prevalence and possibly in the average number of cigarettes smoked, have led to a decline in age-standardised incidence and a shift in tumour histology, with adenocarcinomas now more common than small cell and squamous cell carcinomas. Second, demographic changes, including a doubling of the population aged over 75, particularly in rural and coastal areas, have resulted in a rise in the absolute number of lung cancer cases. Increased incidental findings from more widespread chest CT scans may also contribute to this trend.

Against this backdrop, the NICaN Lung Cancer Clinical Reference Group met in Belfast in November 2025 to review the evidence and design future services aimed at delivering measurable improvements in quality, efficiency, and survival. Discussions included the developments required to implement lung cancer screening, alongside other service enhancements.

AIM

To deliver demonstrable improvements in quality, efficiency and survival delivered by lung cancer services in Northern Ireland.

Measures (as per the National Lung Cancer Audit)

1. Patients diagnosed and treated
2. Timelines for diagnosis:
 - a. CT
 - b. Red Flag appointments
 - c. Bronchoscopy
 - d. Endobronchial Ultrasound - EBUS
 - e. Pathology turnaround times
 - f. CT-guided biopsy
 - g. PET-CT
 - h. Navigational Bronchoscopy
3. Radical treatment rates:
 - a. Surgery
 - b. Radical non-surgical treatments
4. Chemotherapy rates for good performance status patients with stage IV disease
5. 1-year and 5-year survival figures.



DAY 1: EXPERT EDUCATION 20 NOVEMBER 2025 PRESENTATIONS

Lung cancer in Northern Ireland changing demand and outcomes over the last 25 years

Dr Wendy Anderson; Interm Chair of NICaN Lung CRG, Respiratory Physician, Lung Cancer Lead, Northern Health and Social Care Trust and Northern Ireland Representative on UKLCC

Key points:

1. Demographic changes (ageing) are driving rapid rises in lung cancer cases in Northern Ireland. These are largely rural and coastal.
2. We need to continue to drive down smoking to prevent cancer in deprived areas.
3. If we are to maintain standards of care with rising demand, we need to be more efficient with our clinical resources for red flags, radiology, surgery and non-surgical treatments.

The Welsh experience of implementing a lung screening programme

Dr Sinan Eccles: Consultant Cwm Taf Morgabwg University Health Board - Respiratory Medicine and Respiratory Lead for the National Lung Cancer Screening Project, Wales

Key points:

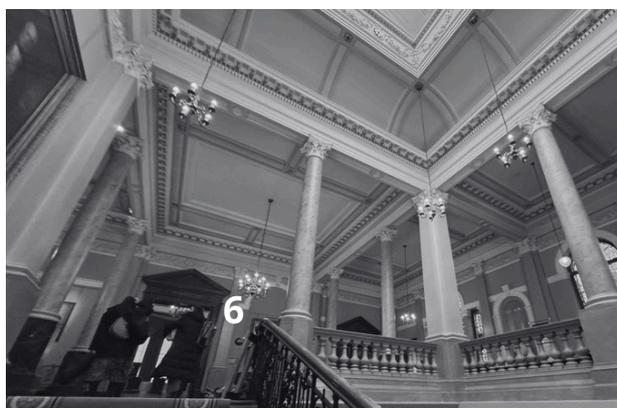
1. Implementing a population-based lung cancer screening programme is the single most effective intervention for reducing cancer mortality in Northern Ireland.
2. Northern Ireland allocates £8.4 billion to health expenditure, and the introduction of lung cancer screening would represent one of the most clinically and cost-effective uses of a very small proportion of this budget.
3. The conditions are now optimal to progress towards the implementation of a lung cancer screening programme, supported by the UK National Screening Committee's recommendation and the substantial preparatory work already undertaken across other UK nations.
4. Implementation and delivery come with challenges but these are surmountable, and not moving forward will lead to other avoidable challenges and costs.
5. To make lung cancer screening happen, Northern Ireland needs a team, a plan, and buy-in from stakeholders and decision-makers.

