6. STANDARDS FOR SPECIFIC CONDITIONS

6.1 CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

Chronic obstructive pulmonary disease is a common lung disease with 28,000 people recorded on GP registers in Northern Ireland as having COPD. It is caused in nearly all cases by long term cigarette smoking. Smoking can lead to damaged airways in the lung, causing cough and phlegm and making the airways narrower, so making it more difficult to breathe. The diagnosis is confirmed by spirometry, a simple breathing test carried out by blowing into a machine which can show if the airways have narrowed. The best way of preventing the progression of COPD is to stop smoking.

Drug therapy can help in COPD. Bronchodilators are drugs which widen the airways. There are different types of bronchodilators which work in different ways and can be used together. They are usually given through an inhaler device or very occasionally by nebuliser.

The symptoms of COPD sometimes worsen. These episodes are known as exacerbations and may be treated with short courses of antibiotics and corticosteroids.

Pulmonary rehabilitation can also improve the symptoms of COPD. This is a programme of supervised exercise as well as discussions with health care professionals and other patients to help understand COPD and its treatment.

In some circumstances hospital admission may be necessary. In a very severe exacerbation the patient may require assistance with their breathing. This can usually be achieved by the technique of non invasive ventilation (NIV). This is carried out by placing a mask over the nose and mouth. The mask is connected to a small machine, which pushes air through the mask and into the person's lungs. This treatment should be set up and monitored by a team of health professionals with appropriate training and experience.

After assessment and stabilisation in hospital, patients may be discharged onto an early discharge scheme delivered by a respiratory team working within the community. This community

respiratory specialist team can also provide case management, which allows for more follow-up within the community setting.

Some patients will require assessment as to whether they may benefit from continuous oxygen treatment, known as long term oxygen therapy (LTOT) or the use of oxygen during exercise. Infrequently patients may gain additional benefit from nebulised drugs following an assessment by the respiratory specialist.

In some cases COPD can progress and cause shortness of breath which does not respond well to drug treatment. Specialist respiratory teams should be available to help deal with the palliative care needs of these patients and those of their carers.

Overarching Standard 8:
All people suspected of having COPD should have accurate diagnosis, assessment and management in primary care.

Rationale:
COPD should be prevented where possible, but, as a minimum, disease progression should be slowed down or avoided by early diagnosis and optimal management in keeping with the most up to date evidence based guidelines.

Evidence:
National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

Strategic Framework for Respiratory Conditions (N. Ireland) (2006)
http://www.dhsspsni.gov.uk/pcd_-_respiratory_framework.pdf

Responsibility for delivery / implementation

HSC Trusts
Primary Care (including community pharmacy)

Quality Dimension

1. All patients older than 35 years, with past/present smoking history, and presenting with exertional breathlessness, chronic cough, regular sputum production, frequent winter bronchitis or wheeze should have spirometry performed.
2. All patients with a diagnosis of COPD should be offered an assessment and review according to NICE guidelines
3. All patients suspected of or diagnosed with COPD should have their smoking history recorded and be given appropriate advice about smoking cessation and specialist smoking cessation services.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with COPD who smoke, who have had appropriate smoking advice	LTC DES Dataset (to be revised)	80% 90%	March 2011 March 2012

Percentage of patients diagnosed with COPD after April 2008 according to NICE Guidelines	QOF	80%	March 2012
Percentage of patients with COPD assessed and managed according to NICE Guidelines	LTC DES dataset (to be revised)	80%	March 2012

Overarching Standard 9:

Specialist community team care
All patients with severe COPD should have access to specialist respiratory team care in the community.

Rationale:
Respiratory services should reflect the core principles of successful chronic disease management models with rapid access to specialist assessment, allowing the patient to be managed in the most appropriate setting and avoid inappropriate admission.

Evidence:
National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

Strategic Framework for Respiratory Conditions (N. Ireland) (2006)
http://www.dhsspsni.gov.uk/pcd_-_respiratory_framework.pdf

Responsibility for delivery / implementation

HSC Trusts
Community specialist respiratory teams

Quality Dimension

1. Patients with severe COPD (2 or more admissions within 12 months and/or those with complex medical and/or social needs or palliative care needs); or requirements for early assessment of acute exacerbations, LTOT assessment, nebuliser assessment and pulmonary rehabilitation, should have access to the full range of specialist community respiratory services.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with COPD and 2 or more admissions within the previous 12 months, who were assessed by the community specialist respiratory team for case management	Hospital PAS Referrals to community respiratory team	60% 90%	March 2012 March 2013
Trusts and locality GPs should develop an agreed care pathway between primary and secondary care for the management of COPD	HSC Trust report	All HSC Trusts and locality GPs	March 2012

Overarching Standard 10:

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

Rationale:
Patients with COPD 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 enabled to work in partnership with their health and social care providers.

