

UK National Screening Committee (UK NSC)

Screening for chronic obstructive pulmonary disease (COPD) in the general adult population

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Aim

This paper provides an update on the public consultation on the evidence map for screening for COPD in the general adult population.

Current Recommendation

Currently, the UK NSC recommends against screening for COPD in the general adult population, based on the evidence provided by the 2018 evidence summary carried out by Solutions for Public Health.

The 2018 review considered four key questions and included evidence from studies published between February 2012 and November 2017. The first question assessed the accuracy of screening tests for COPD. The review concluded that risk assessment questionnaires gave a high number of false positives, and while pulmonary function tests (alone or in combination with questionnaires) may reduce the false positive rate, studies were small with considerable variation in populations, tests, cut-offs and results. The second question assessed the impact of screening on smoking cessation rates; one randomised controlled trial (RCT) and three uncontrolled cohort studies were included. Overall, there was uncertainty about the impact of spirometry or a COPD diagnosis on smoking cessation rates. The third question assessed the clinical effectiveness of pharmacological treatments in screen-detected COPD. No studies were identified in screen-detected populations, and there was a lack of evidence on pharmacological interventions in people with milder COPD. The fourth question assessed the impact of COPD screening on mortality, morbidity or health-related quality of life. One cluster RCT assessed screening versus usual care in a frail elderly population, and did not demonstrate an advantage for screening, but significance tests were not reported and the population

may not be generalisable to population screening. Overall, the review found insufficient evidence to recommend population screening for COPD.

2025 Evidence Map

In 2025, an evidence map was completed by Sheffield Evidence Network for Screening Synthesis (SENSS). The evidence map focused on two research questions:

1. Question 1: What is the volume and type of evidence on the effect of screening for COPD in previously undiagnosed adults on morbidity, mortality and health-related quality of life?
2. Question 2: What is the volume and type of evidence on the effect of screening for COPD in previously undiagnosed adults on smoking cessation rates?

The findings of the evidence map concluded that there is insufficient evidence on population screening for COPD to justify further evidence synthesis work. Specifically:

1. Question 1 (clinical effectiveness): two systematic reviews were identified for Q1; however, neither review identified any RCTs addressing the effect of COPD screening on health outcomes. This map also identified three RCTs of screening or case-finding for undiagnosed COPD followed by randomisation to enhanced care or usual care. Some analyses showed a significant benefit of enhanced care, however, the majority did not show any significant difference. Although the review primarily focused on population screening, some relevant studies in high-risk groups were also included. However, evidence in high-risk groups remained very limited and did not affect the overall findings. In summary, this evidence map did not identify robust evidence on the benefits of COPD population screening on health outcomes; further evidence synthesis work is unlikely to lead to a conclusive answer to this question. Further primary research on targeted COPD screening in current and former smokers may be valuable.
2. Question 2 (screening effect on smoking cessation): two meta-analyses assessing the effect of spirometry feedback on smoking cessation were identified. These were based on RCTs published up to 2017. Both reported a non-significant trend for higher smoking cessation in the spirometry feedback groups, and a significant effect when restricting to studies of low risk-of-bias, or to studies providing smoking cessation medicines or intensive counselling. In summary, the available evidence suggested a potential, but not definitive, effect of spirometry feedback on smoking cessation. Further evidence synthesis work, including meta-analysis to address the lack of power in individual studies, may provide more conclusive evidence regarding the effect of lung function feedback on smoking cessation rates. Further primary research on targeted COPD screening in current and former smokers may be valuable. However, further synthesis work on smoking cessation on its own would be unlikely to lead to a change in the UK NSC's current position.

Action

Members are asked to advise whether they:

- agree with the final recommendation, that a population screening for COPD should not be introduced; and
- agree that population screening for COPD should be archived.

UK NSC recommendation

Based on the conclusion of the evidence map, we propose the following recommendation:

Systematic population screening for COPD in adults is not recommended in the UK and that this topic is archived.

Consultation

A three-month consultation (13 January 2026 – 7 April 2026) was hosted on the UK NSC website. Direct emails were sent to 11 stakeholder organisations (Annex A) and 22 individuals who had subscribed to updates on this topic.

Comments were received from the following 7 stakeholders, with no comments received from the general public (see Annex B for comments):

- Royal College of Nursing
- Chiesi Ltd
- Royal College of General Practitioners
- Asthma + Lung UK
- The Taskforce for Lung Health's
- Association of Respiratory Nurses
- The University of Birmingham

All stakeholders supported the UK NSC's recommendation not to introduce population screening for COPD.

Nevertheless, they emphasised the significant burden of COPD in the UK, including the high number of people living with undiagnosed disease. Stakeholders highlighted the importance of earlier detection, noting that timely diagnosis could lead to fewer hospital admissions and better health outcomes. They also pointed to the wider costs of delayed diagnosis, including reduced quality of life, increased risk of comorbidities, and lost productivity.

The main themes identified from stakeholders' comments are summarised below, along with responses to each theme. Across most responses, stakeholders called for consideration of targeted (high-risk) screening approaches to COPD instead, rather than population screening.

Integrating COPD screening in existing programmes and employing a more targeted approach

Stakeholders suggested that COPD case-finding could be considered alongside the existing Lung Cancer Screening Programme, given the overlap in risk factors and the potential to identify suspected COPD through lung health checks. They noted that currently there is no consistent pathway for people with suspected COPD identified in this way. They also highlighted the emerging local initiatives linking Lung Cancer Screening Programme with local clinics, which they suggested had helped develop integrated diagnostic and treatment pathways for suspected COPD individuals.

Some stakeholders felt that the evidence map was too broad in scope and suggested that future work should take a more targeted approach, focusing on clearly defined high-risk groups. Several stakeholders recommended commissioning a new evidence review on targeted screening or case-finding in high-risk groups, rather than waiting a further 3 years before reconsidering the topic.

Some stakeholders criticised the framing of the evidence map, suggesting that the search strategy may have been too narrow. They felt that embedded or pathway-based approaches, where COPD is detected as part of multi-condition programmes, may have been overlooked or excluded. Future reviews may therefore need to consider broader evidence on integrated case-finding models, particularly where COPD detection is linked to existing lung cancer screening, or other targeted programmes.

Response:

Thank you for these comments. This evidence map mainly focused on population screening, in line with the scope of the previous review. Stakeholders agreed that the available evidence does not support a population approach to COPD screening.

Regarding targeted screening, it is important to distinguish between different approaches to identifying individuals with COPD. Targeted screening programmes are intended for individuals who are asymptomatic or have undiagnosed disease within defined higher-risk populations. In contrast, the identification and management of individuals presenting with symptoms is considered part of routine clinical care and is guided by clinical guidelines rather than screening programmes. The UK NSC's remit is to assess the evidence for screening programmes, rather than to improve or optimise guideline-based clinical care pathways.

We note the strong interest from stakeholders in targeted approaches to COPD identification, particularly in higher-risk groups and in the context of existing programmes. Following the expansion of the UK NSC's remit to include targeted

screening, the committee now formally consider both population and targeted screening. However, as this evidence map was commissioned as an update to an existing regular review of population screening for COPD, its main focus remained on population screening. Stakeholders may submit proposals for targeted COPD screening through the UK NSC's [open call](#) process, either as a new topic or as a potential modification to an existing programme (for example, in the context of lung cancer screening). This enables the UK NSC to consider any relevant and high-quality emerging evidence, evaluations, or trials relating to targeted approaches in high-risk populations at an earlier stage.

