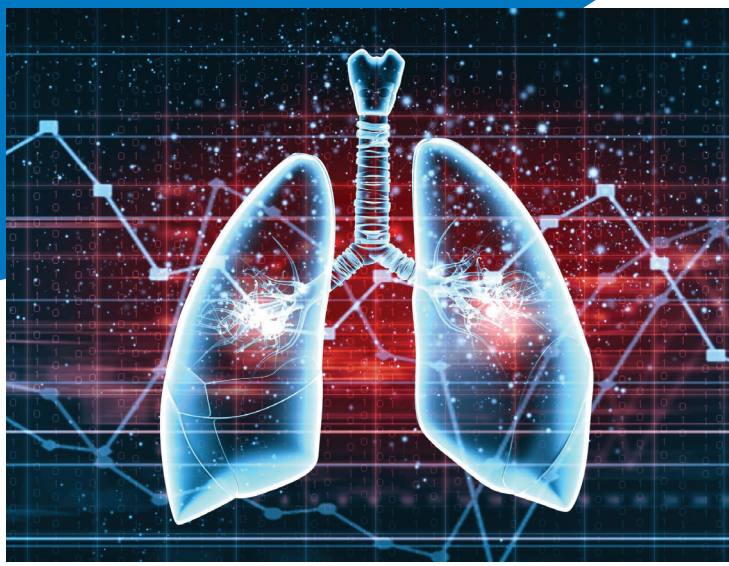
The Facts



Inspiring Change

A review of the quality of care provided to patients receiving acute non-invasive ventilation

DATA

- 353 sets of case notes reviewed
- 432 questionnaires completed by clinicians from hospitals across the UK
- 168 questionnaires returned on the organisation of acute NIV services in UK hospitals

CODING

- 61% of excluded cases were due to the patients having CPAP not NIV, as the same code is used for both

PATIENT GROUP

- 69% of patients were admitted with COPD and 60 patients had been ventilated previously for the same indication

STAFFING

- 144 hospitals had a named medical clinical lead for their NIV service - usually a respiratory consultant but in 110 hospitals, this person had no specific time allocated in their job plan to lead the service
- Only 79 hospitals reported having a defined ratio of nurses to NIV patients as recommended by the British Thoracic Society
- 45% of hospitals had staff without a defined competency who supervised NIV patients

VITAL SIGNS and MONITORING

- 19% of respiratory wards, 26% of general medical wards where NIV was used and 8% of respiratory high care wards did not have continuous oxygen saturation monitoring
- 53% of patients had an oxygen saturation of 91% or lower and 97% of patients required treatment with oxygen prior to NIV
- 21% of acute medical units and 33% of respiratory high care areas had no continuous ECG monitoring available
- 15% of patients had a heart rate of >120/minute at the start of ventilation, the level at which guidelines recommend continuous ECG monitoring
- 56% of patients had a respiratory rate of 25 or more on arrival in hospital, and 50% had a respiratory rate in this range at the start of NIV
- 46% of patients whose care was reviewed could have had improved monitoring

DOCUMENTATION

- 69% of hospitals had a prescription form for NIV
- 83% of hospitals used an observation chart specifically for use with NIV but ventilator settings were not adequately documented in 51% of cases

TREATMENT

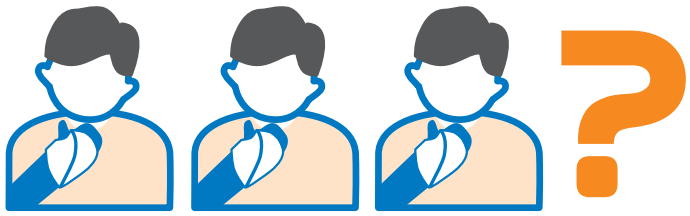
- 27% of patient cases reviewed had a delay in starting NIV

EQUIPMENT

- 40% of hospitals reported times when they had more patients requiring NIV than machines available

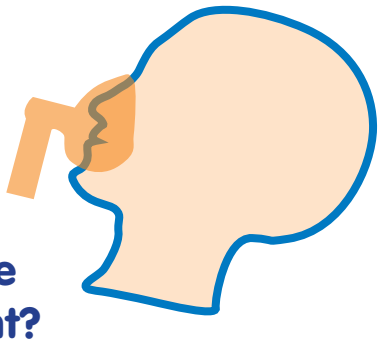
NCEPOD

TO IMPROVE THE QUALITY OF CARE FOR PATIENTS RECIEVING ACUTE NON-INVASIVE VENTILATION WE NEED TO:

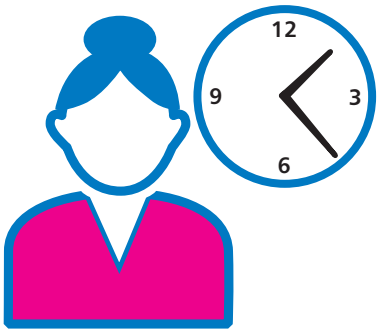


DETERMINE how many patients are treated in each hospital – recognising that coding may be misleading

CONSIDER the model of care used to provide NIV – can the machine go to the patient?

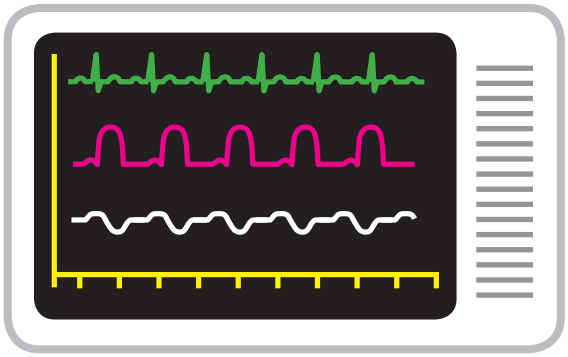


ENSURE there is an operational policy that includes appropriate staffing and location of treatment



APPOINT a clinical lead for NIV and allocate time for this in their job plan

TRAIN STAFF to be competent in prescribing acute NIV and manage the ventilator settings



MONITOR vital signs frequently and improve documentation

ENSURE all patients have an escalation plan in place