Royal College of Physicians | National respiratory audit programme (NRAP)

National Respiratory Audit Programme (NRAP)

Chronic Obstructive Pulmonary Disease (COPD) Audit: User guide
Secondary Care
Version 0.3 June 2023

Contents

Introduction to NRAP

More than 9 million people are living with a diagnosis of asthma or COPD in the UK.
The National Asthma and COPD Audit Programme (NRAP) is run by the Royal College of Physicians (RCP) and aims to improve the quality of their care, services, and clinical outcomes.
We do this by supporting and training clinicians, informing policy, and empowering people living with asthma and COPD, as well as their carers.
We have a track record of delivery and are critical to assessing progress against the NHS Long Term Plan.
Visit our website to find out more about the Programme and its four audit workstreams.

Overview of the COPD audit

The COPD continuous clinical audit collects information on all people admitted to hospital in England and Wales with exacerbations of COPD.
All hospitals in England and Wales that provide acute COPD care can participate in the audit by entering admission data from patient care case notes into a secure and bespoke audit web tool. The data collection period for the COPD clinical audit started on 1 February 2017 and runs continuously.

How this document will support you

This document is a resource for COPD secondary care teams submitting data to the NRAP webtool. All headings in the contents page are linked to the appropriate chapter for ease of navigation. It is advised that users take the time to read through the whole document to gain a better understanding of the

process of data submission to improve the quality of the data submitted and to become familiar with the tools and documents available on the website to help improve respiratory services.

"Data are fundamental to informing services, both in terms of understanding where we are now and monitoring quality improvement (QI) going forward. Paramount to this is accurate data entry"

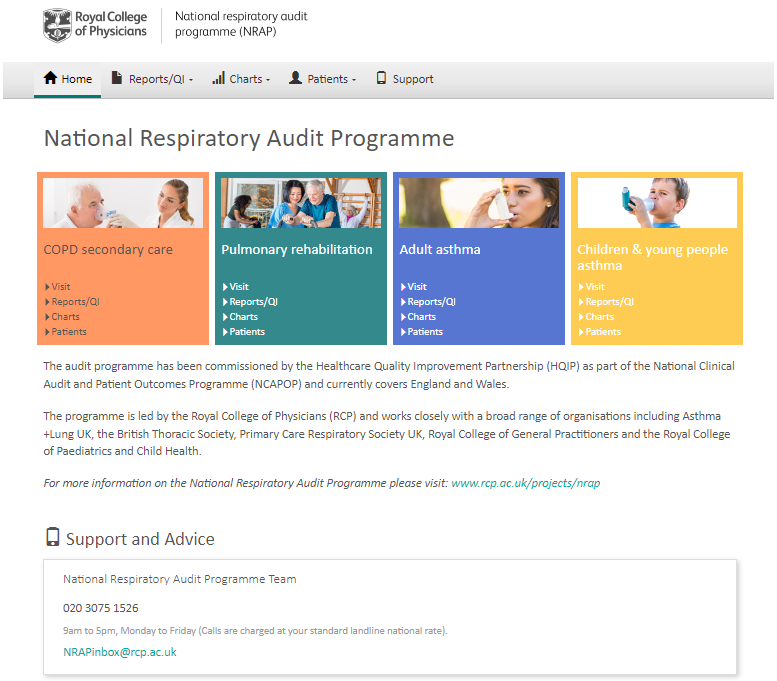
(Professor Jenni Quint, respiratory consultant and professor of respiratory epidemiology).

Registering for the audit

All hospitals in England and Wales who admit people with COPD exacerbations are eligible to participate. Visit the workstream's resources page to download a copy of the registration form.

Accessing the audit webtool

The COPD audit web-tool can be reached via www.NRAP.org.uk:

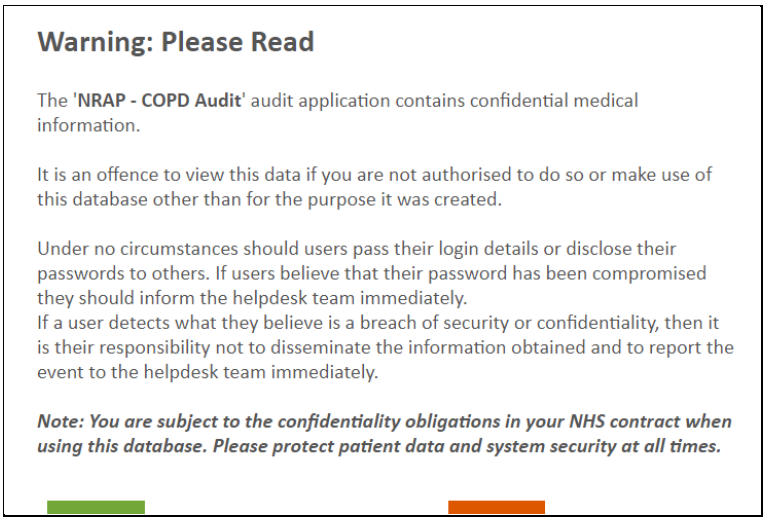


Audit reports and quality improvement (QI) support are publicly available. To submit and review your service's data, you must log in to the webtool.

Every individual that enters data to the audit should have a unique login.

Logging into the database

Once you have reached the webpage, please click **'Visit'** to log into the web tool. Enter your own username and secure password. **Do not** use someone else's details. A pop-up box will appear as follows:



Once you have read the text, click **'I agree'**. This is an information governance procedure necessary for participating in the audit.

