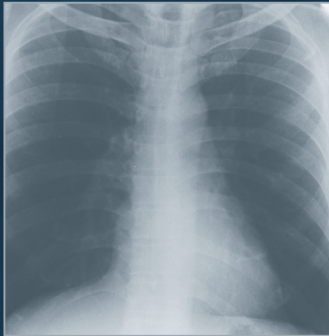


National COPD Audit Programme



COPD: Time to integrate care

National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Resources and organisation of care in hospitals in England and Wales 2017

**National organisational audit report
April 2018**

Prepared by:



**Royal College
of Physicians**

**Imperial College
London**

In partnership with:



**British
Thoracic
Society**

Commissioned by:



Working in wider partnership with:



The Royal College of Physicians

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Healthcare Quality Improvement Partnership

The National COPD Audit Programme is commissioned by the Healthcare Quality Improvement Partnership (HQIP) as part of the National Clinical Audit (NCA) Programme. HQIP is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. Its aim is to promote quality improvement, and in particular to increase the impact that clinical audit has on healthcare quality in England and Wales. HQIP holds the contract to manage and develop the NCA Programme, comprising more than 30 clinical audits that cover 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 audits, also funded by the Health Department of the Scottish Government, DHSSPS Northern Ireland and the Channel Islands.

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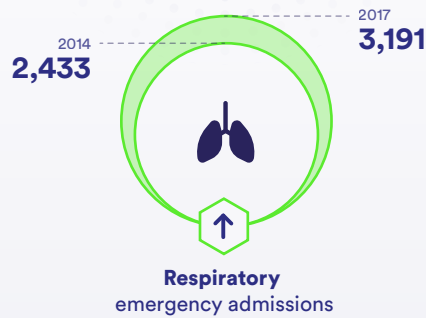
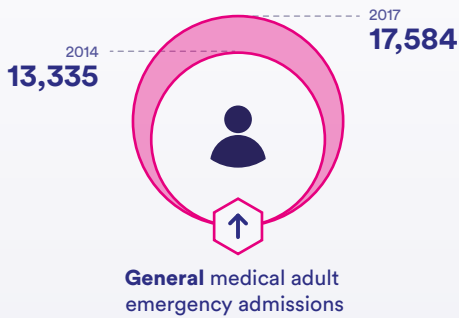
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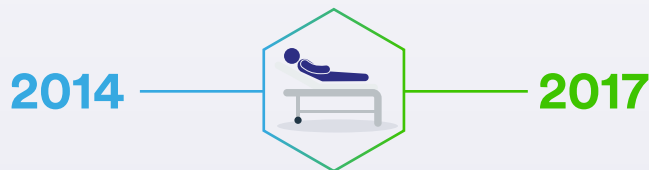
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Report at a glance

Workload (Medians)

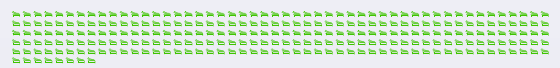


Beds



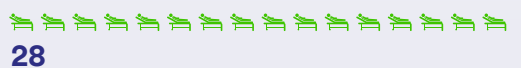
The median number of medical beds has **increased**

⬆ **25%**



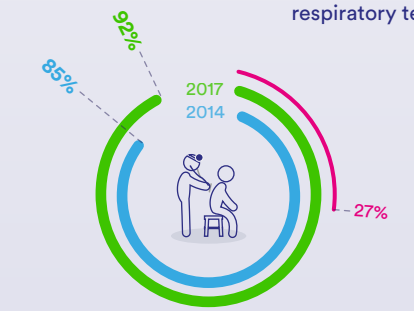
The median number of respiratory beds remains largely **the same**

⬆ **0%**



Respiratory review

The provision of new-patient ward rounds by senior decision makers (ST3 or above) from the respiratory team has improved, but remains suboptimal outside of respiratory wards:



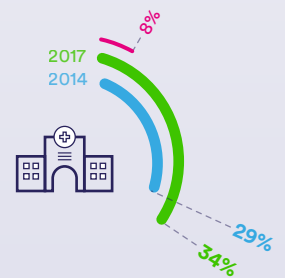
Respiratory wards

Increased to **92% in 2017** from **85% in 2014**. Only **27% operate 7 days per week**.



