Royal College of Physicians

National Respiratory Audit Programme (NRAP)

Patient and public report

Catching our breath: Time for change in respiratory care

Published 2025

Contents

Quick links

- National Respiratory Audit Programme (NRAP)
- NRAP online benchmarking table and runcharts (publicly accessible data and reports)
- Asthma + Lung UK
- Royal College of Paediatrics and Child Health Asthma & Me ambassadors

I hope this report from NRAP will help drive change in respiratory care across England and Wales so patients can expect the best treatment at the right time no matter where they live.'

– Alice, patient

I really appreciate how lung patients are now given the chance to share experiences. Years ago, this was not possible. The people living these conditions are as much of an expert as the medical professionals.'

– Sue, patient

The best healthcare comes with mutual respect and understanding on all sides.'

– Melissa, patient

Introduction

What is NRAP?

The National Respiratory Audit Programme (NRAP) aims to improve the quality of care, services, and clinical outcomes for people with respiratory conditions (including asthma and chronic obstructive pulmonary disease [COPD]). We do this by collecting data on hospital admissions and pulmonary rehabilitation (PR) courses, which are used both to inform and improve care and to produce reports with national recommendations. We also support clinicians and service providers to improve the quality of care they provide.

Our annual report

Catching our breath: Time for change in respiratory care is the NRAP's annual report summarising the care received by people with asthma and COPD across England and Wales. In it, we review the data to make four recommendations to improve the quality of care for people with respiratory conditions.

This report provides insights into the current state of respiratory care across England and Wales. All data collected via our webtool are analysed and have been used to understand the quality of care provided for people with asthma, COPD and those assessed for PR. These data were collected between 1 April 2023 – 31 March 2024.

Purpose of this report

This patient and public report is an accessible version of our full annual report and has been produced in collaboration with the NRAP adult patient panel (coordinated by Asthma+Lung UK [A+LUK]) for members of the public and people with lived experience of respiratory conditions and their carers.

View the full annual report.

‘Everyone with respiratory conditions deserves access to the highest quality of care, whenever and wherever it is needed. However, NHS services in England and Wales are currently facing significant challenges in meeting this need, and in many instances, the standards of care must be greatly improved. This report identifies key areas that require attention and offers ways for services to do this. *Catching our breath: Time for change in respiratory care* aims to raise awareness of these issues and engage both patients and the public in efforts to improve respiratory care.’

– Tom Wilkinson, NRAP senior clinical lead

Key purposes of clinical audits

- **To track change:** This involves continuous data collection that feeds into annual reports where we track progress against the expected standards of care.
- **To explore variation:** We evaluate where performance differs in parts of the health system, this includes services (hospitals), trusts, health boards and regions.
- **To support healthcare improvement:** We produce guidance and support services to improve aspects of care that are measured by the audit.

Improving availability and quality of data

NRAP needs good information to understand what care people with lung conditions are receiving. If we don't have good enough information, it's harder for services to know what's working and what needs to change. In England, medical professionals don't always have access to primary care (GP's) data about people with lung conditions. This means that they might miss important signs that someone needs better care. It's vital that data are collected for all questions in our datasets, for all patients who are eligible. These data are then analysed to create reports and recommendations that help us understand and improve the quality of care.

This graph shows the percentages of people with asthma and COPD who have a record of whether or not they smoke in their notes. It is important that healthcare professionals know whether a patient smokes as stopping smoking will be the best thing they can do to improve their lung health.

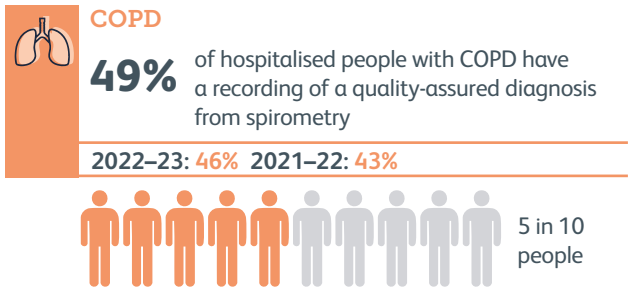
Smoking information is not well captured for children and young people (CYP) with asthma and that may lead to missed opportunities to support CYP to deal with nicotine addiction.

