Non invasive ventilation at home

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Introduction

- What is non invasive ventilation
- Types of patients with non invasive ventilation
- Equipment patients will have at home
- Complications with non invasive ventilation at home
- How to use non invasive ventilation at home
- Common asked questions
- Who to contact for advice
What is non invasive ventilation (NIV)

• Non-invasive ventilation (NIV) refers to the provision of ventilatory support through the patient’s upper airway using a mask or similar device

• CPAP - Continuous Positive Airway Pressure
  ▫ Used to treat type I / hypoxic respiratory failure

• BiPAP - Bilevel Positive Pressure Ventilation
  ▫ Used to treat type II / hypercapnic respiratory failure
Conditions with may benefit from NIV at home

- Chronic obstructive Pulmonary disease with Type 2 Respiratory Failure
- Conditions which affect muscle weakness
- Motor neurone disease
- Chest wall disorders
- Obesity hyperventilation
Domiciliary NIV service

- COPD patients
- New to NIV at home
- 2 week nurse led service
Equipment for home NIV

- Machine with power lead
- Filter
- Hose
- Mask and headset
- Carry bag
Home NIV

- Large range of interfaces designed for home use
- **Expiratory port** normally built into mask
Oxygen and NIV at home

- Oxygen therapy can be entrained in to NIV
- Patients on LTOT be need to have it via NIV when in use
Complications with non invasive ventilation at home

• Mask seal problems
  ▫ Small leak to bottom of mask is common and will not affect performance
  ▫ Leak into the eyes can cause redness and irritation
• Pressure damage on nasal bridge
  ▫ Indication mask is too tight or poor fit
• Throat dryness
  ▫ Dry mouth is very common, usually glass water by the bed is enough to resolve issues
• Nasal problems
  ▫ Nasal stuffiness, sneezing and running nose – normally settle down
How to use Non invasive at home

- The recommended is NIV is used for minimum of 5 hours per night
- Some patients may find some benefit in using NIV during the day
- Regular cleaning of machine, mask and tubing
- Checking skin for any pressure damage from mask or straps
Common questions asked

- Going on holiday – machines can be used abroad using a plug adaptor
- Power cut – no long term effects for not using NIV for a few hours overnight
- Waking with headaches/more sleepy during the day – contact PFU
- NIV feels it is giving breath at wrong time – contact PFU
Who contact

• Pulmonary function unit: 0114 2714784

• COPD NURSE: bleep 2526 via 0114 2434343

• Brearley 4 – 0114 2715092