7. STANDARDS RELATING TO ALL CONDITIONS

7.1 NEBULISER TREATMENT

Nebuliser systems convert a liquid drug to a mist of fine particles which are delivered to the lungs by inhalation. Nebulisers help to get a high dose of the drug directly to the lung. This allows faster onset of action. However, for most chronic disease management, a hand held device is equally effective and much more convenient to use. Many people are buying nebulisers when they do not need this form of treatment.

Many people using nebulisers do not have them maintained. It has been found that in fact people in these situations are not getting any of the drug into their lungs and getting no benefit from treatment.

Therefore it is important that before anyone starts using a nebuliser they are assessed by the specialist respiratory service. All patients being considered for home nebulised therapy should be referred for assessment to a specialist respiratory physician or general practitioner with a specialist interest (GPwSI) in respiratory disease for review of diagnosis and optimisation of management. This is to rule out other causes of worsening symptoms (such as lung cancer) and to consider other forms of management (such as pulmonary rehabilitation). Where the diagnosis is already confirmed a respiratory nurse or physiotherapist specialising in the area (for example paediatric cystic fibrosis) may carry out assessments for, and trials to evaluate effectiveness of, home nebulised therapy following a standardised protocol.

Where people are assessed as needing a nebuliser for chronic disease management it is important that they get training in its use and in the importance of regular maintenance and checking of effectiveness.

Nebulisers during acute exacerbations of respiratory disease

Where a person has an acute relapses of a chronic respiratory disease a short course of nebuliser therapy may be required for relief of symptoms. In patients with chronic carbon dioxide retention where there is a risk of oxygen sensitivity (for example

COPD) nebulisers should usually be driven by air. In acute asthma attacks nebulisers should be driven by oxygen at a flow rate of 6-8litres/minute. It is important that the correct form of nebulisation is available in acute situations.

Overarching Standard 46:

Long term home nebuliser treatment
All patients with respiratory disease should only start long term home nebuliser therapy following appropriate assessment and education.

Rationale:
Patients with respiratory diseases may need to use a nebuliser instead of a hand-held inhaler in both acute situations and for chronic disease management. It is important, particularly for chronic disease management that nebuliser treatment is shown to be more effective than other devices. Hand-held inhalers are the most cost-effective treatment mechanisms for most patients. Nebulisers will only be effective if efficiency checking and maintenance systems are used.

Evidence:
Clinical Resource Efficiency Support Team (CREST) (2006) Guidelines for the prevention of infection and decontamination of respiratory equipment in Northern Ireland http://www.crestni.org.uk/publications/prevention-infection-equip.pdf

Northern Ireland Respiratory Forum Nebuliser Standards (2007)

CF Trust (2002) Antibiotic Treatment for Cystic Fibrosis - Report of the Cystic Fibrosis Antibiotic Group
http://www.cftrust.org.uk/aboutcf/publications/consensusdoc/C_3200Antibiotic_Treatment.pdf

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) (1997) Nebuliser treatment Best practice guideline http://www.brit-thoracic.org.uk/ClinicalInformation/NebuliserTreatmentBestPractice/NebuliserTreatmentBestPracticeGuideline/tabid/131/Default.aspx

British Thoracic Society / Scottish Intercollegiate Guidelines Network Guidelines on Management of Asthma [this is a 'Living Guideline' i.e. is updated annually] www.brit-thoracic.org.uk/ClinicalInformation/Asthma/AsthmaGuidelines/tabid/83/Default.aspx NHS Management Executive (1992) EL (92)20. Provision of equipment by the NHS
Responsibility for delivery / implementation
HSC Trusts Primary Care (including community pharmacy
Quality Dimension
1. Patients with respiratory diseases, who are being considered for long term home based nebuliser treatment, should be assessed by the specialist respiratory team (excluding palliative care treatment). 2. All nebulisers, which are supplied by HSC Trusts, should be maintained according to the recommendation of NI Nebuliser standard. 3. All GP premises and out of hours GP services should have access to air and oxygen driven nebulisers.

Performance Indicator	Data Source	Anticipated Performance Level	Date to be achieved by
Percentage of new patients starting long term nebuliser therapy who have been assessed at a specialist respiratory service	HSC Trust data base (to be developed) LTC DES database (to be reviewed) HSC Trust report	Establish baseline Performance level to be determined once baseline established	March 2011 March 2012
Percentage of patients, assessed as needing nebulisers for long term home use and, where the nebulisers are supplied by HSC Trusts, who receive appropriate training in their use	HSC Trusts database (to be developed) HSC Trust report	Establish baseline Performance level to be determined once baseline established	March 2011 March 2012
Percentage of patients, assessed as needing nebulisers for long term home use and, where the nebulisers are supplied by HSC Trusts, who have nebulisers maintained to agreed standards	HSC Trusts database (to be developed) HSC Trust report	Establish baseline Performance level to be determined once baseline established	March 2011 March 2012