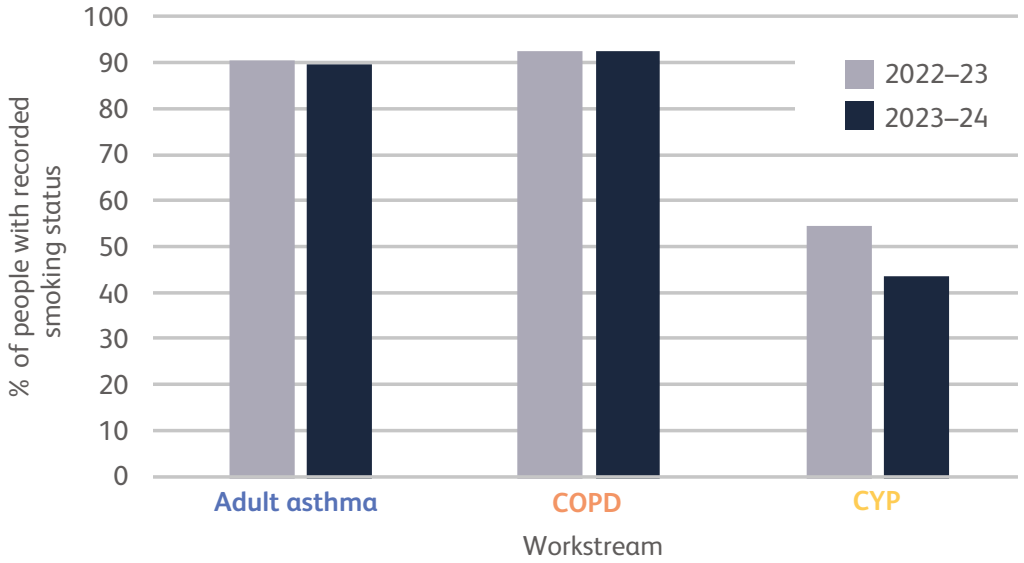
'Better data is the first step to better care, but only if we use it to drive real change through quality improvement. Incomplete data mean we miss opportunities to detect issues early, tailor treatments for patients and improve outcomes. By collecting comprehensive data and acting on what it tells us, we can identify what's working, what isn't and drive improvements in respiratory care.'

– Katherine Hickman, NRAP primary care clinical lead

What do the data show?

Our data show that less than half of hospitalised people with COPD have had a quality-assured spirometry test for diagnosis. Without data from primary care, we don't know if this important test is being done. This has improved compared to previous years, but there is still progress to be made.



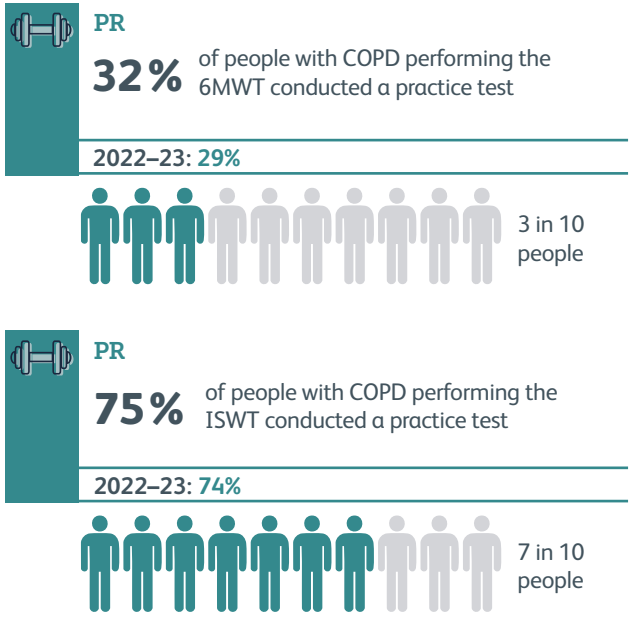


Pulmonary rehabilitation: practice walk tests

Exercise tests are essential to help healthcare professionals understand how well someone's lungs are working. One of these is a walk test, which helps to measure how well people with COPD can move around without getting out of breath. This is done at the beginning and end of a course of pulmonary rehabilitation (PR) and should be used to tailor the exercises the patient goes on to do during the course. Walk tests are a key measure taken during PR. They help to determine how limited activity is for someone with a lung condition. Performing a practice of this test first is vital to ensure that the real test is completed properly.

What do the data show?

Our data show that only 32% of people with COPD had a practice 6-minute walking test (6MWT), while 75% who completed an incremental shuttle walk test (ISWT) did a practice test first. This shows that healthcare teams aren't always following the right steps and could indicate that people are not receiving care tailored to their needs.



"An important part of the PR programme is the exercise programme; this must be individually tailored to each patient. To do this we ask people to complete an exercise test (usually walking based). Most people will walk further when the test is repeated, and therefore it is crucial that two tests are conducted at the beginning to understand an individual's unique exercise capacity. If we get this right, it is likely that participation in the programme will have a better outcome.'

– Sally Singh, NRAP pulmonary rehabilitation clinical lead

What are we recommending?

