

## Improving the care of adults with difficult to manage asthma: a practical guide for primary healthcare professionals

### INTRODUCTION

This guide provides a systematic, practical approach to support primary care and other community healthcare professionals to improve the care of people over the age of 18 years with difficult to manage asthma.

- Difficult to manage asthma is asthma that either the patient or the clinician finds difficult to manage.
- A patient with difficult to manage asthma has daily symptoms and regular exacerbations despite apparently best treatment.

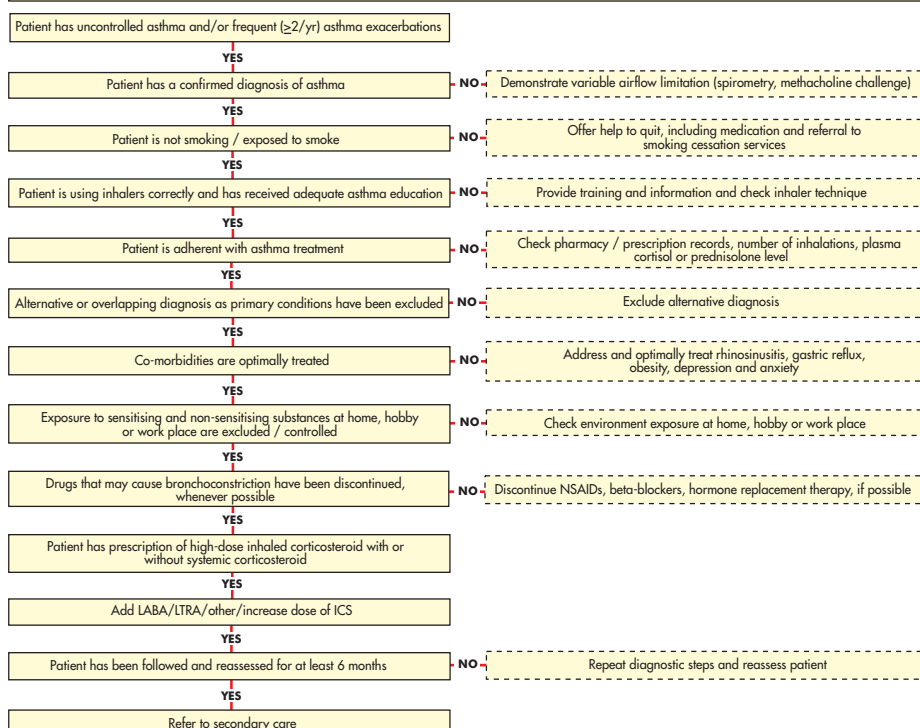
There are two main groups of patients with difficult to manage asthma:

- People whose asthma has been controlled in the past but who have now lost control.
- People whose asthma has never been controlled.

Investigations and management should aim to:

- Identify when asthma control is lost / has never been achieved by prompt and effective monitoring.
- Gain/regain control and then maintain control of asthma with effective, well-tolerated treatment.

### How to investigate and improve asthma control in a patient with difficult to manage asthma



### HOW TO REVIEW A PATIENT WITH DIFFICULT TO MANAGE ASTHMA

Regular structured review is the key measure to improve the detection and care of patients with difficult to manage asthma.

Patients with difficult to manage asthma should be reviewed every three months until treatment goals are achieved, then annually.

#### Before the review

Encourage patients to use a quick checklist before each visit to provide key information quickly and plan what they want to discuss with you.

#### At the review

**SIMPLES\*** provides a useful acronym for the main factors to check:

#### Smoking

- Ask about current smoking habits and exposure to second-hand smoke. People may be more willing to be honest about their smoking in a written self-completed questionnaire.
- Encourage and support smokers to quit including medication and referral to expert stop smoking services.
- Consider alternative therapy to inhaled corticosteroids (ICS) in patients who cannot quit because smokers respond less well to ICS than nonsmokers.