Creating new users

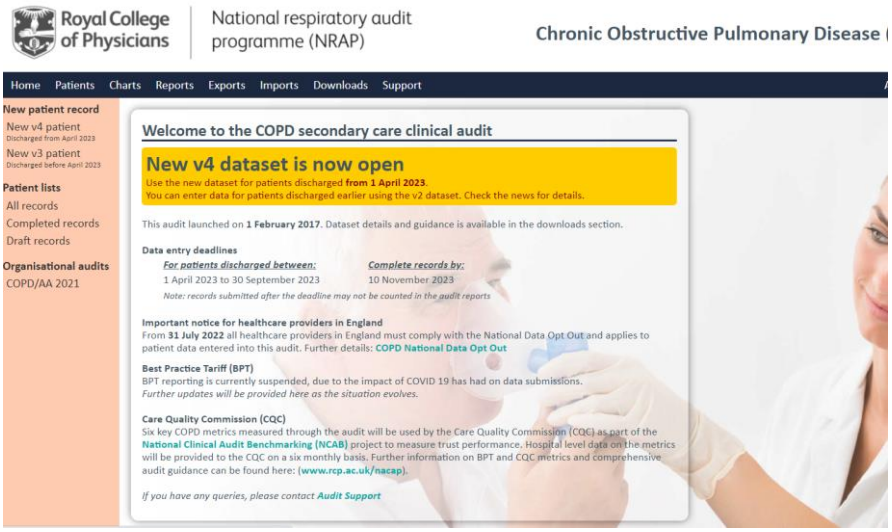
Any registered user that already has login details can create new logins for additional users. Click on **'Support'** from the home page, and once the page loads click **'New user'** on the left-hand side. Click **'Create user'** and follow all instructions to complete registration.

Forgotten password

You can also reset your password via the support tab.

Click on '**Support'** within the home page, and then click on '**Password reset'.** Follow all instructions to change your password.

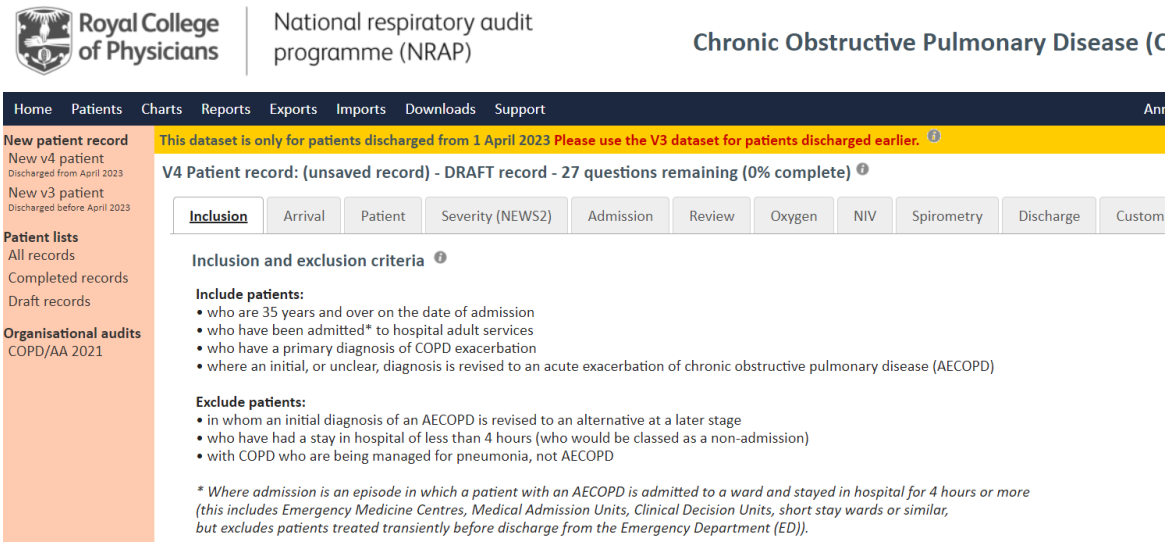
Navigating the COPD audit homepage



The following features are available from the homepage of the COPD audit web tool:

- **'New patient (v3)'** - Here is where to enter a patient who was discharged before 1 April 2023.
- **'New patient (v4)'** - Here is where to enter a new patient who was discharged on or after 1 April 2023.
- **'Home'** - This will take you back to the COPD audit homepage.
- **'Downloads'** - Supporting documents are available to download here (e.g. guidance documents, data collection sheets, etc.).
- **'Support'** - Further support is available here (e.g. new user creation, password reset).
- **'Patients'** - This page shows you the list of patients from your hospital/service that have been entered onto the web-tool.
- **'Charts and Reports'** - This page will show you run-charts and reports based on the COPD clinical audit data.
- **'Imports'** - From here you can upload suitably formatted CSV files of patient records in bulk.
- **'Exports'** - From here, you can export all the patient records entered onto the web-tool into an Excel spreadsheet.
- **'Custom fields'** -You can create custom fields for local use.
- **'News/Events'** - Here you will find key workstream updates to support you and your team take part in the audit.

Entering data



- Navigate through questions using the tabs at the top of the page or the '**Next**' and '**Prev**' buttons at the bottom of the page.
- Help notes are available by clicking on the 'i' icon next to the question.
- Use '**Save**' to save the current record. This will also validate the record and if it does not comply with validation rules it will be highlighted in red and saved as incomplete. Incomplete records can be returned to and completed at a later date. Incomplete records will not be included in any audit reporting.
- Use '**Close**' to close the current record. You can return and edit a record at any point whilst the audit is open, provided it has been saved **before** closing.

Custom fields

Please note that this feature is only available to hospitals using the webtool to submit data on a patient-by-patient basis. It is not available for hospitals that undertake bulk uploads of data in CSV format.

We are aware that individual hospitals may wish to collect additional data for local analysis and as such we have provided the facility to create custom fields to append the dataset.

A maximum of 20 additional fields are available and each additional field created will appear under the **'Other'** tab in the patient record.

How to create a new custom field

1. From the main home page, click on the **'Custom fields'** tab at the top of the screen
2. Click on **'Create new field'** on the left-hand menu**,** which opens a new page
3. Enter the field label, which is the description of what data you wish to record in this field
4. Choose field name from the dropdown box, e.g. *Userfield 1*
5. Enter field type - the options are text, number, date, or drop-down list. Choose the option most preferable to your service. Customs are for local use only and are not used by NRAP.