As mentioned above, this evidence map was commissioned as an update to the existing regular review topic on population screening for COPD, and its primary focus was on population screening. Although targeted screening was not the main focus of this review, relevant studies involving smokers as a high-risk group were included (see page 9 for the inclusion criteria and page 28 Table 2). However, evidence on targeted populations that meet the inclusion criteria is limited. Publications on COPD screening within lung cancer screening programmes were identified through the comprehensive search; however, these studies were excluded because they either did not include a control group or did not report outcomes relevant to the agreed research questions. Similar reasons applied to other studies suggested by stakeholders.

We appreciate stakeholders sharing relevant research. These studies were assessed against the agreed inclusion criteria, but were not included as they fell outside of the scope of the evidence map. Reasons for exclusion included the absence of a control group, the reporting outcomes outside the map scope, and publication as conference abstracts rather than peer-reviewed articles. Decisions on implementing a population-wide systematic screening programme require a robust evidence base. The UK NSC therefore sets high standards for study requirements across all stages and types of its evidence products and processes.

Evidence maps are intended to assess the volume and type of the evidence available for specific screening research questions, and to inform whether a topic should proceed to a more substantial evidence review. Therefore, evidence maps include only peer-reviewed publications, and conference abstracts are not included.

Research questions and search strategies are discussed and agreed with the reference group and reviewers for each review cycle. Studies mentioned by the stakeholders may therefore not be included where their outcomes, study design, or publication types do not align with the agreed scope.

Other high-risk cohorts

Some stakeholders emphasised the importance of considering high-risk or underserved groups, including people with severe mental illness, neurodivergence, or learning disabilities, who may face additional barriers to screening, diagnosis, and smoking cessation support. They suggested that tailored approaches may be needed to reduce inequalities in COPD detection and care.

Response:

Thank you for raising this important point. The UK NSC agrees that access to screening, diagnosis, and support should be equitable for everyone. Although this evidence map focused primarily on population screening, relevant studies in targeted or high-risk groups, such as smokers, were also considered where they met the inclusion criteria. However, limited evidence was identified for these groups. More broadly, feasibility and accessibility are important considerations of UK NSC reviews. These factors are assessed at a later stage of the review process and would also be considered by the NHS if a screening programme were taken forward.

Policy recognition

Stakeholders noted that there is already policy recognition of the importance of earlier COPD detection. For example, in Wales, the planned targeted lung cancer screening programme is expected to include standardised protocols for managing incidental findings of other conditions, including COPD.

Response:

We recognise COPD as an important health problem and note stakeholders' comments about the value of earlier identification. We agree appropriate communication and/or management of incidental findings is a vital element of lung cancer screening. We therefore welcome the planning that has been undertaken to address expected incidental findings, such as radiological evidence of COPD identified through low-dose CT.

Smoking cessation

Stakeholders emphasised the importance of linking any COPD case-finding with smoking cessation services. They suggested that onsite smoking cessation support within lung cancer screening programmes can increase quit attempts and may be cost-saving. However, they noted that access to these services varies across the country, partly due to funding cuts.

Response:

Thank you for drawing our attention to variation in funding for on-site smoking cessation services within the Lung Cancer Screening programme. While operational issues are outside of the scope of this evidence map, we recognise the importance of any smoking cessation support in strengthening screening programmes and improving health outcomes. We agree that embedding appropriate smoking cessation is a vital component of the programme and note that this is reflected in England's Lung Cancer Screening Programme quality assurance standards (stand 10) as part of the lung cancer screening programme. However, the specific models of smoking cessation services offered and their operational delivery by providers are beyond the remit of the UK NSC.

Lack of regulation in spirometry delivery and workforce capacity

Several stakeholders recommended that any future decisions about COPD screening or targeted case-finding should consider workforce capacity. They highlighted the need for greater investment in training, clear competency frameworks, and quality assurance for spirometry, noting that the lack of regulation and consistency in spirometry delivery remains an issue.

Response:

Thank you for raising the issue of workforce capacity. We recognise that a skilled workforce and sufficient diagnostic capacity are essential for any screening programme. These considerations form part of the UK NSC's assessment of whether a programme could be implemented effectively, should the evidence indicate that screening offers overall benefit.

Annex A: List of Organisations Contacted

1. Association of Respiratory Nurse Specialists (ARNS)
2. Asthma + Lung UK
3. British Geriatrics Society
4. British Society of Lifestyle Medicine
5. British Thoracic Society
6. Primary Care Respiratory Society UK
7. Royal College of General Practitioners
8. Royal College of Nursing
9. Royal College of Physicians
10. Royal College of Physicians and Surgeons of Glasgow
11. Royal College of Physicians of Edinburgh

Annex B: Consultation Responses

Note: Personally identifiable information has been redacted from certain comments, where individuals have chosen not to have personal details made public.

Name: XXXX XXXX, XXXX XXXX

Email: XXXX XXXX, XXXX XXXX

Organisation: Royal College of Nursing

Role: UK Professional Lead - Long Term Conditions; UK Head of Nursing Practice

The RCN welcomes the opportunity to respond to this consultation and to highlight the essential role nurses play in diagnosing COPD. As a professional and trade union body, our contribution focuses on the implications for nursing practice and workforce. In developing this response, both the RCN Nursing Practice Academy and Workforce Academy were engaged to represent the voice of nursing.

As an organisation, having reviewed the evidence from the UK National Screening Committee we agree that a national population screening programme for COPD is not recommended. This aligns with the 2018 recommendation and the current consultation materials, which highlight insufficient evidence that screening improves outcomes at a population level.

While this conclusion is reasonable based on the evidence base, it is essential to consider the practical implications for diagnostic pathways, particularly spirometry, which remains central to case-finding and accurate diagnosis for any future reviews.

Lack of Regulation and Quality Assurance in Spirometry Delivery

A key concern is the continued absence of national regulation defining who is permitted to perform quality-assured spirometry, which is fundamental to accurate COPD diagnosis. Although there have been longstanding discussions about making ARTP-accredited competency a mandatory requirement, this has not been implemented. As a result, there is significant variation across primary, community, and secondary care in:

- Training standards
- Competency assessment
- Ongoing quality assurance
- Interpretation skills

This inconsistency directly affects the reliability of spirometry and contributes to unwarranted variation in COPD diagnosis and management.

Impact on the Nursing Workforce

Registered nurses, particularly those in primary care and community respiratory services in which they provide long-term condition management are central to COPD diagnosis, including:

- Performing and interpreting spirometry
- Conducting holistic respiratory assessments
- Supporting tobacco addiction treatment and self-management -management

- Identifying comorbidities and wider determinants of health

Any future decisions about screening, case-finding, or diagnostic pathways must consider workforce capacity. As without investment in training, protected time, and clear competency frameworks, the nursing workforce cannot sustainably meet increased diagnostic demand. Whilst at this stage a national screening programme is still not recommended, this issue is crucial to consider for future review of the evidence

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Email: XXXX XXXX

Organisation: Chiesi Ltd

Role: Head of Public Affairs

Publish submitter's name: True

Publish Organisation name: True

Condition: COPD

Chiesi Ltd Consultation Response – UK NSC 2025 COPD Screening Evidence Map

Chiesi Ltd (Chiesi) welcomes the opportunity to respond to the UK National Screening Committee (UK NSC) consultation on the 2025 evidence map for screening for chronic obstructive pulmonary disease (COPD).¹ As a research-oriented international biopharmaceutical group that develops and markets innovative therapeutic solutions in respiratory health, rare diseases, and specialty care, Chiesi's mission is to improve people's quality of life and act responsibly towards both the community and the environment.

