

## 6.2 ASTHMA IN ADULTS

Asthma is a common disease in Northern Ireland with over 100,000 people on GP registers recorded as having asthma. This disease affects the bronchi, which are the tubes carrying air in and out of the lungs. People with symptomatic asthma have bronchi which are almost always red and sensitive (inflamed). When a person with asthma comes into contact with something that irritates their airway (an asthma trigger), the muscles around the walls of the airway tighten so that the airways become narrower and the lining of the airways become inflamed and start to swell.

When asthma is well controlled, quality of life improves and allows people to do the things they want to do. Treatment is available for all people with asthma although for a small number of cases it may be less effective.

People with difficult and severe asthma can have unpredictable severe asthma attacks which occur without warning, resulting in them being admitted to hospital quite frequently. They may also need regular or frequent courses of steroid tablets to treat their symptoms.

It is essential, therefore, that all people with asthma are appropriately assessed, diagnosed, informed, treated and reviewed regularly, according to the severity of their condition.

The standards set out below outline the standard of care that people with asthma and their carers should expect to receive. The standards specify what is required in relation to:

- the appropriate assessment and investigations for those people suspected as having asthma;
- the information which people with asthma should receive to enable them to self-manage their condition, and,
- the treatments, therapies and management which people with asthma, difficult asthma and severe acute asthma should have available to them.

It is important, therefore, that people with asthma and their carers are aware of these standards and use them to their advantage to help manage their condition and improve their quality of life.

Each standard is underpinned with a rationale and evidence from various organisations which have carried out research in these areas for the proposed action together with clear statements about the expected quality aspects which are required for each of the actions.

Much work has gone into developing these standards and it is hoped that they will benefit both health and social care professionals and people with asthma, to improve the health and wellbeing of people with asthma.

## Overarching Standard 16:

### Diagnosis of Asthma

All people with suspected asthma should have an appropriate assessment and investigations to confirm the diagnosis.

#### Rationale:

Any individual with symptoms suggestive of asthma should have a robust diagnosis before committing them to prolonged treatment for this condition.

#### Evidence:

British Thoracic Society / Scottish Intercollegiate Guidelines Network Guidelines on Management of Asthma [this is a 'Living Guideline' i.e. is updated annually] <http://www.brit-thoracic.org.uk/ClinicalInformation/Asthma/AsthmaGuidelines/tabid/83/Default.aspx>

#### Responsibility for delivery / implementation:

HSC Trusts

Primary Care (including community pharmacy)

#### Quality Dimension

All patients with a clinical diagnosis of asthma should have:

1. A clinical history and examination consistent with the diagnosis of asthma and not suggestive of an alternative condition.
2. Where possible objective lung tests e.g. spirometry should be undertaken at the time of suspected diagnosis and interpreted according to BTS/SIGN guidelines.
3. A documented clinical response to asthma treatment.
4. All staff assessing and diagnosing asthma should be trained to the agreed standards set by the Regional Respiratory Forum.
5. All staff performing and interpreting spirometry should have undergone appropriate training.

#### Performance Indicator

Percentage of new patients with a diagnosis of asthma who meet the diagnostic standards in the BTS/SIGN guidance

#### Data Source

QOF  
Rolling audit of GP records

#### Anticipated Performance Level

60%  
80%

#### Date to be achieved by

March 2011  
March 2012

**Overarching Standard 17:****Self management**

All patients with asthma and their carers should be given the opportunity to learn about their condition and receive self management information.

**Rationale:**

There is high quality clinical trial evidence supporting the use of personalised action plans in the self management of asthma to improve asthma outcomes.

**Evidence:**

British Thoracic Society / Scottish Intercollegiate Guidelines Network Guidelines on Management of Asthma [this is a 'Living Guideline' i.e. is updated annually] <http://www.brit-thoracic.org.uk/ClinicalInformation/Asthma/AsthmaGuidelines/tabid/83/Default.aspx>

Northern Ireland Regional Forum Self Management Framework, Draft 2008

**Responsibility for delivery / implementation:**

HSC Trusts

Primary Care (including community pharmacy)

**Quality Dimension**

1. All patients with asthma should be given the opportunity to learn about all aspects of the disease process to include the nature of the disease, rationale for symptoms experienced, description of treatments and their function, treatment options, and help with the identification and avoidance of risk/trigger factors.
2. Written individualised asthma self management action plans should be discussed face-to-face with the patient and include
  - How to recognise and manage deterioration in condition
  - How and when to seek appropriate medical help
  - Contact numbers for named health professionals.
3. All patients with asthma who smoke should have their smoking status recorded, be offered appropriate smoking cessation advice and access to specialist smoking cessation services.