   If you select drop down list, enter the options you wish to be available. The field will default to the first answer in this list, so you are advised to have a blank option at the top of the list to avoid confusion and ensure that users have to choose the correct option. Use the space bar for the first option, hit the return key to move to the next line and type the second option in. Enter all the options like this.
6. Specify whether you want this field included in your records
7. For the field order, choose the appropriate number from the drop-down menu that corresponds with the field name, i.e. *Userfield 1* should have field number 1

   'Field help, comments or notes' is a free text box to help users fill in the custom field (this can be left blank).
8. Click **'save'** and **'close'**.

The additional custom field will now appear in each new record created. In addition, when you export data, you will have the option to include the custom field in your export. More information about exports is available later in this guide.

If at any time you turn off a custom field (by selecting 'no' to 'Include this field in your records?'), the information will remain on records already submitted whilst that custom field was active.

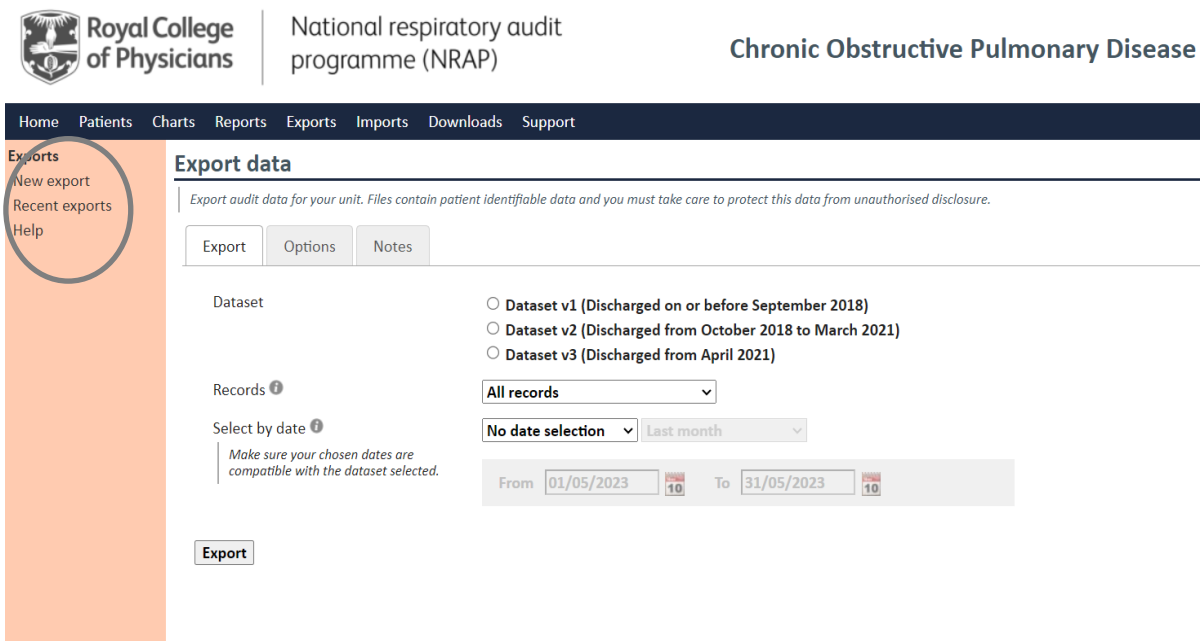
Please note that once a custom field has been created it cannot be changed. If you wish to delete a custom field, you will need to contact the Crown helpdesk (helpdesk@crownaudit.org). If a custom field is removed completely, all data recorded in that field while it was active will be lost.

Importing data

You can bulk upload data in a suitably formatted .csv file. Guidance on how to format these files is available on the web tool's **'Downloads'** page once you are logged in.

Exporting data

1. Click on '**Exports**' in the top bar of the homepage to be taken to the exports page. Then select 'new export from the bar on the left-hand side



Viewing patient records

It is possible to view the patient records already entered by selecting **'Patients'** from the menu bar. You will be able to view which patients have been entered onto the web tool.

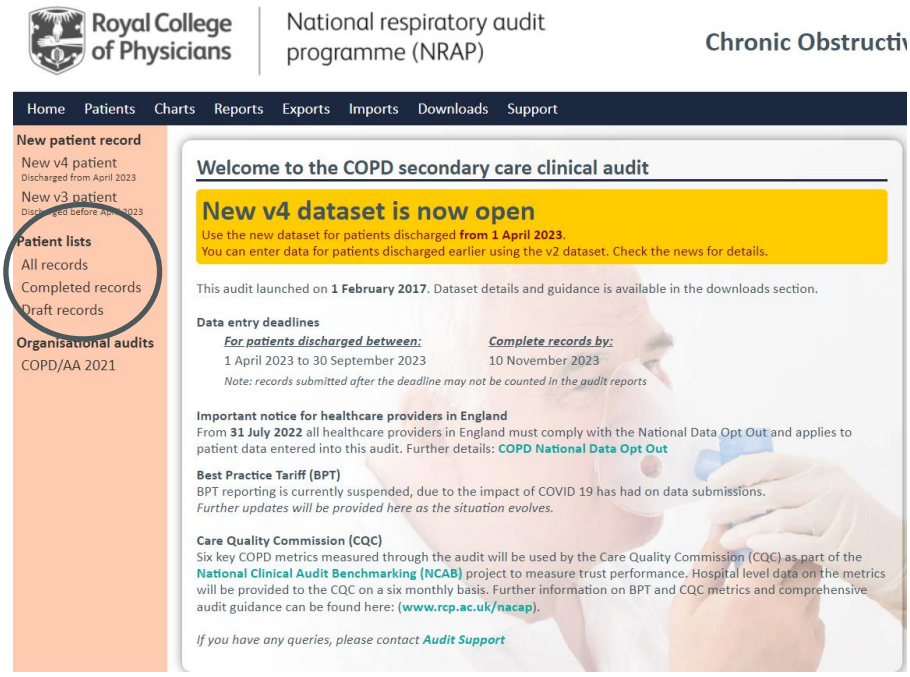
Every patient entered on the web tool is assigned an *'Artemis ID'*, which serves to anonymise the data. It is presented as a long sequence of letters and numbers such as 5C920511992C579832C378DF34B8AFBB. Please use this if you wish to discuss particular patient records with the helpdesks.

