The national strategy for COPD will provide a 10-year plan for improving quality of services and patient care

Clinicians and commissioners should prepare for the launch of this strategy and implementation of its evidence-based recommendations, says Dr Steve Holmes

On 23 February 2010, a 171-page consultation document was published by the Department of Health (DH) as part of the final processes in developing a national strategy to revolutionise the clinical care for people with chronic obstructive pulmonary disease (COPD).[1] The national strategy for COPD should be published later this year, and it is reassuring to know that the DH has consulted with patients, carers, and healthcare professionals across traditional NHS boundaries, as it has throughout the development of the proposed strategy.

For years, the need to improve care for people with long-standing respiratory conditions has been apparent to those of us who work in primary care or are involved in medical care within the acute sector. With the realisation of the costs involved, this issue has become increasingly important to commissioners.

The development of the national strategy for COPD began 10 years ago with a report that indicated the high levels of respiratory disease in this country.[2] This was reinforced in 2004 by the Chief Medical Officer's recognition in his annual report that there was a need to improve diagnosis and provide structured care for people with COPD.[3] The DH has been developing this strategy since 2005, and has undertaken work with the Healthcare Commission,[4] the British Lung Foundation, the British Thoracic Society, and the Primary Care Respiratory Society UK during this process.

It is worth reiterating that 835,000 people in England were diagnosed with COPD in 2008,[5] although it is estimated that over three million have the disease.[1] Chronic obstructive pulmonary disease accounts for around 25,000 deaths in England and Wales[6] and is expected to be the third leading cause of death worldwide by 2030.[7]

The cost to the NHS is significant, with estimates of between £810 million and £930 million a year, mainly linked to the costs of hospital admissions and drugs.[1] The median length of stay for a person admitted with COPD is 5 days, a reduction from 6 days in 2003, but 33% are readmitted within the next 90 days.[8] From this information it is easy to think that most of the management is based in secondary care; however, for about 91% of current COPD cases, treatment takes place in primary care through the management of acute exacerbations, chronic disease reviews, and the important management of co-morbidities.[9]

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We must recognise that the strategy is aspirational and will be a target for clinicians and commissioners to achieve over the next 10 years; it is also a strategy that is expected to be delivered locally, as is suggested by the appointment of national and regional respiratory lead clinicians to help steer the process forwards.

The key areas of the consultation on the national strategy for COPD[1] are summarised in Box 1 below. It is worthwhile for us to consider each of these proposed key areas in a little detail to understand how they will have an impact on clinical care in the short and medium term.

Box 1: Key areas of the national strategy on COPD

- Prevention and identification
- Finding the 'missing millions'
- High-quality care and support
- End-of-life care
- Asthma
- Supporting the implementation of the strategy

Prevention and identification

The recommendations for prevention and identification as provided in the consultation document are summarised in Box 2 (right).

We should not underestimate the importance of prevention, especially when cigarette smoking is involved. Although smoking rates are reducing in England, more than one in five adults still smoke[10] and the longer term implications of cigarette smoking will remain with us for many years. The strategy seeks to address hot spots where prevalence is or could be high, and tries to encourage smoking cessation to minimise healthcare inequalities.[1] There is also a proposal to address the importance of lung health and maintaining health (which is likely to require media work as well as work by healthcare professionals).[1]

Currently, we have no formal screening programme for COPD, and opportunistic screening is not being undertaken reliably in primary care or elsewhere.

Box 2: Recommendations for prevention and identification

- **Recommendation 1:** Work should be undertaken locally to identify where prevalence is high, and planned interventions should be developed to encourage behavioural change and help minimise inequalities.
- **Recommendation 2:** The importance of lung health needs to be understood and people should take appropriate action to maintain good lung health.
- **Recommendation 3:** The consequences of exposure to the main risk factors for COPD should be understood and people with early symptoms of lung disease need to be able to recognise their symptoms and seek further investigation.
- **Recommendation 4:** Further evaluation should be undertaken on the impact of the use of lung tests on individuals' motivation for smoking cessation and on testing for lung disease as a case-finding approach.
- **Recommendation 5:** Employers should look to minimise the risks of workforce exposure to known risk factors, and work with partners from healthcare and social care to support people with COPD to manage their condition and remain in work.

We are disadvantaged further as many people with early symptoms of COPD are unaware of the importance of their symptoms and accept them rather than present for treatment. This is perhaps promoted by 'therapeutic nihilism' in which many clinicians compound the patients' own perceptions by being unaware of the benefit that pulmonary rehabilitation and pharmacological interventions reduce exacerbations and hospital admissions. The evidence suggests that treatment for COPD reduces admissions and exacerbations by around 25%.[11–13]

There are proposals highlighted in the consultation document to undertake research to look at case finding that is more structured; for example, with the use of questionnaires, peak flow readings, case-finding spirometry, and microspirometry as screening tools to help direct those with a positive screening test to formal spirometry and detailed clinical assessment.

Finding the 'missing millions'

The recommendations for finding the 'missing millions' are summarised in Box 3 below.

