



Royal College
of Physicians

NACAP

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

Adult asthma and COPD organisational audit 2019

Resources and organisation of care in hospitals in England,
Scotland and Wales 2019

Key findings and recommendations

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National Asthma and COPD Audit Programme (NACAP) The NACAP is a programme of work that aims to improve the quality of care, services and clinical outcomes for patients with asthma and COPD in England, Scotland and Wales. Spanning the entire patient care pathway, NACAP includes strong collaboration with asthma and COPD patients, as well as healthcare professionals, and aspires to set out a vision for a service which puts patient needs first. To find out more about the NACAP visit: www.rcplondon.ac.uk/nacap.

Adult asthma and COPD organisational audit 2019 report This report was prepared by the following people, on behalf of the asthma advisory group and COPD advisory group (the full list of members are included in the online appendices here: www.rcplondon.ac.uk/nacap-resources).

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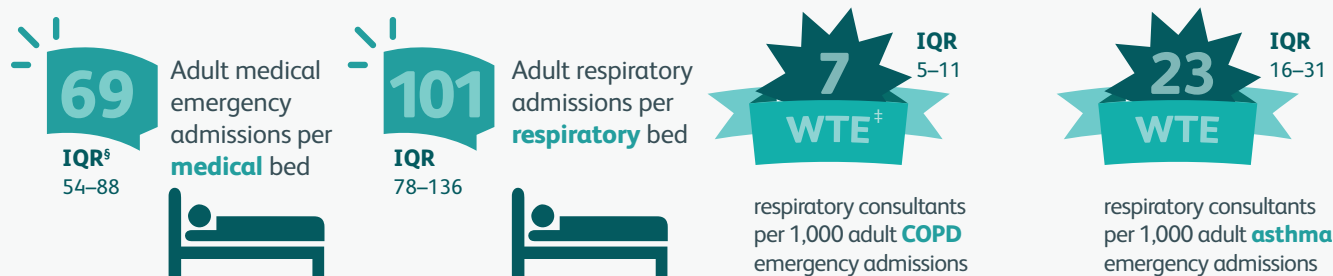
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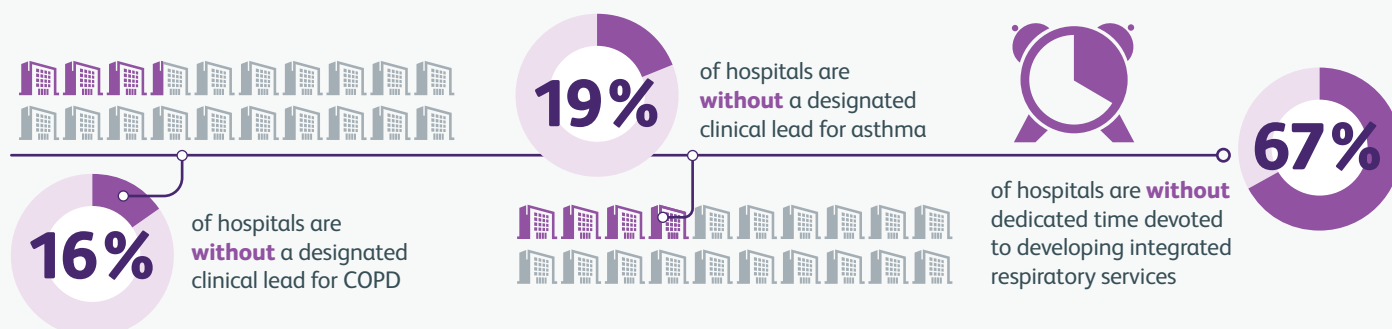
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Report at a glance

Safe (CQC domain): Workload (medians)*,†

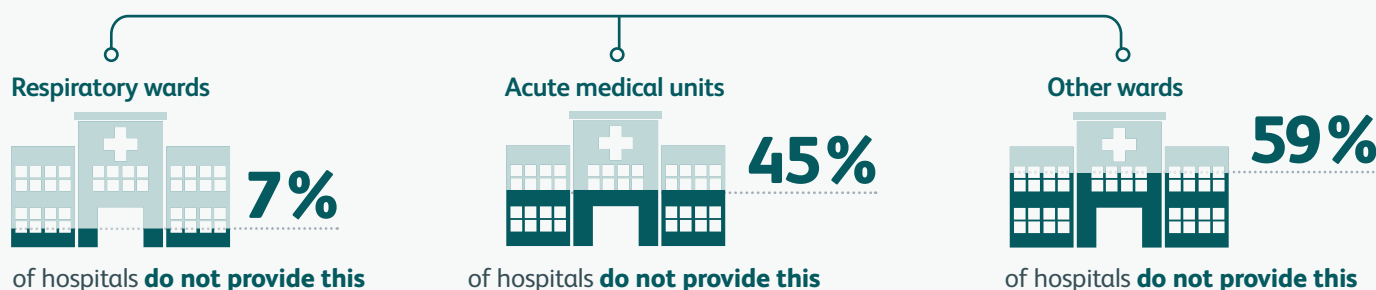


Well-led (CQC domain): Clinical leadership[¶]

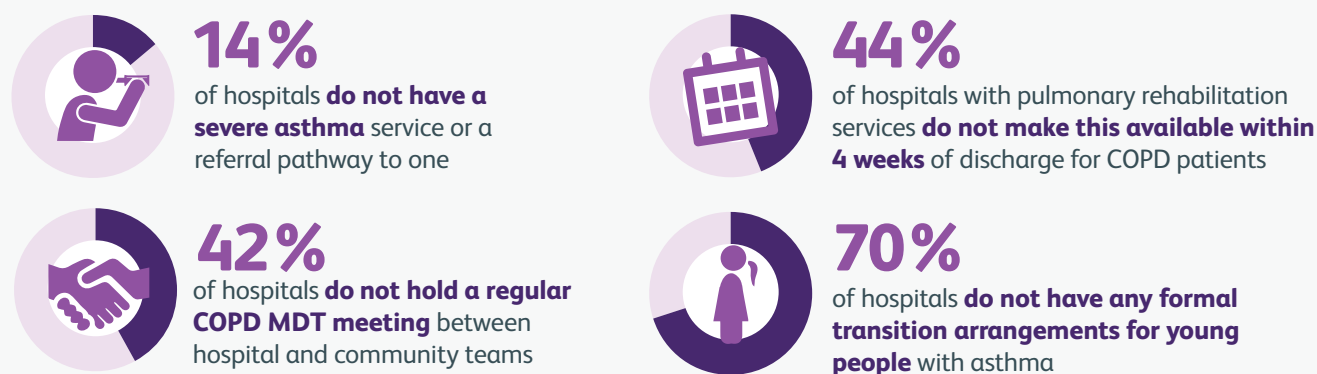


Effective (CQC domain): Respiratory review^{**}

Provision of ward rounds by **senior decision makers (ST3 or above)** from the respiratory team for new asthma and COPD patients:



Responsive (CQC domain): Integrated care^{††}



* Figures based on the 2018/19 financial year.