Smoking cessation and the impact on life expectancy and treatment outcomes

Professor Sanjay Agarwal: National Specialty Adviser for Tobacco Dependency at NHS England, Chair of the Royal College of Physicians Tobacco Advisory Group and Consultant in Respiratory and Intensive Care Medicine

Key points:

1. Smoking cessation in lung cancer screening saves lives - preventing new cancers, reducing comorbidity, reducing complications of treatment.
2. Smoking cessation after lung cancer is diagnosed saves lives - reduces treatment complications, reduces comorbidity, improves survivorship.
3. Smoking cessation pathways are low cost, high impact i.e. cost-effective.
4. Smoking cessation directly reduces health inequalities, providing access to treatment that may not otherwise be provided or sought.



Radiology perspective on lung cancer assessment and diagnosis

Dr Allanah Barker: Consultant Cardiothoracic Radiologist, Cambridge University Hospitals NHS Foundation Trust

Key points:

1. Artificial Intelligence (AI) systems significantly improves the quality and efficiency of CT systems for screening.
2. Specific training for NHS radiologists designed to help report screening CTs, halves the number of individuals requiring further investigation for false positive results, improving quality and dramatically reducing costs.

Surgical perspective on lung cancer screening

Miss Ralitsa Baranowski: Consultant Thoracic Surgeon, Royal Victoria Hospital Belfast

Key points:

1. Lung cancer is a clear marker of social deprivation, with incidence, late presentation, and mortality closely aligned with levels of poverty, higher smoking prevalence, and reduced access to preventive services. A lung cancer screening programme must therefore prioritise the most deprived communities to ensure equitable access, maximise health impact, and address long-standing disparities in outcomes.
2. Delays in the diagnostic pathway directly impact survival. Northern Ireland continues to experience longer waits and fragmented investigation processes; each additional step or week lost increases the risk of disease progression, recurrence, and reduced overall survival. Streamlined, rapid, “one-stop” diagnostic pathways are therefore essential to improving outcomes and reducing avoidable harm.
3. Address long-standing health inequalities by investing in innovation and ensuring equitable access to specialist services. Patients in Northern Ireland should have access to the same standard of surgical treatment as those in England, Scotland, and Wales.
4. Access to modern diagnostic technology in Northern Ireland is currently limited
5. Unlike other parts of the UK, patients in Northern Ireland currently do not have access to robotic surgery, robotic bronchoscopy, or advanced image-guided diagnostic procedures. This technological gap contributes to delays in diagnosis, restricts access to minimally invasive treatment options, and reinforces inequities in cancer care and outcomes across the region.



Oncology perspective - non-surgical radical treatments

Dr Jonathan McAleese: Consultant Clinical Oncologist, Belfast City Hospital

Key points:

1. Strengthen resilience within the clinical oncology workforce through investment, ensuring consistent Multidisciplinary Team (MDT) cover and supporting increased treatment capacity required. This should be complemented by the recruitment of an additional specialist radiographer to enhance service delivery.
2. Support development of Stereotactic Ablative Body Radiotherapy (SABR) specialist radiographer and completion of set-up in North West Cancer Centre (NWCC).
3. Continued development and support of clinical trials to secure the evidence base.

Potential for efficiency in nodule protocols based on British Thoracic Society guidelines

Dr Neil Macaskill: Consultant Thoracic Radiologist based at the Ulster Hospital

Key points:

1. Northern Ireland should draw directly on proven best practice from UK regions with established lung cancer services, avoiding unnecessary redesign or extended pilot phases. The breadth of local and external expertise should be used to drive efficient, evidence-based implementation.
2. Ensure optimal use of the current workforce by maintaining doctor-led clinics as the starting point, while expanding multidisciplinary skill-mix in line with NHS England as services scale. Workforce recruitment and planning must be aligned with increasing demand.
3. Northern Ireland should fully capitalise on its unified Picture Archiving and Communication System (PACS) and Electronic Patient Care Record (EPR) systems to maximise clinical and radiology efficiency—an advantage not available in England's more fragmented digital landscape.