Chiesi supports the UK NSC's commitment to evidence-based policy and recognises the importance of rigorous evaluation in determining whether a screening programme should be recommended. However, we believe that the current evidence map is too broad, and by focusing on general adult population screening it does not reflect the UK NSC's expanded remit to consider targeted screening for high-risk groups.^{2,3} Chiesi believes the current framing limits the usefulness of the evidence map and risks missing a significant opportunity to improve outcomes for people living with undiagnosed COPD.⁴

Chiesi's response sets out the case for rescoping the evidence questions to focus on targeted, case finding and rerunning the evidence mapping accordingly. Beyond the financial case, the principle is clear: earlier identification enables earlier intervention, shifting care away from avoidable exacerbations and emergency admissions towards prevention, proactive management and improved outcomes, exactly the direction of travel set by the Government's 10 Year Health Plan and its 'three shifts'.⁵ The response also highlights key developments in the COPD landscape, including new data, policy shifts, and real-world delivery models that support a more targeted approach.

The Need for Earlier COPD Diagnosis

COPD affects an estimated 3 million people in the UK, yet nearly 2 million remain undiagnosed.⁶ Many individuals are only diagnosed when their condition is already advanced, resulting in avoidable hospital admissions and poorer health outcomes. COPD exacerbations are the second most common cause of emergency hospital admissions in England, accounting for 1 in 8 total UK hospital admissions, and respiratory diseases are a major

contributor to winter pressures on the NHS.⁷ Adults with undiagnosed symptomatic COPD are thought to have a 4.3 times greater risk of death from respiratory causes, and a 2 times greater risk of death from any cause, compared to individuals without COPD.⁸

The UK NSC's 2018 evidence summary acknowledged that early detection of COPD can slow disease progression. It noted that many people appear "asymptomatic" in the early stages, that untreated COPD progressively impairs quality of life, and that the purpose of a screening-style approach would be to identify COPD when it is unrecognised and offer interventions that slow deterioration.⁹

The same review cycle also recognised that earlier identification of COPD among the right people can be cost-effective through case-finding.⁹ Stakeholders responding to the 2018 consultation were clear that a "no screening" recommendation should not be read as "no value in earlier diagnosis," particularly for people with symptoms, even if mild. The Royal College of Physicians stated that "the emphasis should be on case finding rather than seeing this as a report that sees no value in earlier diagnosis of COPD in symptomatic people even if the symptoms are mild".¹⁰ The British Thoracic Society similarly noted that "there is supportive evidence for case finding" and that the distinction between general population screening and case finding is important.¹¹ The Global Initiative for Chronic Obstructive Lung Disease (GOLD) also advocates for case finding as a potential strategy for identifying undiagnosed individuals at high risk of COPD to allow earlier identification of the disease.⁸

UK NSC's Expanded Remit and Targeted Screening

Since the 2018 review cycle, the UK NSC's remit has expanded to include targeted screening for high-risk groups and stratified screening tailored to individual risk.³ The UK NSC and the Chief Medical Officers across the UK have set out clear definitions that distinguish targeted screening from population screening, including the principle that above-average risk can be driven by factors such as lifestyle and exposure history. Smoking is explicitly used as an illustrative example of risk beyond age or sex.³

This is already the UK NSC's approach in lung cancer, where smoking is used to define a higher-risk cohort for targeted screening.¹² That same cohort is also inherently at elevated risk of COPD. Smoking is responsible for 80–90% of COPD cases, and 15% of smokers will develop COPD.⁹ The overlap in risk factors between lung cancer and COPD is substantial, and the NHS Lung Cancer Screening Programme is already identifying large numbers of people with suspected COPD through incidental findings of emphysema on low-dose CT scans.^{13,14}

Targeted COPD Screening is Already Happening in Practice

In England, the NHS Lung Cancer Screening Programme is already identifying large numbers of people with suspected COPD through incidental findings on CT scans. In 2025, NHS England reported that from the 1.2 million lung health checks that had been completed to date, 7,000 lung cancer diagnoses had been made, but the same CT scans had found over 100,000 incidental findings of emphysema.¹⁴ While people with lung cancer were put on specific care and treatment pathways, no consistent pathway for diagnosing and treating patients with suspected COPD has been established.¹⁵ This means that for every 1 patient receiving a lung cancer diagnosis and treatment, 13.5 people with emphysema are not getting the same level of care.¹⁴

Furthermore, the NHS Wales Lung Health Check Operational Pilot, which ran in 2023–2024, further highlights the need for a targeted approach.¹⁶ The pilot highlighted that around 2% of people received a lung cancer diagnosis (12 people from 547 scans), but 61% of participants were identified as having emphysema, nearly half of those with moderate or severe emphysema, but were unaware of their condition.¹⁷

These data show that lung cancer screening routinely identifies a much larger group who would benefit from COPD case-finding than those entering cancer pathways.

Based on this data and the potential to improve diagnostic rates, Chiesi has been working with the NHS to develop a model for diagnosis and treatment for this patient cohort.

In Hull, the collaborative FRONTIER programme (a partnership between Hull University Teaching Hospitals NHS Trust and Chiesi) was established in 2024 to close this gap.¹⁸ It links lung cancer screening outcomes directly to a rapid, “one-stop” respiratory diagnostic clinic. Participants who are not diagnosed with lung cancer but are identified as high-risk for COPD based on symptoms and/or imaging findings are invited for symptom assessment and objective measurement of airflow limitation.¹⁸ Where COPD is confirmed, treatment is initiated immediately, and a comprehensive care plan is provided in the clinic.¹⁸

The latest available data from FRONTIER shows that 819 people have been reviewed, of whom 46.8% received a new COPD diagnosis and started treatment through the pathway.¹⁹ Alongside these clinical outcomes, partners have also developed an economic narrative to support decision-makers considering broader adoption of targeted diagnostics. Data presented at the European Respiratory Society (ERS) Congress in 2025 suggest that targeted diagnostics could save the NHS in England an estimated £33 million over 10 years, based on modelling shared alongside FRONTIER outputs.¹⁹

Building on this programme, Chiesi and the Hull team began FRONTIER 2 in December 2025, delivering the same one-stop diagnostic approach but in a Community Diagnostic Centre (CDC) rather than a hospital-based clinic.²⁰ This approach supports the NHS Long Term Plan by bringing healthcare closer to home. FRONTIER 2 is now seeing patients through the CDC clinic and is due to run until January 2027.²⁰

In the Wirral, the COMET programme (a collaborative working project between Chiesi UK & Ireland and Wirral Primary Care Collaborative Limited) is delivering targeted COPD diagnostics and follow-up care in community settings such as GP surgeries.²¹ COMET is providing targeted diagnostics for people at high risk of COPD, including diagnosis using spirometry and follow-up care in the community, offering tailored treatment plans.²¹

Policy Recognition and Parliamentary Evidence

The policy relevance of these programmes has already been recognised. In response to Parliamentary Question UIN 57226, tabled by Bob Blackman MP, the Department of Health and Social Care confirmed that “NHS England is aware of the interesting data originating from Hull, which demonstrates that an appreciable number of people can be identified as having chronic obstructive pulmonary disease through a targeted approach to those who have been through lung cancer screening. This work is informing policy considerations”.²²

NHS Wales Lung Health Check Operational Pilot

In June 2025, the Welsh Cabinet Secretary for Health and Social Care announced that Wales will introduce a national targeted lung cancer screening programme and confirmed that the programme will have standardised protocols for managing incidental findings of other conditions, such as COPD.²³

System-level Change

The NHS is already moving toward targeted case finding. NHS England's COPD commissioning strategies set out a proactive, data-led approach to identify and prioritise high-risk cohorts, including the use of validated search tools. They also link this to expanding diagnostic capacity outside hospital settings, including through Community Diagnostic Centres.²⁴ This is reinforced through the Respiratory Transformation Partnership, a national initiative developed by the Health Innovation Network and NHS England to drive whole-pathway improvement in asthma and COPD.²⁵ A national procurement notice for a new "Respiratory Transformation Partnership" signals a further step change in system ambition and sets out how industry partners can support the introduction of innovation into asthma and COPD pathways at scale.²⁶

These developments underscore that the NHS is building the infrastructure and partnerships needed to support targeted COPD case-finding, and the UK NSC's evidence review should reflect this delivery context.