† There are no national standards for safe staffing of respiratory services. However, the observed variation between providers strongly suggests that standards are needed to ensure the NHS delivers safe care to all patients, regardless of the organisation they present to.

§ IQR = interquartile range.

† WTE = whole time equivalent.

¶ National recommendations are that each service should have a dedicated clinical lead to ensure a high-quality service in accordance to standards is provided for patients.

** Audit data demonstrates that patients reviewed by a member of the respiratory team are more likely to receive high-quality guideline-recommended care.

†† The NHS Long Term Plan recommends that the NHS develops integrated care systems to optimise patient care.

How to use this report

1. Scope and report structure

This report contains the main messages and key recommendations derived from an analysis of data collected for the adult asthma and chronic obstructive pulmonary disease (COPD) organisational audit component of the National Asthma and COPD Audit Programme (NACAP). Data collection for the organisational audit took place between 1 April and 1 July 2019 across England, Scotland and Wales. The audit collected information on the resourcing and organisation of services relevant to the care of adult patients with asthma and COPD that are admitted to hospital.

A separate data analysis and methodology report is available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19 and provides the following information:

- the full data analyses, presented with England, Scotland and Wales results separately, as well as combined results for all three countries denoted as 'All' (England, Scotland and Wales) in tables and figures, with explanatory notes throughout
- nationally benchmarked results for participating hospitals for a selection of dataset variables
- appendices, including the methodology for the audit.

References to the appropriate National Institute for Health and Care Excellence (NICE) clinical guidelines and quality statements, and British Thoracic Society (BTS) guidelines relevant to asthma and COPD care, are inserted throughout the key findings.

2. Report coverage

167/175 (95%) eligible hospitals in England, 6/25 (24%) eligible hospitals in Scotland and 16/17 (94%) eligible hospitals in Wales participated in this organisational audit. The low participation rate from Scotland has resulted in instances of highly skewed data for some metrics, therefore, for these metrics, data for Scotland are not reported separately in the data analysis and methodology report.

3. Intended audience

This report is intended to be read by healthcare professionals, NHS managers, chief executives and board members, service commissioners and policy makers, as well as voluntary organisations. A separate report has been produced for patients and the public and is available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19.

We strongly advise that secondary care teams discuss these findings with commissioners as a basis for informing future integrated care partnership service development.

Foreword by Professor Mike Roberts, programme clinical lead, NACAP



This report highlights the variation and inequalities in the provision of resource and organisation of care to meet national quality standards for asthma and COPD services. Equity of access to high-quality care should be the reasonable expectation of all patients and the public. While some provider organisations meet many quality standards, others fail to do so across a range of provision that should be a serious cause of concern to commissioners.

For hospitals to provide high-quality services there must be effective leadership, both at board level, and from front-line clinicians. There must be sufficient numbers of clinical and support staff with appropriate training and effective team working. Cohesive services require systems to be integrated internally and with community and primary care teams, and the views and experiences of patients should be at the heart of all that we do. This audit demonstrates that around one in six organisations lack this clinical leadership, that there is a three-fold variation in staffing levels adjusted for workload, that over a half of hospitals do not operate joint community team working, while over two thirds have no formal transitional arrangements for young people with asthma to move to adult services. Almost a half of hospitals do not formally consult patients on services at all, and less than a third engage with patients frequently to help plan services.

The purpose of this report, however, is not to criticise organisations where the organisation of care falls below that expected, but to highlight where this occurs with a view to engaging providers, commissioners, patients, clinicians and managers in a programme of improvement. Within this report we itemise the national quality standards that all partners in this improvement programme should be sighted on. The report highlights good practice that can be replicated elsewhere, so reducing the unwarranted variation currently observed. We provide example case studies of good practice on our website* and signpost improvement teams to other relevant sources of education, training and improvement support.^{†,‡} In addition, the NACAP reports on the quality of care of all engaged provider organisations through real-time run charts, providing data in a format to support improvement at hospital level.

We call upon commissioners, trusts and health boards to work together with patients to ensure that national quality standards are met in all provider organisations across the NHS and to acknowledge that the variation reported here is not acceptable within a NHS committed to equitable access and provision of high-quality care to all citizens.

* To view the NACAP workstream good practice repositories, please visit: www.rcplondon.ac.uk/nacap

† Please visit the Respiratory Futures website for more information: www.respiratoryfutures.org.uk/

‡ For more information about NACAP-specific quality improvement activities, please visit: www.rcplondon.ac.uk/projects/national-asthma-and-copd-audit-programme-nacap-quality-improvement

Recommendations

For providers across the sectors

We have defined two key national recommendations for 2020/21 based on the organisational audit data as follows:

1. To resource and organise respiratory services to the national quality standards and guidelines highlighted in this report.
2. To work with commissioners and with patients to achieve these standards.

For commissioners, sustainability transformation partnerships (STPs) and health boards in England and Wales

1. To commission asthma and COPD services to the national NICE and BTS/SIGN standards, working with providers and patients to achieve these standards.
2. To identify variation in the standard of services offered by hospitals within the same locality, and to work to achieve high-quality services across all providers.

For health boards in Scotland

1. Health boards should actively support hospitals to participate in national audit, providing resources for data collection, analysis and improvement, in order to better understand where changes can be made for patient benefit and then to implement those changes.

For specialist societies

1. Consider providing a framework for the range and type of secondary care specialist services that should be provided to all patients with COPD and asthma.
2. Consider providing recommendations for the minimum safe number of respiratory specialist staff that should be available to support safe respiratory services.

For patients/carers

1. Members of patient representative organisations should advocate for the universal implementation of national quality standards across all hospitals.
2. Individuals should engage with local commissioners and hospitals through participation in patient experience groups to co-design service improvement.