#### Inhaler technique

- Does the patient have the best choice of inhaler for their needs?
- Observe the patient using their inhalers to ensure correct technique.
- Recheck inhaler technique on each visit.

#### Monitoring

Assess asthma control in a systematic way using a simple, validated tool, such as:

#### RCP 3 questions for assessing asthma control

In the last week/month:

1. Have you had difficulty sleeping because of your symptoms?
2. Have you had any asthma symptoms during the day?
3. Has your asthma interfered with your usual activities?

*Yes to any of the above questions* = uncontrolled asthma – investigate further

*Yes to all three questions* = increased risk of hospital admission

#### Pharmacotherapy

Is the patient being treated at the right step for the severity of their asthma?

- Check for both unintentional and intentional nonadherence by asking the patient about how they take their medication and by checking prescription records for their asthma medication (where this information is available) for the last six months, at every visit.

- Check the patient understands their treatment, tailoring information to their specific needs: what it is, what it is for, how it works, potential side-effects and how to minimise them.

#### Lifestyle

Ask patients specific questions about their exposure to factors that may worsen their asthma such as exposure to pets or occupational exposure:

- Where do you live?
- Is your house damp – does mould grow on any of the walls?
- Have you noticed anything in the environment (outside or in the home) that makes your asthma worse?
- What hobbies do you take part in?
- Have you noticed a pattern before your asthma gets worse?
- Does your asthma get better or worse at the weekends – or stay the same?

#### Education

Check patient understands their asthma: what it is, why treatment helps.

#### Support

Check what support the patient has from their family and involve the family where possible in supporting the patient's understanding of asthma and their adherence to treatment.

◀ Difficult asthma (failing to achieve control on maximally recommended doses of inhaled therapy) may affect 5-10% of adults with asthma. The World Health Survey found that half of people with clinical/treated asthma reported wheezing in the last 12 months and 20% had never been treated for asthma.

Morbidity and health costs are disproportionately high in patients with difficult asthma and they are at greater risk of fatal and near fatal exacerbations. Patients with difficult to manage asthma are also at increased risk of steroid-related adverse effects if they are treated with high-dose inhaled steroids or courses of oral steroids.

Improved asthma control means improved quality of life, reduced symptoms and exacerbations for the patient, reduced hospital visits and admissions and lower risk of premature death. Benefits for healthcare providers include reduced use of services and resources.

## REGULAR REVIEW

Regular, structured review is the only way to improve the detection and care of patients with difficult to manage asthma. Review can be carried out in community-based clinics or using newer approaches such as telephone or Internet consultations for routine asthma reviews if clinics are not feasible – although it is important that patients are able to demonstrate they are using correct inhaler technique.

Patient education and empowerment to self-manage asthma should be an important component of every visit. Encourage the patient to lead the discussion and invite them to ask about any concerns or questions they may have.

## INVESTIGATING THE POSSIBLE CAUSE OF DIFFICULT TO MANAGE ASTHMA

In patients suffering daily symptoms and regular exacerbations, investigate possible causes:

### Wrong diagnosis/not previously diagnosed

Confirm diagnosis of asthma by reviewing clinical history and measuring reversible airflow obstruction objectively using peak expiratory flow and spirometry if available.

### Inadequate treatment

#### • *Undertreatment*

If patients are not adequately controlled on their current therapy, step up therapy to gain control.

In some cultures, patients may be taking non-traditional or alternative medicines for asthma. Ask about this and discuss whether evidence-based therapy would be more beneficial.

#### • *Poor inhaler use*

Problems with inhaler technique are common in clinical practice and can lead to poor asthma control. Patients should be trained in correct technique for their inhaler. Observe their technique and encourage the patient to observe their inhaler technique.

#### • *Individual variation in treatment response*

Analysis of individual responses to asthma treatments in clinical trials show there can be huge variations in how individual patients respond. This underlines the need to carefully monitor the

effect of treatment for each individual and to adjust to meet the required response.

