

## 6.10 BRONCHIECTASIS

Bronchiectasis is a term used to describe a particular type of airway damage. Normally the branches of the lungs get smaller as they go further out in the lungs, like the branches of a tree. In bronchiectasis these tubes become widened and this allows secretions to gather. These secretions are rich in nutrients and become easily infected.

There are a number of different causes of bronchiectasis. Sometimes a scar from an old wound can stretch the remainder of the lung and distort the bronchi (tubes). This is common after tuberculosis infection. The stretched tube then becomes a reservoir of secretions and a focus of infection. Other structural causes of bronchiectasis include whooping cough.

Some conditions are associated with altered immunity and poor ability to fight infections. Others are associated with a failure to clear secretions. Usually microscopic hairs, called cilia, move secretions along the airway to the top of the lung. In primary ciliary dyskinesia the fibres do not work well and secretions gather and infections occur. The most common cause for altered secretions is cystic fibrosis.

There are likely to be around 5,000 people in Northern Ireland with bronchiectasis, resulting in 300 to 500 admissions per year.

It is important that people (children and adults) are properly assessed to confirm a diagnosis of bronchiectasis. The infections in bronchiectasis can be difficult to treat. They often require prolonged courses of antibiotics given by injection. Daily physiotherapy is needed to clear excessive secretions. Written agree self management plans support people to manage their own or their child's condition. Care for people with bronchiectasis by a specialist respiratory team reduces the effects of the disease and cuts down the number of admissions to hospital and the length of stay in hospital if someone has to be admitted. This team can make sure that the correct investigations and management are carried out.

**Overarching Standard 38:****Assessment and diagnosis**

All people (children and young people and adults) with suspected bronchiectasis should have an appropriate diagnostic assessment.

**Rationale:**

A significant proportion of people (children and young people and adults) with a chronic productive cough have bronchiectasis. A comprehensive assessment is necessary to establish the diagnosis and direct management.

**Evidence:**

British Thoracic Society (BTS) Bronchiectasis guidelines (pending)

Bradley J, Lavery K, Rendall J, Elborn JS. Managing bronchiectasis Practitioner. 2006 Apr;250(1681):194, 197, 199-200.

Tsang KW (2006) Bronchiectasis in Respiratory Infections, Hodder Arnold

“Bronchiectasis” Chang AB. In: Kendig’s Disorders of the Respiratory Tract in Children. Saunders, 2006 Ed Chernick.

Primary Ciliary Dyskinesia: current state of the art. Bush A et al. Arch Dis Child 2007; 92: 1136-40. <http://adc.bmj.com/cgi/content/full/92/12/1136>

**Responsibility for delivery / implementation**

HSC Trusts  
Primary Care

**Quality Dimension**

1. All patients with suspected bronchiectasis should be referred to a respiratory physician/paediatrician for investigations to confirm diagnosis.

<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 suspected bronchiectasis have appropriate investigations completed for adults in secondary care and children and young people in tertiary care as per the BTS guidelines	HSC Trust report (adults)	All HSC Trusts	March 2011
	Bronchiectasis database in tertiary care for children and young people (to be developed)	50% 90%	March 2011 March 2012

## Overarching Standard 39:

### Management

All patients with symptomatic bronchiectasis should be accurately assessed and managed by the specialist respiratory team.

### Rationale:

Care for patients with bronchiectasis by a specialist respiratory team reduces morbidity and frequency of hospital admission in those with moderate to severe disease. Inpatient care by the specialist respiratory team reduces length of stay and the likelihood of readmission.

### Evidence:

British Thoracic Society (BTS) Bronchiectasis guidelines (pending)

Bradley J, Lavery K, Rendall J, Elborn JS. Managing bronchiectasis Practitioner. 2006 Apr;250(1681):194, 197, 199-200.

Tsang KW (2006) Bronchiectasis in Respiratory Infections, Hodder Arnold

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Primary Ciliary Dyskinesia: current state of the art. Bush A et al. Arch Dis Child 2007; 92: 1136-40 <http://adc.bmj.com/cgi/content/full/92/12/1136>

### Responsibility for delivery / implementation

HSC Trusts

### Quality Dimension

1. All patients should be reviewed at least annually by a designated respiratory physician/paediatrician within the context of a specialist respiratory multidisciplinary team.
2. All patients should have timely access to assessment and treatment at home or in hospital to a specialist respiratory team where indicated.
3. All patients requiring admission should be under the care of a specialist respiratory team (adults and children and young people).

<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 all patients with symptomatic disease attending secondary care have had a comprehensive annual review to include spirometry, BMI and sputum microbiology	HSC Trust report in secondary care (adults)	For adults All HSC Trusts	March 2011
	Bronchiectasis database in tertiary care for children and young people (to be developed)	For children and young people 50% 80% (BHSCT only)	March 2012 March 2013
Percentage of inpatients (adults and children) receiving antibiotic therapy for an exacerbation who have had spirometry and sputum microbiology	PAS Audit	For adults All HSC Trusts	March 2011
		For children and young people 60% 70% (BHSCT only)	March 2012 March 2013
Percentage of inpatients with an exacerbation who are admitted under the care of a specialist respiratory team	PAS Audit	For adults All HSC Trusts	March 2011
		For children and young people 60% 70%	March 2011 March 2012

## Overarching Standard 40

### Self Management

All patients with symptomatic bronchiectasis and their carers should be given the opportunity to learn about their disease and receive self management information.

#### Rationale:

Patients with bronchiectasis, and their carers, should be given greater control over their lives by ensuring that knowledge of their condition is developed to a point where they can take responsibility for its management and be enabled to work in partnership with their health and social care providers.

#### Evidence:

British Thoracic Society (BTS) bronchiectasis guidelines (pending)

Bradley J, Lavery K, Rendall J, Elborn JS. Managing bronchiectasis Practitioner. 2006 Apr;250(1681):194, 197, 199-200.

Tsang KW (2006) Bronchiectasis in Respiratory Infections, Hodder Arnold

Lavery K, O'Neill B, Elborn JS, Reilly J, Bradley JM. Self management in bronchiectasis: the patients' perspective. Eur Respir J. 2007 Mar;29(3):541-7  
<http://erj.ersjournals.com/cgi/content/abstract/29/3/541>

"Bronchiectasis" Chang AB. In: Kendig's Disorders of the Respiratory Tract in Children. Saunders, 2006 Ed Chernick

Primary Ciliary Dyskinesia: current state of the art. Bush A et al. Arch Dis Child 2007; 92: 1136-40 <http://adc.bmj.com/cgi/content/full/92/12/1136>

#### Responsibility for delivery / implementation

HSC Trusts

**Quality Dimension**

1. All patients with symptomatic bronchiectasis should be given the opportunity to learn about all aspects of the disease process and receive information on;
  - Nature of the disease
  - Rationale for symptoms experienced
  - Description of treatments and their function
  - Treatment options
  - Identification and avoidance of risk factors
2. All patients with symptomatic bronchiectasis should have agreed self management action plans which encourage them to respond promptly to the symptoms of an exacerbation.

<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 who have symptomatic bronchiectasis attending secondary care have been given individualised, face-to-face information and a written action plan	HSC Trust report in secondary care (adults)	All HSC Trusts	March 2011
	Bronchiectasis database in tertiary care for children and young people (to be developed)	70% 80%	March 2011 March 2012