Key findings



Section 1: Admissions

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Audit results – admissions:

- Between **1 April 2018 and 31 March 2019 (the 2018/19 financial year)** the median number of admissions were as follows:
 - 69 (interquartile range (IQR): 54–88)** general medical adult emergency admissions per medical bed
 - 101 (IQR: 78–136)** respiratory-coded admissions per respiratory bed
 - 11 (IQR: 9–14)** adult asthma-coded emergency admissions per 1,000 adult medical emergency admissions
 - 34 (IQR: 28–43)** COPD-coded emergency admissions per 1,000 adult medical emergency admissions.
- It is acknowledged that the figures for asthma and COPD-coded emergency admissions appear to be lower than expected. Possible reasons for this include:
 - The data is based only on patients with the following ICD-10 codes in the primary position:
 - J44.0, J44.1, J44.8 and J44.9 for COPD
 - J45.0, J45.1, J45.8, J45.9, J46.0 for asthma.
 - There may be errors in the original data where coding inconsistencies have not been investigated/corrected.
- 90% of hospitals** have a dedicated respiratory ward. But not all respiratory admissions are managed there:
 - The national average proportion of all emergency COPD-coded admissions discharged, or died, on dedicated respiratory wards **in the 2018/19 financial year** was **39% (median) (IQR 25–74%)**.
The national average proportion of all emergency asthma-coded admissions discharged, or died, on dedicated respiratory wards **in the 2018/19 financial year** was **41% (median) (IQR 24–75%)**.

Audit results – beds:

- The median number of bed types were as follows:
 - 275 (IQR: 203–400) medical beds (average per hospital)[§]**
 - 30 (IQR: 26–47) beds on dedicated respiratory wards (average per hospital)^{**}**

[§] In the 2017 COPD organisational audit for England and Wales, the median number of medical beds was 258 (the full report is available at: www.rcplondon.ac.uk/projects/outputs/copd-time-integrate-care-organisational-audit-2017)

^{**} In the 2017 COPD organisational audit for England and Wales, the median number of beds on dedicated respiratory wards was 28 (the full report is available at: www.rcplondon.ac.uk/projects/outputs/copd-time-integrate-care-organisational-audit-2017)

- **0 (IQR: 0–1)** level 2 beds on dedicated respiratory wards, **per 1,000 adult respiratory admissions**
- **3 (IQR: 2–6)** high-dependency unit (HDU) beds **per 10,000 adult medical emergency admissions**
- **5 (IQR: 3–7)** intensive care unit (ICU) beds **per 10,000 adult medical emergency admissions.**
- **85% of hospitals have a HDU and 94% have an ICU** to which asthma and COPD patients can be admitted.



Section 2: Staffing levels

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Key standards:

There are no national recommendations for the number of staff to be made available to manage care for respiratory patients. What is clear from these data is that there is wide variation in the number of specialist staff per 1,000 respiratory admissions across hospitals, and that such variation must result in variable care quality. Vacancies against an establishment further undermine effective care.

- [NICE 2011 QS10 \[Care in hospital\]](#): People admitted to hospital with an exacerbation of COPD are cared for by a respiratory team and have access to a specialist early supported-discharge scheme with appropriate community support.¹
- [NICE 2013 QS25 \[QS9\]](#): People admitted to hospital with an acute exacerbation of asthma have a structured review by a member of a specialist respiratory team before discharge.²

Audit results – respiratory consultant staffing levels:

- 7 (4%) hospitals have no **respiratory consultant(s)** in post. In addition, 26% of hospitals have between 0.1–1 WTE vacancies, 14% have between 1.1–3.0 WTE vacancies and 2% have more than 3.0 WTE vacancies for respiratory consultant staff.

Audit results – respiratory nurse staffing levels:

- 19% of hospitals do not have a **general respiratory nurse specialist(s)** in post. In addition, 11% of hospitals have between 0.1–1 WTE vacancies, 5% have between 1.1–3.0 WTE vacancies and 3% have more than 3.0 WTE vacancies for a general respiratory nurse specialist.
- 58% of hospitals do not have a **COPD nurse specialist(s)** in post. In addition, 7% of hospitals have between 0.1–1 WTE vacancies for this position while 93% of hospitals have no vacancies.
- 67% of hospitals do not have an **asthma nurse specialist** post. In addition, 4% of hospitals have between 0.1–1 WTE vacancies for this position while 96% have no vacancies.

Audit results – respiratory physiologist

- 17% of hospitals do not have a **respiratory physiologist(s)** in post. In addition, 15% of hospitals have between 0.1–1 WTE vacancies for this position, while 81% of hospitals have no vacancies.



Section 3: Access to specialist staff and services

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Key standards – access to respiratory medical team:

- [National COPD Audit Programme 2014 \[National Organisational Audit Report\]](#): Each unit should nominate a respiratory clinical lead for discharge care and integrating services, this individual having designated time to improve the uptake of discharge bundles, improve the quality of discharge information and work collaboratively with colleagues in primary care to improve integrated pathways for COPD.³
- [NICE 2011 QS10 \[QS10\]](#): People admitted to hospital with an exacerbation of COPD are cared for by a respiratory team and have access to a specialist early supported-discharge scheme with appropriate community support.¹
- [NICE 2013 QS25 \[QS9\]](#): People admitted to hospital with an acute exacerbation of asthma have a structured review by a member of a specialist respiratory team before discharge.²
- [NRAD 2014 \[Organisation of NHS Services, Recommendation 1\]](#): Every NHS hospital and general practice should have a designated, named clinical lead for asthma services, responsible for formal training in the management of acute asthma.⁴

Audit results – access to respiratory medical team:

- 81% of hospitals have a **designated named clinical lead for asthma** and 84% of hospitals have a **designated named clinical lead for COPD**.
- 81% of asthma and COPD patients on admissions wards are **reviewed by a senior decision maker (ST3 or above)** daily on weekdays. In addition, 58% of asthma and COPD patients are reviewed daily on weekends by a senior decision maker.
- For 78% of hospitals, **respiratory consultants and ST3s contribute to the acute medical take**.
- **On-call availability of respiratory consultants, or ST3s and above, for acute medicine** is mixed with:
 - availability every day in 9% of hospitals
 - availability 1 day in 2/3 in 23% of hospitals
 - availability 1 day in 4/5 in 32% of hospitals
 - availability less frequently than 1 day in 5 in 36% of hospitals.
- 19% of hospitals operate a **dedicated on-call rota** for respiratory emergency admissions.

