

National COPD Audit Programme



COPD in England – Finding the measure of success

National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Primary care report for England 2014–15

**Executive summary
November 2016**

Prepared by:



**Royal College
of Physicians**



Royal College of
General Practitioners

In partnership with:



Commissioned by:



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Document purpose	To disseminate data to give a picture of how the care of people with COPD in primary care was being delivered in England in 2014–15
Title	<i>COPD in England – Finding the measure of success: National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Primary care report for England 2014–15. Executive summary.</i>
Authors	Baxter N, Holzhauser-Barrie J, McMillan V, Saleem Khan M, Skipper E, Roberts CM (on behalf of the National COPD Audit Programme: primary care workstream)
Publication date	November 2016
Audience	Health professionals, NHS managers, chief executives and board members, service commissioners, policymakers, voluntary organisations, patient support groups, COPD patients, their families/carers and the public
Description	<p>This report is being published as part of the National COPD Audit Programme. It details national data relating to primary-care-delivered COPD care in England. This report is relevant to anyone with an interest in COPD. It provides a broad view of primary 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 in need of change and to facilitate development of improvement programmes that are relevant not only to primary care providers but also to commissioners and policymakers.</p>
Supersedes	There is no scheduled review date for this report, which presents publicly available information on the care of people with COPD in primary care in England, in combination with pertinent results from the first of three annual audits conducted in Wales. Reports on future Welsh audit cycles, which are anticipated to be published in 2017 and 2018, will, therefore, add to the learning contained within this report.
Related publications	<ul style="list-style-type: none"> • National Institute for Health and Care Excellence. <i>Chronic obstructive pulmonary disease in adults</i>. Quality Standard 10 (QS10). London: NICE, 2016. www.nice.org.uk/guidance/qs10 • National Institute for Health and Care Excellence. <i>Smoking: supporting people to stop</i>. Quality Standard 43 (QS43). London: NICE, 2013. www.nice.org.uk/guidance/qs43 • National Institute for Health and Care Excellence. <i>Chronic obstructive pulmonary disease in over 16s: diagnosis and management</i>. Clinical Guideline 101 (CG101). London: NICE, 2010. www.nice.org.uk/guidance/CG101 • Stone RA, Holzhauser-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 • Stone RA, Holzhauser-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 • Steiner M, Holzhauser-Barrie J, Lowe D, Searle L, Skipper E, Welham S, Roberts CM. <i>Pulmonary Rehabilitation: Time to breathe better. National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Resources and organisation of Pulmonary Rehabilitation services in England and Wales 2015</i>. National organisational audit report. London: RCP, November 2015. www.rcplondon.ac.uk/projects/outputs/pulmonary-rehabilitation-time-breathe-better • Steiner M, Holzhauser-Barrie J, Lowe D, Searle L, Skipper E, Welham S, Roberts CM. <i>Pulmonary Rehabilitation: Steps to breathe better. National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Clinical audit of Pulmonary Rehabilitation services in England and Wales 2015</i>. National clinical audit report. London: RCP, February 2016. www.rcplondon.ac.uk/projects/outputs/pulmonary-rehabilitation-steps-breathe-better • Baxter N, Holzhauser-Barrie J, McMillan V, Saleem Khan M, Skipper E, Roberts CM. <i>Time to take a breath. National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Clinical audit of COPD in primary care in Wales 2014–15</i>. National clinical audit report. London: RCP, October 2016. www.rcplondon.ac.uk/projects/outputs/primary-care-time-take-breath
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Report preparation

This report was written by the following, on behalf of the national COPD primary care audit 2014–15 workstream group. (The full list of workstream group members is included in the appendix of the full report.)

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Foreword

Chronic obstructive pulmonary disease (COPD) inflicts a huge toll on individual patients, their carers, and on the NHS. In total, 1.2 million people in the UK have been diagnosed with COPD and 30,000 people die of the disease each year.¹

Previous national COPD audits have concentrated on acute management of COPD in secondary and tertiary care, but the current National COPD Audit Programme (commissioned in 2013) includes an audit of primary care for the first time. The original aim of the primary care audit was to collect data from practices in England and Wales relating to the routine care of people with COPD, which went beyond that provided by publicly available data sources. The metrics were based on recommendations in the COPD Clinical Guidelines and COPD Quality Standards produced by the National Institute for Health and Care Excellence (NICE) in 2010, 2013 and 2016^{2,3,4} respectively.