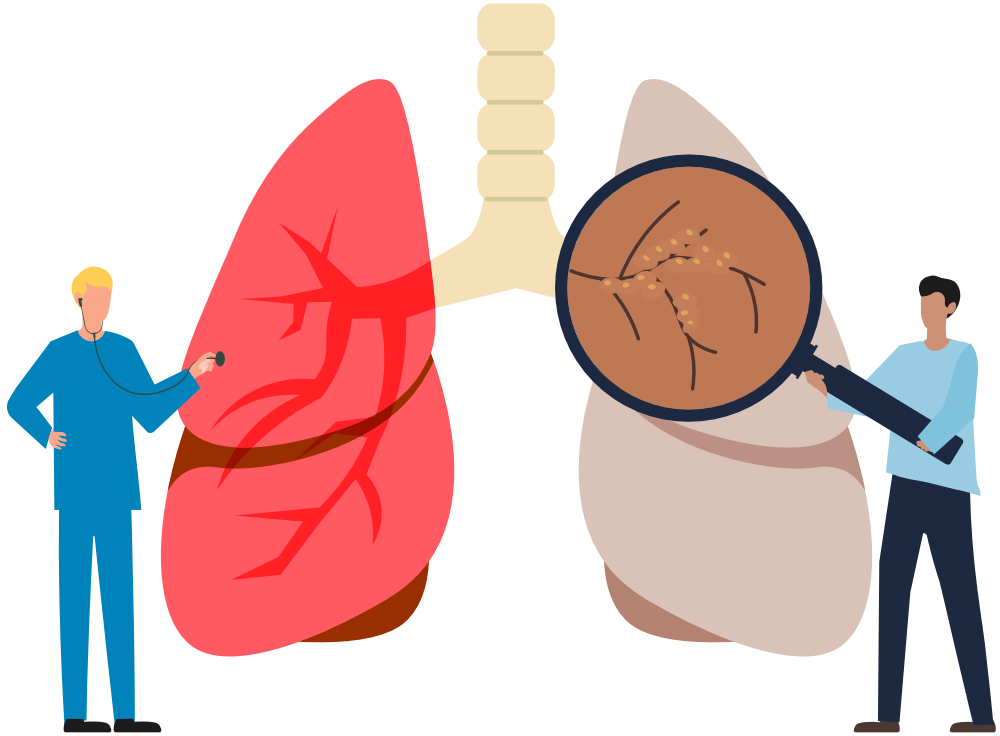
1. All patients with lung conditions (asthma and COPD) should be entered into the audit: Integrated care boards and local health boards should mandate for all eligible services to participate in NRAP, to achieve 100% service participation and a minimum of 50% case ascertainment by all services in NRAP audits by May 2026. This will require all hospitals to have named NRAP clinical leadership and dedicated audit support.

Having this recommendation in place would ensure that we are able to measure data from as many eligible patients as possible to make the appropriate, informed, recommendations.

Why do improvements in care matter?

It's understandable that inputting data will be pushed down the priority list when you are constantly stretched for time. But, as patients, we rely on this audit process to help make sure our conditions are managed consistently.'

– Heather, patient



Useful resources for patients

> NHS: What are clinical audits?

Getting the best treatment quickly

In order for people with asthma and COPD to get better, it is important that they receive the right treatment as soon as possible. Quick treatment can save lives and help people feel better faster. Our data have found that medical professionals do not always check important signs or give the right medicine in time.

The first hours of care

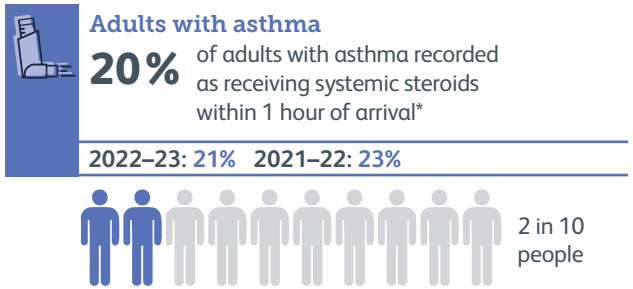
Asthma

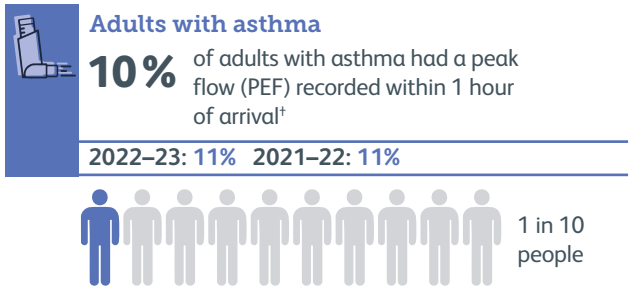
For adults with a flare-up of asthma, this includes both receiving systemic steroids and having a peak flow (PEF) measure (to see how well they can breathe) taken within 1 hour of arrival at hospital.

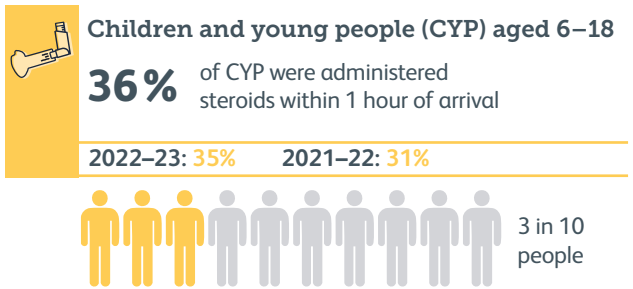
However, only 10% of adults had their PEF checked within the hour of arrival, down from 19% before the COVID pandemic, which means fewer people are now getting this test.

Children and young people (CYP) with asthma are also not getting the right medicine fast enough. Only 36% received steroids within 1 hour of arrival at hospital. There is evidence that these medicines and tests help people breathe better and recover faster, so it is important that people receive them when in hospital.

What do the data show?