Case study – Heartlands Hospital (University Hospitals Birmingham NHS Foundation Trust):

Heartlands Hospital is one of four hospital sites at University Hospitals Birmingham NHS Foundation Trust. The team have managed to **achieve high levels of specialist review of admitted respiratory patients** through four main methods:

1. The respiratory team have established a specialist respiratory on-call rota, which now has an electronic method of adding patients for specialist review. Through consultant presence at the morning handover within general medicine, and registrar presence at 5pm and 9pm handovers, the respiratory team are able to reiterate regularly the need for acute teams to tell them about respiratory patients. After review by the medical team a daily email is sent to the respiratory department, including the COPD nurses.
2. Two respiratory consultants (jointly with acute medicine) have been appointed, thus ensuring regular specialist input within the acute and short stay wards. This relieves pressure on the specialist take and ensures short stay patients can be seen more easily.
3. The respiratory nurses check in with outlying wards, in particular those with high turnover of patients, on a daily basis. This ensures that any patients not alerted to the medical team via the electronic list are known to the respiratory team and can be seen.
4. The clerk entering NACAP data knows the names of all the respiratory SpRs and fellows; this means that patients seen by a member of the specialist team in out of hours in particular, who also might be discharged quickly (or not subsequently on the respiratory ward), have their specialist review recognised and entered onto the NACAP system.



Specialist review
of respiratory
patients at
Heartlands
Hospital

The respiratory department has registrars, consultants and respiratory nurses within the reviewing team. The medical staff do rounds twice daily, 7 days/week, using the electronic list, and nurses contact wards and review the email list daily Monday–Friday.

The respiratory department has also changed processes in two ways. Firstly, the department has had more respiratory engagement with acute medicine over the last 18 months. Secondly the nurses monitor the data received from coding each month to determine if there are particular areas where patients are being missed, and use this to determine which areas they should target with daily calls/visits.

Key standards – access to other staff and services:

- [BTS/SIGN 2019 \[6.2.9\]](#): Weight-loss interventions (including dietary and exercise-based programmes) should be considered for overweight and obese adults and children with asthma to improve asthma control.⁵
- [NICE 2019 NG115 \[1.2.103\]](#): Refer people [with COPD] for dietetic advice if they have a BMI that is abnormal (high or low) or changing over time.⁶
- [NICE 2019 NG115 \[1.2.109\]](#): People with end-stage COPD and their family members or carers (as appropriate) should have access to the full range of services offered by multidisciplinary palliative care teams, including admission to hospices.⁶
- [NICE 2011 QS10 \[QS13\]](#): People with advanced COPD, and their carers, are identified and offered palliative care that addresses physical, social and emotional needs.¹

Audit results – access to other staff and services:

- 99% of hospitals provide **inpatient dietetic services** which are available to asthma patients and COPD patients.
- 99% of hospitals provide **on-site palliative care services** which are available to COPD patients.

Key standards – smoking cessation services:

- [BTS/SIGN 2019 \[6.2.3\]](#): People with asthma and parents/carers of children with asthma should be advised about the dangers of smoking and second-hand tobacco smoke exposure, and should be offered appropriate support to stop smoking.⁵
- [NICE 2019 NG115 \[1.2.3\]](#): At every opportunity, advise and encourage every person with COPD who is still smoking (regardless of their age) to stop, and offer them help to do so.⁶
- [NICE 2019 NG115 \[1.2.4\]](#): Unless contraindicated, offer nicotine replacement therapy (NRT), varenicline or bupropion as appropriate to people who want to stop smoking, combined with an appropriate support programme to optimise smoking quit rates for people with COPD.⁶
- [NICE 2018 NG92 \[1.1.1\]](#): Use sustainability and transformation plans, health and wellbeing strategies, and any other relevant local strategies and plans to ensure evidence-based stop smoking interventions and services are available for everyone who smokes.⁷
- [NICE 2018 NG92 \[1.1.3\]](#): Prioritise specific groups who are at high risk of tobacco-related harm.⁷
- [NICE 2018 NG92 \[1.3.1\]](#): Ensure the following evidence-based interventions are available for adults who smoke:⁷
 - behavioural support (individual and group)
 - bupropion
 - NRT – short and long acting
 - varenicline
 - very brief advice.
- [NICE 2018 NG92 \[1.3.3\]](#): Offer varenicline as an option for adults who want to stop smoking, normally only as part of a programme of behavioural support, in line with NICE's technology appraisal guidance on varenicline.⁷
- [NICE 2018 NG92 \[1.3.4\]](#): For adults, prescribe or provide varenicline, bupropion or NRT before they stop smoking.⁷
- [NICE 2018 NG92 \[1.3.8\]](#): Ensure behavioural support is provided by trained stop smoking staff.⁷

Audit results – smoking cessation services:

- **63%** of hospitals have a **smoking cessation service available** for asthma and COPD patients to access.^{††}
- **NRT** is routinely **available in 99%** of hospitals, but varenicline (52%) and bupropion (37%) are less widely available to inpatients.

Case study – Eastbourne District General Hospital (East Sussex Healthcare NHS Trust)

Eastbourne District General Hospital was identified as providing a comprehensive smoking cessation service.

- When the respiratory nurses review patients for the discharge bundle they provide very brief advice (VBA) to all current smokers.^{‡‡} They ensure NRT is prescribed and offer a referral to a smoking cessation clinic, either as an inpatient or in the community.
- Pharmacists and pharmacy technicians are present on each ward and support junior doctors with the prescription of NRT.
- A pharmacist and a smoking cessation adviser from One You East Sussex, the local smoking cessation service provider, run a joint smoking cessation clinic once per week on the respiratory ward.
- An electronic referral form to One You East Sussex is available on the Integrated Clinical Environment (ICE) system and can be sent by all healthcare workers with the patient's permission.

Smoking
cessation service
at Eastbourne
District General
Hospital

^{††} For this organisational audit, 'smoking cessation service' was defined as a formal smoking cessation programme, delivered in the hospital, either by hospital staff or a visiting smoking cessation practitioner.