Please do not, under any circumstances, send patient identifiable information including names, NHS or hospital numbers, dates of birth or postcodes to any member of the NRAP audit team.

For more information about NRAP's information governance framework, please see the information governance section of this guide.

It is not currently possible to search through the patient record list by NHS number. However, your web browser search function (hit 'Ctrl' and 'F', and then enter in the text you are searching for) will work on this page. It is likely that you will see the same NHS number multiple times as patient readmissions are entered as separate records. Duplicates are automatically captured by the web tool using a combination of patient's NHS number, date of birth, admission date, and postcode.

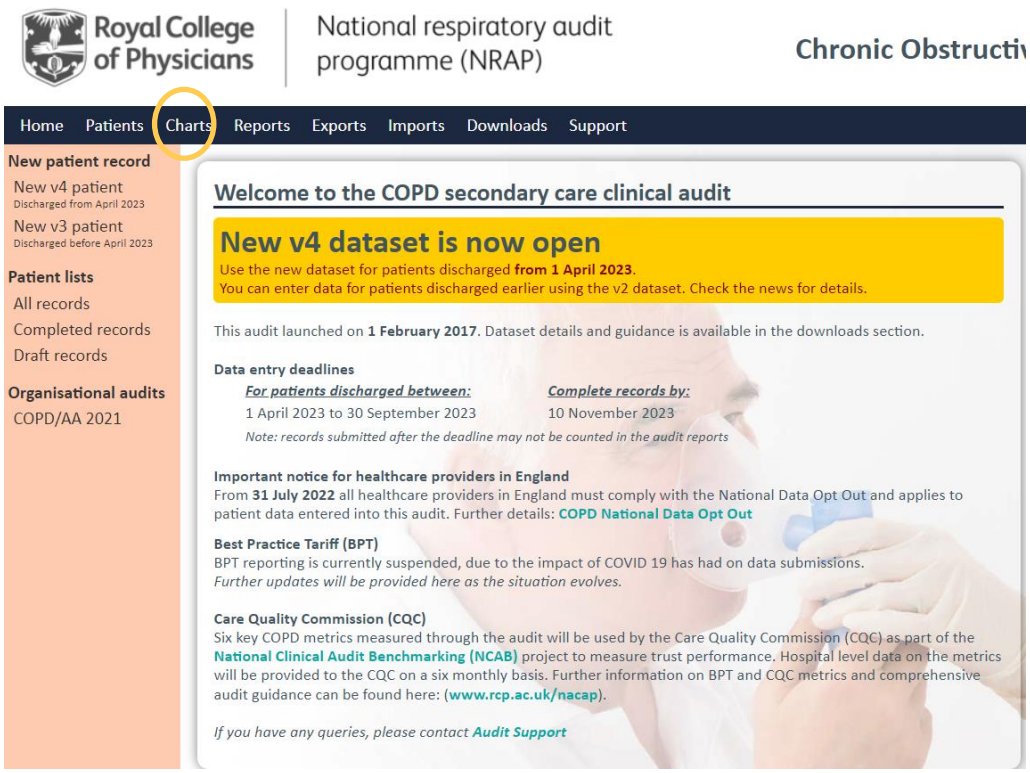
Deleting patient records



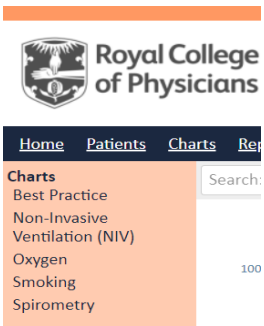
In order to delete a record log, click either **'complete records'**, **'draft records'** or **'all records'** from the left-hand bar. Now select the NHS number you wish to delete.

You will be taken to a screen which has a delete button near the top right. This will remove the entry from your records.

Online run charts

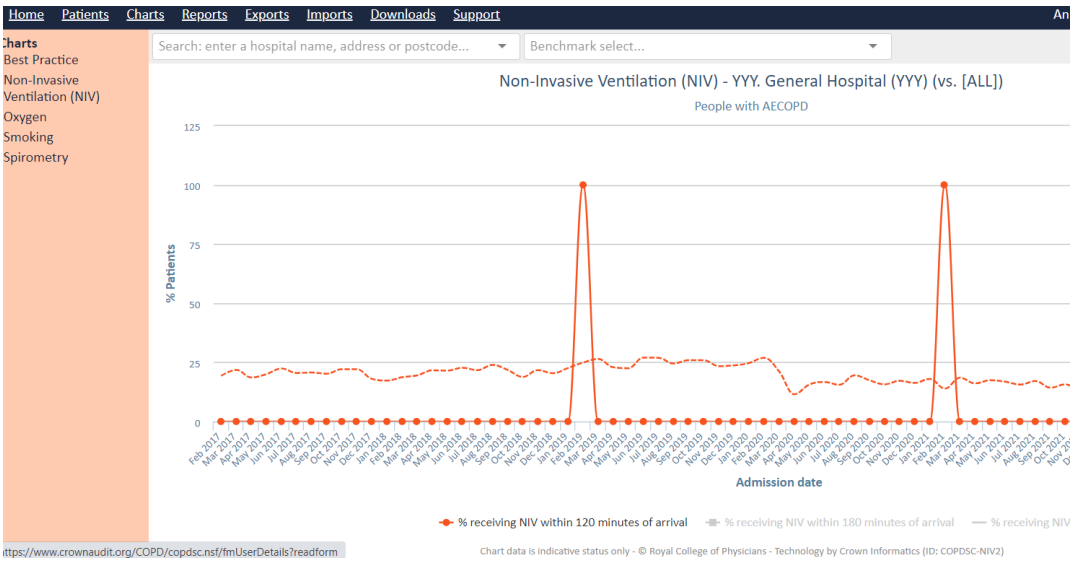


Click on the 'Charts & Reports' tab on the homepage to access your service's charts. On the menu on the left of the screen, click on each chart to view.