Medical admissions units

Increased to **49% in 2017** from **41% in 2014**. Only **14% operate 7 days per week**.



Other wards

Increased to **34% in 2017** from **29% in 2014**. Only **8% operate 7 days per week**.

Integrated care



Use of COPD discharge care bundles has increased to **88% in 2017** from **77% in 2014**.



Access to early/assisted COPD discharge teams has increased to **88% in 2017** from **82% in 2014**.



There is a contrast between access to integrated services on **weekdays (99-100%)** to weekends (**43%**).



The availability of pulmonary rehabilitation within 4 weeks of discharge has improved (**46% in 2017**, **38% in 2014**), although this is still suboptimal.

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How to use this report

This report contains the main messages and key recommendations derived from an extensive analysis of data. References to the appropriate National Institute for Health and Care Excellence (NICE) clinical guidelines* and quality statements[†] are inserted throughout the key findings. The full data analyses are available online (via www.rcplondon.ac.uk/time-to-integrate-care) for in-depth perusal.

The data are presented largely in tabular form, with explanatory notes throughout. Although the full data are available to the interested reader, it is not necessary to review them to appreciate the key messages, which are outlined below. We strongly advise that secondary care teams discuss these findings between themselves, as well as with their colleagues in primary care, their commissioners and other relevant healthcare teams.

Please note that all the appendices to this report, including the full methodology, can be found in the online data report. Copies of our datasets, our good practice repository and the resources supplied for both the organisational and clinical audits can be found via our website: www.rcplondon.ac.uk/projects/outputs/secondary-care-audit-2017-resources.

If you would like to discuss any of the findings or recommendations in more detail with other participants, or you have ideas that you would like to share, you can log in to our audit forum on the Respiratory Futures website: www.respiratoryfutures.org.uk/copdsecondarycareauditforum/.

* National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease in over 16s: diagnosis and management (partial update) (CG101)*. London: NICE, 2010. www.nice.org.uk/guidance/CG101 [Accessed March 2018].

[†] National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease in adults (QS10)*. London: NICE, 2016. www.nice.org.uk/Guidance/QS10 [Accessed March 2018].

National Institute for Health and Care Excellence. *Chronic obstructive pulmonary disease in adults (QS10) – 2011 edition*. London: NICE, 2011. www.nice.org.uk/Guidance/QS10 [Accessed March 2018].

Introduction

The National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme last conducted a secondary care organisational audit in 2014.¹ It remarked upon the continuing rise in COPD admissions, and noted that access to respiratory care was reduced at weekends and for COPD patients who are admitted to non-respiratory wards (the majority).² There was also considerable variation in the delivery of discharge processes. While there had been improvements in some areas (particularly palliative care, the organisation of non-invasive ventilation (NIV) and the availability of supported discharge), there was insufficient provision of smoking cessation services and post-exacerbation pulmonary rehabilitation (PR).

The 2014 audit therefore recommended improvement measures to increase the proportion of patients who receive early respiratory specialist review and to achieve better coordination of patient care at discharge and beyond. It advocated for an increase in the proportion of COPD patients who are managed on respiratory wards. Hospitals and clinical commissioning groups (CCGs) were urged to develop more effective pathways for managing COPD patients.

This report presents the results from a snapshot audit of the organisation and resourcing of COPD care that was undertaken in hospitals in England and Wales in the spring of 2017. Where possible, the results are displayed alongside the equivalent results from the previous audits (in 2014, 2008 and 2003). The [recommendations in this report](#) should be considered alongside the recommendations from the earlier audit reports.

The standout observations from this round of audit are the:

- increase in the median number of emergency, respiratory and COPD admissions (although it is not known whether this is due to increased prevalence or acuity of the cohort, or to a rise in avoidable admissions)
- improved access to respiratory teams, despite the increase in workload and scant change in staffing levels
- under-provision of respiratory beds (including level 2[‡] on respiratory wards): **the majority of COPD patients are treated on non-respiratory wards where specialist care access is lowest**
- improved (but still less than ideal) access to PR within 4 weeks of discharge
- improved provision of palliative care and integrated, cross-sector services
- reduced access to respiratory teams and cross-sector care at weekends
- reduced provision of inpatient smoking cessation services.