^{‡‡} VBA is used as a smoking cessation intervention and is composed of three parts: a) asking and recording the patient's smoking status; b) advising on the best way of quitting; and c) acting by offering a specialist referral and prescribing pharmacotherapy where appropriate. Healthcare professionals can provide VBA in as little as 30 seconds. For more information about VBA please visit: www.gov.uk/government/publications/preventing-ill-health-commissioning-for-quality-and-innovation/guidance-and-information-on-the-preventing-ill-health-cquit-and-wider-cquit-scheme



Section 4: 7-day working

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Key standards:

- [NICE 2011 QS10 \[QS10\]](#): People admitted to hospital with an exacerbation of COPD are cared for by a respiratory team and have access to a specialist early supported-discharge scheme with appropriate community support.¹
- [NICE 2013 QS25 \[QS9\]](#): People admitted to hospital with an acute exacerbation of asthma have a structured review by a member of a specialist respiratory team before discharge.²
- [NICE 2019 NG115 \[1.3.36\]](#): Consider physiotherapy using positive expiratory pressure devices for selected people with exacerbations of COPD, to help with clearing sputum.⁶
- [NICE 2019 NG115 \[1.2.98\]](#): It is recommended that the multidisciplinary COPD team includes respiratory nurse specialists.⁶

Audit results – ICU outreach provision:

- An **ICU outreach service** is provided for critically ill cases requiring ICU management on **weekdays in 88%** of hospitals, on **weekends in 84%** of hospitals and **out of hours in 59%** of hospitals.
- 12% of hospitals do not provide an ICU outreach service.

Audit results – specialty triage to respiratory medicine provision:

- Operation of a system of **specialty triage of patients to respiratory medicine** is available on **weekdays in 60%** of hospitals, on **weekends in 42%** of hospitals, and **out of hours in 22%** of hospitals.
- 40% of hospitals operate no specialty triage of patients to respiratory medicine.

Audit results – on-call respiratory consultant provision:

- An **on-call respiratory consultant** is available on **weekdays in 53%** of hospitals, on **weekends in 30%** of hospitals and **out of hours in 22%** of hospitals.
- 46% of hospitals do not have an on-call respiratory consultant.

Audit results – new-patient ward rounds by senior decision makers:

- The provision of new-patient ward rounds by senior decision makers (ST3 or above) from the respiratory team are as follows:
 - **on acute medical units (AMUs):**
 - 53% of hospitals undertake new-patient ward rounds on weekdays and 22% of hospitals do so on weekends. In 5% of hospitals new-patient ward rounds are undertaken during out of hours.
 - **on respiratory wards:**
 - 93% of hospitals undertake new-patient ward rounds on weekdays and 32% of hospitals do so on weekends. In 6% of hospitals, new-patient ward rounds are undertaken during out of hours.

- **on other wards:**

- 41% of hospitals undertake new-patient ward rounds on weekdays, 12% on weekends and 3% during out of hours.

Audit results – respiratory nurse provision:

- 89% of hospitals provide **respiratory nurse(s) review** on weekdays for asthma patients and 93% provide this for COPD patients. This is **lower on weekends** for asthma and COPD patients (19% and 30% respectively).
- 1% of hospitals have respiratory nurse availability for these patients in out of hours.

Audit results – inpatient physiotherapist provision:

- 95% of hospitals provide **inpatient physiotherapist review on weekdays** for asthma patients, and 96% for COPD patients. This is **lower on weekends** for asthma and COPD patients (70% and 72% respectively).
- Out of hours, inpatient physiotherapist availability for asthma and COPD patients is lower (50% and 51% respectively).

Case study – Northern General Hospital (Sheffield Teaching Hospitals NHS Foundation Trust)

Northern General Hospital aims to deliver a specialist, 7 day a week consultant-led respiratory service, maximising specialist nursing input.

- Patients are identified for specialist respiratory care by addition to a list on an electronic white board.
- Patients are triaged to the respiratory list from the emergency department (ED) or via the single point of access for community referrals.
- The white board also separately records general patient reviews, and reviews on the respiratory post-take ward round (PTWR) delivered by consultant respiratory physicians.
- Usual review is on an acute medical unit (AMU) before transfer to a base respiratory ward, but reviews also occur at other locations (ED, clinical decision unit, non-respiratory base ward).
- A PTWR commences at 8am, 365 days per year, and sees all respiratory admissions from the last 24 hours not yet seen by a consultant.
- A 'hot take' after PTWR, seeing new respiratory admissions and problem solving, occurs until 7pm on weekdays.
- On consultant PTWR, a green-coloured PTWR sheet, detailing the summary of investigations, diagnosis and clear management plan, is added to the paper patient records.

**Specialist 7-
days/week
respiratory service
at Northern
General Hospital**

For patients with COPD

- Admissions with (or likely to have) COPD are identified daily from the electronic white board by COPD specialist nurses, 365 days per year.
- Patients are reviewed on the same day by specialist nurses who check diagnosis, review treatment, check inhaler technique, provide education, refer to smoking cessation / pulmonary rehabilitation / community respiratory / mental health teams and triage to early supported discharge. Repeat visits are provided as required.
- The nursing team complete a single page pro forma, added to the notes alongside the consultant PTWR plan including lung function, historical oxygen saturations and appropriate input post discharge.
- Electronic notes are also made on SystemOne; these are shareable with the community team who may receive referrals. This is visible to two-thirds of Sheffield GPs.
- A weekly multidisciplinary team (MDT) meeting (between hospital and community team colleagues) reviews patients from this process.

For patients with asthma

- Asthma nurse specialists review the electronic white board twice daily during week days and visit patients identified as being admitted with asthma.
- Nurses carry out a review of diagnosis and management which includes a review of concordance and inhaler technique.
- Patient education is undertaken with advice about the need for early primary care review; all patients reviewed are supplied with an Asthma UK action plan. Complex patients with asthma are discussed at the weekly Asthma MDT.

