Royal College of Physicians

National Respiratory Audit Programme (NRAP)

Organisational audit 2024

Resourcing and organisation of asthma and COPD care in hospitals, and PR services in England and Wales

Based on data from 2022–24

Publication year: 2024

In association with:

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Association of Respiratory Nurses

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Introduction

Respiratory conditions affect the lives of millions of people in the UK, impacting on health and wellbeing across the entire life course. They are both a key driver of chronic symptoms and impaired quality of life, and also acute illness, causing hospital admissions through infection and exacerbations.

Therefore, timely provision of high-quality respiratory care requires the coordination of multidisciplinary teams that are appropriately trained and resourced to provide the expertise necessary to ensure optimal outcomes for all, where and when it is required. The quality of this care is closely related to the nature of clinical services, their capabilities and capacity to deliver.

This report presents the findings of a national audit of acute hospital respiratory services and pulmonary rehabilitation (PR) services across England and Wales. By combining these data in a single report by the National Respiratory Audit Programme (NRAP) for the first time, we provide unique insights into how respiratory services are organised and identify variations in both team structure and resourcing.

The report carries five recommendations focusing on key areas, which if improved will drive real impact and improve outcomes. To enable this, alongside these recommendations the report outlines how services can work to improve these and other areas of care, and highlights the NRAP Healthcare Improvement programme, which is working with services across England and Wales to drive change.

Professor Tom Wilkinson, NRAP senior clinical lead

How to use this report

The data collection for the audit ran from 26 February to 29 March 2024. The audit collected cohort data from 1 April 2022 to 31 March 2023 for admissions information, and where static data snapshots were required, for example number of beds, this was taken from September 2023. Staffing information was a contemporaneous snapshot of the data from early 2024.

A range of additional online resources is designed to support the report:

- The full methodology outlines how the analysis was carried out and includes a glossary of terms. Organisations were included in the report if they consented and had complete data. R Scripts were used to process and analyse the data for the 2022–23 organisational audits.
- The line-of-sight table describes the evidence base for the recommendations in the report.
- Full data files are available to download 10 days after publication at data.gov.uk.
- Children and young people asthma (CYPA) organisational audit data deep dive.
- Adult asthma (AA) and chronic obstructive pulmonary disease (COPD) organisational audit data deep dive.
- Pulmonary rehabilitation (PR) organisational audit data deep dive.
- Benchmarked key performance indicator data files for children and young people asthma, adult asthma / COPD and pulmonary rehabilitation.

*Recommendation implementation/improvement timescales have been applied, signifying an ambition for change by end of March 2026. This is in place as the next measurable organisational audit is scheduled for publication in late 2026.

Audit participation, engagement and geographical coverage

This report has been compiled using data from the hospitals and PR services in England and Wales that submitted their organisational data to the National Respiratory Audit Programme's organisational audit in 2024*. The participating organisations were as follows:

Participating hospitals/services per region		East of England total	London total	Midlands total	North East and Yorkshire total	North West total	South East total	South West total	Wales total
CYPA	Participated	11	21	19	23	22	18	10	5
	Registered	18	28	25	27	22	24	13	11
AA/COPD	Participated	12	25	19	20	21	19	13	7
	Registered	19	29	28	30	25	26	18	17
PR	Participated	17	26	21	28	27	24	11	6
	Registered	19	29	28	29	29	25	19	9

Participating integrated care boards / local health boards per region									
CYPA	Participated	6	5	11	4	3	6	6	3
	Registered	6	5	11	4	3	6	7	7
AA/COPD	Participated	6	5	10	4	3	5	7	4
	Registered	6	5	11	4	3	6	7	7
PR	Participated	6	5	10	4	3	6	6	4
	Registered	6	5	11	4	3	6	7	7

Children and young people's asthma	**76.8% of eligible hospitals submitted complete data (129/168)**
Adult asthma/COPD	**70.8% of eligible hospitals submitted complete data (136/192)**
Pulmonary rehabilitation	**85.6% of eligible services submitted complete data (160/187)**

* Only services registered with NRAP were able to provide data to the organisational audit.
A small number of services submitted partially completed data into the audit. These data were not able to be incorporated into the report.