Evidence:
Department of Health (2001) The Expert Patient: a new approach to chronic disease management in the 21st century
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4006801

National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (2004) (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

Strategic Framework for Respiratory Conditions (N. Ireland) (2006)
http://www.dhsspsni.gov.uk/pcd_-_respiratory_framework.pdf

Northern Ireland Regional Forum Self Management Framework, Draft 2008

Responsibility for delivery / implementation

HSC Trusts
Primary Care (including community pharmacy)

Quality Dimension

1. COPD patients should be given the opportunity to learn about all aspects of the disease process and receive information on the:
    - Nature of the disease
    - Rationale for symptoms experienced
    - Description of treatments and their function
    - Treatment options
    - Identification and avoidance of risk factors

2. Patients with COPD should be given self management action plans which encourage them to respond promptly to the symptoms of an exacerbation.			
Performance Indicator	**Data Source**	**Anticipated Performance Level**	**Date to be achieved by**
Percentage of patients with COPD with moderate / severe disease (as per NICE guidelines) given individualised, face to face information and a written self management action plan	LTC DES data set (to be revised) NICHSA / Asthma UK survey	90%	March 2012

Overarching Standard 11:

Long term oxygen therapy
All patients with COPD, who are hypoxic (low oxygen), should have referral for assessment and prescription for long term oxygen therapy, if appropriate.

Rationale:
Long term oxygen therapy (LTOT) improves survival and reduces hospital admissions in patients with COPD who are hypoxic.

Evidence:
National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

Royal College of Physicians (1999) Domiciliary Oxygen Therapy Clinical guidelines http://www.rcplondon.ac.uk/pubs/brochure.aspx?e=78

British Thoracic Society (BTS) (2006) Clinical component for the home oxygen service in England and Wales http://www.brit-thoracic.org.uk/Portals/0/Clinical%20Information/Home%20Oxygen%20Service/clinical%20adultoxygenjan06.pdf

Responsibility for delivery / implementation

HSC Trusts
Primary Care
Community specialist respiratory team

Quality Dimension

1. Patients being considered for LTOT and/ or ambulatory oxygen should be assessed according to NICE Guidelines.

Performance Indicator	**Data Source**	**Anticipated Performance Level**	**Date to be achieved by**
Percentage of patients prescribed LTOT according to NICE guidelines	Regional GAIN audit	Establish baseline Performance level to be determined once baseline established	March 2011 March 2012

Overarching Standard 12:

Oxygen during transportation
All patients with COPD should be treated with appropriate controlled oxygen therapy during transportation in ambulances.

Rationale:
Patients with COPD who become hypoxic should have their hypoxia corrected with oxygen therapy during transport. However some of these patients can develop acute hypercapnic respiratory failure if excessive oxygen is administered.

Evidence:
National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

British Thoracic Society (BTS) (2008) Guideline for emergency oxygen use in adult patients http://www.brit-thoracic.org.uk/Portals/0/Clinical%20Information/Emergency%20Oxygen/Emergency%20oxygen%20guideline/EmergencyOxygenSupplement_web.pdf

Responsibility for delivery / implementation

HSC Trusts
Northern Ireland Ambulance Trust (NIAS)
Respiratory physicians
Primary Care

Quality Dimension

1. COPD Patients with a history of hypercapnic respiratory failure should be issued with an Oxygen Alert Card and a 24% or 28% Venturi mask.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with a history of hypercapnic respiratory failure issued with an Oxygen Alert Card and a 24% or 28% Venturi mask and ambulance control informed	LTOT database	Establish baseline Performance level to determined once baseline established	March 2011

Overarching Standard 13:

Management of acute exacerbations
All patients with an acute exacerbation of COPD should be managed to an optimal standard in an appropriate setting.

Rationale:
Exacerbations of COPD may require different management strategies, according to severity.

