

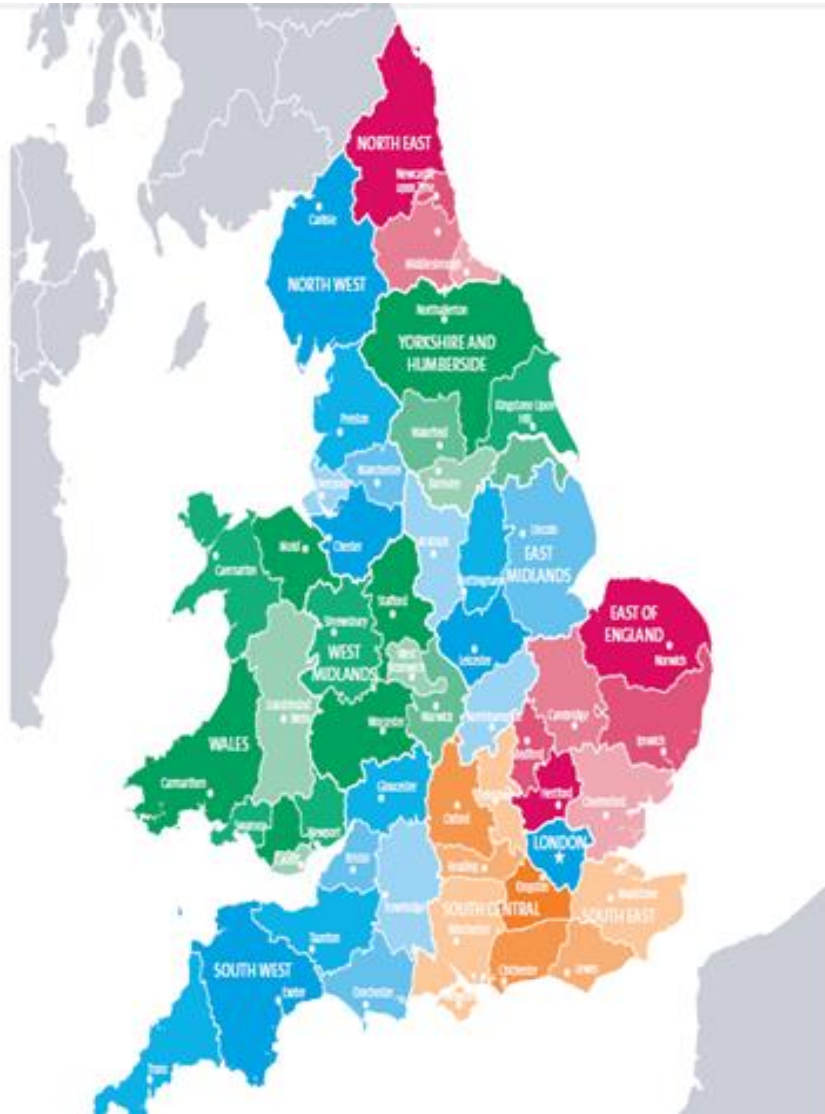
Baywater Healthcare

Home Oxygen Service Presentation

Ian Borrows, RN



Supplier Regions



- Baywater Healthcare are currently the home oxygen supplier for:
- West Midlands
- Yorkshire
- Wales
- North West (due to start October 2020)

Seven day service

Baywater Healthcare work seven days a week

- For installations
- For HOOF requests
- For deliveries

This enables rapid hospital discharges and helps to reduce prolonged hospital stays

Healthcare Helpline opening hours are 08:00 - 6.30pm for standard and next day HOOF requests and also cylinder delivery requests



OPEN
7 DAYS
A WEEK

Oxygen Equipment



Oxygen Concentrator



- Oxygen Concentrators can provide flow rates from 0.1lpm- 15 lpm and are suitable for long term oxygen therapy (LTOT).
- Suitable for respiratory conditions including COPD, ILD, neonatal lung disease, CF.
- Concentrators have no backup battery so are always supplied with a static cylinder for power cuts