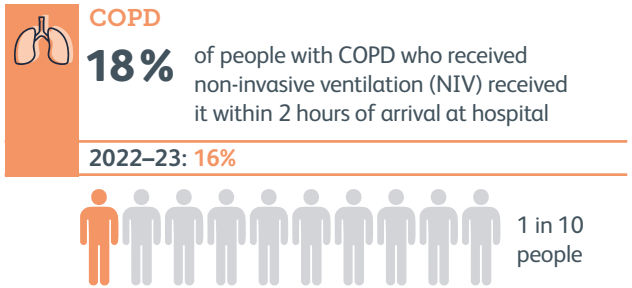




By looking at the year-on-year data, we can see that performance has gradually decreased or remained at a similar percentage. This means that the percentage of people getting the right care at the right time has fallen.

COPD

Non-invasive ventilation (NIV) can be a life-saving treatment for selected people with COPD, but NRAP data shows that only 18% of people got this treatment. Evidence shows that, when needed, NIV can shorten the length of hospital stays in people with an exacerbation of COPD complicated by lung failure, known as acute hypercapnic respiratory failure (AHRF).



This data point has only very slightly improved since last year. It is important that people with COPD receive this life-saving treatment if they need it.

* excludes patients who had received steroids in 24 hrs prior to admission
† excludes patients unable to do PEF

Pulmonary rehabilitation: timely access to treatment

It is important that people who have COPD are referred to and start PR as soon as possible to help them get better. Guidance tells us that people with stable COPD should start PR within 90 days of referral.

What do the data show?

Our data show that only 40% of people with stable COPD start PR within 90 days, which is an improvement on last year (32%) but still not enough. On average, people wait 107 days before starting PR.

PR

40% of people with stable COPD started PR within 90 days of referral

2022–23: 32%

4 in 10 people

PR

69% of people who are enrolled to PR who completed the programme*

2022–23: 68%

7 in 10 people

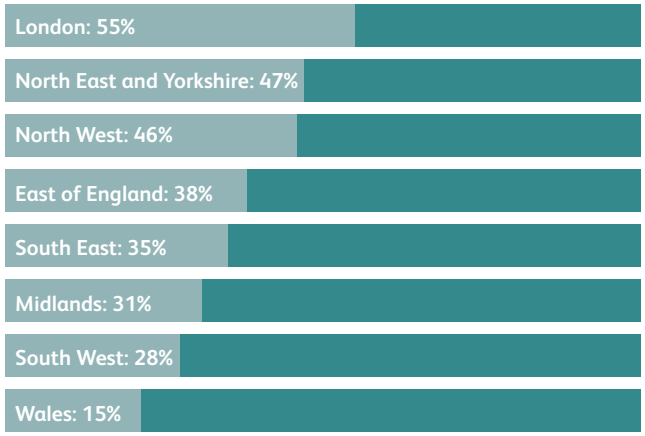
PR

Average wait time of **107 days** for people with stable COPD

2022–23: 130

In some regions like London, 55% of people start PR on time. But in other places, like the South West, only 28% do.

Regional variation: start date for PR within 90 days of referral



‘PR is acknowledged to be a crucial component of management for people with chronic respiratory disease, but access to the service is compromised. There is clear variation across the country that services and funders need to address. It is disappointing that less than half of people referred start a programme within the 90 days, this should be a target for improvement.’

– Sally Singh, NRAP pulmonary rehabilitation clinical lead

*Please note, this data point is defined as: Percentage of patients enrolled onto a PR programme who had a discharge assessment.

What are we recommending?

2. Creating and agreeing an emergency routine for people with asthma and COPD: The British Thoracic Society, as the expert body, should lead the development of a standardised acute care bundle for patients with asthma and COPD on arrival to hospital, working towards May 2026. This should involve consultation with other bodies such as the Royal College of Emergency Medicine, Society for Acute Medicine, and NRAP.

This recommendation would ensure that there is an appropriate process for medical professionals to follow when treating people with asthma and COPD in their first hours of care in hospital. We can measure improvement in the first hours of care by tracking our key performance indicators (KPIs).

Why do regional differences matter?

The provision of COPD care should be the same wherever you live. These data show there is a postcode lottery for patients accessing PR, particularly for those living in Wales who may have to wait longer to access services.'

– Alice, patient

"Every patient deserves the right care at the right time. Timely treatment can mean the difference between recovery and serious complications. Our data shows that sometimes patients wait too long to get assessed and medications are not always given soon enough. By acting quickly and following best practices, we can improve outcomes and help patients recover more quickly. It's also vital that we clearly communicate what good care looks like so patients feel they can ask for and receive the treatment they deserve.'

– James Dodd,
NRAP adult asthma clinical lead

Useful patient resources

- NHS: Asthma exacerbation and flare ups
- Asthma + Lung UK: Managing COPD flare-ups
- Asthma + Lung UK: Pulmonary rehabilitation information (for patients)

Helping people quit smoking: tobacco dependence

Smoking is a significant cause of COPD, and asthma in children, and makes both conditions worse. For people diagnosed with asthma and COPD, advice on treatment to quit or reduce the harm from smoking can help them to live longer and feel better. NHS guidance says that smokers should have uncomfortable nicotine cravings treated when unwell in hospital as well as the opportunity to talk about their smoking with a specialist.