Limitations of the 2025 Evidence Map's Scope (Appendix 1 and Appendix 2)

Given the above real-world developments, Chiesi expresses concern that the 2025 evidence map, as scoped, does not adequately capture the evidence relevant to a targeted approach. The map is framed narrowly around standalone, population-level screening for COPD in asymptomatic adults.² As described in Appendix 1 of the evidence map, the literature search was designed primarily to identify studies explicitly labelled as "COPD screening" or "COPD case-finding" in asymptomatic, previously undiagnosed populations, limited to English language publications from 2017 onward.² For questions on health outcomes, only randomised or controlled trial designs were included.² The search strategy also relied heavily on screening abstracts, without routinely retrieving full texts for borderline cases. Appendix 2 of the map then reports the findings from only those studies that met these strict inclusion criteria, essentially, screening-focused studies reporting predefined outcomes.²

While this methodology is understandable for a quick "evidence map," it severely limits scope and omits evidence directly relevant to targeted screening programmes. In practice, this means that embedded, pathway-based approaches, in which COPD is detected through multi-condition programmes, would likely be excluded unless the authors explicitly framed their work as a "COPD screening" trial. The evidence map, as currently framed, unfortunately ensures that an embedded, multi-condition pathway such as Hull's FRONTIER would not appear in the map's results because it isn't structured as a classical screening trial and may not report all the outcomes the map was intended to capture.²

Chiesi is concerned that by structuring the evidence review this way, the UK NSC has concluded that "little new evidence exists" when, in fact, there is growing evidence and experience; it simply exists in different places and forms. Some of it appears in academic

journals, but using keywords such as “screening” may not retrieve it. Some of it appears in service evaluations, pilot reports, and conference abstracts, which may fall outside a traditional academic search but are highly relevant to assessing whether a targeted approach could work.

For example, the NHS Wales pilot evaluation (cited above) is not a journal article but contains crucial data.¹⁷ NHS England’s own reporting from the lung health check programme (e.g., how many emphysema findings are being identified) is not a controlled trial but provides vital data.¹⁴ There are also commissioning guidelines and protocols.²⁴ Furthermore, the Taskforce for Lung Health’s “incidental findings” protocol for lung checks, published in 2024, lays out how the system could handle CT scans showing signs of emphysema to prompt earlier COPD action.¹⁵ This kind of literature may not fit neatly into a standard systematic review, but is part of an evidence landscape that should inform policy.

Even within academia, several relevant studies and analyses appear to have been omitted due to the scope:

- A 2019 model by Lambe et al. in Thorax found that systematic COPD case-finding in UK primary care (inviting ever-smokers aged 50+ for screening every 3 years) could be cost-effective, with an estimated cost per QALY of ~£16.6k and a 78% probability of cost-effectiveness at a £20k/QALY threshold.²⁷
- A 2020 BMJ Open paper by Haroon et al. (from the TargetCOPD trial) reported that many patients identified via active case-finding were not subsequently added to disease registers or managed according to guidelines, highlighting implementation challenges that need addressing in any future programme. ²⁸
- As mentioned, there are also recent conference findings (Thorax 2024 abstract) about lung check follow-ups, and editorials discussing the “missing millions” of undiagnosed COPD and how lung screening could help find them. All of these are part of the evolving evidence base for targeted case-finding, but a population-screening-focused map wouldn’t capture them.²⁹

In summary, the 2025 evidence map’s narrow scope essentially asks a somewhat outdated question (“Should we screen all asymptomatic adults for COPD?”) and, unsurprisingly, finds little new evidence to overturn the previous “no” answer. But the evidence map does not address the question that would truly inform COPD outcomes: can the NHS effectively implement a targeted case-finding approach in high-risk groups for COPD, and would it improve outcomes? To answer that, a broader range of evidence and practical experience than the current map provides must be considered.

Recommendation: Re-frame the Evidence Review and Embrace Targeted Case-Finding
Chiesi believes the UK NSC should apply its expanded remit and reframe the review question.³ Rather than waiting another three years to ask the same question again, the UK NSC should now ask: what is the potential value of a targeted case-finding strategy for COPD in high-risk groups, and what evidence would be needed to support its implementation?

- Practically, Chiesi urges the UK NSC to commission (or facilitate) a revised evidence review focused on targeted high-risk case-finding for COPD. This would mean adapting the search strategy and scope to include studies and data on:
- Case-finding in primary care (for example, opportunistic testing of smokers or patients with chronic respiratory symptoms).
- Integrated approaches with other programmes (for example, adding spirometry or COPD screening questionnaires to lung cancer screening, flu clinics, Health Checks, or other health system touchpoints).
- Outcomes beyond mortality/FEV1 that capture benefit in earlier disease, such as symptom improvement, exacerbation reduction, quality of life, and healthcare utilisation (e.g. hospital admissions avoided).
- Harms and cost-effectiveness specific to targeted testing (for instance, rates of false positives, overdiagnosis of mild disease, resource implications on primary care or diagnostic services).
- Real-world implementation evidence, including pilot programmes and evaluations (e.g. results from the NHS England lung health check pilots, the Hull FRONTIER project, the Wirral COMET community case-finding clinic, and the NHS Wales lung check pilot).

Such a re-scoped evidence-gathering exercise should also draw on the literature and clinical guidelines. For example, it should note recommendations from sources such as the Global Initiative for Chronic Obstructive Lung Disease (GOLD), which, in its 2025/2026 report, placed significant emphasis on earlier diagnosis and introduced a COPD case-finding algorithm for the first time.⁸ It should take into account the British Thoracic Society's perspectives, which emphasise that while the evidence does not support general population COPD screening, there is supportive evidence for case-finding, and the distinction should be stated clearly so it is not missed by commissioners and clinicians.¹¹ Chiesi also encourages the UK NSC to engage with ongoing research throughout the period between reviews.

By re-scoping the question, Chiesi believes the UK NSC would align its review with the healthcare community's focus: targeted, risk-based approaches to earlier identification of undiagnosed COPD. This would provide a more decision-relevant evidence base for the Committee and for policymakers. It would also ensure that the next time COPD is reviewed, it does not merely reiterate what we already know (that blanket screening is not warranted) but instead provides a clear analysis of whether a targeted programme could meet screening criteria (or what gaps must be filled to do so).

