National Asthma and Chronic Obstructive Pulmonary Disease Audit Programme (NACAP)

Drawing breath

The state of the nation's asthma and COPD care and recommendations for improvement

Royal College of Physicians | NACAP

In association with:

British Thoracic Society

Imperial College London

PCRS
Primary Care Respiratory Society

ASTHMA+ LUNG UK

RCPCH
Royal College of Paediatrics and Child Health
Leading the way in Children's Health

ARNS
Association of Respiratory Nurse Specialists

RCGP Royal College of General Practitioners

GIRFT
GETTING IT RIGHT FIRST TIME

Commissioned by:

HQIP
Healthcare Quality Improvement Partnership

Informed by data on:

- people with asthma and COPD discharged from hospital between April 2021 and March 2022
- people with COPD assessed for pulmonary rehabilitation between March 2021 and February 2022
- people with asthma and COPD extracted from 315 general practices in Wales between April 2020 and July 2021
- structure and resources of hospital services that provide asthma and COPD care in England and Wales in 2021

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Introduction

It is a pleasure to introduce *Drawing breath*, a single 'state of the nation' view of the care of people with asthma and COPD in England and Wales. This report is the first to combine data on asthma, COPD and pulmonary rehabilitation across primary and secondary care services to underpin key messages, optimising respiratory care across the pathway.

More than 9 million people are living with a diagnosis of asthma or COPD in the UK. The National Asthma and COPD Audit Programme (NACAP) aims to improve the quality of their care, services and clinical outcomes. We do this by supporting and training clinicians, empowering people living with asthma and COPD and their carers, and informing policy.

The primary role of NACAP is to support individual clinical teams to make improvements in the quality of care they deliver. The data included in this report reflect a period during which the COVID-19 pandemic stretched respiratory staff and services to their limits, therefore, direct comparisons with previous reports should be interpreted with caution. The findings enable us to reflect and identify opportunities to restore and strengthen the provision of care for people living with asthma and COPD. We hope you see increased value in the new joined-up format.

Making an impact together

'NACAP has worked tirelessly to improve outcomes for patients with asthma and COPD, championing quality improvement and audit and working collaboratively across a wide range of organisations. NACAP's outputs have provided a wealth of insight for both BTS members and the wider respiratory community, enabling them to benchmark their practice against local and national data.'

– British Thoracic Society

'NACAP has shown the power of bringing the respiratory community together to work to a common goal, and we've been able to ensure the patient voice has been represented in this work. NACAP has produced high-quality data and reports, and we've been able to use these findings to campaign to improve the quality of care for people with lung conditions.'

– Asthma + Lung UK

How to use this report and its recommendations

Commissioners and providers: To work together to create an environment that enables clinicians to deliver high-quality care.

Clinical teams (quality improvement): To create SMART aims bespoke to your service and the people you care for. See our top tips for setting SMART aims. You can also access benchmarking for key performance indicators here and full data files at data.gov.uk.

People with asthma and COPD, and their families and carers: To understand what high-quality care looks like so you can communicate on equal terms with clinicians and expect and ask for excellent care for yourself and people you support.

Audit participation and case ascertainment

Every service can contribute to driving improvement in respiratory care by participating in the NACAP audits. Feedback, in the form of real-time, publicly available run charts and national reports, provides a focus and framework for measuring standards of care, enables local collaboration on patient safety initiatives, and supports local and national goal setting.

We acknowledge the endeavours of the 708 services in England and Wales that have contributed to this report through submission of data in spite of the additional pressures resulting from the response to the COVID-19 pandemic.

The data included in this report are informed by 103,194 case records submitted to the audit programme. These records relate to people with asthma and COPD admitted to hospital with an exacerbation and people with COPD assessed for pulmonary rehabilitation. Data from the latest children and young people's organisational audit, adult asthma and COPD organisational audit, and primary care clinical audit are also included. NACAP only collects primary care data for Wales, however, data for England are available through the Quality and Outcomes Framework.

Comprehensive data are crucial to enable us to draw conclusions about patient care. We therefore encourage you to capture information for all eligible patients. NACAP has responded to feedback from services and continues to make improvements to the webtool to make participation easier. For assistance entering data, please contact the NACAP team. We also urge all eligible services that are not currently participating in the NACAP audits to register using the support available on our website.

A list of eligible services, and those that participated in the audit, can be found here.