Everflo Concentrator

- Low flow rate 0.1 - 1 lpm
- Standard flow rate 1 – 5 lpm
- Similar in weight and dimensions to our other static concentrators
- The filter has a plastic cover over it which is easy to remove for weekly cleaning of the filter



Quieter Concentrators

- 0.5 – 3 litres
- Quieter
- Smaller
- No filter on the back of VisionAire to washout
- Suitable for patients with limited space, electricity pre-payment meters
- Nidek 3 may also be beneficial for those with dexterity issues and visual impairment



Filter Cleaning



- Fitted in the back of some models of concentrator is a removable filter
- The filter should be removed once a week and washed in warm soapy water to clean
- Air dry

Using and Oxygen Machine (Concentrator)

- Firstly plug the oxygen machine into a wall socket and switch to the on position
- Press the switch on the front of the oxygen machine to the on position, all three lights will illuminate on the front of the machine and should turn off when the oxygen purity is at the flow rate you require
 - Please note it can take up to 20 minutes for all lights to turn off
- To set the prescribed flow rate you need to turn the dial on the flow tube where the little ball rises and falls
- In order to set the flow rate on the machines with a flow tube turn the dial until the ball reaches the number of litres per minute in accordance with the patient's prescription.
 - Look at the ball at eye level rather than above or below
- On the back of the oxygen machine there is a small removable filter that should be changed for a clean one, once per week.
 - The one that has been removed should be washed in warm soapy water, rinsed under a tap and left to air dry.
- To attach the nasal prongs or mask remove these from the packet. Take the wider end of the tube and push onto the nozzle on the front of the machine.

Transportable Concentrators

Transportable concentrators are suitable for long term oxygen and ambulatory use

- They provide continuous oxygen flow ranges of 0.5 - 2lpm
- Also provide settings of 1 – 6 (pulse dose for ambulatory)
- Sequal Eclipse – weight 8.1 kg
- Simplygo - weight 4.5kg -
- Battery duration example 3.5 hours (pulse setting 2)
- Battery recharge time 2 – 3hours (approx)
- 2 batteries supplied
- Ability to use mains, battery or DC power in cars



User Profile

- Consider patient suitability, dexterity, weight, lifestyle, mobility
- LTOT 0.5 – 2lpm
- Ambulatory 1 – 6 (pulse dose settings)
- Adult and paediatric
- Paediatric patients must be aged 7 and over to use built in conserver
- Active mobile patients
- Ability to transport equipment
- Flexible equipment for domestic holiday use
- Cost effective – reduced activity charges (only six monthly service)



InogenOne portable concentrators – pulse dose settings only

- Small size
- Light – 2.6 or 3.3 kg depending on the model of unit
- Battery life – e.g. 4 hours on setting 2
- Warm up time of 2 minutes
- In car lead supplied
- Ability to use mains, battery and DC power supply
- Cost effective – no activity charges other than services



Inogen G3

- Small size
- Light - 2.2kg
- Settings of 1 – 5
- Requires assessment as settings do not equate to litres per minute
- Battery life – e.g. 8 1/2 hours on setting 2
- Warm up time of 2 minutes
- In car lead supplied
- Ability to use mains, battery and DC power supply
- No trolley required or supplied



User Profile

- Ambulatory modality
- Must be able to use a conserver and nasal cannula
- Flexible device for short term domestic travel options
- Requires assessment prior to ordering - pulse dose setting
- Requires mobility to be able to manage equipment
- Good dexterity and vision
- Children aged 7 years or over



Static Cylinder (B10)

- Used as a backup cylinder for all concentrators
- No need to request back up cylinder on HOOF automatically supplied with a concentrator order
- Static cylinder on Hoof A and HOOF B
- Used as recovery oxygen for paediatrics