Healthcare professionals should ask everyone in hospital if they smoke and offer them treatment and support but our data show that right now this is not always happening.

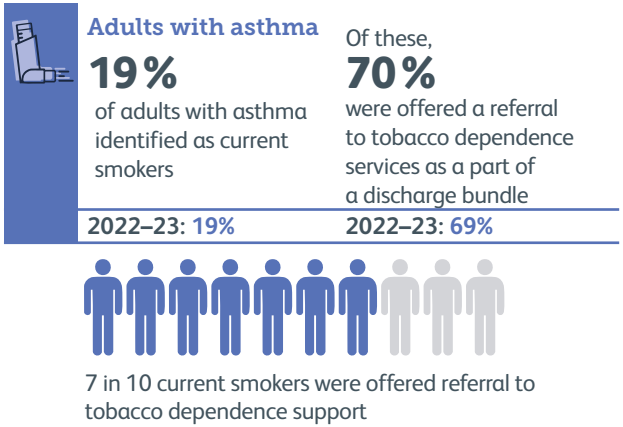
Some examples of treatment for tobacco dependence include: nicotine replacement therapy (NRT), pharmacotherapy (medications) and behavioural support from a tobacco dependence specialist.

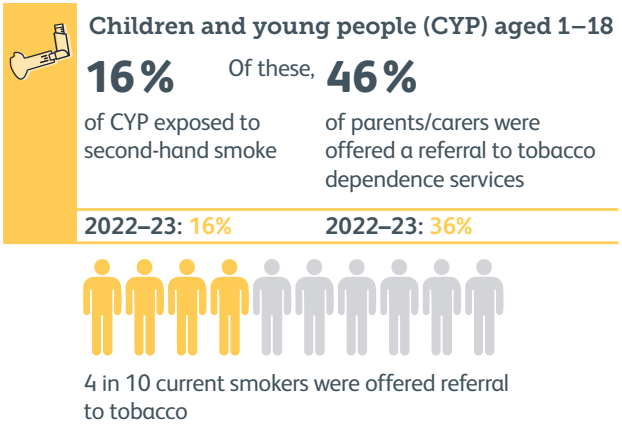
What do the data show?

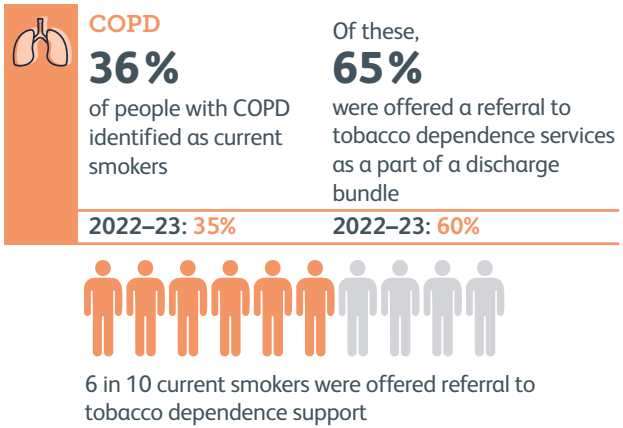
One in three adults with asthma or COPD who smoke are not getting treatment and support for smoking when they are unwell in hospital. This is a big problem because quitting smoking can greatly improve health and reduce future hospital visits.

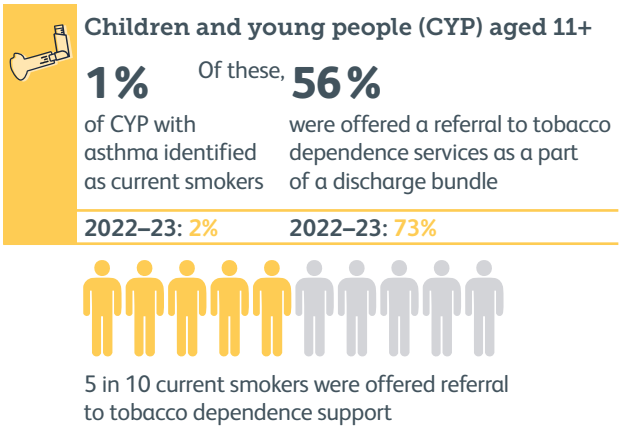
Some progress has been made but more people need to be offered the treatment and support that works. Many people who smoke are still not given the support they need to stop smoking.

Although the percentage of children and young people who smoke is low, it is vital that this tobacco dependence is addressed.









What are we recommending?

We highlight the importance of our *Breathing well* recommendation, which is maintained for this year's report:

3. Ensure that all smokers are offered tobacco dependence support: All people with COPD and asthma who smoke, and smokers who are parents of children and young people with asthma, should be offered evidence-based treatment and referral for tobacco dependence. In England, the Department of Health and Social Care, NHS England and integrated care boards should work together to provide increased resource to all acute, mental health and maternity services in England, so that every provider develops and implements a comprehensive inpatient tobacco dependence service.