708

eligible services participated
(asthma and COPD secondary care services and pulmonary rehabilitation)

88.4%

Cases submitted to NACAP	% of cases identified by HES and PEDW[1]	
COPD	63,409	39.5%
Adult asthma	16,132	47.7%
Children and young people's asthma	14,168	92.3%
Pulmonary rehabilitation	8,772	57.2%

NHS England Long Term Plan

The recommendations throughout this report are designed to support the implementation of the NHS Long Term Plan. NACAP data were used to inform the respiratory element of the NHS Long Term Plan, and the continued collection of audit data will allow monitoring of performance against these ambitions. By combining the reports for COPD, asthma and pulmonary rehabilitation, NACAP better aligns with the ambitions in the NHS Long Term Plan for an integrated approach to respiratory medicine and can be used as a tool to evidence the effectiveness of any interventions. For further support, we recommend contacting your local respiratory clinical network.

Ambitions for change

These five ambitions for change describe NACAP's key goals for improving care for people with asthma and COPD.

Improve provision of early and accurate diagnosis

For everyone living with asthma and COPD to have their diagnosis confirmed by a guideline-defined approach, and to receive prompt, evidence-based care to help manage their long-term condition.

Improve provision of timely care

For everyone living with asthma or COPD to receive rapid assessment and care, including access to interventions which help prevent hospital admissions, such as pulmonary rehabilitation.

Improve provision of care received from the right people

For everyone admitted to hospital due to a deterioration in their asthma or COPD to have access to timely specialist advice and for each service to have a named person with responsibility for leading and improving asthma, COPD and pulmonary rehabilitation services.

Empower people with asthma and COPD and their carers by providing joined-up care pathways and high-quality information

For people living with asthma and COPD to be well informed about what good care looks like and know what to ask for when care falls short. Examples include a managed transition from paediatric to adult services, the importance of receiving help and advice to stop smoking and the importance of care provided by a multidisciplinary team.

Minimise variation in care contributing to health inequalities

For everyone with asthma and COPD to have timely access to excellent care irrespective of where they live, their background and personal circumstances.

Recommendation 1: For every person to receive an early and accurate diagnosis based on a guideline-defined approach and a plan for their care

This could be achieved by:

> conducting physiological testing in hospitals and primary care to support correct diagnosis of asthma
> measuring post-bronchodilator spirometry in primary care to support correct diagnosis of people with COPD
> ensuring that the diagnosis of asthma and COPD are correctly documented and available to other clinical teams
> primary care teams offering referral to pulmonary rehabilitation for all people with COPD and an MRC breathlessness grade of 3–5
> commissioners supporting an increase in post COVID-19 spirometry testing by providing the necessary resource to primary care.

61.8%

of hospitals had access to both FeNO and spirometry as diagnostic tools for children and young people with asthma[2]

43.9%

of adults diagnosed with asthma in the past 2 years have a record of any objective diagnostic measurement in primary care[3]
Wales only

1.9%

of adults had a record of receiving a gold standard diagnostic test for COPD[4] (post-bronchodilator spirometry) in primary care in the past 2 years[3]
Wales only

5.6%

of people with COPD and Medical Research Council (MRC) grade 3–5 breathlessness were offered pulmonary rehabilitation in the past 3 years in primary care[3]
Wales only

NICE (2017) NG80 (1.3.3) BTS/SIGN 2019 [3.3.4] NICE (2013) QS25 [QS1] BTS/SIGN 2019 [10.1] NICE (2016) QS10 [QS1] NICE (2018) NG115 [1.1.4] NICE (2018) NG115 [1.1.5] BTS (2014) [QS1a]

Recommendation 2: For care to be provided to people with asthma and COPD within the recommended timeframe after hospital admission, to support optimal outcomes

This could be achieved by:

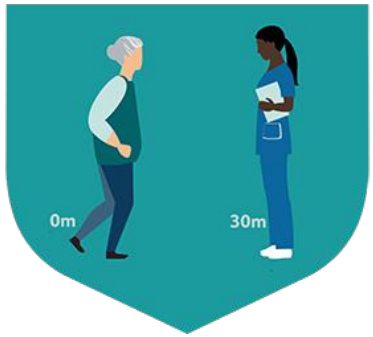
- administering systemic steroids to children and young people (6+) with asthma within their first hour of arriving at hospital (only applicable to patients who did not receive them as part of pre-hospital care)
- providing key elements of care for adults with asthma[5] within the first hour of arriving at hospital (only applicable to patients who did not receive them as part of pre-hospital care)
- ensuring that adults with COPD receive non-invasive ventilation (NIV) within 2 hours of arrival at hospital if required
- ensuring that pulmonary rehabilitation commences within 90 days of receipt of referral for people with stable COPD and within 30 days of leaving hospital for those admitted with COPD exacerbation
- commissioners ensuring that providers have a system in place to deliver all aspects of the first hour of hospital care and that an audit of adherence has been undertaken in the last 12 months
- commissioners providing adequate resource in services providing pulmonary rehabilitation to enhance capacity and support timely enrolment.