Summary of national recommendations

Recommendation 1

Implementation of workforce ratios

- NHS England and the NHS in Wales should endorse appropriate workforce-to-patient ratios in line with existing British Thoracic Society (BTS) workforce guidance.
- Integrated care boards (ICBs) and local health boards (LHBs) should identify any services which do not achieve the target ratios at present, and prioritise resources to enable individual providers to advertise at least 75% of relevant posts to achieve the ratio by the end of March 2026.
- The British Paediatric Respiratory Society (BPRS) should produce appropriate workforce ratio guidance for CYP asthma services.

Recommendation 2

7-day access to respiratory specialist advice and respiratory nurse specialists

ICBs and LHBs to support services to achieve the following by the end of March 2026:

- Where demand exists[1], hospitals to have a respiratory consultant available 7 days a week* to advise and review adult patients admitted with an asthma/COPD exacerbation.
- All hospitals to have a respiratory nurse specialist onsite 7 days a week* available to review all (adult and CYP) patients admitted with asthma/COPD exacerbations.

* not necessarily 24 hours a day

Recommendation 3

Supporting young people with asthma to transition into adult care

ICBs and LHBs should identify any hospitals which do not have a formal transition service and ensure they have one in place by the end of March 2026. Organisations such as the Association of Respiratory Nurses (ARNS), the British Paediatric Respiratory Society (BPRS), Royal College of Paediatrics and Child Health (RCPCH) and the BTS should work together with young people to co-develop good practice guidelines, which adapt and improve current transition models to reflect and meet the needs of young people with asthma.

Recommendation 4

Tobacco dependence treatment and support for CYP

All people with COPD and asthma should have access to tobacco dependence support. In particular, ICBs and LHBs should ensure that all children and young people admitted to hospital with asthma, and their parents and carers, have access to NHS-funded, evidence-based opt-out tobacco dependence treatment and support as part of their care.

Recommendation 5

Widening access to PR

ICBs and LHBs should support services in ensuring that all patients with chronic respiratory disease have timely access to a quality assured pulmonary rehabilitation (PR) programme, including those who were admitted to hospital post exacerbation. This should include supporting services to be able to accept suitable patients for all chronic respiratory diseases listed. Reaching this target may require staff recruitment, training and additional funding. Services should work with referrers to increase awareness of the increased scope of rehabilitation, and develop pathways to ensure appropriate referrals.

1. Implementation of workforce ratios

Appropriate workforce-to-patient ratios should be achieved, across England and Wales by 2026, in line with recommended ratios by the respiratory medicine GIRFT report and British Thoracic Society workforce guidance.

The recommendations in this report support those that have been made previously by other organisations, and for detailed understanding should be read in conjunction with:

- Getting It Right First Time: Respiratory medicine GIRFT programme national specialty report (2021)
- British Thoracic Society: A respiratory workforce for the future (2022)

What the audit shows

The GIRFT respiratory medicine specialty report recommends a minimum ratio of one respiratory nurse specialist (RNS) for every 300 COPD admissions per year and one RNS per 300 asthma admissions per year.[1]

The data highlight that there is significant variation across services in England and Wales. Our data indicate that 63 services (46.3%) in England and Wales currently reach the target ratio for COPD recommended by GIRFT, and 101 services (74.3%) reach the target ratio for adult asthma (Fig 1). It should be noted that in those services achieving the standard, the respiratory nurse specialist(s) may not necessarily be dedicated to acute admissions.