We think it's really important that anyone with asthma or COPD who smokes, or parents of children and young people with asthma who smoke, is offered treatment in hospital and referral to help them stop smoking.

Useful patient resources

- England: Find stop smoking support services near you
- Wales: Find stop smoking support services near you

‘People who smoke know that it is not in their best interests; most want to stop and have tried many times. This can cause feelings of frustration or guilt, or a lack of hope, especially if someone has already developed a health problem related to smoking. However, most people are not offered the right treatment and support to tackle their smoking. An admission to hospital is an important time to think about this, and there are now new medications and treatments that work, as well as free NHS support available in hospitals. We want to encourage clinical teams to make sure this is offered to all patients with COPD and asthma and to support where this is not happening.’

– Irem Patel, NRAP COPD clinical lead

Care provided when leaving hospital

It's important for hospitals to make sure that they are giving patients the appropriate medications, referrals and guidance when they're discharged from hospital to ensure that they continue to get better and have the best chance of staying out of hospital in the future.

Adults with asthma – the discharge bundle for adults with asthma includes:

- medication being reviewed
- a personalised asthma action plan (PAAP) being provided/reviewed
- tobacco dependence advice and support provided for current smokers
- clinical review within 4 weeks (follow-up).

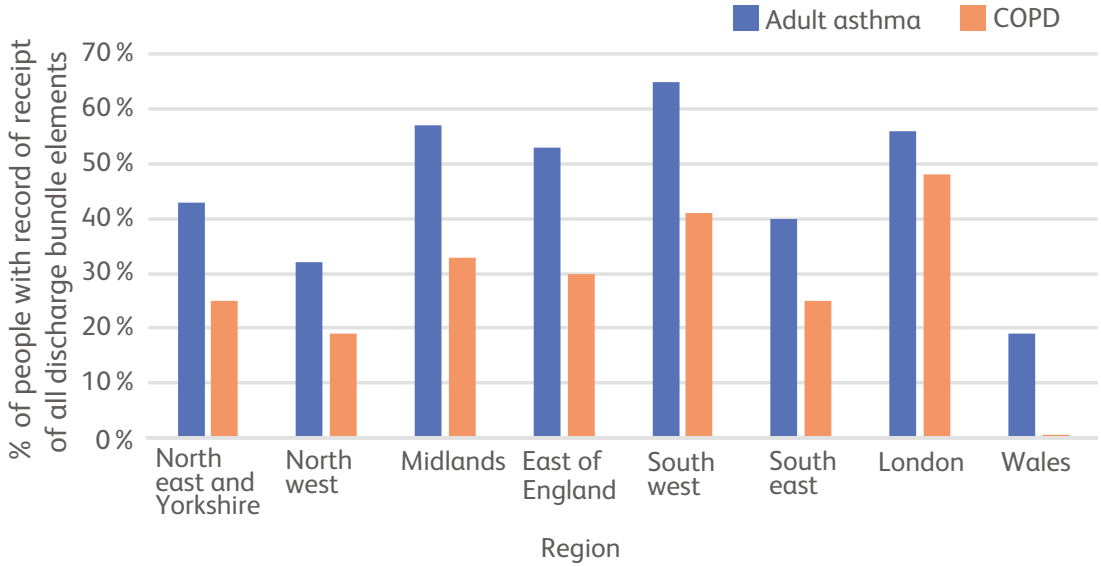
People with COPD – the discharge bundle for people with COPD includes:

- inhaler technique and medication being reviewed
- self-management plan being agreed and provided
- tobacco dependence advice and support provided for current smokers
- assessed for suitability for pulmonary rehabilitation
- follow-up request (within 72-hours of discharge)
- emergency drug pack provided (or not provided, if not suitable).

What do the data show?

The amount of people with asthma and COPD receiving a discharge bundle remains low. We can also see a lot of variation in how different regions perform.

This graph shows that more people with asthma receive all the elements of the discharge bundle, compared to people with COPD. Performance as a whole is low across England and Wales.



The impact of regional differences

'As someone who lives in Wales, I find the difference in percentages of provision of care frightening.'

– Sue, patient

Children and young people with asthma – good discharge planning for children and young people (CYP) with asthma includes:

- a personalised asthma action plan (PAAP) being provided/reviewed
- inhaler technique being checked
- ensuring that patients receive a follow-up after 2 days OR 4 weeks.

What do the data show?