Flow rate (litres per minute)	Duration
0.5	70 hours 44 mins
1	35 hours 22 mins
1.5	23 hours 34 mins
2	17 hours 41 mins
3	11 hours 47 mins
4	8 hour 50 mins
6	5 hours 53 mins
8	4 hours 25 mins
15	2 hours 21 mins



Portable Cylinders



- Smaller cylinders, portable that allow freedom of movement
- Enable mobility away from the home
- Provided with cylinder carrybags as standard provision
- Trolley's and trolley-bags available at request to assist mobility further

Standard Ambulatory Cylinder (F400)



Flow rate (litres per minute)	Duration <u>without</u> conserver	Duration <u>with</u> conserver
0.1	71 hours 40 mins	
0.2	35 hours 50 mins	
0.5	14 hours 20 mins	
1	7 hours 10 mins	21 hours
2	3 hours 35 mins	10 hours
3	2 hours 23 mins	7 hours
4	1 hour 47 mins	5 hours
6	1 hours 11 mins	3 hours
8	53 mins	
10	43 mins	
15	28 mins	

Weight full 3.2kg-3.7kg (7lb-8lb)

Height 53cm (20.8ins)

Diameter 10cm (3.9ins)

Capacity 430 litres

Lightweight Ambulatory Cylinder (F300)

Used for young children or frail adults



Flow rate (litres per minute)	Duration <u>without</u> conserver	Duration <u>with</u> conserver
0.5	10 hours 16 mins	
1	5 hours 8 mins	15 hours
1.5	3 hours 25 mins	
2	2 hours 34 mins	7 hours
3	1 hour 42 mins	5 hours
4	1 hour 17 mins	3 hours
6	51 mins	2 hours
8	38 mins	1 hour
15	20 mins	

Weight full 2.1kg-2.6kg

(4.6lb-5.7lb)

Height 43cm (16.9ins)

Diameter 8.5cm (3.3ins)

Capacity 308 litres

Oxygen Consumables



Nasal Cannula

- Cannula should be cleaned daily with a disinfectant wipe or warm soapy cloth
- Never immerse cannula in water
- Discard after any infection, if they become hard/discoloured
- Nasal cannula (curved tip, straight tip, paediatric - adult)
- Flow cannula from 0.1 - 15lpm



How To Fit Nasal Cannula

- Place nasal prongs into the patients nostrils
- Tuck the tubing behind the patients ears
- Secure the cannula by adjusting the toggle under the patients chin



Face Masks

- Venturi systems deliver fixed percentage of oxygen for safety
- Medium concentration masks 2 – 8lpm
- Non-rebreathe mask 8 – 15lpm
- Oxygen masks should be cleaned daily in hot soapy water, rinsed and thoroughly air dried before use
- Non rebreathe mask should not be submersed in water – wipe clean the mask with damp cloth
- Depending on usage masks can be used for 6 months, cannula 2 months
- Reorder as required



How to fit a facemask

- If using a venturi barrel system, ensure barrel is securely fitted to base of the mask and that the barrel is in no way damaged
- Place the mask over the patients nose and mouth
- Pull elastic over the patients head to secure the mask in place
- If using a non-rebreathe mask ensure that the bag fully inflates when oxygen is turned on



How to fit a facemask

- If using a venturi barrel system, ensure barrel is securely fitted to base of the mask and that the barrel is in no way damaged
- Place the mask over the child's nose and mouth
- Pull elastic over the patients head to secure the mask in place
- If using a non-rebreathe mask ensure that the bag fully inflates when oxygen is turned on



Venturi Barrels

These are the colours and flow rates/oxygen percentages which Baywater purchase.

Different brands of venturi barrel may use the same colours for different flow rates and percentages.