35.3%

of children and young people received systemic steroids within 1 hour of admission to hospital

15.6%

of adults with COPD requiring NIV received It within 2 hours of being admitted to hospital



40% of adults with stable COPD started pulmonary rehabilitation within 90 days of receipt of referral

20.1% of adults admitted to hospital with an exacerbation of COPD started pulmonary rehabilitation within 30 days of receipt of referral

First hour of hospital care for adults with asthma[5]

16.3% of those eligible had a peak flow taken

25.6% had systemic steroids administered

36.1% had beta 2 agonists administered

5.3% had oxygen prescribed to target range

BTS/SIGN 2019 [9.8.4A] NICE 2013 QS25 [QS8] RCEM asthma guidance [standard 5] RCEM asthma guidance [standards 3 and 5] NICE 2013 QS25 [QS9] NICE 2011 QS10 [QS7] NICE 2018 [NG115] 1.3.30 BTS (2014) [QS1b] BTS (2014) [QS3b] NICE 2016 QS10 [QS5]

Recommendation 3: For people with asthma and COPD to receive care by appropriately trained healthcare professionals, at each stage of their care pathway

This could be achieved by:

- ensuring the presence of a respiratory nurse specialist in the hospital who is trained in the care of children and young people with asthma
- ensuring people admitted with an exacerbation of asthma are reviewed by a respiratory specialist within 24 hours, 7 days a week
- making 7-day specialist advice available to all patients admitted with an exacerbation of COPD
- protecting time for pulmonary rehabilitation clinical leads to provide leadership to the team
- commissioners ensuring that providers have a named clinical lead in the hospital for COPD, children and young people's asthma and adult asthma services.

80.8%

of hospitals had a designated lead for care of children and young people with asthma[2]

85.5%

of hospitals had a designated lead for the care of adults with asthma[6]

88.7%

of hospitals had a designated clinical lead for COPD[6]

69.1%

of pulmonary rehabilitation services had a clinical lead with designated time for service management[6]

94.3%	of hospitals offered specialist advice to patients admitted with an exacerbation of COPD 5 days a week[6]
45.3%	of services provided specialist advice to patients admitted with an exacerbation of COPD 7 days a week[6] (asthma and COPD combined)

81.8%	of adults with asthma received a specialist review during their episode of care in hospital
67.2%	of adults with asthma received a specialist review within 24 hours on a weekday
52.7%	of adults with asthma received a specialist review within 24 hours on a weekend

51.5%	of hospitals provided children and young people with access to a respiratory nurse specialist trained in paediatric asthma[2]

BTS/SIGN Asthma Guidelines 2016 (9.6.2) NRAD 2014 why asthma still kills: organisation of NHS services [Recommendation 1]
NRAD 2014 why asthma still kills: organisation of NHS services [Recommendation 1] GIRFT 2021 [12a] GIRFT 2021 [14a]
BTS quality standards for pulmonary rehabilitation in adults (2014)

Recommendation 4: Primary, secondary and community services to implement ways to work together, offering people with asthma and COPD a seamless pathway of care

This can be achieved by:

- adult and children and young people's asthma services working together to provide a service for transition between child and adult asthma services
- recording smoking status for all children and young people (11 years and over) admitted to hospital with an asthma attack
- providing people with asthma with a written or electronic personalised asthma action plan (PAAP) in primary care
- holding a weekly MDT meeting between hospital and community teams to facilitate transitions of care following a hospitalised exacerbation of COPD
- providing effective delivery of Best Practice Tariff (BPT)[7+] discharge elements for people admitted to hospital with a COPD exacerbation
- recording a smoking status for all adults admitted to hospital with an exacerbation of COPD or asthma and offer them a referral to a smoking cessation service
- quality assuring pulmonary rehabilitation programmes for people with COPD, including the provision of discharge assessments and exercise plans
- commissioners promoting and encouraging primary care staff to complete the NCSCT second-hand smoke online training and ensuring correct coding is in place for children and young people asthma templates.

