

# Time to take a breath – COPD audit results from primary care

**Bronwen Thompson in discussion with Noel Baxter, Clinical Lead, National COPD Audit Programme Primary Care Workstream; Carol Stonham, PCRS-UK representative on Primary Care Workstream Group and Kevin Gruffydd Jones, RCGP representative on Primary Care Workstream Group**

The first results from the National COPD Audit Programme in primary care were published in October. In a report entitled 'Time to take a breath', a snapshot of the way that COPD is being managed in Wales evaluated the clinical effectiveness of COPD care in the general practice setting.

*“There is a wealth of material in this report that is directly relevant to all who provide care to COPD patients. It highlights many areas for improvement and I would urge every primary care professional to review its findings and reflect on what they could do to improve care in their own practice or locality. The report won't make a difference – it is only if clinicians pick up on the learning from it and make changes to their current practice that patients will be managed better and have more positive outcomes,”* says Dr Noel Baxter, the Primary Care Workstream Lead for the RCP National COPD Audit – and also PCRS-UK Executive Chair.

## Background to the audit

A national audit for COPD commenced in England and Wales in 2013. This was designed to collect data from secondary care, primary care and pulmonary rehabilitation services in order to monitor the quality of care and adoption of best practice guidelines across the two countries. To date, reports have been published on the organisation of care in secondary care and pulmonary rehabilitation and the outcomes of care in secondary care and pulmonary rehabilitation. Important lessons have emerged from these reports which highlight areas for improvement both within those sectors but also across the system. Primary care, community care and commissioners should review the findings of all these reports to explore the part they could play in driving change across the local health economy.

National audits have traditionally been focused on data collection in secondary care, but it has been increasingly recognised that, for conditions which are largely managed in primary care, measuring the quality of care there becomes relevant and important. The national diabetes audit blazed the trail with data collection in primary care, and COPD was to follow suit. Unfortunately there have been significant challenges and delays with the audit due to increasing limitations on data extraction from practices in England. At present it has not been possible to carry out the audit in England beyond publicly available QOF data, but it is hoped that this nationally important work can be rolled out to England in the future. It is fortunate that Wales has not had the same issues, so the collection of data from primary care has been able to proceed.

Practices in Wales were invited to take part in the audit in early 2016, and 60% of practices signed up. 280 practices provided valuable information about the care of 48,029 people living with COPD in Wales through automatic data downloads from the practice computer systems. Data extracted from computers were compared with data collected from QOF to examine the degree of consistency or disparity.

## Summary of key findings

### Poor standards of diagnosis or inconsistent coding?

- Only 20% of people on the COPD registers had an electronic record of the post-bronchodilator FEV<sub>1</sub>/FVC ratio, which is necessary for diagnosing COPD.
- 63% of patients on the COPD register had a record of an X-ray around the time of diagnosis, which NICE recommends for all COPD diagnoses to exclude co-morbidities.
- There is considerable variation in data accuracy and coding across practices, particularly for diagnosis. In people who had a record of post-bronchodilator spirometry, only 27% had a value that was consistent with a diagnosis of COPD. Therefore, overall, the data extraction from Wales provided confidence in the quality of COPD diagnosis in only 14% of people on the COPD register. This was in sharp contrast to the QOF data in Wales which shows practices recorded confidence in diagnosis in over 90% of cases. Dr Noel Baxter commented: “Low recording rates could reflect lower

standards of care, but may also reflect confusion about appropriate coding. It was hard to tease out exactly what the issue was for some questions." In conclusion, at best 42% of the COPD registered population and at worst 86% will require diagnostic re-evaluation to confirm COPD.

### **Under-use of high value interventions means patients are missing out on optimal care**

Many highly effective treatments supported by good evidence are available to manage COPD. Many of these are being used, but there is also evidence that effective interventions are being under-used and harmful or ineffective treatments over-used.

- In COPD patients recorded as being current smokers, almost 75% had been referred to stop smoking service. However, only 10.8% of current smokers had received any pharmacotherapy to help them quit.
- Two-thirds of patients with an MRC breathlessness score making them eligible for pulmonary rehabilitation had never actually been referred to pulmonary rehabilitation.

### **Discrepancies between coding in notes and QOF results means people with more serious disease may not be getting the care they need**

- The number of COPD patients with an MRC breathlessness score recorded in the audit year was 58%. A breathlessness score is important for planning care and for detecting worsening of COPD.
- In only 11% of patients with COPD was an exacerbation coded in 2013–14, which is almost certainly an under-recording. There was wide variation between Health Boards, with the lowest recording 7% versus 14% for the highest.
- Over 15% of COPD patients on COPD registers were exception-reported in QOF.
- Considerable discrepancies emerged between the high level of achievement of regular reviews reported for QOF, while the individual components of a review were not coded in records.
- There is undoubtedly a need for greater clarification about what should be monitored during a routine COPD review and how this should be recorded.

### **The report makes many recommendations for improving COPD diagnosis and management. These include:**

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

- Clinicians to be alert to breathlessness, cough, frequent chest infections as potential early signs of disease and to investigate with quality-assured spirometry.
- Patients with a risk factor and symptoms to be assessed by competent clinicians with appropriate training.
- People at risk of COPD are at risk of lung cancer and a chest X-ray is an essential part of the breathlessness assessment and COPD diagnosis.