Specialist input can be associated with better outcomes for COPD patients and the delivery of better processes of care for asthma, such as care bundle completion. [2,3]

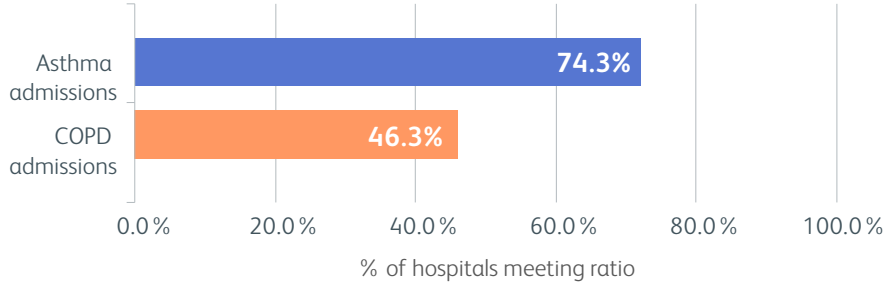

Fig 1. Services meeting 1 RNS per 300 admissions

What good practice looks like

In order to manage patients effectively specialist staff are needed, however vacancies reported within this audit are high. This suggests that workforce ratios need to be prioritised in line with national guidance outlined in BTS and GIRFT guidance.

While similar principles for workforce ratio could apply for CYP asthma services, the GIRFT and BTS guidance only include recommendations for adult services.

Recommendation 1

- NHS England and the NHS in Wales should endorse appropriate workforce-to-patient ratios in line with existing British Thoracic Society (BTS) workforce guidance.
- Integrated care boards (ICBs) and local health boards (LHBs) should identify any services which do not achieve the target ratios at present, and prioritise resources to enable individual providers to advertise at least 75% of relevant posts to achieve the ratio by the end of March 2026.
- The British Paediatric Respiratory Society (BPRS) should produce appropriate workforce ratio guidance for CYP asthma services.

2. 7-day access to respiratory consultant and respiratory nurse specialist

Access to respiratory consultant and respiratory nurse specialist to be made available 7 days a week in hospitals in England and Wales by 2026.

The rationale for this recommendation is informed by the following national guidance and quality standards:

- BTS: Delivery of care – 7-day services
- GIRFT: Respiratory medicine – national specialty report
- NICE (2018). QS25: Asthma guidance
- NICE (2023). QS10: Quality statement 8: Hospital discharge care bundle: Chronic obstructive pulmonary disease in adults
- NHSE (2022/23): Annex C: Guidance on best practice tariffs

What the audit shows

This recommendation is built around having the right person in the right place at the right time, available for assessment and advice.

Respiratory consultant availability

For adult asthma and COPD patients, 70.6 % of services have a respiratory consultant available on weekdays, against 46.3 % availability on weekends. This has not changed markedly since the 2021 organisational audit.

Respiratory nurse specialist availability

In total, 32.4 % of services had access to a respiratory nurse to review patients with COPD over the weekend, compared with 93.4 % on weekdays. 22.1 % of services had access to a respiratory nurse to review adult patients with asthma over the weekend, compared with 92.6 % on weekdays. 0.8 % of CYP services had access to a respiratory nurse to review CYP patients with asthma over the weekend, compared with 72.1 % on weekdays.

