

Chronic obstructive pulmonary disease



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Welcome

NICE issued a new updated clinical guideline on chronic obstructive pulmonary disease (COPD) in June 2010. Replacing the previous 2004 guideline, it includes a series of new recommendations based on the best available evidence.

Nursing
IN PRACTICE

Clinical guideline

Chronic obstructive pulmonary disease (COPD) is a condition that makes breathing difficult. COPD is a broad term that covers several lung conditions, including chronic bronchitis and emphysema. It usually develops because of long-term damage to the lungs from breathing in a harmful substance (such as cigarette smoke or chemical fumes). Around 835,000 people in the UK have been diagnosed with COPD, but it is thought that there are about 2 million people living with the disease who have not been diagnosed.

Symptoms include getting short of breath easily, having a cough that has lasted a long time, often coughing up phlegm or catarrh or a lot of coughing, breathlessness or wheezing during cold weather. Patients can also experience exacerbations, a sustained worsening of symptoms. These exacerbations are one of the most common causes of emergency hospital admissions in the UK.¹ The treatments available for COPD help people to breathe more easily, but they don't repair the damage to the lungs.

This partially updated guideline covers the diagnosis, treatment and care of adults with COPD. It includes recommendations on how the diagnosis should be made and the

treatments that should be offered at different times.

Implementing the NICE recommendations will help provide the best possible care for people with COPD. The guideline is aimed mainly at primary and secondary healthcare professionals who have direct contact with patients with COPD, and make decisions about their care. Several key recommendations are of interest to nursing practice. Michael Rudolf, Consultant Respiratory Physician at Ealing Hospital, London and Chair of the Guideline Development Group, said: "Although the management of people with COPD has improved substantially over the last few years, there is still much more to be done, which is why the new updated NICE guideline contains recommendations specifically designed to address the issues of correct diagnosis and effective treatments.

"I believe that the resulting recommendations will ensure that patients continue to receive the best possible care, both by improving identification of the condition and by increasing the choice of treatments based on the most up-to-date clinical and cost-effectiveness evidence."

REFERENCE

1. British Lung Foundation. *Invisible Lives – Chronic Obstructive Pulmonary Disease (COPD) – finding the mission millions*. London: BLF; 2007.

Key priorities for implementation from the NICE guideline

DIAGNOSING COPD

The presence of airflow obstruction should be confirmed by performing post-bronchodilator spirometry. All health professionals involved in the care of people with COPD should have access to spirometry and be competent in the interpretation of the results.

ENCOURAGING PATIENTS TO STOP SMOKING

Helping patients to stop smoking is a key intervention for nurses, and encouraging COPD patients to stop smoking is one of the most important components of their management. All COPD patients still smoking, regardless of age, should be encouraged to stop, and offered help to do so at every opportunity.

Unless contraindicated, the guideline recommends healthcare professionals should offer nicotine replacement therapy (NRT), varenicline or bupropion, as appropriate, to people who are planning to stop smoking combined with an appropriate support programme to optimise smoking quit rates.

PROMOTE EFFECTIVE INHALED THERAPY

In people with stable COPD who remain breathless or have exacerbations despite use of short-acting bronchodilators as required, offer the following as maintenance therapy:

- If $FEV_1 \geq 50\%$ predicted: either long-acting beta2 agonist (LABA) or long-acting muscarinic antagonist (LAMA).
- If $FEV_1 < 50\%$ predicted: either LABA with an inhaled corticosteroid (ICS) in a combination inhaler, or LAMA.
- Offer LAMA in addition to LABA+ICS to people with COPD who remain breathless or have exacerbations despite taking LABA+ICS, irrespective of their FEV_1 .

PROVIDING PULMONARY REHABILITATION FOR ALL WHO NEED IT

Pulmonary rehabilitation should be made available to all appropriate people with COPD, including those who have had a recent hospitalisation for an acute exacerbation.

USE OF NON-INVASIVE VENTILATION

Non-invasive ventilation (NIV) should be used as the treatment of choice for

persistent hypercapnic ventilatory failure during exacerbations not responding to medical therapy. It should be delivered by staff trained in its application, who are experienced in its use and aware of its limitations. When patients are started on NIV, there should be a clear plan covering what to do in the event of deterioration and ceilings of therapy should be agreed.