It appears from these data, and from data that were previously published by the audit programme,^{1,2} that the following key improvements are needed:

- reduced admissions and readmissions
- more COPD patients cared for on respiratory wards
- improved access to integrated, cross-sector respiratory services
- improved access to respiratory care at the weekends.

To achieve these objectives, and to ensure that patients receive the best COPD care all week, respiratory teams should collaborate across the sectors with other healthcare professionals in primary and secondary care. Respiratory teams should work with commissioners and emerging integrated care structures to develop the necessary service reorganisation and resource.

[‡] Level 2 beds are beds where patients requiring more detailed observation or intervention stay. This may include support for a single failing organ system or postoperative care and those 'stepping down' from higher levels of care.

Key findings



Admissions, staffing levels and general organisation of care

To see the data analysis in full, please access the data analysis and results report available at www.rcplondon.ac.uk/time-to-integrate-care.

Admissions

- There has been an apparent increase in workload, as self-reported by hospitals:
 - **general medical adult emergency admissions:** median 17,584 vs 13,335 in 2014 (and 10,953 in 2008[§])
 - **respiratory emergency admissions:** median 3,191 vs 2,433 in 2014
 - **COPD admissions:** median 609 vs 570 in 2014 (and 504 in 2008, 458 in 2003).
- **88% of hospitals** have a dedicated respiratory ward but only 33% of the total emergency coded COPD admissions were discharged from these wards in 2016.
- Regarding the number of beds available:
 - **medical beds** have increased (median 258 vs 207 in 2014)
 - **respiratory beds** remain largely the same (median 28 vs 27 in 2014)
 - **level 2 beds in respiratory wards** are unchanged, with over half of hospitals having no level 2 beds (58% in 2017 vs 59% in 2014).
- The number of hospitals with a specific respiratory high dependency unit (HDU) has reduced since 2014 (16% to 9%), but there has been a 7% increase in the number of hospitals that provide 10 or more general HDU beds (30%).

Staffing and general organisation of care

- Respiratory team staffing (*NICE CG101, 1.1.8.2;*³ and *NICE QS10, 2011 statement*⁴) is unchanged since 2014, despite the apparent increase in workload.
- Access to respiratory care remains markedly reduced at weekends.
- Hospital-provided **smoking cessation services** (*NICE CG101, 1.2.1*³) have reduced since 2014; only 54% of hospitals now provide smoking cessation services (compared with 63% in 2014).
 - Nicotine replacement therapy is available in 97% of hospitals, but varenicline (49%) and bupropion (40%) are available in fewer than half of hospitals.
- Hospital-provided **PR services** have reduced since 2014.
 - Only 56% of hospitals now provide a PR programme (down from 60%).
 - 94% (92% in 2014) of hospitals reported that patients had access to PR (*NICE CG101, 1.2.8*)³ although only 45% (38% in 2014) of those could attest to patients having access within 4 weeks of discharge (*NICE QS10,*⁵ *statement 5*).
- Inpatient **dietetic services** (*NICE CG101, 1.2.12.6*³) are **better staffed** (13% of hospitals report four or more whole time equivalents (WTEs) being available, up from 9%), but more hospitals report that no dietetic service is available (19% vs 12% in 2014).
- **Palliative care services** (*NICE CG101, 1.2.12.10*³) have **improved further**, with 97% on-site provision (88% in 2014, 50% in 2008) and better staffing (a 12% increase in hospitals with four or more WTEs available).

§ Please note that questions about the number of admissions pertained to the last complete calendar year prior to the audit. Therefore, the results reported in the 2017 audit relate to admissions in 2016; 2014 audit results relate to 2013 admissions; and 2008 audit results relate to 2007 admissions.