Use the 'About this chart' option to see what each chart shows, what data are used, and definitions of all the lines.

If you hold your mouse over any point on a line on the chart, a yellow box will appear, giving the numbers shown at that point in time.



How to customise charts

1. Toggle each line on or off by clicking on the line's label underneath the chart
2. Zoom in on a particular time period by clicking and dragging your mouse on the chart, across the time you would like to view. To revert to the original view, click 'Reset zoom' in the top right corner.

How to download charts

Click on the menu button in the top right corner and select the format you want to export it in.

How often are the charts updated?

The run charts are updated every hour so when you add or amend a record, it will be included as the charts are refreshed. They update based on the date of patient contact with the service, **NOT** when the data was entered. The charts show data with a two month delay to give time for data checking by inputters and to avoid displaying small numbers. The national percentile lines are updated every six months.

Organisational audit

1. A snapshot organisational audit of COPD and asthma care will run in Spring 2024 and will collect information on how services are organised, and what resources they have.
2. This audit should reflect your respiratory services as a whole therefore asthma and COPD teams are encouraged to work together to complete one questionnaire per service.

3. The organisational audit will run from February to March 2024 and will be available on the webtool when you log in.

Reporting

Annual: The COPD annual reports are available on the NRAP website and you do not need to log in to access them. The latest COPD annual report was published in February 2023.
The reports are aimed primarily at clinicians, managers, chief executives and policymakers and present analysis of participating sites' performance against NICE guidelines and quality standards whilst providing recommendations for clinicians.

The next editorial report will be published in June 2024 and will include key data and recommendations for care in COPD, adult, children and young people's asthma and pulmonary rehabilitation.

Regional: NRAP also produces 6-monthly regional reports. All data are reported at both Integrated Care Service (ICS)/Local Health Board and individual hospital level for the following key COPD audit indicators:

- Patients receiving acute treatment with NIV within 2 hours of arrival
- Patients receiving respiratory review by a member of the respiratory team within 24 hours of admission*
- Current smokers prescribed stop smoking drug or referred to behavioural change intervention
- Patients that require oxygen are prescribed to target saturation
- Patients with spirometry result available
- Patients receiving key elements of a discharge bundle

Previous regional reporting outputs are available here. The next regional report will follow the May 2023 data deadline – regional reports will then be replaced by real-time benchmarking tables, accessible via the webtool.

Care Quality Commission (CQC): Six key COPD metrics measured through the audit will be used by the Care Quality Commission (CQC) as part of the **National Clinical Audit Benchmarking (NCAB)**

National Clinical Audit Benchmarking (NCAB) project to measure trust performance. Hospital level data on the metrics will be provided to the CQC on a six-monthly basis.

Best Practice Tariff (BPT): The NHS response to COVID-19 included suspension of the national tariff payment system from 1 April 2020, with all providers and commissioners moving to a block contract arrangement for this period. Best Practice Tariff reports resumed with effect from 1st April 2023. *Further updates will be provided at NRAP.org.uk as the situation evolves.*

Information Governance

This audit has Section 251 Approval from the Health Research Authority Confidentiality Advisory Group (reference number: 23/CAG/0045). This allows identifiable data to be collected and processed without patient consent. If a patient has applied for National Data Opt-out **do not enter their data** into the audit.

Personal confidential data items for this audit are processed by Crown Informatics under section 251 approval prior to anonymisation and transfer to Imperial College London for analysis. Reported data and data files released under government transparency guidance are managed in line with UK statistics authority guidance on the handling of small numbers to prevent the identification of individuals. Data included in COPD reporting outputs can be found at data.gov.uk

For more information, please see our information governance FAQs in the **'Downloads'** tab on the website homepage when you log in.

Information for patients

Information for patients is available from the **'Downloads'** tab on the homepage when you log in. This should be displayed in all areas where COPD patients may be treated.

COPD inclusion and exclusion criteria

When entering data to the audit webtool, you should only include patients that were **originally** admitted due to an AECOPD. Please discount patients that develop an exacerbation whilst already admitted for an alternative issue.

Include patients:

- who are 35 years and over on the date of admission,
- who have been admitted* to hospital adult services,
- who have a primary diagnosis of COPD exacerbation,

- where an initial, or unclear, diagnosis is revised to an acute exacerbation of chronic obstructive pulmonary disease (AECOPD).

  **Where admission is an episode in which a patient with an AECOPD is admitted to a ward and stayed in hospital for 4 hours or more (this includes Emergency Medicine Centres, Medical Admission Units, Clinical Decision Units, short stay wards or similar, but excludes patients treated transiently before discharge from the Emergency Department (ED)).*

- **Please refer to the quick guide below for specific ICD-10* codes and positions eligible for inclusion in the COPD clinical audit.**

1st position	2nd position
J44.0 – COPD with acute lower respiratory infection	Any code
J44.1 – COPD with acute exacerbation	Any code
J44.8 – other specified COPD	Any code
J44.9 – COPD unspecified	Any code
J43.9 - emphysema	Any code
J22 – unspecified acute lower respiratory infection	J44.0 or J44.1 or J44.8 or J44.9 or J43.9
R06.0 – dyspnoea (shortness of breath)	J44.0 or J44.1 or J44.8 or J44.9 or J43.9
J96.0 – acute respiratory failure	J44.0 or J44.1 or J44.8 or J44.9 or J43.9
J96.1 – chronic respiratory failure	J44.0 or J44.1 or J44.8 or J44.9 or J43.9
J96.9 – respiratory failure	J44.0 or J44.1 or J44.8 or J44.9 or J43.9
J10.1 – influenza due to other identified influenza virus with other respiratory manifestations	J44.0 or J44.1 or J44.8 or J44.9 or J43.9

Retrospectively identifying patients who have been miscoded

To ensure that all eligible patients are included in the audit, NRAP recommends that if resources allow, clinical leads should periodically review patients lists. If any patients have been miscoded, and their correct code is shown in fig. 1 in the necessary first or second position, they should retrospectively be included in the audit.