MANAGING EXACERBATIONS

The frequency of exacerbations should be reduced by appropriate use of inhaled corticosteroids and bronchodilators, and vaccinations. The impact of exacerbations should be minimised by:

- Giving self-management advice on responding promptly to the symptoms of an exacerbation.
- Starting appropriate treatment with oral steroids and/or antibiotics.
- Use of non-invasive ventilation when indicated.
- Use of hospital-at-home or assisted-discharge schemes.

MULTIDISCIPLINARY WORKING

COPD care should be delivered by a multidisciplinary team. It is recommended that respiratory nurse specialists form part of the multidisciplinary COPD team.

Irrespective of the healthcare setting, nurses have an important role in:

- Holistic assessment, treatment and monitoring of patients with COPD.
- Health education and helping patients with smoking cessation.
- Advising patients on self management strategies.

- Providing palliative care.

Healthcare professionals, including nurses, should be alert to the presence of depression in patients with COPD. The presence of anxiety and depression should be considered in patients who:

- Are hypoxic.
- Have severe dyspnea.
- Have been seen at or admitted to a hospital with an exacerbation of COPD.

NICE has published a clinical guideline entitled *Depression in adults with a chronic physical health problem*, which updates the recommendations on the treatment of depression in patients with COPD.

The NICE COPD updated guideline and *Quick Reference Guide* can be read in full at <http://guidance.nice.org.uk/CG101>. Also on the website are a baseline assessment tool and a set of PowerPoint slides highlighting the key priorities for implementation.

Nice quality standard on COPD in adults

NICE has recently published a quality standard on the assessment, diagnosis and clinical management of COPD in adults.

Quality standards are a set of specific, concise statements and measures that act as markers of high-quality, clinical and cost-effective patient care across a pathway or clinical area, covering treatment or prevention. They are derived from the best available evidence, such as NICE guidance or other evidence sources accredited by NHS Evidence, and are produced collaboratively with the NHS and social care, along with their partners and service users. Quality standards apply nationally across England.

Quality standards form a cornerstone of the NHS Outcomes Framework, which sets out the aims and objectives towards improving outcomes in the NHS, and what this will mean for patients and healthcare professionals. The quality standards on COPD complement the new outcomes strategy for COPD and asthma, developed to improve outcomes for patients by coordinating the efforts of the NHS, patients, social care and voluntary organisations.

The quality standard on COPD includes 13 statements that aim to define high-quality care for patients. These include that people with COPD should have a current individualised comprehensive management plan, with high-quality information and educational material about the condition and its management, relevant to the stage of disease. It also states that people with COPD who smoke regularly are encouraged to stop and are offered the full range of evidence-based smoking cessation support. In addition, the standard states that people with advanced COPD, and their carers, are identified and offered palliative care that addresses their physical, social and emotional needs.

Please see: www.nice.org.uk/guidance/qualitystandards/chronicobstructivepulmonarydisease/copdqualitystandard.jsp for more information.

The outcomes strategy for COPD and asthma can be found at: www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_127974

COPD Commissioning Guide

Later this year NICE hopes to publish a web-based guide on commissioning services for people with COPD. The guide will support commissioners in designing services to improve outcomes for patients and to help the NHS make better use of its resources. Like others in the NICE series of commissioning guides it will approach the commissioning of COPD services as part of an integrated care pathway, drawing on both the recently updated NICE clinical guideline on the management of COPD and the NICE COPD quality standard.

The commissioning guide will offer advice on a range of issues, including local needs assessment and opportunities for clinical service redesign. It will also signpost to other relevant sources of information, including commissioning guidance, and set benchmarks to help commissioners determine the level of service needed.

Illustrated with service models from the NHS, the commissioning guide will highlight where commissioning services for people with COPD, in line with NICE guidance, will support national drivers such as the Quality,

Innovation, Productivity and Prevention (QIPP) programme work stream on long-term conditions and end-of-life care, and the *Operating Framework for the NHS in England 2011/12*.