Conclusion

In conclusion, Chiesi urges the UK NSC to capitalise on its expanded remit and the momentum in the healthcare system. High-risk, targeted case-finding for COPD is already happening in a piecemeal fashion; the UK NSC can add significant value by rigorously evaluating it and guiding its optimal implementation. Chiesi recommends that the UK NSC:

- Re-frame the question to focus on targeted screening/case-finding for COPD in groups at elevated risk (e.g. smokers over a certain age, or those with CT evidence of emphysema).
- Undertake a new evidence mapping or rapid review that includes both traditional studies and real-world evidence on such targeted approaches, as outlined above.
- Develop interim guidance or an updated recommendation that reflects the current evidence. Even if a full recommendation in favour cannot be made yet, the Committee should acknowledge the expanded remit and outline the evidence needed for a future positive recommendation and support the research community to generate that evidence.
- Lead health systems to continue collecting data on this topic and ensure that projects move from pilot phase to full implementation in health systems when proven to work. To support this, an official endorsement of piloting targeted COPD case-finding with proper evaluation would help build the momentum behind the work.
- Work with NHS England and the devolved NHS bodies to establish formal pathways for COPD aligned to lung cancer screening programmes so that they formally gather data on outcomes that can inform any future review.
- Integrate patient and system perspectives in the assessment. Earlier diagnosis of COPD, combined with smoking cessation, pulmonary rehab, and pharmacotherapy, could improve quality of life for patients and reduce health inequalities (since undiagnosed COPD is more common in deprived areas). These aspects should be explicitly weighed alongside the more “academic” screening criteria.

Chiesi remains committed to working collaboratively to improve outcomes in COPD. Chiesi stands ready to share data and lessons from our partnerships (such as FRONTIER and COMET) and will continue to support research and service evaluations that provide the evidence needed. Chiesi believes that by re-thinking the approach to COPD case-finding, the UK NSC can facilitate a step change in how this disease is managed. Beyond the financial case, the principle is clear: earlier identification enables earlier intervention, shifting care away from avoidable exacerbations and emergency admissions towards prevention, proactive management and improved outcomes. In turn, this supports the shift from late crisis management to early intervention and prevention.

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Do you consent to your name being published on the UK NSC website alongside your response?				Yes	
Section and / or page number	Text or issue to which comments relate		Comment <i>Please use a new row for each comment and add extra rows as required.</i>		
P4	Targeted Screening		We agree with the UK NSC position to not introduce screening for COPD in adults. The potential value of targeted screening would depend on whether identifying reduced spirometry results (for example, <80% predicted) leads to meaningful behaviour change, particularly improved smoking cessation rates. In the absence of clear evidence that this results in improved outcomes, the case for targeted screening remains limited. We do not consider that population-wide screening would be an effective or proportionate approach.		
P10 & 11	Cohort Selection		We are concerned that no specific cohorts have been considered within this work. Groups such as people with severe mental illness, neurodivergence, or a learning disability may face additional barriers to accessing smoking cessation support and diagnostic services. They are also less likely to engage with preventative interventions, such as vaccination programmes and targeted lung health checks. In this context, there may be value in considering whether defined high-risk cohorts could benefit from a more tailored or targeted approach. This could help address existing inequalities in access and outcomes, and ensure that those at greatest risk are not inadvertently excluded from potential interventions.		
General	General		We note that observational studies suggest earlier diagnosis and		

		treatment of COPD may be associated with reduced exacerbations, hospitalisations and mortality compared with later diagnosis. While acknowledging the limitations of observational evidence, this supports the potential value of earlier identification in symptomatic individuals. We agree that non-selective population screening is unlikely to be cost-effective, which is consistent with international evidence. However, the Global Initiative for Chronic Obstructive Lung Disease (2026) recommendation for case-finding in higher-risk patients is a pragmatic approach that warrants consideration. In relation to previous concerns raised by the UK NSC, we note that there is an established diagnostic pathway for COPD based on characteristic symptoms and confirmatory spirometry, as reflected in National Institute for Health and Care Excellence guidance. The impact of case-finding on smoking cessation remains mixed, but there is emerging evidence that structured interventions in early disease may lead to improved outcomes. There is therefore a reasonable evidence base to support targeted case-finding in higher-risk, symptomatic populations. These individuals may be identifiable through validated questionnaires, which could be incorporated into existing primary care interactions, such as NHS Health Checks or routine reviews for cardiovascular disease, given the high level of co-morbidity. Further research is needed to assess the cost-effectiveness and feasibility of such targeted approaches within the NHS.
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Is your submission an official response on behalf of your organisation?	YES

Introduction

Asthma + Lung UK supports the UK National Screening Committee's (NSC) commitment to evidence-based recommendations and notes its recommendation that screening for Chronic obstructive pulmonary disease (COPD) in the general adult population should not be introduced at this time due to insufficient evidence. However instead of deferring action for three years, we recommend that the NSC examine the potentials of targeted approaches, an area not sufficiently addressed in the 2025 evidence map.

The UK NSC has already distinguished population screening from targeted screening in its own remit and evidence processes¹, defining targeted screening as a nationally delivered proactive programme for people at elevated risk (for example, people with a smoking history at higher risk of lung cancer, or relatives of people with familial hypercholesterolaemia). We are therefore asking the Committee to apply this same framework to COPD: maintain the current position on general adult screening but actively consider a targeted approach to identify COPD in clearly defined high-risk groups reached through existing programmes such as the Lung Cancer Screening (LCS) programme and Community Diagnostic Centres, integrating these into the adult breathlessness pathway.

Unlike population screening, a targeted approach to diagnosis prioritises those individuals who are high-risk, such as current or former smokers, people with symptoms of breathlessness, cough and/or sputum production, as well as those with evidence of lung damage on CT scan. This approach is particularly relevant for the LCS programme, where individuals who are high risk for lung cancer are also high risk for COPD, there is a significant opportunity to diagnose high-risk individuals much earlier, and to reduce the frequency at which they are diagnosed within emergency care settings when their condition is advanced. This would ensure they receive optimal treatment sooner, including smoking cessation support. Emerging evidence from pilot schemes and local initiatives in the UK already demonstrates that integrated, targeted approaches are both feasible and effective.

COPD remains one of the UK's largest causes of preventable ill health, with around 1.7 million people affected and 600,000 undiagnosed.² COPD exacerbations are a leading cause of emergency hospital admissions and a major driver of winter pressures and elective care disruption. Our 2023 report found that nearly one in four people waited five years or more for COPD diagnosis and one in eight waited ten years or more.³ Delays of this scale further increase costs to the NHS and worsen health outcomes, particularly in deprived communities where COPD prevalence is highest.

It should also be remembered that COPD mortality sees the biggest gap between the richest and poorest communities of all conditions, with the most deprived communities 4.7x more likely to die of COPD.⁴ In suggesting that the NSC focus specifically on targeted approaches, it is these most vulnerable communities who are the most likely to benefit.

To ensure early and accurate diagnosis and optimal treatment, we recommend that the NSC:

- Distinguish clearly between population screening and targeted approaches in high-risk groups
- Actively promote and evaluate COPD case-finding within existing programmes (especially the LCS programme and Community Diagnostic Centres, integrating these with the adult breathlessness pathway) rather than deferring action for three years
- Explicitly incorporate smoking cessation, equity and service capacity into future assessments of COPD-related screening and case-finding

The case for timely COPD diagnosis

Around 1.7 million people in the UK are estimated to have COPD, with 600,000 remaining undiagnosed. A majority of individuals are only diagnosed with COPD after substantial periods of symptomatic breathlessness, episodes of bronchitis, and reduced physical activity (with attendant contribution to multimorbidities like cardiovascular disease, diabetes, hypertension, and osteoporosis, as well as anxiety and depression). Diagnosis when COPD is already advanced, results in worse quality of life, higher rates of exacerbations, increased comorbidities and greater costs.⁵ For example, late diagnosis results in a 15.7% increase in direct costs per patient over the two years following their diagnosis.⁶

Higher exacerbation rates mean COPD flare-ups are among the most common cause of emergency hospital admission.⁷ The latest data estimates that emergency admissions for COPD rose by 9%⁸ accounting for 1 in 8 hospital admissions⁹, outpacing other respiratory disease admissions and making COPD a major contributor to winter pressures. Even a single moderate COPD exacerbation increases the risk of both the number and severity of future events, and the risk of COPD-related and cardiovascular-related mortality.¹⁰

Failure to identify COPD in symptomatic individuals means that they are not accessing well-established, evidence-based, high-value interventions that have been shown to improve breathlessness, exercise capacity and quality of life, while also reducing the risk of acute exacerbations and hospitalisation. These include NICE's Five Fundamentals of COPD (smoking cessation, vaccination, pulmonary rehabilitation written self-management plans, and managing multimorbidity) as well as inhaled bronchodilator and anti-inflammatory therapies.