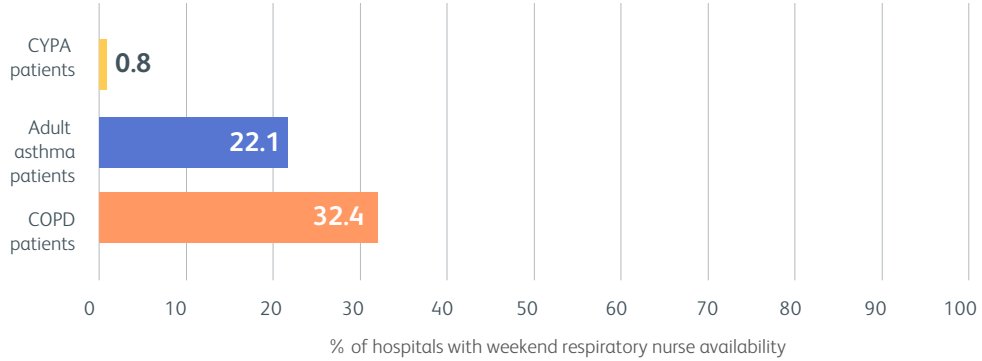

Fig 2. Services with respiratory nurse specialists at weekends

What good practice looks like

All patients attending hospital with an exacerbation of asthma or COPD should have access to specialist respiratory care 7 days a week. This will facilitate the delivery of optimal asthma/COPD management by completing a specialist review within 24 hours of admission.[4]

Recommendation 2

ICBs and LHBs to support services to achieve the following by the end of March 2026:

- Where demand exists[1], hospitals to have a respiratory consultant available 7 days a week* to advise and review adult patients admitted with an asthma/COPD exacerbation.
- All hospitals to have a respiratory nurse specialist onsite 7 days a week* available to review all (adult and CYP) patients admitted with asthma/COPD exacerbations.[4]

*not necessarily 24 hours a day

3. Supporting young people with asthma to transition into adult care

Asthma transition services should be available to all young people transferring to adult services in England and Wales by 2026.

The recommendations in this report support those that have been made previously by other organisations, and for detailed understanding should be read in conjunction with:

- NCEPOD: The inbetweeners
- NICE (2016). NG43: Transition from children's to adults' services
- NICE (2016). QS140: Transition from children's to adults' services
- CQC: From the pond into the sea
- RCPCH: Facing the future
- Department of Health and Social Care: 'You're welcome'
- Welsh government: Transition and handover from children's to adult health services

What the audit shows

Data were returned by both CYP and adult asthma services. 79/129 CYPA services (61.2%) and 55/136 adult services (40.4%) reported having at least one good practice element of formal transition for CYP moving to adult services. Only 14/129 CYPA services (10.9%) and 20/136 adult asthma services (14.7%) reported that they delivered all five good practice transition elements. The least-reported element was access to a named caseworker to assist the young person and their family through the transition process (22/129; 17.1%).

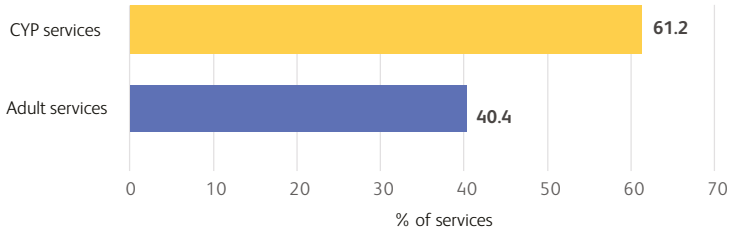

Fig 3. Hospitals that have at least one element of formal transition plan arrangement in place