Documents to note each of the specialist reviews referred to above are available at:
www.rcplondon.ac.uk/copd-asthma-organisational-2018-19



Section 5: Management of care

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Key standards – managing respiratory failure (emergency oxygen therapy):

- [BTS 2017 \[Guideline for oxygen use in healthcare and emergency settings – 11.1.2\]](#): Each hospital should have an agreed policy and protocol for oxygen prescribing to allow staff to adjust oxygen delivery devices and to give oxygen in emergency situations prior to the availability of a prescription.⁸
- [BTS 2017 \[Guideline for oxygen use in healthcare and emergency settings – 11.1.6\]](#): Every healthcare facility should have a standard oxygen prescription document or, preferably, a designated oxygen section on all drug-prescribing cards or guided prescription of oxygen in electronic prescribing systems.⁸
- [BTS 2017 \[Guideline for oxygen use in healthcare and emergency settings\]](#): All critically ill patients outside of a critical care area (eg intensive care unit (ICU), high-dependency unit (HDU), respiratory HDU) should be assessed and monitored using a recognised physiological track and trigger system such as the National Early Warning Score (NEWS).⁸
- [BTS 2017 \[Guideline for oxygen use in healthcare and emergency settings\]](#): Oxygen should be prescribed to achieve a target saturation of 94–98% for most acutely ill patients, or 88–92% or patient-specific target range for those at risk of hypercapnic respiratory failure.⁸

Audit results – managing respiratory failure (emergency oxygen therapy):

- 96% of hospitals have an **oxygen policy** in place.^{§§}
- 98% of hospitals have a **designated place in which to record the prescription of oxygen** in the ward medication chart/record.^{***}
- **NEWS2** is used in 79% of hospitals as their system of early warning detection.
- Early warning detection charts allow target saturation to be recorded at 87% of hospitals, actual saturation to be recorded at 96% of hospitals and amount of oxygen administered to be recorded at 95% of hospitals.

^{§§} In the 2017 COPD organisational audit for England and Wales, 94% of hospitals had an oxygen policy in place.

^{***} In the 2017 COPD organisational audit for England and Wales, 96% of hospitals had a designated place in which to record the prescription of oxygen in the ward medication chart/record.

Non-invasive ventilation	
Key standards:	Audit results:
BTS 2018 (Acute NIV in adults [QS1]) : Acute non-invasive ventilation (NIV) should be offered to all patients who meet evidence-based criteria. Hospitals must ensure there is adequate capacity to provide NIV to all eligible patients. ⁹	7% of hospitals report not meeting this.
BTS 2018 (Acute NIV in adults [QS2]) : All staff who prescribe, initiate or make changes to acute NIV treatment should have evidence of training and maintenance of competencies appropriate for their role. ⁹	26% of hospitals report not meeting this.
BTS 2018 (Acute NIV in adults [QS3]) : Acute NIV should only be carried out in specified clinical areas designated for the delivery of acute NIV. ⁹	9% of hospitals report not meeting this.
BTS 2018 (Acute NIV in adults [QS4]) : Patients who meet evidence-based criteria for acute NIV should start NIV within 60 minutes of the blood gas result associated with the clinical decision to provide NIV and within 120 min of hospital arrival for patients who present acutely. ⁹	34% of hospitals report not meeting this.
BTS 2018 (Acute NIV in adults [QS5]) : All patients should have a documented escalation plan before starting treatment with acute NIV. Clinical progress should be reviewed by a healthcare professional with appropriate training and competence within 4 hours of starting NIV and by a consultant with training and competence in acute NIV within 14 hours of starting acute NIV. ⁹	26% of hospitals report not meeting this.
BTS 2018 (Acute NIV in adults [QS6]) : All patients treated with acute NIV should have blood gas analysis performed within 2 hours of starting acute NIV. Failure of these blood gas measurements to improve should trigger specialist healthcare professional review within 30 minutes. ⁹	25% of hospitals report not meeting this.

Key standards – pulmonary rehabilitation

- [BTS 2014 Quality standards for pulmonary rehabilitation \[QS3\]](#): People admitted to hospital with acute exacerbations of COPD (AECOPD) are referred for pulmonary rehabilitation at discharge.¹⁰
- [BTS 2014 Quality standards for pulmonary rehabilitation \[QS3\]](#): People referred for pulmonary rehabilitation following admission with AECOPD are enrolled within 1 month of leaving hospital.¹⁰
- [NICE 2019 NG115 \[1.2.81\]](#): Make pulmonary rehabilitation available to all appropriate people with COPD (see recommendation 1.2.82), including people who have had a recent hospitalisation for an acute exacerbation.⁶
- [NICE 2016 QS10 \[QS5\]](#): People admitted to hospital for an acute exacerbation of COPD start a pulmonary rehabilitation programme within 4 weeks of discharge.¹

Audit results – pulmonary rehabilitation:

- 84% of hospitals recorded that **provision of pulmonary rehabilitation for COPD patients takes place within the community**. 33% of hospitals have a **pulmonary rehabilitation service available** for their COPD patients **on site**, and **17% have an available service at another hospital**.⁺⁺⁺
 - Of the hospitals that provide a pulmonary rehabilitation service (either at the hospital, at another hospital or within the community), 45% provide this service to COPD patients within 4 weeks of discharge from hospital.
 - This would suggest that there has been no improvement in availability of pulmonary rehabilitation within 4 weeks of discharge over the last 2 years.

⁺⁺⁺ Hospitals were able to select more than one location option for the following dataset question: *Is there a pulmonary rehabilitation service available to COPD patients discharged following exacerbation from the hospital?*



Section 6: Integrating care

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Key standards – severe asthma service:

[BTS/SIGN 2019 \[4.3.4\]](#): Patients requiring frequent or continuous use of oral corticosteroids should be under the care of a specialist asthma service.⁵

[NICE 2018 QS25 \[QS5\]](#): People with suspected severe asthma are referred to a specialist multidisciplinary severe asthma service.²

[NRAD 2014 \[Organisation of NHS Services, Recommendation 2\]](#): Patients with asthma must be referred to a specialist asthma service if they have required more than two courses of systemic corticosteroids, oral or injected, in the previous 12 months or require management using British Thoracic Society (BTS) stepwise treatment 4 or 5 to achieve control.⁴

Audit results – severe asthma service:

- **39%** of hospitals have a **severe asthma service**. Of the 61% of hospitals that do not, only **86%** have a **referral pathway** to a severe asthma service.

