Standards for the non−emergency use of oxygen for the relief of breathlessness at Hayward House

1. Oxygen will only be used for breathlessness following a formal evaluation of its effects using the prospective audit proforma. This will identify the flow rate of oxygen that corrects SaO_2 ≥90% and the benefit to the patient.

2. For consistency oxygen saturation must be assessed using the TuffSat pulse oximeter (Datex Ohmeda, USA).

3. Oxygen must be prescribed by the admitting doctor. A verbal prescription is acceptable if undue delay is anticipated.

4. The correct prescription of oxygen will include on the drug card details of:
   - *source* (oxygen concentrator or cylinder, entered in 'GAS' section)
   - *delivery device* (nasal cannulae or face mask and mask type i.e. 'medium' or 'high concentration')
   - *flow rate.*

   Example of correctly completed oxygen prescription

DATE	TIME	GAS	MASK TYPE or NASAL CANNULAE	%	FLOW RATE	CONTINUOUS or INTERMITTENT	DOCTOR'S SIGNATURE
2.12.03	15.00	Oxygen Concentrator	Nasal cannulae		2L/min	Intermittent	*A.N.Other*
29.12.03	11.00	Oxygen Cylinder	Mask, medium concentration		8L/min	Continuous	*A.N.Other*
29.12.03	17.00	Oxygen Cylinder	Mask, high concentration		6L/min	Continuous	*A.N.Other*

5. Any change in prescription will require amendment of the prescription chart.

6. When oxygen flow rates of ≤4L/min suffice, oxygen concentrators with nasal cannulae are to be used preferentially.

7. *Medium concentration* face masks used at Hayward House are Lifecare 2000, 2009 and 2010. A range of desired oxygen concentrations can be achieved (see Table). *Medium concentration* face masks deliver a maximum oxygen concentration of 60% at a flow rate of 8L/min.

8. The *high concentration* face mask used at Hayward House is Intersurgical 1102. Correct use requires ensuring that the reservoir bag is fully inflated with oxygen and at the end of inspiration it does not empty more than a half.

Table. Recommended methods of delivering a range of oxygen concentrations

Desired oxygen concentration[a]	Source	Flow rate	Delivery device
24	Oxygen concentrator[b]	1L/min	Nasal cannulae
28	Oxygen concentrator	2L/min	Nasal cannulae
36	Oxygen concentrator	4L/min	Nasal cannulae
50	Oxygen cylinder	6L/min	Medium concentration face mask
60	Oxygen cylinder	8L/min	Medium concentration face mask
80	Oxygen cylinder	5-8L/min	High concentration face mask

a. The oxygen concentration actually received by the patient is difficult to accurately predict as it is dependent on various factors including breathing pattern, the oxygen source and delivery device. Oxygen therapy has to be individually titrated according to response.

b. Oxygen concentrators can concentrate air up to 98% oxygen. They are less effective at higher flow rates, e.g. 75% oxygen at 5L/min.