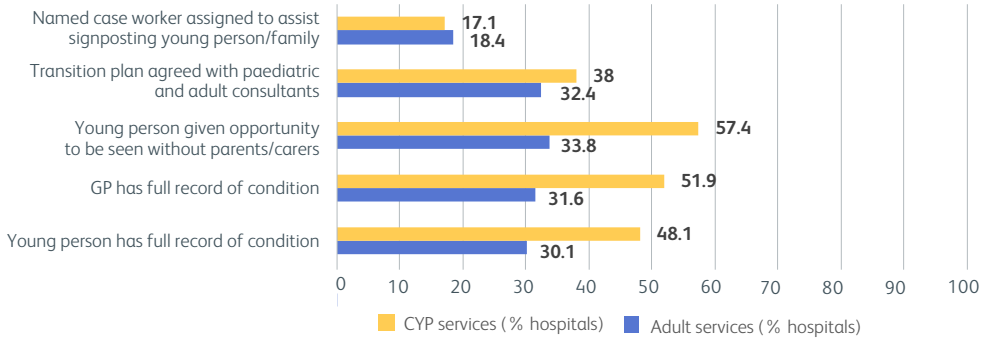

Fig 4. Elements of good practice for CYP transition

What good practice looks like

All young people with asthma who remain under specialist asthma clinics should be able to smoothly transition from paediatric services to adult services. This can be achieved via specialised transition pathways, which should be available to all young people with asthma.[5,6] The transition pathway should allow for the involvement of paediatric and adult asthma specialists, engage the young person directly – giving them the ability to be consulted on their own, and allow them to move from parent-coordinated to self-managed asthma care easily.

Recommendation 3

ICBs and LHBs should identify any hospitals which do not have a formal transition service and ensure they have one in place by the end of March 2026. Organisations such as the Association of Respiratory Nurses (ARNS), the British Paediatric Respiratory Society (BPRS), Royal College of Paediatrics and Child Health (RCPCH) and the BTS should work together with young people to co-develop good practice guidelines, which adapt and improve current transition models to reflect and meet the needs of young people with asthma.

4. Access to tobacco dependence treatment and support for CYP

Treating tobacco dependence in children and young people with asthma.

The rationale for this recommendation is informed by the following national guidance and quality standards:

- NHS Long Term Plan
- NICE (2023). NG209: Tobacco: preventing uptake, promoting quitting and treating dependence
- BTS clinical statement: Medical management of inpatients with tobacco dependency (2024)

What the audit shows

Only 44.4% of hospitals for children and young people with asthma in England, and 20% of hospitals in Wales, can signpost or refer patients to a tobacco dependence service (Fig 5). Access to a tobacco dependence service for CYP asthma patients' parents and carers is higher, with 71% of hospitals in England and 60% of hospitals in Wales reporting that there is provision available for parents and carers who smoke.

In England 41.1% of hospitals for children and young people with asthma, and 20% of hospitals in Wales, provide access to a tobacco dependence service for both CYP asthma patients and their parents and carers. This number has not significantly improved since 2021 when it was 37.7% (England) and 16.7% (Wales). Returned data indicates 74.2% of hospitals in England and 60% of hospitals in Wales have a tobacco dependence service for CYP asthma patients or their parents/carers.

Why this matters

Passive and active smoking significantly endangers short- and long-term respiratory health in children and adolescents. Parental smoking, especially in poorer households, is the primary source of passive exposure, increasing the risk of childhood asthma and year-round symptoms. Additionally, 30% of deaths from second-hand smoke occur in children, mainly from lower respiratory infections in those under 5.

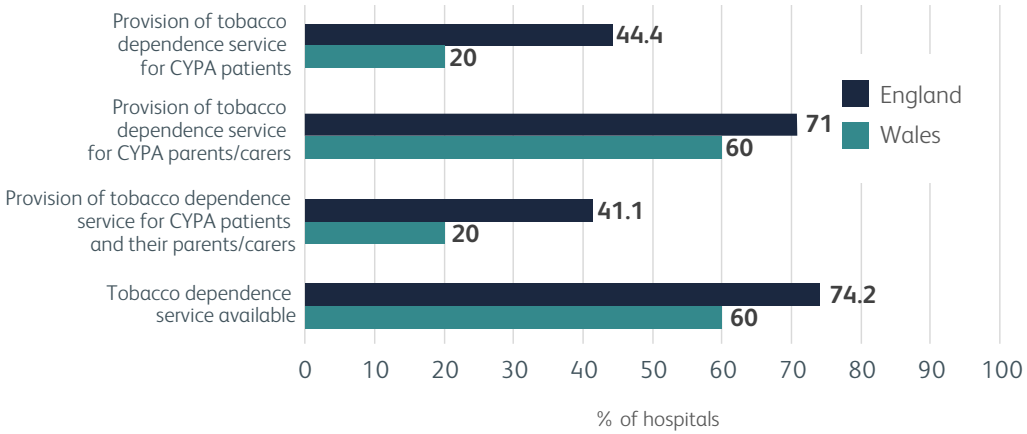

Fig 5. Access to tobacco dependence service for children and young people with asthma and their parents/carers