Evidence:
National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

Strategic Framework for Respiratory Conditions (N. Ireland) (2006)
http://www.dhsspsni.gov.uk/pcd_-_respiratory_framework.pdf

Responsibility for delivery / implementation

HSC Trusts
Primary care

Quality Dimension

1. All patients should have timely access to an assessment by their GP and community specialist respiratory team, as appropriate.
2. All patients with an exacerbation of COPD should be assessed and managed according to NICE guidance.
3. All patients who are admitted to hospital should be seen by a member of the specialist respiratory team (respiratory nurse specialist / respiratory physiotherapy specialist / respiratory physician / SpR, staff grade or consultant).

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with COPD admitted to hospital with an exacerbation who receive care in line with NICE Guidelines	PAS BTS/RCP audit pro forma and data Rolling audit	70% 80% Attaining 4 out of 5 key items each year	March 2011 March 2012
Percentage of patients with COPD admitted to hospital with an exacerbation who receive care from a respiratory team	BTS/RCP audit pro forma (selected aspects) Rolling audit	80% 90%	March 2011 March 2012

Overarching Standard 14:

Non invasive ventilation
All patients with COPD with acute and/or chronic type 2 respiratory failure should have timely access to ventilatory support, if required, in a unit supervised by a respiratory physician or intensive care physician.

Rationale:
Non invasive ventilation (NIV) should be used be used as the treatment of choice for persistent hypercapnic ventilatory failure despite optimal medical therapy.
There is evidence that it reduces the need for admission to intensive care, reduces length of stay and improves survival.

Evidence:
National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

Strategic Framework for Respiratory Conditions (N. Ireland) (2006)
http://www.dhsspsni.gov.uk/pcd_-_respiratory_framework.pdf

British Thoracic Society (BTS) Standards of Care Committee. NIPPV Non invasive ventilation in acute respiratory failure (2002) http://www.brit-thoracic.org.uk/Portals/0/Clinical%20Information/NIV/Guidelines/NIV.pdf

Responsibility for delivery / implementation

HSC Board
Public Health Agency
HSC Trusts

Quality Dimension

1. Patients with an acute exacerbation of COPD who are found to have respiratory acidosis (pH<7.35) despite delivery of controlled oxygen therapy and maximal medical treatment should be assessed for non invasive ventilation.
2. All hospitals receiving acute medical admissions should have facilities on site and trained staff available for non invasive ventilation 24 hours per day, 7 days per week.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients with an acute exacerbation of COPD who are found to have respiratory acidosis (pH<7.35), despite delivery of controlled oxygen therapy and maximal medical treatment, who are assessed for NIV	Hospital PAS Audit	95%	March 2011
Percentage of patients admitted to hospital with an acute exacerbation of COPD who have access on site 24 hours per day, seven days per week to NIV	HSC Trust report	100%	March 2011

Overarching Standard 15:

Supported discharge
All patients admitted to hospital with acute exacerbations of COPD should be assessed and, if appropriate, managed at home.

Rationale:
Hospital-at-home and assisted discharge schemes are safe and effective and should be available to patients as an alternative to hospital admission where appropriate.

Evidence:
National Institute for Health and Clinical Excellence (NICE) (2004) Management of chronic obstructive pulmonary disease in adults in primary and secondary care (Update due in June 2010)
http://www.nice.org.uk/Guidance/CG12

Strategic Framework for Respiratory Conditions (N. Ireland) (2006)
http://www.dhsspsni.gov.uk/pcd_-_respiratory_framework.pdf

British Thoracic Society (BTS) (2007) Intermediate Care - Hospital-at-Home in COPD Guideline http://www.brit-thoracic.org.uk/Portals/0/Clinical%20Information/Intermediate%20Care%20-%20Hospital%20at%20Home/intermediatecarehospitalathomecopd%20feb07.pdf

Responsibility for delivery / implementation

HSC Board
Public Health Agency
HSC Trusts
Hospital and community specialist respiratory teams

Quality Dimension

1. Patients with an acute exacerbation of COPD should be assessed according to the BTS Guideline for Hospital-at-Home and if suitable, managed at home by a designated respiratory team (specialist respiratory nurse / physiotherapist supported by a respiratory physician).

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of patients who are admitted with an exacerbation of COPD who are assessed appropriately for early supported discharge	PAS BTS/RCP audit pro forma and data.	90%	March 2012