*More information on how inclusion criteria were determined available here.

Exclude patients:

Exclude patients:

- In whom an initial diagnosis of an AECOPD is revised to an alternative at a later stage.
- Who have had a stay in hospital of less than 4 hours (who would be classed as a non-admission).
- With COPD who are being managed for pneumonia, not AECOPD.

  *This would usually mean the presence of consolidation on a chest x-ray.

Dataset review

The COPD dataset is reviewed annually to ensure that only data pertinent to patient care at each service are collected. Each field in the dataset is important to help hospitals evaluate the service they provide, discover any shortfalls and monitor improvements in care. Most fields have help buttons beside them to provide further information. This guide and the help buttons are designed to enable the submission of high-quality data.

Arrival

	Field	Notes
1.1	Date and time of arrival at your hospital	Please record the date and time the patient arrived at your hospital. It is important to record the arrival time because this is the first point of contact with the organisation. The point of arrival is often the ED or MAU, though patients occasionally come from home/elsewhere into other wards. These cases must also be included. The arrival time will be used as the start-point when determining the time to acute treatment with NIV for those who receive it. Time is best determined from the ambulance transfer sheet, the A&E/ED record or MAU/ward arrival record. For services whose ED is in a different hospital, please still record the date and time the patient arrived at the current hospital. We recommend that you add custom fields to the dataset to record where aspects of care have been affected due to the patient's transition between sites. This will not be included in NRAP's national reporting outputs but will be useful for your service's internal performance review.

Patient information

	Field	Notes
2.1	NHS number	The field will accept valid NHS number which are ten digits long. Optionally, you can use spaces or dashes or 3-3-4 format. Please use **'OVERSEAS'** for patients that reside permanently outside the UK. Permission has been granted to use the NHS number as a patient identifier. This will be used to determine: • case-mix, • length of stay, • readmission rate, • mortality, • and the timing of key care processes. The NHS number is essential to create a Patient Record. It should only consist of digits. • It may be formatted as 000 000 0000 (spaces) or 000-000-0000 (dashes) • It should contain exactly 10 digits. • NHS Numbers start with a 4, 6 or 7 • A warning will be given if the number appears invalid. Use '[NONNHS]' for patients that reside in the UK, but do not have an NHS number.
2.2	Date of birth	dd/mm/yyyy The web-tool only allows patients that are: ○ aged 35 years and over ○ aged under 115 years old. Cannot be a future date.
2.3	Home postcode	Please enter the full postcode. For patients with no fixed abode, use '[NFA]' and for patients visiting from abroad please use 'OVERSEAS'. **Square brackets** must be used where specified. Permission has been given to facilitate case-mix adjustment and understand local referral trends.
2.4	Gender	Please enter the patient's gender as it appears in the notes/referral information. 'Other' should be used for patients who do not recognise themselves as either male, female, or transgender. If the gender for the patient cannot be determined 'Not recorded/Preferred not to say' should be selected
2.5	Ethnicity	Please enter the patient's ethnicity as it appears in the notes.

		It is not expected that services ask patients about their ethnicity. Please answer this question based on the information recorded in the patient notes.
2.6	Does this patient have a current mental illness or cognitive impairment recorded?	It is not expected that services ask patients about their mental health status. Please answer this question based on the information recorded in the patient notes.
2.6a	If yes to question 2.6, select all mental health illness / cognitive impairment recorded.	It is not expected that services ask patients about their mental health status. Please answer this question based on the information recorded in the patient notes. 'Other' should be used where the patient is considered to have a mental health illness or cognitive impairment but this does not appear in the options given.
2.7	Does the patient currently smoke, or have they a history of smoking any of the following substances? Tobacco (including cigarettes (manufactured or rolled), pipe or cigars); Shisha; Cannabis; or other illicit substances?	*This question aligns to:* • *NICE 2011 QS 5, NICE 2013 (Smoking: Supporting People to Stop) QS43. https://www.nice.org.uk/guidance/qs43* • *BTS/SIGN 2016 (Management of asthma) guidelines 6.2.3 and 7.2.6* • *NRAD 2014 (Why asthma still kills), recommendation 2 of patient factors and perception of risk.*
2.7a	If yes to question 2.7 please indicate their current smoking status?	Please select never, ex or current based on the smoking status recorded in the patient notes. Using radio buttons – select all that apply If 'no' or 'not recorded' selected for Q2.7 then question is greyed out
2.7b	What is the patient's current vaping status?	**Using radio buttons – select one** • Current vaper • Ex-vaper

		• Never vaped • Not recorded

National Early Warning Score (NEWS) 2

This has been reintroduced into the dataset to be able to measure COPD severity and ensure accurate case fix adjustment for all necessary reporting. The NEWS2 is based on the aggregate scoring of six simple, and routinely collected, physiological parameters. Find out more here.