Box 3: Recommendations for finding the 'missing millions'

- **Recommendation 6:** Healthcare professionals should understand the risk factors for COPD and offer advice or an appropriate intervention to those who are at risk.
- **Recommendation 7:** In line with World Health Organization advice, all people with a diagnosis of COPD and/or a history of adult asthma should be assessed for alpha-1-antitrypsin deficiency.[14]
- **Recommendation 8:** A diagnosis of COPD should be confirmed by quality assured spirometry and other investigations appropriate to the individual.
- **Recommendation 9:** An assessment of the severity and presence of co-morbid conditions should be made at the point of initial diagnosis, and at least every 3 years.
- **Recommendation 10:** Disease registers should be accurate and used to improve COPD outcomes.
- **Recommendation 11:** Good-quality information should be provided at diagnosis and delivered in a format that any person can understand.

The strategy is designed to support and encourage early identification and diagnosis. There are concerns that often the diagnosis is not being made robustly; indeed, on reviewing the hospital records of people discharged with an admission diagnosed as 'acute exacerbation of COPD', it was only possible to find a spirometry record for 55% of people within the 5 years prior to their admission. This was despite more than 60% being reviewed in a specialist hospital clinic.[8] This may be because the information was available in primary care or the spirometry was performed more than 5 years before admission, but certainly highlights that we have a long way to go to produce high-quality diagnoses. A recent paper suggests that quality spirometry is a cornerstone of good clinical diagnoses in respiratory disease[15] and that primary care diagnoses should aim to be as quality assured as possible.

There is also good evidence that significant co-morbidities (e.g. coronary heart disease, diabetes, depression, osteoporosis, and carcinoma of the lung) are much more common in patients with COPD than in the general population.[13,16–19] The recommendations suggest assessment and review specific to some of the common co-morbidities, as such management is likely to improve patient-related outcomes in these areas.[1]

Other key areas for development are accurate disease registers and patient records that can be shared by clinicians across the NHS, helping to facilitate patient care. This requires accurate entry of high-quality diagnoses rather than, as can happen, a diagnosis being assumed in an emergency situation that is passed onwards into a variety of records systems (e.g. when an out-of-hours presentation to primary or secondary care is labelled as 'an acute exacerbation of COPD or asthma' and entered onto computer systems without a formal diagnosis having been made).

There are also proposals included on providing good-quality patient information;[1] the more empowered our patients are, the better able they are to care for themselves and know what they should expect, and to self manage their condition more readily without the need to seek healthcare advice.

High-quality care and support

Box 4 (see p.4) summarises the recommendations for high-quality care and support that are set out in the consultation document.

The mainstay of good care after a robust diagnosis must be ongoing high-quality care and support. Already, considerable work has been carried out to develop help in the management of long-term conditions (e.g. expert patient programmes, self-management plans, and enhanced communication with patients and carers) and, where appropriate, this should be embedded in COPD care rather than reinventing care cycles. We are also very fortunate in England to have robust clinical guidance[20] rather than opinion-based documents to manage COPD (and an update to NICE Clinical Guideline 12 on the management of COPD is expected in June 2010);

Box 4: Recommendations for high-quality care and support

- **Recommendation 12:** Management approaches to chronic disease should be adopted in healthcare and social care for all people diagnosed with COPD, irrespective of severity or symptoms.
- **Recommendation 13:** All people with COPD should receive evidence-based treatment using a structured medicines-management approach. A step-up approach to smoking cessation intervention as part of preventive management strategies should be taken.
- **Recommendation 14:** All people with COPD and hypoxaemia should be assessed clinically for long-term oxygen therapy and reviewed at regular intervals, and existing home-oxygen registers should be reviewed.
- **Recommendation 15:** All people with COPD should be advised to undertake moderate exercise according to their condition. People with functional impairment should be referred for quality assured pulmonary rehabilitation.
- **Recommendation 16:** People with COPD should be encouraged to learn how to help manage their condition themselves and how to have positive interactions with healthcare professionals and others about their condition. They should also be encouraged to engage with others who have COPD to promote exchanges of information, support, and advice.
- **Recommendation 17:** The quality of the identification and management of exacerbations should be improved and all people with COPD who have an exacerbation should be reviewed afterwards to ensure that their treatment remains optimal and relapses are reduced to a minimum.
- **Recommendation 18:** All people with COPD who are in respiratory failure should be issued with oxygen-alert cards, and ambulance staff should be able to recognise and respond appropriately to respiratory failure in COPD.
- **Recommendation 19:** People with COPD should receive a specialist respiratory review when acute episodes have required referral to hospital. They should be assessed for management by early discharge schemes, or by a structured hospital admission, to ensure that length of stay and subsequent readmission are minimised.
- **Recommendation 20:** All people with acute respiratory failure should be identified and investigated promptly and offered treatment with non-invasive ventilation with access to mechanical ventilation, if required.

however, we need to concentrate on our smoking-cessation advice to reduce the severity of the disease in the long term. In many parts of the NHS, concern has been expressed with regard to long-term oxygen therapy, which is prescribed widely but not always in keeping with good guidance.[21–24] It is hoped that the strategy will ensure the right people acquire the right amount of oxygen in the right way. It is increasingly unacceptable that oxygen be prescribed on a whim or after a patient request without appropriate assessment and referral after findings of hypoxaemia (with pulse oximetry[25]).