Asthma + Lung UK estimated that the annual economic cost of COPD in the UK was £9 billion in 2019 costs. Costs to the NHS accounted for £4.5 billion, lost productivity around £2 billion and quality of life around £2.6 billion.¹¹

These costs, compounded by delayed diagnosis and unequal access to testing - which drives under-diagnosis, particularly in deprived communities where COPD is prevalent - means earlier, targeted identification in high-risk groups has substantial potential to increase cost-effectiveness, improve health outcomes and reduce avoidable admissions to ease future NHS demand.

What a credible model could look like

We agree with the NSC that any COPD case-finding or screening programme must be underpinned by accurate testing and evidence-based pathways. The necessary diagnosis process combines/collates risk factors, symptoms, spirometry and results from imaging. Evidence from recent UK initiatives demonstrates what can work in practice.

A key aspect of any credible model is ensuring accurate testing for timely diagnosis. Quality-assured spirometry remains an essential tool for COPD diagnosis as set out in NICE guideline NG115.¹² The NHS has developed the spirometry commissioning standard¹³ setting out best practice to deliver equitable access and 40 out of 41 Integrated Care Boards have now commissioned spirometry in primary care. However, this is not guaranteed to continue due to a lack of a stable funding mechanism undermining timely and accurate diagnosis for many high-risk individuals, especially smokers and those in deprived areas.

Additionally, evidence shows testing alone is not enough for diagnosing and treating COPD. Accurate testing must be embedded in a robust, evidence-based pathway that ensures timely diagnosis, optimisation of treatment, pulmonary rehabilitation and smoking cessation support.

Integrated pathways have shown success at the local level through initiatives like the FRONTIER Hull project which utilises its local LCS programme by linking incidental emphysema findings to rapid respiratory assessment and treatment.¹⁴ Patients identified as being high-risk for COPD were invited for assessment including spirometry, and where COPD was confirmed, treatment was started immediately in the clinic along with a comprehensive care plan. The one-stop clinic has reviewed 819 patients of whom 383 (47%) received a COPD diagnosis and treatment through the pathway.¹⁵ The project's second stage delivers the same one-stop diagnostic approach in a Community Diagnostic Centre rather than hospital-based clinic.

Similarly, the COMET Wirral programme focuses on providing timely COPD diagnosis and treatment to patients identified through the LCS programme in Wirral. Instead of hospital clinics, the services are provided in community settings such as GP surgeries, to test different implementation models. The programme is expected to see over 2,500 patients, with further evaluation to come.

The need for robust, integrated pathways provided by the local initiatives has been acknowledged by the government. The first Men's Health Strategy for England recognises respiratory diseases as a key health challenge, especially for men from deprived communities, former industrial workers and smokers.¹⁶ The strategy calls for better management of respiratory conditions and targeted case-finding and robust pathways in diagnosis and treatment for high-risk groups and is funding case-finding initiatives in former coalfield areas.

Beyond these local initiatives and national developments, international guidelines such as the GOLD 2026 guide¹⁷ recommending targeted case-finding and emerging research on early COPD diagnosis highlight the importance of identifying high-risk and early-stage disease, both to optimise existing interventions and to prepare for future disease-modifying treatments. This strengthens the strategic case for the UK to develop and evaluate targeted case-finding models now, so that infrastructure is in place as new therapies become available.

Inclusion of COPD case-finding in the Lung Cancer Screening Programme

The LCS programme offers a unique opportunity to implement and evaluate targeted COPD case-finding. The overlap in risk factors between lung cancer and COPD is substantial; evi-

dence suggests that incidental findings such as COPD, pulmonary fibrosis and bronchiectasis are likely to be more frequent than lung cancer diagnoses within the LCS target population.¹⁸

The LCS programme, which includes people who have, or are at risk of developing, respiratory conditions, has already completed around 1.3 million lung checks across England, diagnosing and treating 7,500 people with lung cancer.¹⁹ The programme has also identified a large number of previously undiagnosed people with COPD; however, without structured pathways many of these individuals have not been provided timely diagnosis and treatment.³ Spirometry was included as a mandatory test in the original protocol but was suspended during the pandemic and it has not been routinely restored despite current guidance stating it can be delivered safely.

Expert consensus from clinicians, academics and patient organisations states that for the LCS programme to be fully effective as a genuine ‘lung health check’, the programme should fully integrate structured approaches to COPD, pulmonary fibrosis and bronchiectasis, alongside lung cancer. Early modelling suggests that integrating targeted COPD case-finding into lung checks could save around £33 million over the next decade through reduced admissions and more efficient care.²⁰

While it remains up to local areas to develop pathways for incidental findings, evidence from Wales - where the national LCS programme has incorporated a standardised incidental findings protocol²¹ - suggest that integrated models are both feasible and scalable.

The current situation where an individual attending LCS with risk factors for COPD (smoking history), identified symptoms (breathlessness), and CT evidence of lung damage, nevertheless has no systematic approach to spirometry to confirm / refute the presence of COPD is bizarre.

We therefore recommend that the NSC:

- Explicitly recognise the LCS programme as a platform for targeted COPD case-finding, distinct from population screening
- Encourage commissioners to pilot and evaluate pathways that link high-risk LCS participants to quality-assured spirometry and COPD care
- Ensure that future evidence reviews make explicit use of data generated from these pilots, including outcomes, harms, equity impacts and cost-effectiveness

Smoking cessation

Any consideration of COPD case-finding must be linked to smoking cessation services. Given that a considerable proportion of current smokers - almost third of smokers in England - are eligible to participate in the LCS programme, making it a crucial opportunity to support quitting. The age and profile of those attending lung health checks means that a negative or fragmented experience of cessation support could reduce their likelihood of making further quit attempts.

Evidence from randomised controlled trials demonstrates that integrating immediate on-site tobacco-dependence treatment within the LCS programme increases smoking cessation attempts²² and is cost-saving.²³ On-site service should include not only Very Brief Advice (VBA) to quit, but rapid access to pharmacological support and behavioural support delivered by tobacco dependency specialists, with an integrated seamless referral into local stop smoking services for ongoing support. LCS pilots have demonstrated the feasibility and benefit of this approach and mandating best practice would strengthen the protocol.

However, stop smoking services across the country have seen significant cuts and with capacity varies widely; in some pilot areas, referrals generated by the programme have overwhelmed existing services. Therefore, we encourage the NSC to highlight the need for sustainable funding for smoking cessation linked to the LCS programme and COPD case-finding, including alignment with proposals for a smokefree 2030 “polluter pays” levy on tobacco industry profits.