	Field	Notes
3.1	What was the patient's first recorded NEWS 2 score for this admission?	Please enter the recorded score. If the score is not available, please record the first observations in the NEWS2 calculator below, every question must be answered in order for the score to be calculated. This should be the first recorded observations on arrival to hospital.
3.2	What was the first recorded respiratory rate for the patient following arrival at hospital?	Record as a whole number, within the range of 0-60 BPM.
3.2b	Oxygen saturation – SpO2 scale 1	Percentage
3.2c	Oxygen saturation - SpO2 scale 2	Percentage SpO2 Scale 2 is for patients with a prescribed oxygen saturation requirement of 88–92%. This should only be used in patients confirmed to have hypercapnic respiratory failure on blood gas analysis on either a prior, or their current, hospital admission. The decision to use Scale 2 should be made by a competent clinical decision maker and should be recorded in the patient's clinical notes. In all other circumstances, SpO2 scale 1 should be used.
3.3a	Any Supplemental Oxygen	Greyed out if 3.1 has numeric value entered or if 'Score not available' checked. Please note 3.1a-3.1g must all be completed in order to generate a score. Radio buttons two options: • Air • Oxygen **Can select one option only**
3.3b	Temperature	Celsius Greyed out if 3.1 has numeric value entered or if 'Score not available' checked. Please note 3.1a-3.1g must all be completed in order to generate a score.

3.3c	Systolic Blood Pressure	mmHg Greyed out if 3.1 has numeric value entered or if 'Score not available' checked. Please note 3.1a-3.1g must all be completed in order to generate a score. Whole number. Must be a maximum of 3 digit number between 0-200 only.
3.3d	Pulse	Beats/min Heart rate is an acceptable alternative if no pulse rate is available. If you have both please record the higher of the two readings. Greyed out if 3.1 has numeric value entered or if 'Score not available' checked. Please note 3.1a-3.1g must all be completed in order to generate a score.
3.3e	Consciousness	Alert, Voice, Pain, Unresponsive (AVPU) Score Greyed out if 3.1 has numeric value entered or if 'Score not available' checked. Please note 3.1a-3.1g must all be completed in order to generate a score. Check boxes four options, select all that apply: • Alert • Voice • Pain • Unresponsive

Admission

We measure both arrival and admission times as there is usually a delay between the two for those patients who need to stay in hospital.

	Field	Notes
4.1a/b	Date and time of admission to unit	Please record the date and time as noted on the initial admission clerking record, in the ED, MAU or other admission ward. You may use the nursing record or time of initial observations if you are unable to find a time on the medical clerking sheet. Must be the same as or within 72 hours of the date and time of arrival.

Respiratory specialist review

	Field	Notes
5.1	Was the patient reviewed by a member of the respiratory team during their admission?	Respiratory team members may be defined locally to include respiratory health professionals deemed competent at seeing and managing patients with acute exacerbation of COPD. These staff members might include respiratory consultants, respiratory trainees of ST3 or above, respiratory specialist nurses or physiotherapists, COPD nurses. **'No'** should be selected if a patient has only been seen by a non-respiratory staff member. This includes patients admitted to ICU who are receiving non-respiratory specialist care. **'Yes'** can be selected if a patient was assessed by a respiratory specialist in A&E before the decision to admit was made but you will only be able to record respiratory review time **after** the time of arrival. We recommend you enter either the time of or approximately 1 hour after the admission. Either option will reflect well on your provision of care in this area. *Time to respiratory review is one of the COPD BPT criteria.* If a patient doesn't have a time recorded in their notes for first review, we suggest asking a member of the clinical team and referring to the notes where possible. We also advise reminding the local team of the importance of recording the correct time, and recommending they incorporate it going forward. This question aligns to the 2011 Quality Standards for COPD which although updated, are still supported by the evidence and useful at a local level.
5.1a/b	Date and time of first review by a member of the respiratory team	dd/mm/yyyy 24hr clock 00 : 00

Oxygen

	Field	Notes
6.1	Was oxygen prescribed for the patient at any point during their admission?	Patients likely to require oxygen at any point during their admission should have it formally prescribed. This is to ensure that all patients admitted with an acute exacerbation of COPD have a prescription of oxygen available to them at all times during their in-patient stay and includes patients who do not use the prescription. NRAP advocates a prescription being written for ALL patients hospitalized with COPD exacerbation.

		This question assesses the adequacy of oxygen therapy. *It aligns with NICE QS10, statement 3 and statement 6, 2016 and the BTS Emergency oxygen guideline.*
6.1a	If yes, was oxygen prescribed to a stipulated target range?	This question is greyed out if 'No' selected for 6.1 **Radio buttons <u>four</u> options:** • 88-92% • 94-98% • Target range not stipulated • Other target range stipulated – Allows free text (100 characters limit) **Can select <u>one</u> option only**
6.2	Was oxygen administered to the patient at any point during this admission?	Radio buttons two options: • Yes • No **Can select <u>one</u> option only**

NIV

	Field	Notes
7.1	Did the patient receive acute treatment with NIV?	Acidotic hypercapnic ventilatory failure is defined as an arterial partial pressure of carbon dioxide ($PaCO_2$) of >6.5 kPa (>50 mmHg) with blood pH <7.35 This question allows us to determine the number of patients who receive NIV acutely during their exacerbation and how rapidly they are treated. *This aligns with NICE QS10, statement 7, 2016, BTS NIV quality standard and the NCEPOD NIV report*.
7.1a	Did the patient receive a continued diagnosis of acidotic hypercapnic ventilatory failure according to their blood gases after receiving 1 hour of optimal medical treatment?	Acidotic hypercapnic ventilatory failure defined as an arterial partial pressure of carbon dioxide ($PaCO_2$) of >6.5 kPa (>50 mmHg) with blood pH <7.35.
7.1b	Please provide the date and time of this blood gas measurement in 7b.	NIV is indicated if a patient diagnosed with acidotic hypercapnic ventilatory failure according to their blood gases has not improved after receiving 1 hour of optimal medical treatment. Greyed out unless previous question was 'yes'.