Children who smoke are 2–6 times more likely to experience respiratory issues and impaired lung growth, leading to a higher risk of lung disease later in life. Addressing tobacco dependence in parents, carers and children is therefore crucial for preventing and treating asthma. The National Review of Asthma Deaths highlights the importance of early intervention, which is a funded priority in NICE guidelines and the NHS Long Term Plan for acute inpatient services.[7,8,9]

Recommendation 4

All people with COPD and asthma should have access to tobacco dependence support. In particular, ICBs and LHBs should ensure that all children and young people admitted to hospital with asthma, and their parents and carers, have access to NHS-funded, evidence-based opt-out tobacco dependence treatment and support as part of their care.

5. Widening access to PR

Ensure that pulmonary rehabilitation (PR) services are resourced to accept referrals for all eligible respiratory conditions by 2026.

The rationale for this recommendation is informed by the following national guidance and quality standards:

- BTS: Clinical statement 2023
- NHSE: Pulmonary rehabilitation commissioning standards
- BTS: Pulmonary rehabilitation quality standard (2014)

What the audit shows

While services overall appear willing to accept referrals, the funding available to them often does not reflect this increased cohort. Our data show that the majority of pulmonary rehabilitation services across England and Wales accept referrals for a range of chronic respiratory diseases, most commonly COPD, bronchiectasis and interstitial lung disease (Fig 6). Extending the availability of pulmonary rehabilitation to people with a range of respiratory conditions has been endorsed in the BTS clinical statement on pulmonary rehabilitation, and commissioning capacity to meet the needs of those living with chronic respiratory disease is referenced within the NHS England pulmonary rehabilitation commissioning standards.[10] Commissioning of services should recognise the extended scope of rehabilitation. 100% of services fund pulmonary rehabilitation for COPD, while only 88.8% of services have funding for interstitial lung disease, 89.4% for bronchiectasis and 75.0% for asthma.

What good practice looks like

Everyone living with respiratory conditions should receive timely access to the best interventions. Timely access to quality-assured pulmonary rehabilitation is an NRAP priority, which is reported and tracked through the clinical dataset. National recommendations indicate that people with stable COPD should commence PR within 90 days from referral and within 4 weeks post hospitalisation, and we would like to see similar targets in place for people with other respiratory conditions.