People with COPD should be offered interventions according to value-based medicine principles – which include flu vaccination, help to overcome tobacco dependency and pulmonary rehabilitation.

- Tobacco dependence treatment is safe and highly effective but under-used. Health professionals should be trained to assess dependency and offer appropriate intervention.
- Anyone with an MRC breathlessness score of 3 or more should be offered and encouraged to attend pulmonary rehabilitation by their primary care health professional and have timely and easy access to a service.
- Health professionals should be up to date on the inhaler devices available, able to support patients with optimal technique and ensure people are offered optimal and appropriate bronchodilator and inhaled corticosteroid medication, taking into account long-term safety of high dose inhaled steroids.

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

- Long-term oxygen therapy is a life prolonging intervention for people with COPD who have hypoxia. When low oxygen saturation is detected, patients should be referred to a suitable assessment and review service. The use of oxygen should be recorded on patient notes as for any other long-term medication to ensure timely review for assessment of safety and effectiveness.
- 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. Recording the 'number of exacerbations in the last year' allows this group to be identified by practices and prioritised.

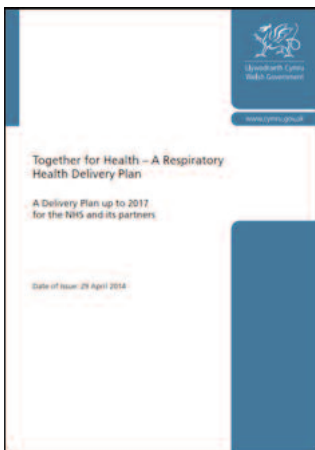
There should be better coding and recording of COPD consultations, prescribing and referrals.

- Be sure that people with COPD 'know their numbers' (i.e. understand why their spirometry test is consistent with COPD) and are supported to manage their own condition as patient access to personal health records improves and their involvement in maintaining their own health becomes an expected norm.
- Much of the variation seen in the data suggests variance in electronic coding. In order to standardise data entry and promote a systematic approach to care, they recommend developing a template to guide systematic recording of key information.

Carol Stonham commented: *“‘Time to take a breath’ has highlighted the areas of everyday care where primary care can make a difference. Much of it is the day-to-day care – be it diagnosis, annual review or exacerbation – and whilst there are pockets of outstanding care, patients are subjected to too much variability. We all need to look at how the care we offer compares locally and nationally and aspire to be the best.”*

### What you can do:

- Examine your practice registers to see how they compare with the data from the audit in Wales. Use this as an opportunity to audit the quality of diagnosis in your local population.
- Focus on diagnostic accuracy, use of high value interventions and whether you have the right data recorded to identify the people with greatest need and highest cost.
- If you don't work in Wales, look out for the RCP Primary Care Workstream second extraction queries in the next *PCRU* and run them in your own primary care population.



Wales has had a comprehensive Respiratory Delivery Plan in place since early 2014 – the only country in the UK to have a plan covering all of the major respiratory conditions. Importantly, they also have a national respiratory group which is overseeing the implementation of this plan – with each of the seven Health Boards also having a local implementation group to ensure that the national plan drives improved care at a local level.

Their first annual report reviewing progress up to the end of 2015 highlighted areas of achievement – e.g. reduction in admissions and read-

missions, but also pointing out the ways in which services needed to improve – reducing smoking rates, uptake of flu vaccinations, better diagnosis. Many of the areas they highlight also feature in the primary care audit report. They therefore have an excellent structure in place in Wales to review the learning from this audit and to drive improvements in care.

It is known from less comprehensive reports and studies from within and outside the UK that Wales is not an outlier in what this audit has found. In November, an additional report was published based on publicly available data from England, such as QOF, so that we now have similar data to examine from across England as well as Wales. Dr Kevin Gruffydd Jones, Clinical Policy Lead for PCRS-UK, recommends that PCRS-UK members not only consider what they can learn from this report but also urge as many colleagues as possible to do likewise.

*“ This audit report provides the opportunity for health professionals and commissioners – wherever they are in the UK – to challenge themselves about their own approach to the diagnosis and management of COPD. Taking some action on just one or two of the areas for improvement identified here could make a difference to the lives of many patients with COPD.”*

### Future?

We are aware of several areas in England developing Sustainability and Transformation Plans (STP) which have prioritised respiratory disease. However, to raise the profile of respiratory disease, we plan to develop a short set of key questions based on the COPD audit which we would encourage every STP area to run, to establish how they compare with Wales.

### Resources

- 'Time to take a breath'. National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: National Primary Care Audit (Wales), 2014-15.
- National COPD audit programme <https://www.rcplondon.ac.uk/projects/national-copd-audit-programme>
- 'Together for health'. Respiratory annual report, 2015. <http://gov.wales/docs/dhss/publications/160213reporten.pdf>
- 'Together for health – a respiratory health delivery plan. A delivery plan up to 2017 for the NHS and its partners'. <http://gov.wales/docs/dhss/publications/140429respiratoryen.pdf>