However, there were significant challenges and delays to the audit due to increasing limitations on data extraction from practices in England; therefore, the audit went ahead in Wales but not in England. This report for England can, therefore, only reflect on what is known already from publicly available data. Where possible and potentially helpful, data extracted from practices in Wales are considered in terms of their relevance to England. This report also reflects on relevant results from reports that have already been published by the National COPD Audit Programme.

The data from Wales showed variation, some of which may have been due to differences in data recording and some of which may have been due to variations in patient demographics and acuity. Further local analysis will be required to better ascertain and understand the reasons for this variation. There is undoubtedly a need for greater clarification about what should be asked during a routine COPD review and how this should be recorded.

We have not had the opportunity in this report to present new and granular detail about the care of people with COPD in England. However, based on the data that are available, this report highlights the need for regional or national templates for COPD review with standardised coding. Confidence in accurate diagnosis of COPD needs to improve. In addition, effectively targeted pharmacological treatments to prevent exacerbations, improve quality of life, relieve breathlessness and treat tobacco dependency, and the individualised mind and body treatment package of pulmonary rehabilitation, can greatly improve the quality of life of many people with COPD. This report provides the springboard for primary care to make sure that the right people get the correct diagnosis and receive effective treatment, whoever they are and wherever they are.

A handwritten signature in black ink that reads "K Gruffydd-Jones." The signature is written in a cursive style and is underlined with a single horizontal stroke.

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Executive summary

This report uses publicly available data from 2014–15 to give a picture of the care of patients with COPD in the general practice setting in England. The material used has been sourced from:

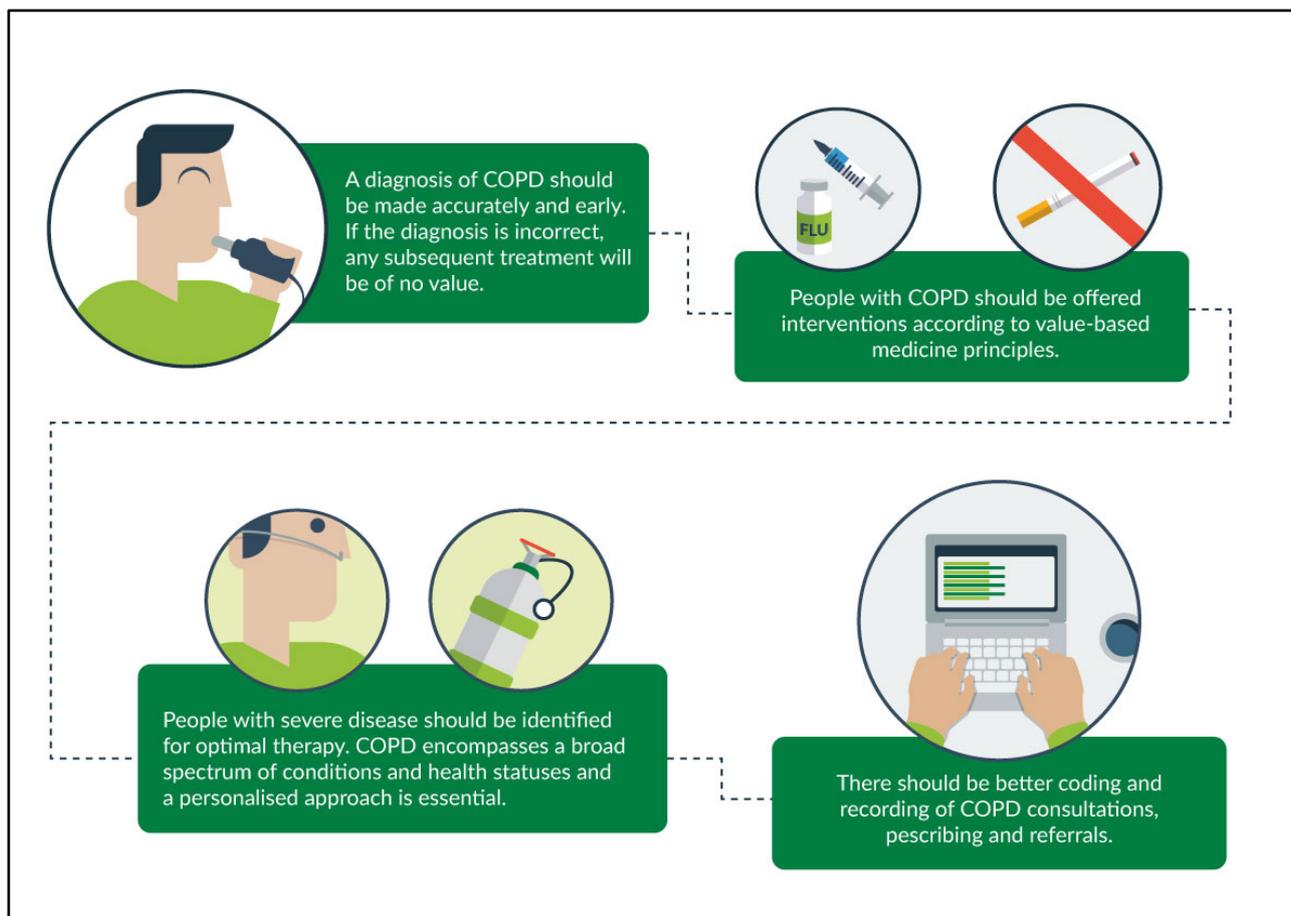
1. Quality and Outcomes Framework (QOF) 2014–15⁵
2. Public Health England's (PHE's) tobacco control profiles⁶ and Interactive Health Atlas of Lung conditions in England (INHALE).⁷