The other key themes that arise from this part of the consultation include the importance of exercise and pulmonary rehabilitation, and of more active ways to identify and manage exacerbations.[1] The patient-safety agenda is emphasised with a recommendation to provide people on long-term oxygen with safety cards to alert emergency services with advice on the dangers of overuse of oxygen. We know that people admitted with COPD have a 13.9% mortality rate at 3 months[8] (more than anticipated for post-myocardial infarction), and hence the strategy emphasises that a specialist review is important after such an event.[1] The strategy does not specify that this must be a doctor or in secondary care—but specialist review does suggest that these people should be reviewed by clinicians with an interest in COPD and, importantly, should have the time, expertise, and opportunity to optimise therapy and minimise the risk of subsequent admission.

End-of-life care

Two recommendations for high-quality care and support were provided in the consultation document (see Box 5, p.5). The consultation document clearly indicates a hidden problem: that end-of-life care in COPD has been ignored compared with other end-of-life conditions.

Box 5: Recommendations for high-quality care and support

- **Recommendation 21**: There should be improved access to high-quality end-of-life care services that ensure equity in care provision for people with severe COPD, regardless of setting.
- **Recommendation 22**: Access to information and appropriate support should be available for carers and those who are bereaved.

Improved access to quality care will require education for respiratory care, palliative-care, and primary care clinicians, among others, if we are to really improve the standard of communication and care. Importantly, it is recognised in the strategy that often carers have looked after their loved ones with COPD for years, and have adapted their lives to do so. For carers who are bereaved, the relatively short period of expert support after death of loved ones, often after a prolonged and roller-coaster illness, can often make great differences to the carers' lives.

Asthma

Although the strategy focuses on COPD and associated services and quality issues, it also highlights opportunities for helping patients with asthma, hence the inclusion of a section specifically on this condition. The recommendations for asthma are summarised in Box 6 below.

Box 6: Recommendations for asthma

- **Recommendation 23**: The NHS should recognise similarities and differences between asthma and COPD, and should commission services accordingly to optimise the model of provision of care.
- **Recommendation 24**: People should be managed according to evidence-based guidelines.

It is recognised that there is a complex relationship between asthma and COPD in the minds of clinicians, which makes commissioning for individual conditions more difficult—there are similarities, but also clear differences. The consultation identifies asthma as a prevalent condition with 5.9% of the English population affected,[1,5] which accounts for 12.7 million lost working days and £1 billion of direct healthcare costs.[1] This correlates with poor asthma outcomes in people who are not managed according to clinical guidelines.[26] The consultation highlights that we also have issues linked to quality care for children and adolescents, as well as for adults.[1]

Role of primary care

Primary care provides the vast majority of clinical care for COPD and asthma, and hence it is important for healthcare professionals and commissioners to consider the national strategy for COPD, especially as it may require adaptations to current clinical practice. Increased screening for COPD, quality assured spirometry, and provision of high-quality care for all people with COPD will be challenges to a primary care environment already feeling overworked. The potential impact on primary care of implementation of the strategy should be carefully considered, and appropriate resources provided to facilitate this—one particular challenge will be identifying areas where disinvestment can occur in order to produce these improvements.

Implementation and conclusions

This is clearly an aspirational strategy that aims to improve respiratory care for patients with COPD and also those with asthma. It expects developments across the areas of prevention, diagnosis, clinical care, and end-of-life care, and highlights asthma care as an important issue. To achieve these aspirations it is important to be realistic, especially with limited new funding being available and a drive towards the Quality and Productivity programme[27,28] in a more financially restrained NHS in England.

This does not mean that the national strategy for COPD will not deliver. In England, with its Strategic Health Authority clinical respiratory leads, national clinical directors for respiratory disease, and a culture of clinicians who all strive to make a difference, the aspirations of this carefully thought-through strategy

Key points

- It is estimated that over 3 million people in England have COPD, but only one third are currently identified
- The condition is estimated to cost the NHS between £810 million and £930 million each year
- The national strategy for COPD will provide a 10-year plan, which aims to:
  - help prevent individuals developing COPD
  - ensure:
    - earlier identification and intervention
    - high-quality delivery of services and patient care to all individuals with the condition
- The strategy will include evidence-based recommendations on prevention, identification, diagnosis, clinical and end-of-life care, patient support, and asthma
- Implementation of the strategy will help to improve the quality of COPD services and patient care

will deliver care and benefits to our patients. However, it is likely to be based, importantly and rightly, on evidence-based and cost-effective care, and effective teamwork across traditional boundaries for the benefit of our patients and their families. We must prepare for the strategy and help to make a real difference.

A useful first port of call for more practical advice on what the strategy means for primary care, and first steps to take, is the Primary Care Respiratory Society UK website (**www.pcrs-uk.org/copd_ns/index.php**).

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