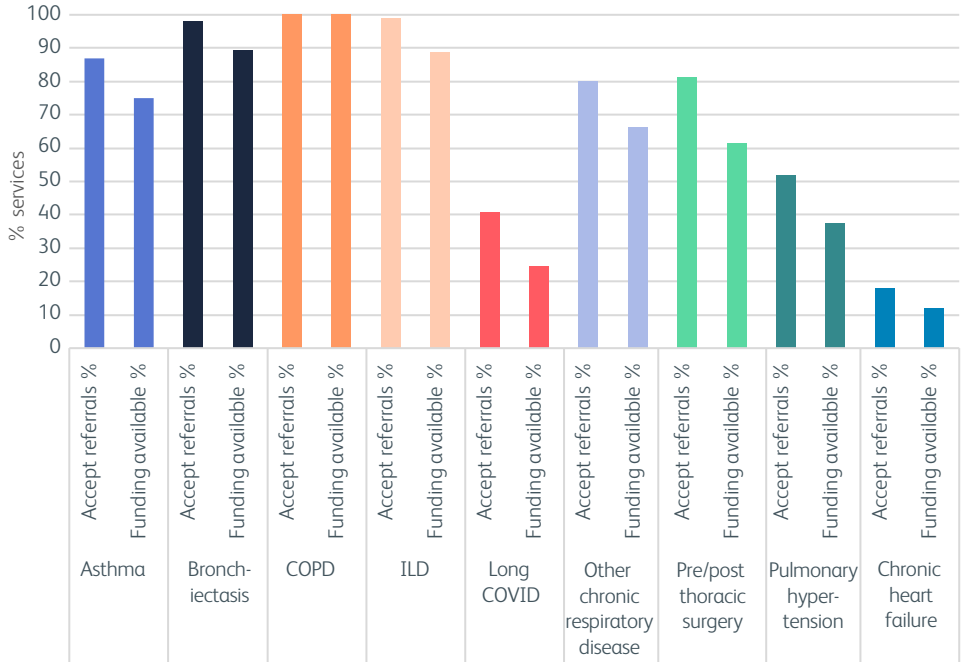

Fig 6. PR services in England and Wales reporting that they accept referrals, or have funding available, for different conditions

Recommendation 5

ICBs and LHBs should support services in ensuring that all patients with chronic respiratory disease have timely access to a quality assured pulmonary rehabilitation programme, including those who were admitted to hospital post exacerbation. This should include supporting services to be able to accept suitable patients for all chronic respiratory diseases. Reaching this target may require staff recruitment, training and additional funding. Services should work with referrers to increase awareness of the increased scope of rehabilitation, and develop pathways to ensure appropriate referrals.

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 Respiratory Audit Programme (NRAP) 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 and the Royal College of Nursing. Its aim is to promote quality improvement in patient outcomes, 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 Respiratory Audit Programme (NRAP)

National Respiratory Audit Programme (NRAP) aims to improve the quality of the care, services and clinical outcomes for patients with respiratory disease across England and Wales. It does this by using data to support and train clinicians, empowering people living with respiratory disease, and their carers, and informing national and local policy. NRAP has a track record of delivery and is critical in assessing progress against the NHS Long Term Plan. To find out more about the NRAP visit our website.

Acknowledgements

This report was produced by:

Dr Alexander Adamson, NRAP data analyst, Imperial College London
Lara Amusan, programme manager, NRAP, CQID, RCP
Tim Bunning, principal consultant, Crown Informatics
Dr Hannah Burke, COPD clinical fellow, NRAP, CQID, RCP
Teena Chowdhury, deputy director, CQID, RCP
Professor James Dodd, adult asthma clinical lead, NRAP, CQID, RCP
Holly Drover, pulmonary rehabilitation clinical fellow, NRAP, CQID, RCP
Ann Marie Fowles, programme coordinator, NRAP, CQID, RCP
Aleksandra Gawlik-Lipinski, children and young people asthma clinical fellow, NRAP, CQID, RCP
Millie Harris, adult asthma clinical fellow, NRAP, CQID, RCP
Jodie Henderson, project manager, NRAP, CQID, RCP
Rachael Hodges, deputy programme manager, NRAP, CQID, RCP
Amy Lewtas, project manager, NRAP, CQID, RCP
Dr George Nava, adult asthma clinical fellow, NRAP, CQID, RCP
Ruth O'Beirne, programme coordinator, NRAP, CQID, RCP
Dr Irem Patel, COPD clinical lead, NRAP, CQID, RCP
Professor Jennifer Quint, data analysis lead, Imperial College London
Eleanor Rochell, programme coordinator, NRAP, CQID, RCP
Professor Sally Singh, pulmonary rehabilitation clinical lead, NRAP, CQID, RCP
Professor Ian Sinha, children and young people asthma clinical lead, NRAP, CQID, RCP
Professor Alice Turner, healthcare improvement clinical lead, NRAP, CQID, RCP
Peter Van Geffen, project manager, NRAP, CQID, RCP
Professor Tom Wilkinson, senior clinical lead, NRAP, CQID, RCP
NRAP advisory groups
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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
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National Respiratory Audit Programme (NRAP)