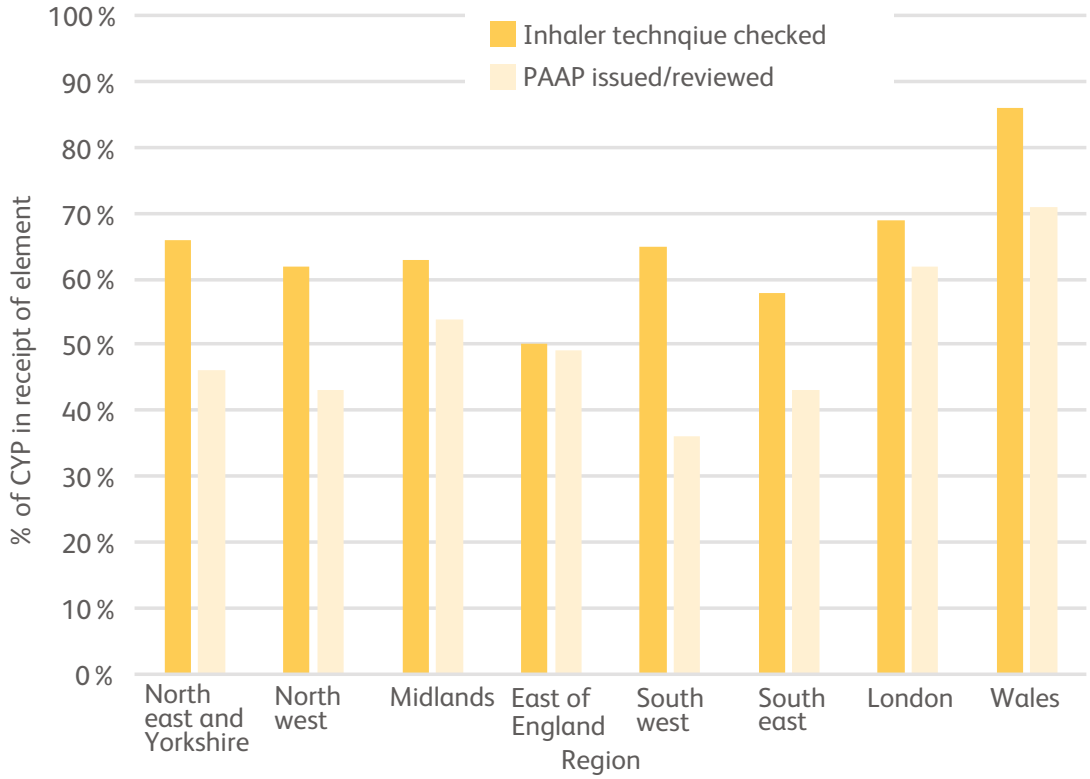
The percentage of CYP who received all elements of good discharge planning varies regionally and by each element. Our data also show that 49% of CYP had a community follow-up requested within 2 working days of discharge and 32% had a specialist review requested within 4 weeks of discharge.

Having a follow-up after being admitted to hospital is important so that healthcare professionals can check if the patient's asthma is responding to treatment, to explore why the flare-up may have happened, and to offer any support/advice about reducing the risk of future attacks.

This graph shows that the proportion of CYP who received an inhaler technique check or PAAP review/ issue differs a lot across regions.

‘It is absolutely crucial that when people are admitted to hospital with respiratory issues, they are discharged with the necessary skills and tools to prevent them coming back. This is why discharge planning is so crucial. We want our patients to be empowered. This is why we've always focused on discharge planning as a key element of the NRAP process.’

– Ian Sinha, NRAP CYP asthma clinical lead



Pulmonary rehabilitation – referral pathways

Guidance from the National Institute for Health and Care Excellence (NICE) and the British Thoracic Society (BTS) recommends that patients who have been in hospital with an exacerbation (flare-up) of COPD should be offered PR when they're discharged from hospital.

What do the data show?

The data show that only 4 % of people in our PR audit were referred to a programme of PR from secondary care services following an exacerbation of COPD (AECOPD). We would expect this figure to be higher and this indicates a missed opportunity for many.

4 in 100 people in the PR audit were referred to PR from secondary care services post treatment for AECOPD

'We know that access to PR after hospital improves a person's wellbeing and, importantly for both the individual and the healthcare system, prevents readmission to hospital. It is crucial that people are referred before discharge and have the opportunity to discuss the programme with the clinical team on the wards. The evidence indicates that the programme should begin within 30 days of discharge, which may feel quite soon after discharge, but clinical teams have expertise to manage patients recovering from an exacerbation.'

– Sally Singh, NRAP pulmonary rehabilitation clinical lead

Spotlight on healthcare improvement – guidance for services

4. Services should review their performance and make improvements where necessary: integrated care boards (ICBs) and local health boards (LHBs) should regularly review NRAP data on discharge planning for CYP and adults with asthma and COPD with their providers. If data indicate gaps in care, or poor data quality, they should collaborate to identify solutions.

This spotlight on healthcare improvement is a suggestion for ICBs and LHBs to be proactive and check their performance in NRAP's key performance indicators (KPIs).

Why is good discharge important?

'Having a little time at discharge to make sure everything you're expecting has happened – and you've planned for anything you maybe aren't expecting – can make the process of going home feel less daunting and can break the cycle of breathing problems before they get worse again.'

– Heather, patient

Glossary of terms

Acute hypercapnic respiratory failure (AHRF): acute lung failure caused by a dangerously high level of carbon dioxide build up in the blood.

Acute non-invasive ventilation (NIV): a machine to help people with a severe flare-up COPD breathe more easily. This involves a mask which is worn over the nose and mouth.