Organisation of acute respiratory care

To see the data analysis in full, please access the data analysis and results report available at www.rcplondon.ac.uk/time-to-integrate-care.

- A minority of hospitals (11% in 2017, 10% in 2014) operate a **separate respiratory take**.
- **On-call respiratory consultant availability** has increased (42% in 2017, 33% in 2014) and triage to respiratory teams is more common (26% with no triage in 2017, 37% with no triage in 2014) (*NICE QS10, 2011 statement⁴*).
- **Availability and access to other members of the respiratory team** (*NICE CG101, 1.1.8.2;³ and NICE QS10, 2011 statement⁴*) has improved:
 - general availability of respiratory nurses to review COPD patients: 95% in 2017, 89% in 2014; the number of hospitals without a respiratory nurse available has halved
 - percentage of hospitals where all COPD patients have access to respiratory nurses: 85% in 2017, 71% in 2014
 - general availability of respiratory physiotherapists to review COPD patients: 98% in 2017, 97% in 2014
 - percentage of hospitals where all patients have access to respiratory physiotherapists: 78% in 2017, 64% in 2014
 - 90% of patients have access to respiratory nurses, although only 27% of hospitals offer 7-day availability.
- Hospital access to integrated COPD teams has increased slightly since 2014 (88% reported access in 2017 vs 82% in 2014).

Weekday versus weekend care

- The audit's previous reports^{1,2,6} revealed variation in care and outcomes depending on the day of the week the patient was admitted.
- The provision of new-patient **ward rounds by senior decision makers (ST3 or above) from the respiratory team has improved**, but it remains less than ideal outside of respiratory wards and at weekends:
 - **on respiratory wards:** increased to 92% in 2017 from 85% in 2014
 - 27% operate 7 days per week, and 84% operate from Monday to Friday (inclusive)
 - **on medical admissions units (MAUs):** increased to 49% in 2017 from 41% in 2014
 - 14% operate 7 days per week, and 40% operate from Monday to Friday (inclusive)
 - **on other wards:** increased to 34% in 2017 from 29% in 2014
 - 8% operate 7 days per week, and 27% operate from Monday to Friday (inclusive).
- Where there is access to senior respiratory staff via a specific on-call rota, the weekend availability of respiratory consultants and trainees is lower than weekday availability:
 - respiratory consultants (34% available Monday to Friday only, 22% available 7 days a week)
 - respiratory trainees (39% available Monday to Friday only, 7% available 7 days a week).
- Where available, **access to integrated COPD services** is better on weekdays (99–100% for the working week) than at weekends (47% on Saturdays and 39% on Sundays).**

** Please see Section 5.2 (part of *Section 5: Integrating care across primary and secondary sectors*) in the data report (www.rcplondon.ac.uk/time-to-integrate-care) for more information on this finding.



Managing respiratory failure – non-invasive ventilation (NIV)

To see the data analysis in full, please access the data analysis and results report available at www.rcplondon.ac.uk/time-to-integrate-care.

- NIV should be given by appropriately trained staff with the right equipment (*NICE QS10*,⁵ statement 7; and *NICE CG101*, 1.3.7³).
 - More hospitals are providing NIV on the respiratory ward (82% in 2017, 81% in 2014 and 74% in 2008).
 - Fewer hospitals report that the intensive care unit (ICU) is a setting where NIV is given (73% in 2017, 83% in 2014, 58% in 2008 and 62% in 2003).
 - NIV is provided in the same proportion of hospitals on the MAU/admissions wards and HDU (54% and 81% respectively, in 2017 and 2014).
- 88% of hospitals (the same as in 2014) have a named clinical lead for the NIV service, in line with the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) recommendations.⁷
- **NIV training programmes** (95%) and monitoring charts (90%) are in **near-universal use**.



Managing respiratory failure – emergency oxygen therapy

To see the data analysis in full, please access the data analysis and results report available at www.rcplondon.ac.uk/time-to-integrate-care.

- Although 94% of hospitals have an oxygen policy (*NICE QS10*,⁵ statement 6; and *NICE CG101*, 1.3.6³), **30%** (32% in 2014) still **have no training** programme in place.
- **Electronic prescribing** of oxygen is increasingly **commonplace** (**23% in 2017**, 10% in 2014).