- 24% **Blue barrel** at 2 litres/min flow rate
- 28% **White barrel** at 4 litres/min flow rate
- 31% **Orange barrel** at 6 litres/min flow rate
- 35% **Yellow barrel** at 8 litres/min flow rate
- 40% **Red barrel** at 10 litres/min flow rate
- 60% **Green barrel** at 15 litres/min flow rate



Patient Safety



Oxygen and fire safety



Fire safety message

- Never smoke or let someone else smoke near home oxygen equipment
- Do not use electronic cigarettes near home oxygen equipment
- 3 metre (10 foot) distance from naked flames
- 1.5 metres from a heat source includes, hair dryers, straighteners and radiators
- Fire and Rescue Service provide free home safety check
- Baywater Healthcare inform FRS when we install equipment
- Oxygen saturates materials for up to 20 minutes after source is removed/turned off.
- Oxygen supply should always be turned off when not in use



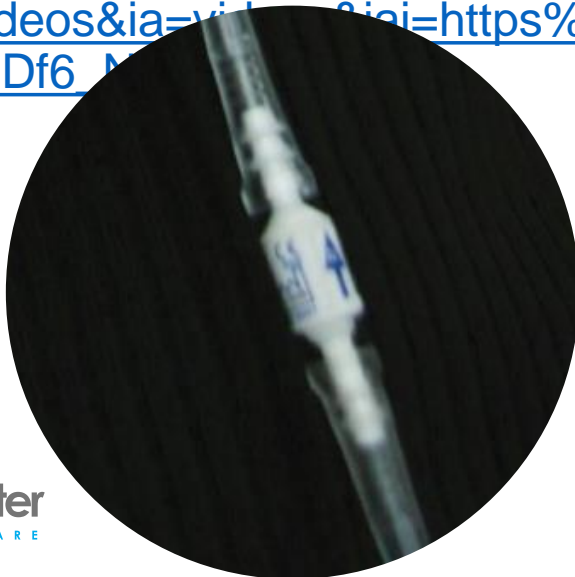
Oils and paraffin

- It is ideal not to use substances containing oils, grease or paraffin (such as skin creams, make-up, lip balms, Vaseline, etc)
- This can include emollients and wound dressings
- These substances soak into clothing, bedding, hair, etc, and make them into a fire hazard
- Sources of ignition may be common items such as cigarettes, candles, hair straighteners, etc.



Firebreaks

- Static cylinders and concentrators are supplied with fire breaks in the tubing line
- In the event of a fire the firebreak stops the progression of the fire any further as shown below
- Firebreaks are fitted throughout the oxygen pipe-work and near the equipment.
- One is fitted to B10's
- https://duckduckgo.com/?q=firesafe+firebreaks+&t=newext&atb=v262-1&iax=videos&ia=video&si=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Df6_M...



Air Mattresses



Pressure relieving mattress that inflates with air over periodic cycles of about 10 minutes, to prevent bedbound patients receiving pressure sores

The bed is filled with air from a pump usually located under or at the end of the bed

Risks Associated with an Air Mattresses

- Patients using air mattresses will have reduced mobility and are usually bedbound
- Smoking on/near air mattress presents risk of burning a hole in the mattress
- If the mattress punctures, air in the mattress will leak out. The pump detects the drop in pressure and will increase the force of air to compensate
- More air will escape through the hole and will feed a fire
- Oxygen Smoking and air mattresses are deemed VERY high risk

Fire Safety images

The following images are from a house fire in Hull where the patient set fire to their bed whilst smoking and using oxygen equipment







Fire Safety

The patient later died of smoke inhalation

Remember never use heated appliances or items that can cause a fire near to oxygen



Hospital images

The next image is a photograph of a ward in Warrington Hospital from the 1990's.





The next photograph shows the same ward after a patient caused a fire due to lying their nasal prongs onto bedding while oxygen was still flowing, and lighting a cigarette.





Oxygen and safety – what is wrong with this picture?



Remember – oxygen fills bedding and materials, always turn oxygen off when it is not in use with a patient.

Thank you for listening

Ian Borrow, Clinical Adviser

Tel:- 07 885 812 938

Email

ian.borrows@baywater.co.uk