#### • *Unintentional or intentional nonadherence*

Nonadherence to controller therapy, especially to inhaled corticosteroids, is common, and a likely factor in poor asthma control. An observational study of non-adherence in difficult asthma showed that one-third (34%) of patients were collecting less than half of their prescriptions for inhaled combination therapy.

Check for both unintentional and intentional nonadherence by asking the patient about how they take their medication and by checking prescription records for their asthma medication (where this information is available) for the last six months at every visit.

Adherence is a modifiable behaviour that can be improved. But this can only be achieved by having a clear understanding of the patient's perspective and the reasons for non-adherence. Interventions to improve adherence should identify the perceptual and practical barriers for the individual and tailor interventions and support to meet these.

### Co-existing conditions

In two case series, coexisting conditions with asthma-like symptoms were found in 19% and 34% of patients with difficult asthma. Identifying and managing these conditions may improve asthma symptom control.

Check for co-existing conditions that may exacerbate asthma or cause similar symptoms:

### Allergic and non-allergic rhinitis

- To diagnose rhinitis, ask: "Do you have an itchy, sneezy, runny, or blocked nose when you don't have a cold?"
- Patients should undergo allergy testing where this is suspected.
- Give patients information on what they are allergic to and provide advice on allergen avoidance and treatments.

### Aggravating factors

People with asthma are often aware of factors that trigger their asthma, so it is important to ask them and provide advice on minimising exposure.

#### *Smoking*

The World Health Survey of people aged 18 to 45 showed 24% of people with clinical/treated asthma were current smokers. Smokers are almost three times more likely than non-smokers to be hospitalised for their asthma over a 12-month period.

- Ask patients about their current smoking habits. They may be more willing to be honest about their smoking in a written self-completed questionnaire.
- Encourage and support smokers to quit, including medication and referral to expert stop smoking services.
- Consider other therapy options in patients who cannot quit because there is evidence that smokers respond less well to inhaled corticosteroids than nonsmokers.

#### *Psychological factors*

Psychological factors, including stressful life events and mental health conditions (particularly anxiety and depression) can worsen asthma control and adherence to treatment.

Ask the patient:

- How often do you feel depressed/down/sad/blue?
- How often do you feel anxious for no apparent reason?
- How often do you feel fatigued/very tired for no apparent reason?

[Scale: Always, often, sometimes, occasionally, rarely]

For patients who say they are always or often depressed or anxious: counselling may be helpful in patients where psychological factors are affecting their asthma control.

For patients always or often fatigued: consider other diagnostic possibilities.

#### *Environmental factors*

There is growing evidence that air pollution contributes to the global burden of respiratory and allergic diseases, including asthma. Hospitalisations for asthma are increased on days of higher air pollution. Indoor factors, such as moulds, house dust mite and indoor air quality are also important in asthma.

Doctors and people with asthma should have access to advance information on environmental factors, including pollution levels and weather, which may affect asthma control.

#### *Occupational factors*

Occupational factors account for approximately one in six cases of asthma in adults of working age, including new onset or recurrent disease. Exposure to agents associated with occupational asthma has been associated with an increased clinical asthma severity score.

#### *Adverse drug effects*

Non-steroidal anti-inflammatory drugs, beta-blockers (including eye drops) and aspirin can exacerbate asthma. Ask patients about other medications they take, including non-prescription medicines.

## REFERRING PATIENTS

### Who to refer?

Patients who continue to have difficult to manage asthma after review and taking steps to reduce all possible causes and despite being on guideline-based treatment should be referred to a specialist clinic.

### Where to refer?

Patients should be referred to clinics with experience in difficult to manage asthma, able to provide care and treatment by a multidisciplinary team.

### What to include in a referral letter?

- Occupation
- Onset of symptoms
- Dyspnoea
- Specified dyspnoea
- Cough
- Specified cough
- Wheezing
- Smoking
- Known allergies
- Peak flow
- Spirometry and bronchodilatation test
- Use of asthma medication
- Other diseases
- Other current medication