Updated asthma guideline: what’s new?

In this article...
- Key updates in the British guideline on asthma management
- Advice for nurses who care for people affected by asthma
- New technologies that can improve asthma care delivery

In 2015, according to the British Thoracic Society (BTS), 1,468 people died from asthma in the UK – the highest figure for over 10 years. Asthma is a common condition, with some 5.4 million people being treated for it in the UK. Treating and caring for people with asthma costs the NHS around £1 billion a year.

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The guideline stresses there is still no single test that can definitively diagnose asthma, and a person’s asthma status can change over time. If health professionals suspect asthma in a patient, they should perform a structured clinical assessment using tests, patient history and examination to assess the probability of them having asthma.

Diagnosis
- When taking a patient’s history, health professionals should review:
  - Symptoms of cough, breathlessness, wheeze and chest tightness that may have varied over time;
  - Recurrent attacks of symptoms;
  - Wheeze previously recorded;
  - Personal or family history of allergic conditions, such as eczema and allergic rhinitis;
  - Variation over time in the obstruction of the patient’s airflow objectively evidenced by lung function tests;
  - Anything that might point to an alternative diagnosis.

In 2016, the BTS and the Scottish Intercollegiate Guidelines Network have published their revised guideline on asthma management. This article highlights what is new and important in the recommendations.

Guideline revision
The BTS/SIGN asthma guideline is updated every two years and is therefore a ‘living guideline’. Following a scoping exercise, sections are selected for updating based on the availability of new evidence. In the latest version (BTS and SIGN, 2016), the section on diagnosis has been entirely revised and the section on pharmacological management has had a major update. There have also been updates in the sections on supported self-management, non-pharmacological management, acute asthma, difficult asthma, occupational asthma, and organisation and delivery of care. Box 1 explains which guideline sections have been updated.

The guideline is of particular value to nurses because they play a vital role in helping people to manage asthma, keeping them well and avoiding unnecessary hospital admissions. In Box 2, a clinician involved in revising the guideline explains why it is a valuable tool. Box 3 lists resources to which nurses can signpost their patients.

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Patient history
When taking a patient’s history, health professionals should review:
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- Recurrent attacks of symptoms;
- Wheeze previously recorded;
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- Variation over time in the obstruction of the patient’s airflow objectively evidenced by lung function tests;
- Anything that might point to an alternative diagnosis.

5 key points
- In 2015, 1,468 people died from asthma in the UK – the highest figure for over 10 years.
- The British Thoracic Society and Scottish Intercollegiate Guidelines Network have published their revised asthma management guideline.
- Diagnosing asthma is not always easy.
- Each patient should be offered a written asthma action plan.
- Electronic technologies, such as automated treatment reminders and computerised decision-support systems, can help deliver asthma care.

Box 1: Updated guideline sections
- Key recommendations
- Diagnosis
- Supported self-management
- Non-pharmacological management
- Pharmacological management
- Management of acute asthma
- Difficult asthma
- Occupational asthma
- Organisation and delivery of care...
assessed through lung function tests or confirmed. If patients respond well – as their records until the diagnosis is confirmed, and indicate ‘suspected asthma’ in start a carefully monitored trial of treatment. If the probability is intermediate, further investigations will be needed; these will differ according to whether the patients’ airways are obstructed.

**Probability groups**

The guideline helps health professionals assign patients to three groups based on the probability of having asthma: high, intermediate and low. It details the key treatment and management actions to be taken for each group and sums them up in a useful diagnostic algorithm.

If the probability of patients having asthma is high, health professionals should start a carefully monitored trial of treatment, and indicate ‘suspected asthma’ in their records until the diagnosis is confirmed. If patients respond well – as assessed through lung function tests or symptom questionnaires – this will confirm the diagnosis. If there is a low probability of asthma or an alternative diagnosis is more likely, health professionals should investigate the alternative diagnosis and undertake or refer for further asthma tests. If the probability is intermediate, further investigations will be needed; these will differ according to whether the patients’ airways are obstructed.

Management

Key points of the guideline about the management of asthma include:

- Short-acting beta, agonists – a group of drugs that can quickly relieve asthma symptoms – are the key ‘rescue therapy’ and can form part of all treatment plans, but should rarely be used on their own;
- The use of medication to prevent future asthma attacks is emphasised – inhaled corticosteroids remaining the most effective ‘preventer drug’ for all adults and children;
- Asthma inhalers should not be prescribed generically to avoid patients being given an unfamiliar device that they may not know how to use properly;
- If a patient has poor control of their asthma, it is essential to check whether they are taking their current drug regimen correctly and regularly before stepping up treatment;
- Weight loss initiatives – including dietary and exercise programmes – can be offered for overweight or obese adults and children, and may help them control their asthma;
- Each patient should be offered a written asthma action plan, which is vital for the effective management of their asthma;
- Women with asthma who are pregnant should be informed of the importance of continuing their asthma medication during pregnancy, both for their own health and that of their child.

**Breathing tests**

Quality-assured spirometry is the essential frontline breathing test, to be performed in most situations for adults and for children over five years of age. It is important that spirometry is quality assured, so the guideline recommends health professionals should be trained and experienced in preparing and delivering the test, as well as analysing the results.

If the test shows obstruction to the patient’s airflow and this is reversed with treatment, a diagnosis of asthma is likely. However, a normal spirometry result does not always mean that the patient does not have asthma, especially if they did not have any symptoms at the time of the test. Health professionals may need to repeat spirometry at the time when the patient is experiencing symptoms and/or use different breathing tests – and observe over time.

Another, often secondary breathing test that can be carried out involves measuring the patient’s fractional exhaled nitric oxide (FeNO), as people with asthma have slightly higher levels of nitric oxide gas. An increase compared with the normal levels in healthy people suggests inflammation of the airways and therefore supports – but does not prove – a diagnosis of asthma.

**New technologies**

The guideline explains how new technologies can help deliver asthma care, and that evidence shows they can be at least as good as traditional methods, although outcomes do vary. These technologies include games to encourage children to take their medication, remote consultations, automated treatment reminders for patients and computerised decision-support systems for health professionals. They can be considered according to local need.

**Good to know**

Beyond the new BTS/SIGN guideline, nurses caring for people affected by asthma will be interested to know that the National Institute of Health and Care Excellence is due to publish revised guidelines on asthma diagnosis in spring 2017. A voluntary certification and registration scheme that will allow nurses to prove their ability to perform spirometry is also scheduled to be brought in over the next five years (Ford, 2016).