Acute exacerbation of COPD (AECOPD): a flare-up of COPD where there is a worsening in the airway function and an increase in respiratory symptoms.

Asthma: a long-term lung condition that affects the airways and causes symptoms, including breathlessness, wheezing and cough. Sometimes symptoms can get worse very quickly, and this is known as an asthma attack or exacerbation.

Audit: clinical audit is a way to find out if healthcare is being provided in line with standards and lets care providers and patients know whether their service is doing well, and whether there could be improvements (NHS).

Behavioural support: for tobacco dependence, this means scheduled meetings (face to face or virtual) between someone who smokes, and a counsellor trained to provide stop-smoking support. Behavioural support can be provided either individually or in a group. Discussions may include information, practical advice about goal setting, self-monitoring and dealing with the barriers to stopping smoking as well as encouragement (NICE).

Case ascertainment: the number of people that services have seen compared to the number of people that they have entered into the audit.

Chronic obstructive pulmonary disease (COPD): a group of long-term lung conditions that cause airways to narrow and symptoms such as shortness of breath, cough and frequent chest infections. When breathing and other symptoms suddenly get worse over a short period of time, this is known as a flare-up or exacerbation.

Dataset: collections of questions that we ask services to answer about the people they have taken care of. These questions can be about many different aspects of the care received during a hospital admission or PR programme.

Incremental shuttle walk test: a walking test used in PR, which allows the operator (eg nurse/physio) to monitor the functional capacity of patients. It can be used with a wide range of patients with varying severity of disability. During this walk test, the patient is required to walk around two cones set 9 metres apart in time to a set of auditory beeps (played via app or CD). Initially, the walk speed is slow, but with each minute the speed progressively increases.

Integrated care boards (ICBs): NHS organisations responsible for planning health services for their local population in England. They manage the NHS budget and work with local providers, such as hospitals and GP practices. There are 42 ICBs in England.

Key performance indicators (KPIs): things that NRAP has identified as the most important for people with asthma and COPD, and for those completing a programme of pulmonary rehabilitation to receive when being cared for. We measure these KPIs and report on them.

Local health boards (LHBs): NHS organisations responsible for planning health services for their local population in Wales. They manage the NHS budget and work with local providers, such as hospitals and GP practices. There are seven LHBs in Wales.

Nicotine replacement therapy (NRT): a medicine that provides a low level of nicotine, without the tar, carbon monoxide and other poisonous chemicals present in tobacco smoke (NHS). This could be a skin patch, chewing gum, tablet etc.

Peak flow (PEF): can assist with the diagnosis and severity assessment of an asthma exacerbation (attack), which will guide the person's treatment. Personalised asthma action plan (PAAP): includes personalised instructions for self-managing asthma, which should be decided collaboratively with the patient.

Pharmacotherapy: for tobacco dependence, this means a medicine like NRT that works by reducing cravings for nicotine and blocking the rewarding and reinforcing effects of smoking (NHS).

Pulmonary rehabilitation (PR): a supervised exercise and education programme that helps people with lung conditions to live and breathe better.

Primary care: the first point of contact in the healthcare system. This includes general practice (GP), community pharmacy, dental and optometry services.

Secondary care: includes urgent and emergency care (including 999 and 111 services, ambulance services, hospital emergency departments (ED), accident and emergency (A&E) and out-of-hours GP services).

Spirometry: a test used to help diagnose and monitor certain lung conditions (including COPD) by measuring how much air you can breathe out in one forced breath.

Systemic steroids: a treatment for acute exacerbations (asthma flare-ups) and management of symptoms in asthma.

Tobacco dependence: when physical and psychological factors make it difficult for someone to stop smoking, even if they want to quit.

Additional patient resources

- Asthma + Lung UK: Asthma, teenagers and young people
- Asthma + Lung UK: Asthma and your child
- Asthma + Lung UK: Breathe Easy groups (with locator)

Do you have any questions?

Please reach out to the NRAP team directly:
Email: NRAPinbox@rcp.ac.uk
Phone: +44 (0)20 3075 1526

Please note, our phone lines are operational between 9am–5pm, Monday to Friday.

Want to get involved?

Campaign for better lung health with Asthma and Lung UK

Find out more about existing campaigns you can get involved in.

Healthwatch

Contact your local Healthwatch to get involved in shaping and influencing their local health and care services.

Acknowledgements

This report was co-created and co-designed by the NRAP Asthma + Lung UK adult patient panel, NRAP programme and clinical team.

Thank you to the following individuals for their contributions:

Victor Cholij
Melissa Holston
Sue Lang
Heather Robertson
Alice Spencer

All other members of the NRAP A+LUK patient panel (who chose to remain unnamed)

National Respiratory Audit Programme (NRAP)

Royal College of Physicians
11 St Andrews Place
Regent's Park
London NW1 4LE

The Spine
2 Paddington Village
Liverpool L7 3EA

Tel: +44 (0)20 3075 1526 | Email: NRAPinbox@rcp.ac.uk | www.rcp.ac.uk/nrap
@NRAPaudit
#NRAP

Royal College of Physicians | National Respiratory Audit Programme (NRAP)