Key standards – integrating care:

- [NICE 2011 QS10 \[QS10\]](#): People admitted to hospital with an exacerbation of COPD are cared for by a respiratory team and have access to a specialist early supported-discharge scheme with appropriate community support.¹
- [NICE 2016 QS10 \[QS3\]](#): People with stable COPD and a persistent resting stable oxygen saturation level of 92% or less have their arterial blood gases measured to assess whether they need long-term oxygen therapy.¹
- [NICE 2018 NG92 \[1.1.1\]](#): Use sustainability and transformation plans, health and wellbeing strategies, and any other relevant local strategies and plans to ensure evidence-based stop smoking interventions and services are available for everyone who smokes.⁷

Audit results: outreach and in-reach early/supported discharge^{***}

- **52%** of hospitals **provide an outreach early/supported discharge service** that is **delivered by a hospital team that works jointly with a community team** and 27% of hospitals do not provide this service. 25% of hospitals selected that this service was delivered by a hospital team.
- **54%** of hospitals **provide an in-reach early/supported discharge service** that is **delivered by a community team that works jointly with a hospital team** and 39% of hospitals do not provide this service. 11% of hospitals selected that this service was delivered by a community team.

^{***} Please note that these figures combined add up to 104%. This is likely due to data entry error as the answer options for the relevant question within the dataset (Which services are provided by whom?) followed a 'tick all that apply' format.

Audit results: admissions avoidance

- **26%** of hospitals provide an **admissions avoidance service** delivered by a **single team that works across the primary/secondary care interface**.

Audit results: oxygen assessment service

- **35%** of hospitals provide an **oxygen assessment service** delivered by a **single team that works across the primary/secondary care interface**.

Medicines management service

- **17%** of hospitals provide a **medicines management service** that is delivered by a **single team that works across the primary/secondary care interface**.^{§§§}

Chronic disease management service

- **24%** of hospitals provide a **chronic disease management service** that is delivered by a **single team that works across the primary/secondary care interface**.

Smoking cessation advice

- **19%** of hospitals provide a **smoking cessation service** that is delivered by a **single team that works across the primary/secondary care interface**.

Audit results – developing integrated respiratory services:

- **33%** of hospitals have **sessional time devoted to developing integrated respiratory services** in the area.
 - Of these hospitals, represented staff members who have designated responsibility for developing these services include: respiratory consultants (65%), respiratory specialist nurses (39%), integrated care respiratory consultants (32%) and respiratory physiotherapists (27%).

Key standards – multidisciplinary team meetings for COPD:

- [NICE NG115 \[1.2.96\]](#): COPD care should be delivered by a multidisciplinary team.⁶
- [NICE NG115 \[1.2.98\]](#): It is recommended that the multidisciplinary COPD team includes respiratory nurse specialists.⁶

Audit results – multidisciplinary team (MDT) meetings for COPD:

- **58%** of hospitals hold a **regular MDT meeting between the hospital and community teams** for patients with COPD.
 - Of these hospitals, 49% host this meeting on a weekly basis and 24% host this on a monthly basis.
 - Of these hospitals, represented staff members include: respiratory consultants (95%), community nurses (97%) and community physiotherapists (86%).

^{§§§} Medicines management includes the clinical, cost-effective and safe use of medicines to ensure that patients get the maximum benefit from the medicines they need, while at the same time minimising potential harm.

Case study – University Hospital of Wales (Cardiff & Vale University Health Board)

- A weekly MDT meeting is led by the respiratory consultant alongside the community team comprising respiratory nurse specialists, physiotherapists and an occupational therapist. The MDT is coordinated by an administrative member of staff who emails the MDT list to the consultant, allowing the patient's results, scans and old letters to be reviewed.
- The MDT offers an opportunity to discuss all aspects of management of COPD patients in the community who are currently under the care of the Community Respiratory Resource Unit (CRRU) team. This could include patients who have self-referred from the community, those who have been admitted to hospital and had their early discharge facilitated by the CRRU team, or those who have been referred by their GP or other healthcare professional to avoid an admission to hospital.
- The MDT discussion focuses on progress of the patient in the community, and whether they require changes to their medical management, further investigations, or referral to other specialties and therapies.
- Patients who are deemed suitable for pulmonary rehabilitation are discussed and referred at the MDT meeting if appropriate. Patients who are unable or unwilling to participate in pulmonary rehabilitation are provided with education and self-management techniques by the CRRU team.
- The MDT also provides the necessary support to the community team so that early discharge and admission avoidance patients can be managed safely in the community. In addition, it provides the team with an educational opportunity as results and radiology scans are reviewed and discussed there.



**The COPD MDT
meeting at
University
Hospital of
Wales**



Section 7: Patient and carer engagement

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Audit results – formal surveys:

- 28% of hospitals undertake a **formal survey less than once a year**, 11% undertake a formal survey **1–2 times a year** and 10% undertake **continuous** surveys. ****
- 46% of hospitals never undertake a formal survey seeking patient/carers views on respiratory services.

Audit results – strategic group for respiratory:

- 69% of hospitals have a **strategic group for respiratory services**.
 - Of these hospitals, 29% include patient representation on this group.

**** For the purposes of this audit, a formal survey excluded the friends and family test, but could be defined locally by hospital teams completing the organisational audit.



Section 8: Transitional care

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Key standards:

- [BTS/SIGN 2019 \[11.11.4\]](#): Transition services must be multidisciplinary and multiagency. Optimal care requires a cooperative working relationship between adult and paediatric services, particularly where the young person has complex needs with multiple specialty involvement.⁵
- [BTS/SIGN 2019 \[11.11.4\]](#): Coordination of transitional care is critical. There should be an identified coordinator who supports the young person until he or she is settled within the adult system.⁵
- [BTS/SIGN 2019 \[11.11.4\]](#): Transition services must address the needs of parents/carers whose role in their child's life is evolving at this time.⁵

Audit results – transitional care:

- **30%** of hospitals have **formal transition arrangements in place** for young people with asthma moving from paediatric to adult services. Of these:
 - 16% ensure the young person has a full record of their condition
 - 18% ensure the young person's GP is sent the same record
 - 23% ensure the young person has a transition plan that has been agreed with both paediatric and adult clinicians
 - 11% ensure the young person has a named case worker to assist in signposting for them and their family.

Case study – Colchester General Hospital (East Suffolk and North Essex NHS Foundation Trust):

In 2012 Colchester General Hospital appointed a paediatric transition nurse to develop a generic paediatric transition procedure to adapt for the continued management of young people with long-term health conditions. The procedure/policy was approved and has been embedded in practice since 2015.