Recommendations

In summary, Asthma + Lung UK asks the UK NSC to:

- Maintain the current position that population-wide COPD screening in the general adult population should not be introduced at this time, while explicitly distinguishing this from targeted approaches in symptomatic and other high-risk groups
- **Support the development and evaluation of targeted COPD case-finding** within existing high-risk programmes (LCS and Community Diagnostic Centres, integrating these with the adult breathlessness pathway), including structured pilots that link high-risk individuals to quality-assured spirometry, diagnosis and treatment, with robust evaluation of outcomes, harms, equity and costs
- Ensure future evidence reviews of COPD-related screening and case-finding explicitly centre smoking cessation impacts, health inequalities and diagnostic and workforce capacity as part of the harm-benefit balance

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Is your submission an official response on behalf of your organisation?	YES

Introduction to the Taskforce for Lung Health

The Taskforce for Lung Health is a collaboration of the largest-ever group of organisations and individuals working together to improve lung health in England. The Taskforce has over 50 members including patients, carers, healthcare professionals, the voluntary sector, and professional associations. An Industries Forum, which works alongside the Taskforce, includes representatives from the pharmaceutical, diagnostics, devices, and digital industries.

The Taskforce's response

The Taskforce for Lung Health notes that the UK National Screening Committee's (NSC) 2025 evidence review found that population screening for Chronic Obstructive Pulmonary Disease (COPD) should not be introduced at this time due to insufficient evidence. However, we disagree with the NSC's finding that action should be deferred for three years. We believe that the evidence review was too broad in its approach focusing on general population screening rather than examining the potential value of targeted screening in high-risk groups, the latter of which was added into the NSC's remit in 2022. We recommend that the NSC conduct a new evidence review specifically examining the potential and feasibility of a targeted screening programme.

The UK NSC has already distinguished population screening from targeted screening in its own remit and evidence processes¹, defining targeted screening as a nationally delivered proactive programme for people at elevated risk. We are therefore asking the NSC to apply this same framework to COPD and actively consider targeted COPD screening in clearly defined high-risk groups.

Applying a targeted approach to COPD screening would provide a significant opportunity to identify undiagnosed individuals earlier, and to reduce the rate of exacerbations and COPD-related hospitalisations.² This would ensure individuals receive optimal treatment sooner and move the NHS away from a crisis management model towards a proactive, preventative one.

The Taskforce's recommendation

The Taskforce asks the UK National Screening Committee to commission a new evidence review to consider a targeted screening approach for COPD. The NSC should conduct new

evidence mapping specifically examining the feasibility and effectiveness of targeted screening in clearly defined high-risk groups.

A proven targeted screening programme model: the Lung Cancer Screening programme

The NSC has already implemented targeted screening programmes in England that have proven highly effective. The Lung Cancer Screening (LCS) programme, previously called the 'Targeted Lung Health Check' Programme, identifies lung cancer early in high-risk groups by targeting current or former smokers aged between 55 and 74. As of April 2025, the programme had completed around 1.3 million lung health checks across England, diagnosing and treating 7,500 people with lung cancer.³ Over 75% of those diagnosed were identified at stage 1 or 2⁴, demonstrating that targeted screening on people at a higher risk of developing lung cancer not only finds the disease but finds it at a stage where treatment can be more effective.

Targeted screening programmes are already supporting identification of COPD

Recent UK initiatives have leveraged the LCS programme's ability to find emphysema to support COPD screening. Trusts in England have begun accessing their regional LCS data on radiological findings of emphysema from CT scans and MRC scoring to identify high-risk individuals, utilising the LCS's incidental findings protocol's 'alternative' pathway guidance⁵ to offer diagnosis and treatment.

The FRONTIER Hull project links incidental emphysema findings from its local LCS programme directly to rapid respiratory assessment and treatment.⁶ Patients identified as being high-risk for COPD were invited for assessment including spirometry, and where COPD was confirmed, treatment was started immediately in the clinic along with a comprehensive care plan. The one-stop clinic has reviewed 819 patients of whom 383 (47%) received a COPD diagnosis and treatment through the pathway.⁷

Similarly, the COMET Wirral programme focuses on providing timely COPD diagnosis and treatment to patients identified through the LCS programme in Wirral.⁸ Instead of hospital clinics, the services are provided in community settings such as GP surgeries, to test different implementation models. The programme is expected to see over 2500 patients within 18 months, with further evaluation to come.

Health economic modelling suggests implementing targeted COPD testing in the LCS programme could save the NHS an estimated £33 million over the next decade.⁹

The costs of delayed diagnosis

Around 1.7 million people in the UK are estimated to have COPD, with 600,000 remaining undiagnosed.¹⁰ Many individuals are only diagnosed when their disease is advanced, resulting in worse quality of life, higher rates of exacerbations, increased co-morbidities and greater costs.¹¹

Even people with mild COPD experience a measurable disease burden by adapting their lives to accommodate their condition by reducing activity, avoiding exertion and accepting breathlessness as an inevitable part of ageing rather than recognising it as a treatable condition.¹² This gradual withdrawal from physical activity is not without consequence: reduced exercise capacity increases the risk of co-morbidities such as cardiovascular disease and depression, compounding the burden of the disease.

Timely diagnosis is essential to ensure individuals can access treatments that reduce exacerbations, slow disease progression and prevent hospitalisation. Individuals with symptomatic undiagnosed COPD face a 4.3 times greater risk of death from respiratory causes and twice the risk of death from any cause compared with individuals without COPD.¹³ Emerging evidence increasingly supports early pharmacological intervention alongside pulmonary rehabilitation, vaccination and smoking cessation support¹⁴ to reduce exacerbations and improve outcomes, all of which are recognised in NICE guideline NG115.¹⁵

The consequences of this delayed intervention are significant. COPD flare-ups are among the most common causes of emergency hospital admission¹⁶, accounting for 1 in 8 hospital admissions¹⁷ and making COPD a major contributor to winter pressures. Even a single moderate COPD exacerbation increases the risk of both the number and severity of future events, and the risk of COPD-related and cardiovascular-related mortality.¹⁸

The Taskforce and Asthma + Lung UK estimated that the annual economic cost of COPD in the UK was £9 billion in 2019 costs. Costs to the NHS accounted for £4.5 billion; lost productivity around £2 billion; and quality of life around £2.6 billion.¹⁹

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UK National Screening Committee

Screening for COPD in adults evidence map consultation comments pro-forma

Name:	Joyce Pang	Email address:	XXXX XXXX
Organisation (if appropriate):	Association of Respiratory Nurses		
Role:	COPD lead for respiratory diseases subcommittee for ARNS		
Do you consent to your name being published on the UK NSC website alongside your response?		Yes	
Section and / or page number	Text or issue to which comments relate	Comment	
		<i>Please use a new row for each comment and add extra rows as required.</i>	
General	N/A	ARNS acknowledges that the date of publication is 2018; however, it would like to offer the following comments.	
Page 5 + 6	Plain English Summary + Executive summary	Need to update summary based on newer guidelines – NICE 2019, GOLD 2026	
Page 7	Findings and gaps in the evidence of this review: “there is a lack of evidence for the effectiveness of pharmacological treatment in asymptomatic adults or adults with mild disease”	Consider measure of: time to first moderate/severe exacerbation.	
Page 10	Background	There is still a challenge in using spirometry as a screening test as “obstruction” does not always equate to a COPD diagnosis. There are additional causes for obstructive spirometry. A diagnosis of COPD cannot be based on spirometry alone. A combination of thorough history taking, review of symptoms and additional investigations are required to rule out differential diagnoses (which is additional cost and time).	