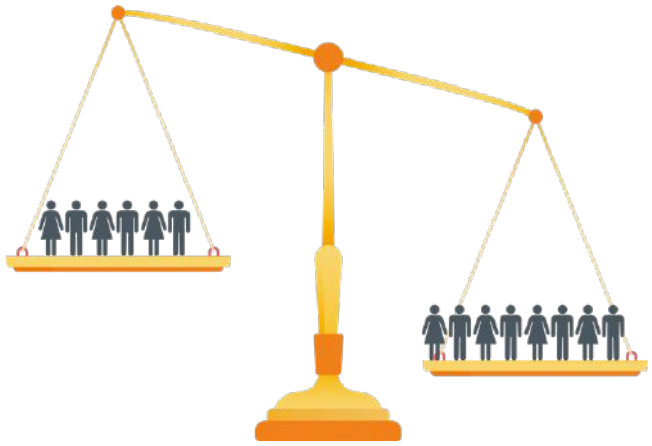
18.7%	of adults in hospital with COPD received ALL mandatory elements of care as defined by the COPD Best Practice Tariff (BPT)[8]	**84.3%**	of people with COPD were provided with an exercise plan at discharge from the pulmonary rehabilitation programme
35.2%	of hospitals held weekly multidisciplinary team (MDT) meetings between hospital and community-based COPD teams	**57.2%**	of pulmonary rehabilitation programmes offered an exercise test at the initial assessment in line with guideline standards

22.9%	of children, young people were provided with a personalised asthma action plan (PAAP) in primary care[3] **Wales only**	**25.0%**	of adults were provided with a personalised asthma action plan (PAAP) in primary care[3] **Wales only**
1.3%	of children and young people were checked for exposure to second-hand smoke in primary care[2] **Wales only**	**42.1%**	of adult asthma services had at least one element of formal transition service to facilitate children moving to adult services[2]
37.0%	of children and young people had second-hand smoke exposure recorded in hospital	**30.1%**	of adults received ALL mandatory elements of care as defined by adult asthma BPT during their hospital admission[7]
65.2%	of children and young people had a documented inhaler technique check before discharge from hospital	**68.2%**	of adults had a documented inhaler technique check before discharge from hospital
42.1%	of children and young people (aged 11+) had a smoking status recorded during their time in hospital		

BTS/SIGN 2019 [6.2.3] NICE guideline [NG43] BTS/SIGN 2019 [11.11.3] BTS/SIGN 2019 [11.11.4] NICE 2013 [QS43] QS3 BTS/SIGN 2019 [5.2.2] BTS/SIGN 2019 [5.3.2] BTS/SIGN 2019 [9.6.3] BTS/SIGN 2019 [9.6.2] NICE 2013 [QS43] QS3 NHSENGLAND_BPT NICE 2017 [NG80] NICE (2018) NG115 (1.2.2) NICE (2018) NG115 (1.2.3) NICE QS10 [QS8] NHSENGLAND_BPT BTS quality standards for pulmonary rehabilitation in adults (2014) [Standard 4] BTS quality standards for pulmonary rehabilitation in adults (2014) [Standard 7] BTS quality standards for pulmonary rehabilitation in adults (2014) [Standard 9]

Minimising variation in care contributing to health inequalities

Across the UK, there are strong links between lung disease, deprivation and health inequalities. The respiratory health of people who experience inequality is affected by a complex interplay of socio-economic and environmental exposures including smoking, suboptimal nutrition, air pollution, poor housing, and occupational hazards. As a national audit programme, we have the responsibility to highlight variation in the quality of care accessed by the 9 million people in the UK living with a diagnosis of asthma or COPD. We will do this by providing recommendations for clinicians and commissioners and patients.



Drawing breath uses the results of the NACAP suite of audits to underpin key messages prompting evidence-based recommendations to optimise respiratory care across the pathway. We encourage a joined-up approach between clinical teams from primary, secondary and community services, patients and commissioners to facilitate excellent care for every person regardless of who they are, where they live, or the services from which they seek help.

For clinical teams and commissioners using the report, we recommend that you consider the questions below in the context of the demographics of the area you serve.

- How can we ensure a patient-centred approach? Is there consideration of the quality of the patient's care experience as well as their clinical care?
- How can primary, secondary and community care services best work together to provide a joined-up care pathway?
- How can we ensure we are meeting patient needs, including access to patient transport, translation services and services that adjust for an individual's way of life, religion or culture?
- How can we make changes in a way that does not exclude the people who need it most so that health inequalities are addressed rather than inadvertently widened?