DAY 2: OVERVIEW OF CONFERENCE 21 NOVEMBER EXPERT GROUP DISCUSSIONS

Group 1: Clinical prerequisites for lung cancer screening. *Chair: Dr Tracy Owen, Deputy Director, Public Health Agency (PHA)*

Group 2: Lung Cancer Audit – achieving accurate post Encompass data and engaging with the National Lung Cancer Audit. *Chair: Belfast Health and Social Care Trust (BHST)*

Group 3: Developing a deliverable service for nodules. *Chair: Dr Neil Macaskill, Radiologist, South Eastern Health and Social Care Trust (SEHST)*

Group 4: Maximising radical treatment rates. *Chair: Dr Andrea Green, Chest Physician, Southern Health and Social Care Trust (SHSCT)*

Group 5: Overcoming obstacles to optimise non-radical treatment and mesothelioma services. *Chair: Dr Peter Bryson, Western Health and Social Care Trust (WHST) and mesothelioma nurses, BHST*

Group 6: Optimising the rapid diagnostic centres to alleviate the stress on Red Flag appointments. *Chair: Mr Craig Donnachie, Department of Health, NI*

Evolving action plan

Objective	Key Considerations	Suggested leads
1. Clinical prerequisites for lung cancer screening	Raise awareness within primary care of the need to complete patient's smoking status	Strategic Planning and Performance Group (SPPG) of the Department of Health, NI (DoH) and PHA
	Ensure that smoking cessation staff (and other opt out services) attend Red Flag clinics where possible	Health and Social Care (HSC) Trusts
	Identify / build skills in respiratory within the radiology workforce and confirm training and experience required	SPPG / Trusts
	Develop a screening model and determine the practicalities for the business case i.e. procurement etc.	DoH and PHA
	Establish a pathway for screening (not just a test)	DoH and PHA
	Implement an AI system to report CT ahead of radiologist involvement	SPPG / Trusts
	Enhance surgery capacity for nodule services	Trust / SPPG
	Establish services to support the mental wellbeing of patients	Trust / SPPG
	Develop a proof of concept for Encompass to host a screening programme.	PHA

Objective	Key Considerations	Suggested Leads
2. Lung Cancer Audit – achieving accurate post Encompass data, and engaging with national audit	Agree and define relevant data for use on Encompass with the aim of avoiding duplication across trusts. Provide training to staff where applicable	MDTS and Encompass Trust Cancer Leads Cancer trackers
	Develop NLCA datasets bespoke to NI for recording and inputting including Mesothelioma audits.	NICaN Lung Cancer CRG with DHCNI
	Establish a Northern Ireland Cancer Registry link to surgery data	Mr Rory Beattie / Northern Ireland Cancer Registry (NICR)
	Set-up a working group with the Northern Ireland Cancer Registry	NICaN Lung CRG
	Consider datasets / model used by the MDT at Royal Marsden	NICaN Lung CRG

Objective	Key Considerations	Suggested Leads
3. Develop an efficient nodule service	Confirm additional training requirements for radiologists e.g. nodule reporting accredited by the Royal College of Radiologists every 2/3 years	Dr Neil Macaskill / Radiologists
	Define AI for CT pre-reporting	Dr Neil Macaskill
	Develop a regional dashboard for the management of nodules	Trusts / SPPG
	Agree how extra investigations may be integrated to existing pathways	Trusts / NICaN Lung CRG
	Increase volume of chest x-rays and capacity of workforce to facilitate this.	Trusts
	Incorporate health promotion into the nodule service	Trusts
	Radiotherapy Group to confirm protocol for patient follow-up: 1. Standard letter to patient if no growth on scan 2. Standard letter to patient to confirm referral to Red Flag service	Trusts

Objective	Key Considerations	Suggested Leads
4. Maximise radical treatment rates	Ensure thoracic surgeons have capacity for at least 1.5 days in surgery per week	BHSCT
	Maximise surgeon access to robot equipment	BHSCT
	Ensure availability of SABR at NWCC and site-specific radiographer	NWCC / SPPG
	Resource and standardise a regional prehabilitation programme for all lung cancer patients <ul style="list-style-type: none"> • Redirect smoking cessation • Prehab needs assessment 	Regional – Trusts / SPPG
	Improve pathways, especially CT Biopsy / EBUS timeframes / straight to CT	Trust Regional approach
	Increase numbers of clinical oncologists and ensure effective integration of skill mix within the oncology pathway	BHSCT / Oncology
	Increase public and professional understanding of lung cancer treatment options and the potential side effects of immunotherapy and targeted therapy	Regional - Trusts / SPPG
	Surgery – increase number of thoracic surgeons i.e. from 4 – 5 Theatre capacity (13 sessions per week) Robotic programme Include beds / nursing staff / increase anaesthetic capacity	Regional i.e. Trusts / SPPG