Page 10	Background	Need to acknowledge possible false negative results using a fixed ratio FEV1/FVC 0.7 in the younger population (as well as false positive results in the older population).
Page 18	Question level synthesis	Likely out of scope for this document, however there may be future diagnostic technologies to improve the efficiency and accuracy of a COPD diagnosis.
General	N/A	Targeted lung cancer screening checks – incidental emphysema findings. All patients with mild/moderate/severe emphysema as an incidental finding, could be offered spirometry as part of the screening process to assist in early and accurate diagnosis.
General	N/A	Regarding studies/evidence included for analysis, consider the issue of access to spirometry/diagnostics in the UK as a whole. Access to spirometry remains variable. In areas with poor access, there may be an increase in health inequalities and underrepresentation of minority groups who may not be included in study data.
General	N/A	Patients who have a moderate or severe exacerbation of COPD have a higher risk of future cardiovascular events e.g. MI. Early diagnosis (therefore early interventions/treatment to prevent exacerbations) can reduce mortality risk.

Please return your completed form to the UK NSC Inbox UKNSC@dhsc.gov.uk by 11.59pm GMT on 7 April 2026.

Name: Peymane Adab and Rachel Jordan

Email: XXXX XXXX

Organisation: XXXX XXXX

Role: Professor of Chronic Disease and Public Health, and Professor of Epidemiology and Primary Care

Publish submitter's name: True

Publish Organisation name: False

Condition: COPD

This response relates to Q1 of the evidence map. We would like to highlight a relevant programme of work that has not been referred to within this review. In addition, we want to comment on where we believe the key uncertainties remain and research is needed, to inform future decisions for the National Screening Committee.

NIHR Programme grant: Case-finding and improving patient outcomes for chronic obstructive pulmonary disease in primary care: the BLISS research programme including cluster RCT

The search for primary studies did not identify a key trial (Target-COPD) conducted by our team, funded by the NIHR, reported in several papers and in the NIHR Journals Library (<https://www.journalslibrary.nihr.ac.uk/pgfar/PGFAR09130#s2>). This cluster RCT first evaluated the effectiveness of screening for undiagnosed COPD in primary care on yield. We also conducted a trial within the trial to compare two approaches to screening: opportunistic (questionnaires administered as patients consulted their GP for any reason) vs active (mailed questionnaires additional to opportunistic) screening. Secondly, we examined the impact of screening on mortality and hospitalizations around 4-5 years after screening.

The Target-COPD trial included 74,818 ever smokers aged 40-79 years with no previous history of COPD, from 54 English general practices. Practices were randomly assigned to targeted case-finding or routine care. Those in the targeted arm were screened for COPD using a respiratory questionnaire, followed by diagnostic post-bronchodilator spirometry for anyone who reported relevant respiratory symptoms. GPs were advised to follow NICE guidelines for newly diagnosed COPD patients. Follow-up data on mortality and hospitalisations were obtained from NHS Digital for all eligible patients, and screen-detected COPD patients were invited to complete a health questionnaire which included a health-related quality of life measure.

We found that yield (ie identification of new cases) was significantly higher among practices where targeted screening took place (adjusted odds ratio 7.45, 95% confidence interval 4.80 to 11.55) and active case-finding was more clinically effective (adjusted odds ratio 2.34, 95% confidence interval 2.06 to 2.66) and more cost-effective than the opportunistic-only approach (£333 vs. £376 per case detected, respectively).¹

We also found that the majority of screen-detected COPD cases had the potential to benefit from guideline recommended treatments¹. Using the trial data, we built a Markov decision-analytic model to compare the cost-effectiveness of a 3-yearly COPD screening programme aimed at people aged > 50 years and who have ever smoked, with current practice, taking a health service perspective. Our model predicted that the incremental cost-effectiveness ratio of such a programme compared with routine care was £16,596 per additional quality-adjusted life-year gained (high probability of being cost-effective using the UK willingness-to-pay thresholds).² We modelled that screening would remain

cost-effective as long as treatment was initiated in at least 8% of previously untreated patients annually. However, when we evaluated longer term (average 4.3 years) follow-up within the trial population, we found no significant difference in terms of hospitalisations (respiratory: adjusted hazard ratio (HR) 1.04, 95% CI 0.73 to 1.47; and all-cause: adjusted HR 1.01, 95% CI 0.98 to 1.04) or mortality (adjusted HR 1.08, 95% CI 0.96 to 1.20) between those who were in the screening arm compared with those in the routine care arm of the trial.

A likely explanation of the findings for the longer-term follow up was the poor clinical management of people with COPD in primary care. We found that one year after screening, only one-fifth of case-found patients had been added to their practice COPD register. Patients who had been added to the register were significantly more likely to receive appropriate guideline recommended care. However, even among those on the register, referrals for eligible patients to pulmonary rehabilitation or smoking cessation, were very low.³

Further interpretation of primary studies identified by the NSC Evidence Map

The CAPTURE cluster RCT conducted in the US by Martinez et al, reported findings similar to those of our Target-COPD trial in terms of poor clinical management of people with COPD identified through screening. This contributed to their finding of lack of difference between the two trial arms. On the other hand, we believe that the trial by Aaron et al requires further attention and is a landmark trial. Rather than evaluating the effectiveness for COPD, this trial compared the effectiveness of high quality clinical management, versus routine care, among people with screen-detected COPD. This trial demonstrates that if the clinical care pathways are put in place, people with COPD identified through screening, do have better clinical outcomes, compared to those who do not receive guideline recommended care. Whilst not all the differences between arms were statistically significant, their pre-specified primary outcome was significant, and for most other outcomes, the direction of effect favoured the intervention. The following were the key results: The annualized rate of participant-initiated health care utilization for respiratory illness (primary outcome) was lower in the intervention group than in the usual-care group (0.53 vs. 1.12 events per person-year; incidence rate ratio, 0.48; 95% confidence interval [CI], 0.36 to 0.63; $P < 0.001$). The rate of hospitalization had an incidence rate ratio, 0.71; (95% CI, 0.17 to 2.99). The rate of emergency department visits incidence rate ratio, 0.92; (95% CI, 0.46 to 1.87). The rate of primary care visits for respiratory illness incidence rate ratio, 0.39; (95% CI, 0.29 to 0.53). The rate of specialist visits incidence rate ratio, 0.89; (95% CI, 0.45 to 1.76). Similarly, the disease-specific quality of life and the FEV1 results were statistically significant, in favour of intervention.

Implications for future research to inform decisions on screening

It is highly unlikely that an adequately powered trial of screening for COPD, with long term health outcomes (exacerbations, hospitalisations, mortality) would be funded. Our own trial required a sample size of 75,000 with new cases as a primary outcome; a trial with clinical outcomes would require a longer follow-up and a magnitude greater sample size. However we believe that the studies that have been conducted to date provide essential parts of the puzzle to help with decisions around COPD screening. Several screening tests have been evaluated, and there are systematic reviews of their diagnostic accuracy. The Target-COPD trial has demonstrated that a systematic active approach to screening can identify clinically relevant, previously undiagnosed cases of COPD. Our

health economic model provided theoretical evidence that screening for COPD is likely to be cost-effective in terms of clinical outcomes, and the trial by Aaron et al demonstrates that guideline-informed clinical care does lead to improved health outcomes for people with COPD identified through screening.

We agree that further systematic reviews are not likely to help with Q1 posed by the NSC. However, we believe that further primary studies should seek to replicate the findings from Aaron et al., perhaps in primary care settings. The remaining uncertainty within screening is around how best to implement guideline based care for people with COPD, so that screening can lead to better health outcomes.

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