As well as focusing specifically on a number of key areas of care for people with COPD – pulmonary rehabilitation, assisted discharge and supportive and palliative care (the guide will include a commissioning and benchmarking tool which commissioners can use to determine the local service levels needed for the provision of services in these areas), it will also consider the implications for commissioning high-quality care across the whole pathway of services for people with COPD. This includes assessment and diagnosis, smoking cessation, oxygen therapy and the management of anxiety and depression.

Around-the-clock COPD symptom control, making a real difference to patients' lives¹⁻³



- Comparable efficacy to traditional LAMA treatment with twice daily dosing^{3-5†}
- Sustained bronchodilation from day 1¹
- Improves patients' breathlessness and health status^{**}(vs. control)¹
- Simple and easy-to-use device⁶⁻⁷
- 15% annual cost saving vs. tiotropium^{8††}

* Based on the cost of 1 Spiriva[®] HandiHaler[®] vs. Eklira[®] Genuair[®] initiation at month 1
 † Network meta-analysis and phase III study evaluation of aclidinium vs. tiotropium
 ** Measured by St George's Respiratory Questionnaire
 †† Assumes use of 1 Spiriva[®] HandiHaler[®] and 11 refills in 1 year or 12 EKLIRA GENUAIR packs in 1 year

Eklira[®] Genuair[®] ▽
322 micrograms inhalation powder aclidinium bromide

Active Ingredient: Each delivered dose contains 375 µg aclidinium bromide equivalent to 322 µg of aclidinium. Each metered dose contains 12.6 mg lactose monohydrate.
Indication: As a maintenance bronchodilator treatment to relieve symptoms in adult patients with chronic obstructive pulmonary disease (COPD).
Dosage and Administration: The recommended dose is one inhalation of 322 µg aclidinium twice daily. Consult SmPC and package leaflet for method of administration.
Contraindications: Hypersensitivity to aclidinium bromide, atropine or its derivatives, including ipratropium, oxitropium or tiotropium, or to the excipient lactose monohydrate.
Warnings, etc. Precautions: Should not be used to treat asthma or for relief of acute episodes of bronchospasm, i.e. rescue therapy. May cause paradoxical bronchospasm. Re-evaluation of the treatment regimen should be conducted if there is a change in COPD intensity. Use with caution in patients with a myocardial infarction during the previous 6 months, unstable angina, newly

diagnosed arrhythmia within the previous 3 months, or hospitalisation within the previous 12 months for heart failure functional classes III and IV as per the "New York Heart Association". Consistent with its anticholinergic activity, dry mouth has been observed and may in the long term be associated with dental caries. Also, use with caution in patients with symptomatic prostatic hyperplasia or bladder-neck obstruction or with narrow-angle glaucoma. Patients with rare hereditary problems of galactose intolerance, Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.
Interactions: Although co-administration with other anticholinergic-containing medicinal products is not recommended and has not been studied; no clinical evidence of interactions when taking the therapeutic dose has been observed.
Pregnancy and lactation: Aclidinium bromide should only be used during pregnancy if the expected benefits outweigh the potential risks. It is unknown whether aclidinium bromide and/or its metabolites are excreted in human milk. The benefit for the

breast-feeding child and long-term benefit of therapy for the mother should be considered when making a decision whether to discontinue therapy. **Ability to drive and use machines:** The effects on the ability to drive and use machines are negligible. The occurrence of headache or blurred vision may influence the ability to drive or use machinery.
Adverse Effects: Common: sinusitis, nasopharyngitis, headache, cough, diarrhoea. Consult SmPC in relation to other side-effects.
Legal Category: POM
Marketing Authorisation Number(s): EU/1/12/778/002 – Carton containing 1 inhaler with 60 unit doses. NHS Cost: £28.60 (excluding VAT)
Marketing Authorisation Holder: Almirall S.A. General Mitre, 151 08022 Barcelona Spain. **Further information is available from:** Almirall Limited, 1 The Square, Stockley Park, Uxbridge, Middlesex UB11 1TD, UK. Tel: (0) 207 160 2500. Fax: (0) 208 7563 888. Email: almirall@professionalinformation.co.uk

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