The audit programme had originally intended to collect data from practices in England relating to the routine care of people with COPD. However, significant challenges and delays were experienced due to increasing limitations on data extraction from English practices and, consequently, this was not possible.

The National COPD Audit Programme continues to believe that patient-level extraction of primary care data is vital to accurately answer the audit questions, as well as to obtain a comprehensive view of the journey of people with COPD through the healthcare system. In addition, the Welsh experience shows that it is possible to extract data from general practice without placing additional burden on the staff within the sector. We hope that the results from Wales will demonstrate the potential benefits of audit for assessing the quality of patient care, as well as providing confidence that it is possible to conduct an audit of this type securely and in a time-efficient manner.

In addition, this report reiterates pertinent findings and learning from the primary care audit for Wales.⁸ In Wales, a total of 280 practices (61%) took part in the audit, which included the records of 48,029 people with COPD. Using Read-coded data entered by primary care clinicians, we extracted key measures at the patient level to answer our audit questions. The results highlighted areas in which quality improvement is needed, some of which are transferrable to England. For example, the results of the extraction of practice data in Wales demonstrated that the computerised coding of how a COPD diagnosis is made was not consistent between practices. Consequently, coding provided confidence in diagnosis for only 14.4% of people on COPD registers. Where there was evidence that spirometry had been performed, one-quarter of the values were not consistent with a diagnosis of COPD. We have not been able to source any current data to answer this question for England. We therefore recommend that practices and clinical commissioning groups (CCGs) consider exploring this, and other learning points outlined in the report, by running similar audit queries on their own populations. Any CCG that wants to run such an audit query should review the technical documents available on the National COPD Audit Programme's primary care website, which detail the Read code queries used in the audit of primary care in Wales in 2014–15.⁹ Queries for the second cycle of audit, which will have been refined based on learnings from the first Welsh national audit, will be available to download from the website in spring 2017.

This report fundamentally aims to support primary care clinicians who are currently working under considerable pressure to deliver the standard of care for people with COPD. We hope to do this by sharing good practice and providing advice on how to address apparent deficiencies in care. To that effect, the report makes the following key recommendations.



Along with the national secondary care^{10,11} and pulmonary rehabilitation^{12,13} audit reports, this report helps to complete a picture of the COPD care offered to patients in England.

Recommendations

These recommendations are based on the learnings from the audit in Wales, a country with QOF results that are similar to those in England. We recommend that practices and CCGs consider gathering more intelligence locally to determine how relevant these recommendations are to their area.

A diagnosis of COPD should be made accurately and early. If the diagnosis is incorrect, any subsequent treatment will be of no value.

- a. People who have breathlessness and/or cough that does not go away or frequent 'chest infections' should have access to health professionals who have been trained to know what to do and have the resources to reach a diagnosis in a timely way. Spirometry is fundamental to a diagnosis of COPD and patients should be assured that their test has been performed and interpreted in the right way. CCGs and providers are alerted to the training standards included in the National Register of certified professionals and operators for spirometry.¹⁴
- b. Trained and competent health workers should offer people with a risk factor and symptoms of COPD a comprehensive and structured assessment of those complaints.
- c. People who are at risk of COPD are at a higher risk of lung cancer, and chest X-ray is an essential part of the breathlessness assessment and diagnosis of COPD.