Integrating care across primary and secondary sectors

To see the data analysis in full, please access the data analysis and results report available at www.rcplondon.ac.uk/time-to-integrate-care.

- Use of **COPD discharge care bundles** (*NICE QS10*,⁵ statement 8) has **increased** to 88% in 2017 from 77% in 2014.
- Access to early/assisted COPD discharge teams (*NICE CG101*, 1.3.4³) has increased (88% of patients had access in 2017, 82% in 2014, 60% in 2008 and 46% in 2003).
 - There has been a slight reduction in hospital-based services (28% hospital-based in 2017, 32% in 2014) in favour of **community provision**.
- The **availability of PR within 4 weeks** of discharge (*NICE QS10*,⁵ statement 5) has **improved**, but it remains less than ideal: 46% of hospitals reported availability within 4 weeks in 2017 (38% in 2014).
- The facility for local hospitals to provide **home NIV** has also improved: 50% of hospitals were providing NIV (*NICE QS10*,⁵ statement 7) in 2017 (43% in 2014).
- More hospitals (59% in 2017 compared with 52% in 2014) are undertaking **COPD multidisciplinary team (MDT) meetings** (*NICE CG101*, 1.2.12³) but 60% devote no sessional

funding to develop integrated COPD care (66% in 2014).

- Only 11% of hospitals have a designated integrated care respiratory physician; 36% of localities (31% in 2014) still have **no integrated COPD care pathway**.



Quality improvement (QI)

To see the data analysis in full, please access the data analysis and results report available at www.rcplondon.ac.uk/time-to-integrate-care.

- The 2014 audit report recommended nine key actions for teams to improve the quality of their care.
 - Only **8% of hospitals** report that they have achieved the recommendation of **managing all of their exacerbating COPD patients on a respiratory ward**.
 - **One-third of hospitals** (32%) said that they achieved the recommendation of having their patients **reviewed by a respiratory specialist within 24 hours**.
 - Overall, **64% of hospitals** said that they had achieved the recommendation of having an **ICU outreach service available 24 hours a day, 7 days a week**.
 - One-third (32%) of hospitals said that they developed an improvement plan, agreed by the MDT and supported formally at trust board and CCG level, based upon the recommendations within the national and their site-specific report.
- Over **140 local QI plans** were submitted to the National COPD Audit Programme during this round of audit, using the findings from the 2014 audit.

Recommendations

The challenges that are illustrated by the data are clear. There is a need to:

- reduce the rise in admissions, where it is possible to do so
- improve access to hospital- and community-based respiratory care (including over weekends)
- develop more effective cross-sector working and integration of COPD services.

We strongly advise **all sectors** to work together to address these challenges. Potential solutions include:

- improving access to high-value interventions such as smoking cessation services and PR⁸⁻¹⁵
- reviewing how the available resource could be used to achieve integrated 7-day working across the sectors (accepting that respiratory teams will require sufficient staff to achieve this)
- improving identification of those who are at risk of readmission (for example, those who have comorbidities or are frail), and modify their treatment and discharge provision accordingly.

For providers across the sectors

Providers should use improvement methodology^{††} to optimise access to, and quality of, services (we suggest working with local QI departments, academic health science networks (AHSNs) and patient groups to achieve specific, measurable and achievable aims).

- Develop achievable QI projects that aim to improve access to services, thereby reducing the risk of avoidable admission. Some examples would include:
 - enhancing specialist COPD care on MAUs and non-respiratory wards
 - improving the proportion of smokers who receive appropriate pharmacotherapy
 - improving the identification of frailty
 - improving the number of eligible patients who are offered a start date for PR within 4 weeks of discharge.
- Review the respiratory bed allocation, in light of the fact that the audit shows that most COPD patients are not being cared for by respiratory teams, despite evidence that suggests this improves outcomes.¹⁶⁻¹⁸
- Work to develop a 7-day, cross-sector COPD service.
 - Start by looking at the existing resource and consider developing a business case to enlarge the team.