Recommendations for patients and carers

- Know what good care looks like and feel empowered to ask for it
- Make sure you know what you need to do when you are unwell, who to seek help from and when you should seek help
- Familiarise yourself with terminology that may be used by health professionals and ask for clarification where needed
- Ensure you, your families and carers are well informed about the care you need by using NACAP resources:
  - Primary care
  - Asthma
  - Children and young people's asthma
  - COPD
  - PR

Glossary

BTS – British Thoracic Society
BPT – Best Practice Tariff
Case ascertainment – a measure of how many patients were audited against how many patients were treated
COPD – chronic obstructive pulmonary disease
Eligible services – services in England and Wales that offer a respiratory service
FeNO – fractional exhaled nitric oxide – a test used to aid the diagnosis of asthma
GIRFT – Getting it Right First Time – a national programme designed to improve the treatment and care of patients
Health inequalities – avoidable, unfair and systematic differences in health between different groups of people
MDT – multidisciplinary team – a team made up of different health professionals, often from different services
MRC breathlessness scale – Medical Research Council scale to grade the effect of breathlessness on daily activities
NACAP – National Asthma and COPD Audit Programme
NIV – non-invasive ventilation – a breathing support machine sometimes used in very unwell people admitted to hospital with an exacerbation of COPD
PAAP – personalised asthma action plan
Participating services – services in England and Wales that input data into NACAP
PEF – peak expiratory flow – a test that measures the rate of airflow from the lungs on breathing out forcefully, to help diagnose or monitor asthma
RCP – Royal College of Physicians
RCPCH – Royal College of Paediatrics and Child Health
SMART aims – specific, measurable, achievable, relevant and timely aims – a method used to make quality improvements
Smoking cessation advice – guidance to help a person to stop smoking
QI – quality improvement

Royal College of Physicians

The Royal College of Physicians (RCP) plays a leading role in the delivery of high-quality patient care by setting standards of medical practice and promoting clinical excellence. The RCP provides physicians in over 30 medical specialties with education, training and support throughout their careers. As an independent charity representing 40,000 fellows and members worldwide, the RCP advises and works with government, patients, allied healthcare professionals and the public to improve health and healthcare.

Healthcare Quality Improvement Partnership

The National Asthma and Chronic Obstructive Pulmonary Disease (COPD) Audit Programme (NACAP) is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit Patient Outcomes Programme (NCAPOP). HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. Its aim is to promote quality improvement, and in particular, to increase the impact that clinical audit, outcome review programmes and registries have on healthcare quality in England and Wales. HQIP holds the contract to commission, manage and develop the National Clinical Audit and Patient Outcomes Programme (NCAPOP), comprising around 40 projects covering care provided to people with a wide range of medical, surgical and mental health conditions. The programme is funded by NHS England, the Welsh government and, with some individual projects, other devolved administrations and crown dependencies **www.hqip.org.uk/national-programmes**.

National Asthma and COPD Audit Programme (NACAP)

More than 9 million people are living with a diagnosis of asthma or COPD in the UK. The National Asthma and COPD Audit Programme (NACAP) aims to improve the quality of their care, services and clinical outcomes. We do this by supporting and training clinicians, empowering people living with asthma and COPD, and their carers, and informing policy. We have a track record of delivery and are critical to assessing progress against the NHS Long Term Plan. To find out more about NACAP visit: **www.rcp.ac.uk/nacap**

Acknowledgements

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Footnotes

[1]Hospital Episode Statistics (HES) for England and Patient Episode Data Wales (PEDW) for Wales | [2]Data from children and young peoples 2021 organisational report | [3]Data from Wales primary care clinical audit report 2021 | [4]Includes spirometry, peak flow (>1 reading or evidence of peak flow diary) or fractional exhaled nitric oxide (FeNO) | [5]If not received as part of pre-hospital care | [6]Data from Adult asthma and COPD 2021 organisational audit | [7]Adult asthma BPT **(England only[+])** mandatory elements – specialist review within 24 hours of admissions, PAAP issued or reviewed, inhaler technique review, smoking cessation advice, referral or support | [8]COPD BPT **(England only[+])** mandatory elements – specialist review within 24 hours of admission and a discharge bundle to cover the following elements 1. Understanding medication and inhaler use 2. Self-management/emergency drug pack 3. Smoking cessation 4. Referral to pulmonary rehabilitation if appropriate 5. Timely follow up. |

[+]While the Best Practice Tariff referenced throughout this report applies to England only, NACAP recommends that Welsh services consider implementing the best practice elements to provide better outcomes for patients.

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