- The transition nursing team now consists of a 1.0 WTE band 7 nurse, a 0.6 WTE band 6 nurse and a band 5 youth worker.
- The hospital has permission to use an adapted version of the 'Ready, Steady, Go' documentation, a transition programme, which is being rolled out across the NHS.^{****}
- The youth worker is developing a young people's forum within the hospital; there is a national initiative to raise the profile of young people as an identified service user group.^{****}

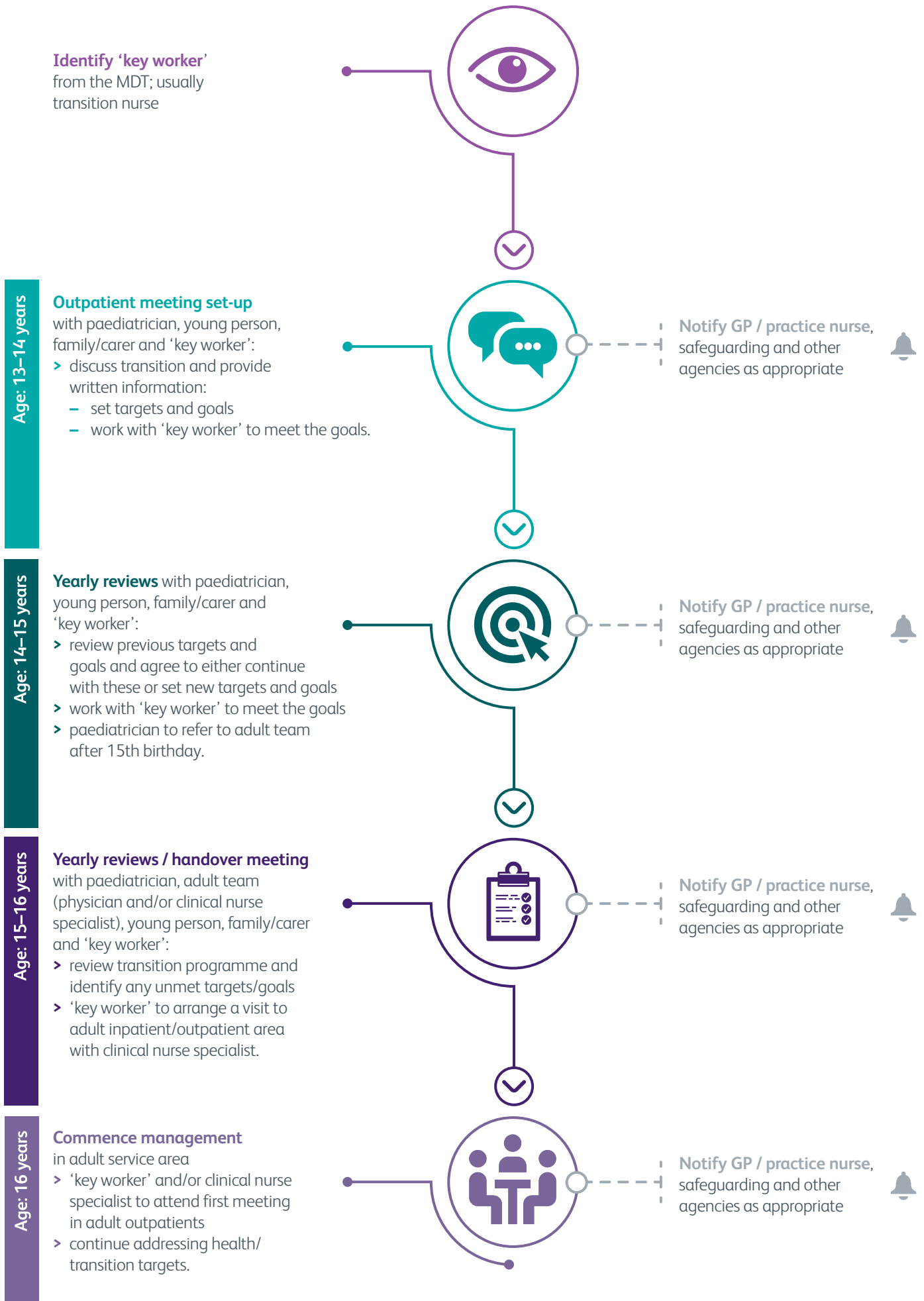
^{****} For more information about the 'Ready, Steady, Go' transition programme please visit:

www.nice.org.uk/sharedlearning/implementing-transition-care-locally-and-nationally-using-the-ready-steady-go-programme

^{***} Please visit the NHS England Youth Forum Impact report for more information, available at:

www.england.nhs.uk/participation/get-involved/how/forums/nhs-youth-forum/

Colchester General Hospital pathway for the transition of children and young people to adult services





Section 9: Reimbursement for costs of care

To see the data analysis in full, please access the data analysis and methodology report available at: www.rcplondon.ac.uk/copd-asthma-organisational-2018-19

Audit results – reimbursement for costs of COPD care:

- For **46%** of hospitals, **reimbursement for costs of COPD care** occurs via **block contract**, and for 32% of hospitals, reimbursement is via payment by results.
- For hospitals in England, **82% of trust local commissioners agree to make the best practice tariff (BPT) payment** for COPD if the BPT is achieved.
- **11%** of hospitals report that commissioners / health boards have agreed a **Commissioning for Quality and Innovation (CQUIN) payment or local incentive payment (LIP)** for COPD care.

Audit results – reimbursement for costs of asthma care:

- For **45%** of hospitals, **reimbursement for costs of asthma care** is via **block contract** and for 34% of hospitals, reimbursement is via payment by results.
- **11%** of hospitals report that commissioners have agreed a **CQUIN or LIP** for asthma care.

Appendix A: Document purpose

Document purpose	To disseminate the results of the national snapshot audit of the organisation and resourcing of adult asthma and COPD hospital services in England, Scotland and Wales 2018/19
Title	COPD and adult asthma: 2019 organisational audit report
Authors	National Asthma and Chronic Obstructive Pulmonary Disease Audit Programme (NACAP), Royal College of Physicians
Publication date	March 2020 (TBC)
Audience	Healthcare professionals, NHS managers, chief executives and board members, service commissioners, policymakers and voluntary organisations.
Description	This report presents the results of the snapshot audit of the organisation and resourcing of adult asthma and COPD hospital services in England, Scotland and Wales which took place between 1 April 2019 and 1 July 2019.
Supersedes	Not applicable
Contact	nacap@rcplondon.ac.uk

Appendix B: References

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