For commissioners / sustainability and transformation partnerships (STPs)

- Ensure that there is an agreed COPD pathway that links discharge processes to admission avoidance strategies, as well as to evolving community-based frailty and social care services.
- Ensure that, within this pathway, PR is available to all appropriate patients, including early post-discharge.

For patients/carers

- Complete the BLF patient passport (<http://passport.blf.org.uk/>) for your COPD care.¹⁹
 - If you are unaware of the BLF patient passport, or are unable to say yes to all the steps, discuss it with your GP, practice nurse or hospital specialist team.
- Contact your local support groups such as Breathe Easy (www.blf.org.uk/support-for-you/breathe-easy), singing for lung health, or walking groups, to help manage your condition.^{16,20}

†† The National COPD Audit Programme's QI workshops page www.rcplondon.ac.uk/projects/outputs/copd-audit-regional-qi-workshops includes a range of resources, and links to other helpful sources.

Appendix A: Document purpose

Document purpose	To disseminate the results of the national COPD secondary care organisational audit 2017
Title	<i>COPD: Time to integrate care. National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Resources and organisation of care in hospitals in England and Wales 2017. National organisational audit report</i>
Authors	Stone RA, McMillan V, Holzhauer-Barrie J, K Mortier, Robinson S, Stone P, Quint J, Roberts CM (on behalf of the National COPD Audit Programme's secondary care workstream group)
Publication date	12 April 2018
Audience	Healthcare professionals; NHS managers, chief executives and board members; service commissioners; policymakers; voluntary organisations; patient support groups; COPD patients and their families/carers; and the public
Description	<p>This is the second of the COPD secondary care organisational audit reports, published as part of the National COPD Audit Programme. This report details national data relating to the organisation and resourcing of COPD care in acute hospitals in England and Wales. Data were collected between 3 April and 30 June 2017.</p> <p>The report is relevant to anyone who has an interest in COPD. It provides a broad view of secondary care services, and will enable lay people, as well as experts, to understand how COPD services function currently, and where change needs to occur.</p> <p>The information, key findings and recommendations outlined in the report are designed to provide readers with a basis for identifying areas that are in need of change and to facilitate the development of improvement programmes that are relevant not only to secondary care providers but also to commissioners and policymakers.</p>
Supersedes	This report adds to the learning contained in the first secondary care organisational audit report, which was published in November 2014. There is no scheduled review date for this report.
Related publications	<p>Stone RA, Holzhauer-Barrie J, Lowe D, Searle L, Skipper E, Welham S, Roberts CM. <i>COPD: Who cares? National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Resources and organisation of care in acute NHS units in England and Wales 2014</i>. National organisational audit report. London: RCP, November 2014. www.rcplondon.ac.uk/projects/outputs/copd-who-cares-organisational-audit-2014</p> <p>Stone RA, Holzhauer-Barrie J, Lowe D, Searle L, Skipper E, Welham S, Roberts CM. <i>COPD: Who cares matters. National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Clinical audit of COPD exacerbations admitted to acute units in England and Wales 2014</i>. National clinical audit report. London: RCP, February 2015. www.rcplondon.ac.uk/projects/outputs/copd-who-cares-matters-clinical-audit-2014</p> <p>Stone RA, Holzhauer-Barrie J, Lowe D, McMillan V, Saleem Khan M, Searle L, Skipper E, Welham S, Roberts CM. <i>COPD: Who cares when it matters most? National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Outcomes from the clinical audit of COPD exacerbations admitted to acute units in England 2014</i>. National supplementary report. London: RCP, February 2017. www.rcplondon.ac.uk/projects/outputs/copd-who-cares-when-it-matters-most-outcomes-report-2014</p>
Contact	COPD@rcplondon.ac.uk

Appendix B: References

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For further information on the overall audit programme or any of the workstreams, please see our website or contact the national asthma and COPD audit team directly:

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If you would like to join our mailing list and be kept informed of updates and developments in the National Asthma and COPD Audit Programme, please send us your email address and contact details.

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