People with COPD should be offered interventions according to value-based medicine principles.¹⁵

- a. Tobacco dependence treatment is safe, well tolerated and effective at prolonging life: it reduces flare ups and has a wider impact on health. However, it is underused. Health professionals who treat people with COPD should be trained to have the right conversation; to know how to assess dependency; and to feel confident and have the resource to treat it.
- b. Flu vaccination is effective and safe but underused in people with COPD. System leaders should identify where variation exists and ensure that people with COPD have the best information to make the right decision for them.
- c. Anyone with a Medical Research Council (MRC) breathlessness grade of 3 or more should be offered and encouraged to do pulmonary rehabilitation by their primary care health professional and have timely and easy access to an appropriate provider of this evidence-based therapy.
- d. Health professionals providing inhaler therapy for COPD should have up-to-date knowledge about what devices are available and ensure that people are able to use their devices (NICE CG101, 1.2.2.11 to 1.2.2.14);³ are offered optimal bronchodilator medication (NICE CG101, 1.1.6);³ and are issued with inhaled corticosteroids (ICS) only when it is likely to be beneficial (NICE CG101, 1.2.2.2 and 1.2.2.3).³ They should ensure that safety of long-term, high-dose inhaled steroids is discussed (NICE CG101 1.1.8).³

People with more severe disease (categorised according to the extent of airflow limitation)¹⁶ should be identified for optimal therapy. COPD encompasses a broad spectrum of conditions and health statuses and a personalised approach is essential.

- a. People having frequent exacerbations of COPD need to be identified, as they are at higher risk of an accelerated decline in their condition and may require specialist review both to manage symptoms and slow decline. The recording of 'number of exacerbations in the last year' allows this group to be better identified by practices and prioritised.
- b. Long-term oxygen therapy is a life prolonging intervention for people with COPD who have hypoxia. When primary care health professionals detect low oxygen saturation in the primary care setting, referral to a suitable assessment and review service should be offered. Primary care should record the use of oxygen on patient notes as they would any other long-term medication, to ensure timely review for assessment of safety and effectiveness.

There should be better coding and recording of COPD consultations, prescribing and referrals.

- a. As patient access to personal health records improves and patients' involvement in their own care becomes an expected norm, there will be opportunities to ensure that people with COPD 'know their numbers' or, in other words, understand why their spirometry test is consistent with COPD. They should be able to record quality of life assessments, their ability and confidence to use inhalers and their understanding of how to help themselves through access to, and involvement with, self-care documentation and action plans.
- b. Much of the variation seen in the Welsh data suggests variance in electronic coding.⁸ In order to link datasets across the system in the future, we ask the wider system (whether through development of the Systematised Nomenclature of Medicine coding system or other activity) to make standard recording templates available to ensure that the right things are recorded and that health professionals can spend more time with patients by avoiding the time spent on duplicate entries or manual entry.

Quality improvement resources

The National COPD Audit Programme has collated a range of materials to assist with local improvement work. A selection of these is listed below, and further resources will be available on our website (www.rcplondon.ac.uk/copd) in due course.

National Institute for Health and Care Excellence (NICE)

- *Chronic obstructive pulmonary disease in adults*. Quality Standard 10 (QS10). London: NICE, 2016. www.nice.org.uk/guidance/qs10
- *Smoking: Supporting people to stop*. Quality Standard 43 (QS43). London: NICE, 2013. www.nice.org.uk/guidance/qs43
- *Chronic Obstructive Pulmonary Disease in over 16s: diagnosis and management*. Clinical Guideline 101 (CG101). London: NICE, 2010 www.nice.org.uk/guidance/CG101 (and a good summary of recommendations is found at www.nice.org.uk/guidance/cg101/chapter/guidance)

British Lung Foundation (BLF)

The BLF website (www.blf.org.uk) has a lot of patient information and also some useful tools, including the COPD patient passport (<http://shop.blf.org.uk/products/copd-passport>), the patient guide to oxygen therapy (<http://shop.blf.org.uk/collections/lung-healthinformation/products/oxygen-booklet>) and the patient guide to exercising with a lung condition (www.blf.org.uk/Page/Exercise-with-a-lung-condition).

Primary Care Respiratory Society UK (PCRS-UK)

The PCRS-UK website (www.pcrs-uk.org) hosts a range of current educational tools and events and has a large archive of resources. Its core resources include:

- Quick guide to the diagnosis and management of COPD in primary care, 2016. <https://pcrs-uk.org/quick-guide-diagnosis-and-management-copd-primary-care>
- PCRS-UK tobacco addiction and smoking cessation advice, 2016. <https://pcrs-uk.org/tobacco-dependency-0>
- PCRS-UK wall chart on home oxygen prescribing, 2016. <https://pcrs-uk.org/wall-chart-home-oxygen-prescribing>
- PCRS-UK management of stable COPD in adults. https://pcrs-uk.org/sites/pcrs-uk.org/files/os13_copd_stable.pdf
- PCRS-UK table of inhaled drugs. www.pcrs-uk.org/resource/Guidelines-and-guidance/table-inhaled-drugs

