A picture containing text, tableware, dishware

Description automatically generated

Name:

Date of Birth: DD/MM/YYYY

MRN Number:

NHS Number:

(OR AFFIX HOSPITAL LABEL HERE)

**Care Bundle**

Acute non-invasive ventilation is an evidence-based treatment for patients with specific conditions who develop hypercapnic (type 2) respiratory failure (PaCO2 >6.5kpa) and acidosis (pH <7.35).

**Please note: W*ard-based NIV should not delay intubation if it is more appropriate***.

For patients presenting in type 2 respiratory failure as a result of pneumonia or

Asthma, only consider NIV if ward-based treatment is the ceiling of treatment.

Tick once completed



**Icon

Description automatically generated**

**Repeat blood gas (ABG / CBG) within 2 hours of commencing NIV**

If the results continue to improve repeat at 4 and 12 hours.

If CO2 does not fall by 1kPa / if pH does not normalise:

* Are saturations maintained at 88-92%
* Has medical management been optimised?
* Have you considered mucus plugging? *Consider physio input*
* Is the mask fitting correctly?

*(Mask leak 20-40l/min acceptable)*

* Are you delivering adequate pressures?
* If appropriate, consider involving ITU
* If further setting changes are made

repeat ABG/CBG one hour later.

**Date: Time Bundle Initiated:**

DD/MM/YYYY 00:00

**Signature:**

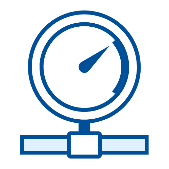
**Print name:**

**Aim for inspiratory pressure of at least 20cmH2O within 60 minutes**

Start with inspiratory pressure (IPAP) 12-15cmH2O and expiratory pressure (EPAP) 4-5cmH2O titrate over 20-30minutes.

Usual pressures required:

* COPD: IPAP 20-24 EPAP 4-6
* Obesity hypoventilation: IPAP 24-28 EPAP 8-10
* Neuromuscular disease: Titrate slowly as lower pressure settings may be sufficient



**Have you completed a ReSPECT form which documents an appropriate treatment escalation plan? Is NIV appropriate? What should happen if this fails?**

* Have you discussed a ceiling of treatment with your patient?
* Have you documented a treatment escalation plan within the patient record?



**NIV should be commenced within 60 minutes of decision to treat**

Before starting NIV have you offered appropriate medical treatment?

* Maintain saturations 88-92% with controlled oxygen
* Sit patient upright / consider physiotherapy input
* Treat underlying condition; Consider bronchodilators, antibiotics and diuretics (if appropriate)
* Review CXR – exclude pneumothorax
* Consider absolute and relative contraindications



**Appropriate patient selection**

* Is the patient in type 2 respiratory failure
* Do they have an appropriate indication for NIV? *Circle as appropriate.*

COPD / Obesity Hypoventilation / Neuromuscular disease / Chest wall deformity / Congestive cardiac failure / Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

