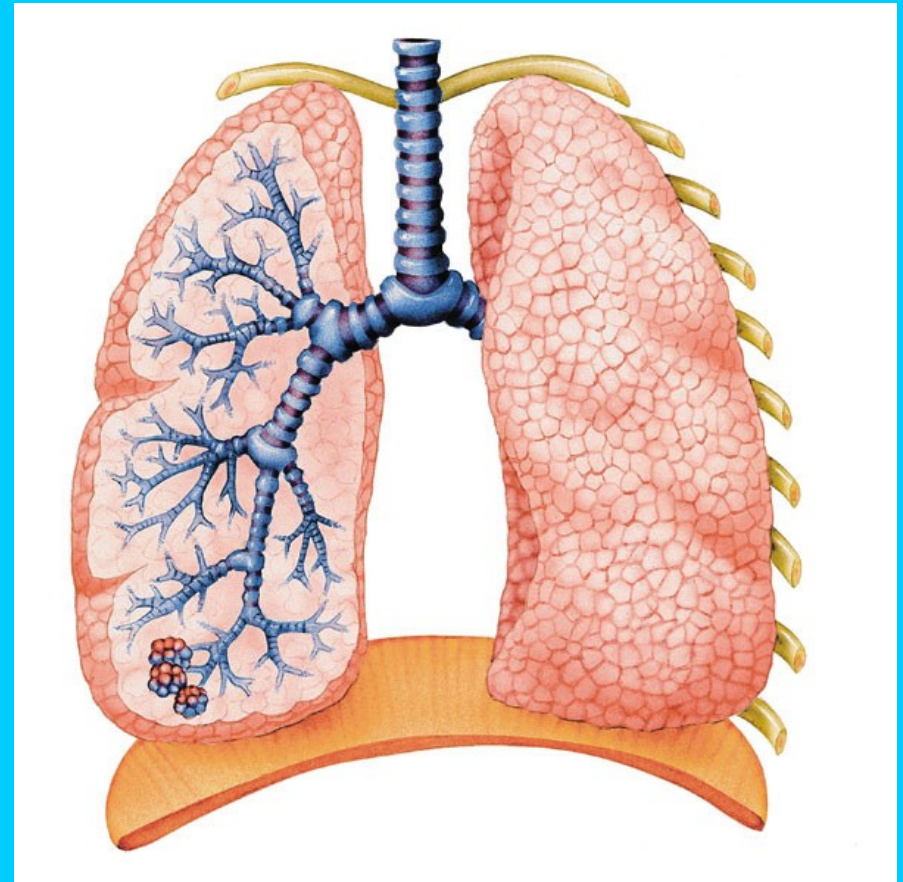


# A Multi Disciplinary Approach to The Introduction of a Non Invasive Ventilation Service in General Medical Wards

Sue Snelson

# Chronic Obstructive Pulmonary Disease

- Chronic bronchitis and emphysema
- A progressive and irreversible decline in lung function
- Results in reduced airflow to the lungs



# Mortality and Morbidity

- In 2004 over 27,000 deaths from COPD in UK
- 5<sup>th</sup> biggest killer worldwide
- Accounted for one million hospital bed days in England (BTS 2006)

# Local impact of COPD

- 2036 patients admitted with acute exacerbation of COPD of varying severity
- Until October 2008 all COPD patients requiring NIV admitted to ICU
- ICU bed pressures leading to non clinical transfers

# Ward based NIV 2006

- Small working group
- Funding secured for equipment
- MAU staff training
- Barriers to implementation

# Ward based NIV 2008

- Led by new Respiratory Consultant
- Larger MDT established
- Included expanded Outreach service and Hospital at Night
- Evidence based guideline developed

# Ward based NIV 2008

- Clear criteria for use
- Clinical Governance group approval
- Step by step set up guide
- Staff training again!

# Inclusion Criteria

- Acute exacerbation of COPD
- Persistent Acidotic Hypercapnic respiratory failure
- No improvement with optimal medical therapy

# Inclusion Criteria

- $\text{pH} > 7.25 - < 7.35$
- Sick but not moribund
- Able to protect own airways
- DNR not an exclusion

# Ward Based NIV 2008

- Commenced October 2008 in MAU
- BiPAP prescribed
- ABG's at one hour and 4 hours
- IPAP and EPAP titrated



# Audit

- 49 patients
- 36 improved and were discharged home
- 5 admitted to ICU ( 2 died)
- Mean ICU stay of 6 days
- 4 did not tolerate the therapy
- 4 died on the ward
- 286 outreach visits totalling 166.5 hours

# The Way Forward

- Additional equipment
- Expand the service
- RCP recommendation – NIV within 1 hour of admission

Any Questions?

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