The following recommendation was made by the Clinical Recommendations Committee (CRC), at the meeting held on 14th May 2009.

**Recommendation 06/09: Short Burst Oxygen Therapy for the treatment of breathlessness is recommended as a Low Priority intervention.**

Approved by the Minister 6th August 2009

**POLICY:**

**Short Burst Oxygen Therapy for the relief of breathlessness**

The Public Health Directorate have reviewed the evidence for the use of Short Burst Oxygen Therapy (SBOT) for the management of breathlessness and recommends to the CRC that SBOT be classified as a **Low Priority** due to the limited evidence of the clinical effectiveness and lack of cost effectiveness. This policy has been discussed with Dr Roy Jones, our local Respiratory Physician and reflects a letter he sent out to all GPs. In addition this policy reflects current guidance from the NHS Home Oxygen Service commissioning framework.

The NICE guidance on COPD notes that SBOT “is one of the most expensive therapies used in the NHS yet its evidence base is poor. It may simply be an expensive placebo that cools the face rather than correcting hypoxia”. We have no local data on the extent of its use but it is being prescribed and in the interests of spending DHSS budget on effective treatment we believe a local policy should be developed to guide professionals and the public in the use of SBOT.

Patients should only be considered for treatment with SBOT for the relief of breathlessness:

- If all other treatment options have been tried **and**
- When the diagnosis is clear and the underlying condition is already being treated optimally **and**
- Following objective assessment including a record of oxygen saturation by a clinician with a special interest and training in the management of respiratory diseases.
- Existing patients on SBOT will need to be properly reviewed and assessed by a specialist respiratory service so that the home oxygen therapy that they receive is the most appropriate for their condition, for the right period of time and with appropriate flow rates to obtain optimal benefits and reduce the chance of adverse effects. Specialist assessment is essential prior to any changes in oxygen therapy service being suggested or implemented. These changes may mean that some patients are assessed for LTOT / Ambulatory oxygen therapy.

Since the NICE guideline on COPD was published (CG12 2004), no new studies indicate that SBOT is clinically effective for the management of breathlessness (cf hypoxia). There is no new evidence to show that SBOT has a significant impact on an individual’s ability to perform activities of daily living (ADL). Some studies have shown small improvements in recovery times post ADL tasks (38 seconds) and in walking distances (about 6 metres further). Despite the many numbers of patients using SBOT, the trials have involved only very small numbers of patients who might not have been representative of oxygen users in general and who usually received oxygen under laboratory-type conditions instead of real life situations. Also, the
studies are of poor quality with differences in trial design, different outcome measures, different exercise regimes and methods of oxygen delivery. In addition the Centre for Reviews and Dissemination (CRD) concludes in a review on SBOT … “Widespread prescription of short-burst oxygen does not appear to be evidence-based. In order for prescription to continue, the scientific rationale must be established and an appropriate method of assessment developed” (2005).

SBOT: Refers to the intermittent use of supplemental oxygen at home usually for periods of about 10 to 20 minutes at a time to relieve dyspnoea. Often the resting PaO2/Sao2 may be normal. Some argue for a large placebo effect due to the cooling effect of oxygen on the face but a similar effect may be achieved using a fan.

Long Term Oxygen Therapy (LTOT): Refers to the provision of oxygen therapy for continuous use at home for patients with chronic hypoxaemia. The oxygen flow rate must be sufficient to raise the waking oxygen tension above 8 kPa. Once started, this therapy is likely to be life long. LTOT is usually given for at least 15 hours daily, to include night time. LTOT typically consists of an oxygen concentrator, which is connected to an electricity supply.

Ambulatory oxygen: Refers to the provision of oxygen therapy during exercise and activities of daily living. This oxygen is delivered by equipment that can be carried by most patients and can be prescribed to patients on LTOT who are mobile and need to or can leave the home on a regular basis. The type of portable device provided will depend on the patient’s mobility. Relatively few patients with COPD actually use ambulatory oxygen therapy for more than 4 hours daily in the first instance. Ambulatory oxygen requires lightweight cylinders, attached to an oxygen-conserving device, or liquid oxygen, supplied in a large-capacity reservoir tank with a portable domiciliary unit.

Exceptional circumstances may be considered where there is evidence of significant health impairment and there is also evidence of the SBOT improving health status.