<b>Performance Indicator</b>	<b>Data Source</b>	<b>Anticipated Performance Level</b>	<b>Date to be achieved by</b>
Percentage of patients with asthma step 2 and above who had individualised face to face information and a self management plan	LTC DES (to be revised) PAS Regional difficult asthma database Asthma UK/NICHSA	60% 80%	March 2011 March 2012
Percentage of patients with asthma who attend for review and who smoke, who have been offered appropriate smoking cessation advice and support services	LTC DES (to be revised)	95%	March 2011

## Overarching Standard 18:

### Ongoing management

All patients with asthma should be on appropriate pharmacological therapy according to the nature and severity of their disease.

### Rationale:

In the majority of cases, asthma is a treatable condition if currently available therapies are targeted appropriately, giving patients with asthma good control of symptoms and excellent quality of life.

Allergic rhinitis affects 10-25% of the population and has a direct relationship with asthma. Good rhinitis control contributes positively to asthma control.

### Evidence:

National Institute for Health and Clinical Excellence (NICE) Corticosteroids for the treatment of chronic asthma in adults and children aged 12 years and over (2008) <http://guidance.nice.org.uk/TA138>

British Thoracic Society / Scottish Intercollegiate Guidelines Network Guidelines on Management of Asthma [this is a 'Living Guideline' i.e. is updated annually] <http://www.brit-thoracic.org.uk/ClinicalInformation/Asthma/AsthmaGuidelines/tabid/83/Default.aspx>

Bousquet J, Van Cauwenberge P, Khaltaev N, *et al.* Allergic Rhinitis and its Impact on Asthma (ARIA) in collaboration with the World Health Organization (WHO). *J Allergy Clin Immunol* 2001; 108 (Suppl):S147-S336. <http://linkinghub.elsevier.com/retrieve/pii/S0091674901624886>

### Responsibility for delivery / implementation

HSC Trusts

Primary Care (including community pharmacy)

### Quality Dimension

1. All patients with a confirmed clinical diagnosis of asthma should have step-wise pharmacological management according to BTS/SIGN Guidelines.
2. All patients with asthma should have their disease control assessed using a validated asthma control questionnaire; and taking into account their use of short acting bronchodilators; and the frequency of exacerbations requiring oral steroids.
3. All patients should be asked to demonstrate their inhaler technique as appropriate.

4. All patients with a clinical diagnosis of asthma either fulfilling the criteria for specialist referral in BTS/SIGN Guidelines or with difficult to control asthma (all patients on step 5 treatment) should be appropriately referred for specialist respiratory physician assessment.
5. Patients with an established diagnosis of asthma should be appropriately evaluated for symptoms of allergic rhinitis.

<b>Performance Indicator</b>	<b>Data Source</b>	<b>Anticipated Performance Level</b>	<b>Date to be achieved by</b>
Percentage of patients who have had their disease control assessed using a validated asthma questionnaire at interview	LTC DES (to be revised)	20% 50% 70%	March 2011 March 2012 March 2013
Percentage of patients on step 5 treatment who are appropriately referred for specialist assessment	DES (to be revised)	20% 50% 80%	March 2011 March 2012 March 2013
Percentage of patients with asthma who have been assessed for symptoms of allergic rhinitis at diagnosis and review	LTC DES (to be revised)	20% 50% 90%	March 2011 March 2012 March 2013

**Overarching Standard 19:****Management of acute severe asthma**

All patients with acute severe asthma should be accurately assessed and managed appropriately.

**Rationale:**

Acute severe asthma can be a life threatening condition. Confidential enquiries into asthma deaths have identified poor recognition or assessment of deterioration by both patients and health care providers as a potential contributory factor, emphasising the importance of prompt and accurate assessment of this condition.