		Date and time (same look as NIV date and time below)
7.2	Did the patient receive acute treatment with NIV?	**Radio buttons <u>two</u> options:** • No • Yes **Can select <u>one</u> option only**
7.2a	On what date did NIV first commence	dd/mm/yyyy NRAP recommend that all people admitted with an AECOPD and require NIV, receive it within 120 minutes of arrival at hospital. If a patient was not decompensated on arrival but did require NIV later during their admission, we recommend that you add a custom field to the dataset to record why NIV wasn't given within 2 hours. E.g. "If the patient did not receive NIV within 2 hours of arrival, please give the reason." This will not be included NRAP's national reporting outputs but will be useful for your service's internal performance review.
7.2b	At what time did NIV first commence	24hr clock 00 : 00 NIV values allowed only on or post arrival.
7.2c	Where was NIV commenced?	Buttons for (select one) - emergency department - medical admissions unit - respiratory support unit - ICU - High dependency unit - respiratory ward - general ward - other

Spirometry

	Field	Notes
8.1	What was the patient's most recently recorded FEV1 % predicted?	Please enter a percentage between 15 and 125. Numeric option must be a: • percentage • maximum of 3 digits to 1 decimal place (values more than 1 decimal place will round up or down)

		• number between 15 and 125. If there is no spirometry available, please select **'Not recorded'**.
8.1a	Date of last recorded FEV1 % predicted	Please enter the date of the last recorded FEV1 % predicted. dd/mm/yyyy This question is greyed out if **'Not recorded'** is selected for 8.1
8.2	What was the patient's most recently recorded FEV1/FVC ratio?	Please enter a value between 0.20 and 0.95. FEV1/FVC ratio can be calculated by dividing the FEV1 by the FVC. If you only have the ratio recorded as a percentage, please divide this figure by a 100 to convert it to a decimal. This question allows us to determine whether the patient actually has airflow obstruction. *The question aligns with NICE QS10, statement 1, 2016.*
8.2a	Date of last recorded FEV1/FVC ratio	Please enter the date of the last recorded FEV1/FVC ratio. dd/mm/yyyy This question is greyed out if **'Not recorded'** is selected for 8.2 Spirometry values must be on or after patient's 35th birthday.

Discharge

	Field	Notes
9.1	Was the patient alive at discharge from your hospital?	**Radio buttons** two **options:** • Alive • Died as inpatient **Can select one option only**
9.2	Date of discharge/death	Please enter the date of discharge/death dd/mm/yyyy The date of discharge is to be found usually at the end of the admission record, or on the discharge summary. If the patient is discharged onto another hospital, an early discharge scheme, hospital at home or community COPD scheme, please give the date of discharge from your hospital and not the scheme. If the patient self-discharged, use date of self-discharge. If the patient has died during admission, please enter their date of death into the questions **'Date of discharge/death'**. The discharge bundle or discharge elements of good practice questions will

		automatically grey out on the web tool and do not need to be completed.
9.3	Was a discharge bundle completed for this admission?	*This question aligns with NICE QS10, statement 8, 2016 and the BTS Intermediate Care guidance.* This is also a Best Practice Tariff item. A structured way of improving discharge processes and care leading to improved patient outcomes. Based on evidence based clinical interventions or actions. This question is greyed out if 'Died as inpatient' is selected for 10.1 Radio buttons three options: • Yes • No • Self-discharge **Can select <u>one</u> option only** Select **'Yes'** if there is evidence of a care bundle record in the patient notes i.e. a bundle sheet or sticker in the notes or a check box in an electronic patient record. An example of a discharge bundle is the British Thoracic Society (BTS) care bundle for COPD This **may also be** your organisation's own definition of a discharge bundle. Please only select **'Yes'** if the patient has received all the required items of either the BTS or your organisation's own bundle during the course of their **current** admission and this has been checked at discharge. Please select 'No' if items are considered but not received because they are deemed unsuitable. You may wish to add in a custom field identifying the reasons why. This will not be included in NRAP's national reporting outputs but will be useful for your service's internal performance review. Select **'Self-discharge'** if a patient has self-discharged, and therefore the team have not been able to provide a discharge bundle. **However**, select **'Yes'** if the patient has received all elements of the bundle **before self-discharge**. **<u>Readmissions</u>** We recommend that a discharge bundle is completed for every admission. It is particularly important to optimise care for those with

		frequent admissions and, in addition to the standard interventions on the bundle, consideration of co-morbidities and social support will be equally important.
9.4	Which of the following specific elements of good practice were undertaken as part of the patient's discharge?	If any of the good practice care elements have not been completed and/or are not applicable please do not select them. If no elements have been completed please select 'None'. **Follow up requests** Communication directly with a named individual responsible for COPD care within the practice counts as a request for follow-up. If the patient has been asked and/or been provided with the necessary information they need to make/request the follow up appointment(s) themselves within the recommended time frame, please select that the component was completed. This question is greyed out if 'Died as inpatient' is selected for 9.1 **Checkboxes twelve options select all that apply:** • **Inhaler technique** Inhaler technique checked. • **Assessment of medication** Medication issued/classes reviewed. • **Self-management plan** Self-management plan provided or referred to community team for plan. • **Emergency drug pack** Emergency drug pack provided or referred to community team for pack. • **Emergency drug pack not provided** Emergency drug pack not provided as assessed as unsuitable • **Oxygen alert** Oxygen alert card provided • **Smoking cessation** Referred to behavioural change intervention and/or stop smoking drug prescribed (Validation: This is greyed out if Q2.7 returns 'No' or 'Not recorded' AND Q2.7a does not return a 'Current' choice for the options provided AND Q2.7b does not return 'Current vaper'). • **Pulmonary rehabilitation** Assessed for suitability for pulmonary rehabilitation.

		• **Follow up requests** At home within 72 hours by person or by phone. • **Multidisciplinary team meeting (MDT)** Patient discussed at an MDT with a community and/or primary care team. • **BLF patient passport** BLF passport offered to the patient. • **None**

Contact us

You can contact us at 020 3075 1526, or copd@rcp.ac.uk.

Our help desk is open from 9am – 5pm, from Monday to Friday.

Twitter: @NRAPaudit