Royal College of General Practitioners (RCGP)

The RCGP has produced a guide to quality improvement for general practice to support the whole primary care team on their quality improvement journey. Some of the tools will be familiar, such as clinical audit and significant event analysis; however, there are many more ways to take advantage of quality improvement to benefit patients and practices, and the guide is designed to help practices get started: www.rcgp.org.uk/clinical-and-research/our-programmes/quality-improvement.aspx

IMPRESS

IMPRESS is a collaboration between the BTS and the PCRS-UK, hosted by NHS Networks. It hosts a range of resources, including for commissioning and integrated care. For example:

- Acute breathlessness assessment. www.networks.nhs.uk/nhs-networks/impress-improving-and-integrating-respiratory/documents/Breathlessness%20algorithm%20IMPRESS%20LSE%20Health%20Foundation%20FINAL.pdf/view
- IMPRESS *Guide to the relative value of COPD interventions*. www.networks.nhs.uk/nhs-networks/impress-improving-and-integrating-respiratory/news/impress-guide-to-the-relative-value-of-copd-interventions

The site draws together evidence and experience on COPD, heart failure, anxiety, obesity and anaemia: www.networks.nhs.uk/nhs-networks/impress-improving-and-integrating-respiratory/news/impress-breathlessness-resources

British Thoracic Society (BTS)

- BTS/SIGN asthma guideline. www.brit-thoracic.org.uk/guidelines-and-quality-standards/asthma-guideline/
- BTS guidelines for home oxygen use in adults. [www.brit-thoracic.org.uk/document-library/clinical-information/oxygen/home-oxygen-guideline-\(adults\)/bts-guidelines-for-home-oxygen-use-in-adults/](http://www.brit-thoracic.org.uk/document-library/clinical-information/oxygen/home-oxygen-guideline-(adults)/bts-guidelines-for-home-oxygen-use-in-adults/)
- BTS recommendations for hospital smoking cessation services for commissioners and health care professionals. www.brit-thoracic.org.uk/document-library/clinical-information/smoking-cessation/bts-recommendations-for-smoking-cessation-services/
- BTS case for change: Why dedicated, comprehensive and sustainable stop smoking services are necessary for hospitals. www.brit-thoracic.org.uk/document-library/clinical-information/smoking-cessation/bts-case-for-change/

Other

- GOLD guidance on COPD. <http://goldcopd.org/gold-reports/>
- London Clinical Senate. *Helping smokers quit: The expired carbon monoxide (CO) test*. www.londonsenate.nhs.uk/wp-content/uploads/2015/04/Helping-Smokers-Quit-Programme-The-expired-carbon-monoxide-CO-test.pdf
- National Centre for Smoking Cessation and Training (NCSCT). *A short training module on how to deliver very brief advice on smoking*. www.ncsct.co.uk/publication_very-brief-advice.php
- Primary Care Commissioning (PCC). *A guide to quality assured diagnostic spirometry*, 2013. www.pcc-cic.org.uk/article/quality-assured-diagnostic-spirometry
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- 4 National Institute for Health and Care Excellence. *Smoking: supporting people to stop*. Quality Standard 43 (QS43). London: NICE, 2013. www.nice.org.uk/guidance/qs43
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- 6 Public Health England. *Local tobacco control profiles for England*. www.gov.uk/government/collections/local-tobacco-control-profiles-for-england [Accessed October 2016]
- 7 Public Health England. *INHALE: INteractive Health Atlas of Lung conditions in England*. <http://fingertips.phe.org.uk/profile/inhale> [Accessed October 2016]
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- 9 National COPD Audit Programme Primary Care Workstream. *National COPD primary care audit (Wales): aims, participation and resources*. London: RCP, 2015. www.rcplondon.ac.uk/projects/outputs/national-copd-primary-care-audit-wales-aims-participation-and-resources
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- 14 Primary Care Commissioning. *Improving the quality of diagnostic spirometry in adults: the National Register of certified professionals and operators*. London: PCC, 2016. www.pcc-cic.org.uk/article/quality-assured-diagnostic-spirometry
- 15 Porter ME. Perspective: What is value in health care? *N Engl J Med* 2010;363:2477–2481. doi: 10.1056/NEJMp1011024. www.nejm.org/doi/citedby/10.1056/NEJMp1011024#t=article
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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 COPD Audit Programme team directly:

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