Objective	Key Considerations	Suggested Leads
5. Optimisation of non-radical treatments including mesothelioma services	Develop regional co-ordination of specialist radiology reporting of CT chest	Establishment of a regional group
	Establishment of regional mesothelioma MDM	SPPG / Trusts
	Establishment of pre-hab pathway at point of Red Flag referral pilot project	Southern Trust Pilot project
6. Reduce Red Flag demand by optimising capacity within rapid diagnostic centres	Set up working group to oversee development of a suitable pathway	NICaN Lung CRG
	Ensure GP representation on CRG	NICaN
	Develop and agree RDC pathway	NICaN Lung CRG
	Standardise regional protocol	NICaN
	Develop protocols for post-op follow-up	NICaN CRG / Mr Rory Beattie
	Confirm and develop a suitable imaging pathway 1. Low-risk Red Flag pathway CT only 2. Nodule follow-up pathway 3. Post-op follow-up 4. Post x-ray follow-up	Lung Radiologists / NICaN CRG

Objective	Key Considerations	Suggested Leads
6 (continued). Reduce Red Flag demand by optimising capacity within rapid diagnostic centres	<p>Ensure that lung cancer CNSs have protected and clearly defined job plans to safely deliver key worker responsibilities. This should include attendance at Red Flag clinics to support and continually improve patient communication, continuity and experience of care.</p>	<p>Regional Lung CNS Forum</p>
	<p>The opportunity to develop nurse-led clinics within thoracic surgery and for Holistic Needs Assessments to be integrated as part of transformational care. CNS clinics would ensure psychosocial needs are identified and symptom management/care coordination are addressed proactively and consistently.</p>	<p>Regional Lung CNS Forum</p>
	<p>Reduce consultant demand through investment into skill mix of specialist and advanced nursing and AHP roles which supports consultant-led rather than consultant delivered activity.</p>	<p>Regional Lung CNS Forum</p>

CONCLUSIONS

There is rising demand for lung cancer care in Northern Ireland. Despite the success of smoking cessation services, demographic change is driving the number of new cases. We need to continue to reduce the numbers of smokers in our communities to minimise those vulnerable to lung cancer.

Treatments are increasingly effective, but demand on the service is limiting delivery. The lung cancer teams across Northern Ireland will work to improve the quality and efficiency of services within the existing resource.

The region will need to pivot surgical capacity in our tertiary centre, ensuring priority access for tertiary demand and allowing our surgeons to deliver benchmarked levels of activity, if we are to achieve acceptable surgical resection rates for lung cancer and position ourselves for further demand from screening.

Northern Ireland needs to plan for the inevitable additional upfront service costs that targeted lung cancer screening will bring, including AI support in reporting of CTs, and access to a robot for thoracic surgery. Ultimately this intervention is cost-effective in our National Health Service and resources required for implementation will reduce the increasing demand for expensive new drug treatments for stage IV disease. It will also move to level up expensive health inequalities that impact our more deprived communities.



The Ulster Thoracic Society would like to thank:

Cathy Brokenshire, the widow of the Rt Hon James Brokenshire MP who served as Secretary of State for Northern Ireland before his early death from lung cancer, and Dr Sinan Eccles, Welsh Lead for Lung Cancer Screening, for taking two days out of their busy schedules to support our meeting; and The Harbour Commissioner's Office, and the Mac Theatre in Belfast, for offering warmth professionalism and flexibility in hosting our conference and the All Party Group from Stormont; and Lynsey Conway and the UK Lung Cancer Coalition for providing invaluable advice and support.

Author: Dr Wendy Anderson, February 2026