**Evidence:**

British Thoracic Society / Scottish Intercollegiate Guidelines Network Guidelines on Management of Asthma [this is a 'Living Guideline' i.e. is updated annually] <http://www.brit-thoracic.org.uk/ClinicalInformation/Asthma/AsthmaGuidelines/tabid/83/Default.aspx>

**Responsibility for delivery / implementation**

HSC Trusts  
Primary Care

**Quality Dimension**

1. All patients presenting with acute severe asthma must be appropriately and rapidly assessed according to BTS/SIGN Guidelines
2. All patients with acute severe asthma must be managed according to the severity of their condition according to BTS/SIGN Guidelines
3. All patients with acute severe asthma should be followed up by a GP or hospital clinician after an acute episode.
4. All hospitals should have established 'red flag' systems, alerting GPs as to the possible need for follow up after treatment at A&E with an acute exacerbation.

<b>Performance Indicator</b>	<b>Data Source</b>	<b>Anticipated Performance Level</b>	<b>Date to be achieved by</b>
Percentage of patients presenting with acute severe asthma who have a documented clinical assessment, peak flow measurement and oxygen saturation measurement	Regional GAIN audit	Establish baseline  Performance level to be determined once baseline established	March 2011
Percentage of patients reviewed in primary care within 10 working days after attendance at A&E and GP out of hours with an acute exacerbation of asthma	LTC DES (to be reviewed) Regional GAIN audit	Establish baseline  Performance level to be determined once baseline established	March 2011
Percentage of patients reviewed within 30 days after any acute admission to hospital with exacerbation of asthma by a clinician with a particular expertise in asthma management – GPwSI, hospital clinician or asthma specialist nurse	PAS HSC Trust 'red flag' system Audit of hospital records	70% 90%	March 2011 March 2012

## Overarching Standard 20:

### Management of difficult asthma at secondary and tertiary level

All patients with 'difficult asthma'\* should be assessed and managed by a team with the appropriate skills and experience.

\*'Difficult asthma' is defined as those who are symptomatic on BTS/SIGN guidelines step 4 treatment and all patients on step 5 treatment.

#### Rationale:

In patients with difficult to control asthma, there may often be other factors contributing to sub-optimal symptom control such as poor adherence to medication, alternative or coexistent diagnoses and psychological comorbidity. Systematic multidisciplinary assessment and management results in improved outcomes for these patients. A proportion of patients will have refractory disease, which is relatively resistant to standard therapies but who may be suitable for treatment with new monoclonal antibody therapy.

#### Evidence:

British Thoracic Society / Scottish Intercollegiate Guidelines Network Guidelines on Management of Asthma [this is a 'Living Guideline' i.e. is updated annually] <http://www.brit-thoracic.org.uk/ClinicalInformation/Asthma/AsthmaGuidelines/tabid/83/Default.aspx>

National Thoracic Society recommendations (ATS, ERS and SEPAR)

Published systematic multidisciplinary protocols

National Institute for Health and Clinical Excellence (NICE) (2007)

Omalizumab for severe persistent allergic asthma

<http://www.nice.org.uk/guidance/TA133>

#### Responsibility for delivery / implementation

HSC Board

Public Health Agency

HSC Trusts

Primary Care (including community pharmacy)

**Quality Dimension**

1. All patients with 'difficult asthma' referred to a secondary level asthma service should have access to appropriate multidisciplinary assessment, if required.
2. All patients, having been assessed as above, and found to have severe persistent asthma, should be referred to tertiary services for multidisciplinary assessment and appropriate drugs therapy, if required.

<b>Performance Indicator</b>	<b>Data Source</b>	<b>Anticipated Performance Level</b>	<b>Date to be achieved by</b>
Establish a system to ensure that patients with difficult asthma are appropriately assessed in secondary care	HSC Trust report	All HSC Trusts	March 2011
Percentage of patients assessed to benefit from appropriate monoclonal antibody therapy who are offered a therapeutic trial	Regional difficult asthma database	Establish baseline  Performance level to be determined once baseline established	March 2011