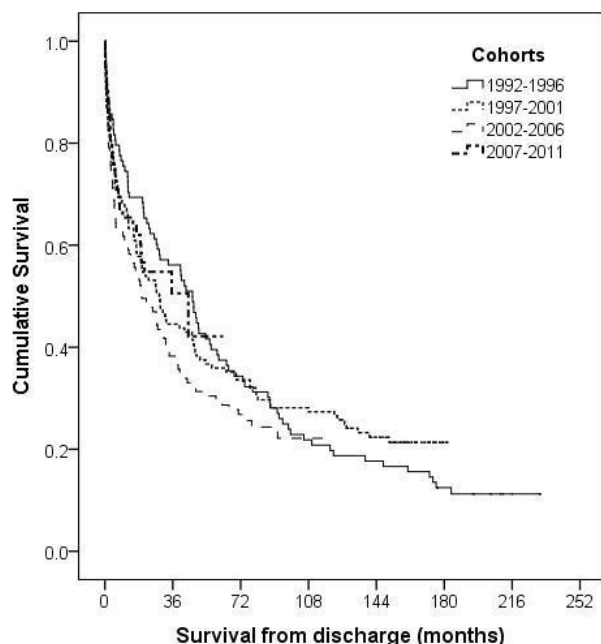


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Abstract P228 Figure 1

**P229 NOCTURNAL NONINVASIVE VENTILATION IMPROVES MUSCLE STRENGTH IN STABLE COPD PATIENTS WITH RESPIRATORY FAILURE**

doi:10.1136/thoraxjnl-2012-202678.290

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**Introduction/Objectives** Non-Invasive ventilation (NIV) is established for treatment of patients with COPD and respiratory failure (RF). Respiratory muscle weakness has been reported in these patients. Aim of the study is to see whether nocturnal NIV improves respiratory muscle strength in these patients.

**Method** 15 stable patients with type II respiratory failure were prospectively given nocturnal NIV at MCRD using Resmed BiPAP at optimal pressure titrated individually for each patient for 8 hours. 7 patients were in control group and were not given nocturnal NIV after obtaining informed consent. Maximal inspiratory, expiratory (PI<sub>max</sub> & PE<sub>max</sub>) and sniff nasal inspiratory pressure (SNIP) were recorded using micro RPM (Care fusion inc.) before and within 5min of removal of nocturnal BiPAP. Paired t-test was used to analyze the recorded data within significant level kept at P<0.05.

**Result** There was significant increase in PI<sub>max</sub> & SNIP after nocturnal NIV support in patients with COPD with respiratory failure (38.87±18.2 cmH<sub>2</sub>O vs 42.07±16.3 cmH<sub>2</sub>O & 29.2±18.26 cmH<sub>2</sub>O vs 32.47±17.25 cmH<sub>2</sub>O; p=0.05 & p=0.048 respectively), but increase in PE<sub>max</sub> (66.4±18.63 cmH<sub>2</sub>O vs 68.53±22.0 cmH<sub>2</sub>O) was statically insignificant (p=0.37). However significant decrease in PI<sub>max</sub> & SNIP was observed in the subset of patients who were not given nocturnal NIV (53.14±20.56 cmH<sub>2</sub>O vs 50.9±21.6 cmH<sub>2</sub>O, 76.3±20.1 cmH<sub>2</sub>O vs 71.9±21.8 cmH<sub>2</sub>O & 38.6±11.7 cmH<sub>2</sub>O vs 33.7±10.4 cmH<sub>2</sub>O; p=0.156, 0.037 & 0.053 respectively).

**Conclusion** Nocturnal NIV support in patients with stable COPD with respiratory failure significantly deloads the respiratory muscle,

thereby improving inspiratory muscle strength indicating role of NIV in stable COPD patients with respiratory muscle weakness

**P230 FACILITATING END-OF-LIFE DISCUSSIONS IN USERS OF HOME MECHANICAL VENTILATION THAT HAVE A LIFE-LIMITING NEUROMUSCULAR DISEASE**

doi:10.1136/thoraxjnl-2012-202678.291

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**Introduction and Objectives** There are many individuals living in the United Kingdom with a neuromuscular disease which will cause their death. Many use home mechanical ventilation (HMV). Discussing end-of-life care with patients with life-limiting disease is currently high on the health agenda. Whilst the published guidance does not provide evidence that patients wish to be involved in these discussions, the knowledge base tends to support it. There are few studies which specifically investigate whether those with progressive neuromuscular disease want to be involved or what facilitates such conversations. We examined the experience of HMV patients with neuromuscular disease with regards end of life discussions.

**Methods** A generic qualitative research approach was employed. Purposive sampling was utilised. Individuals, volunteered to participate in a face-to-face interview. The interview transcripts were analysed using a thematic content approach to identify common themes.

**Results** Interviews were conducted with 9 individuals; 5 male, 4 female with a mean age of 58 years (range 31–74). Five participants had Motor Neuron Disease (MND). Four had less progressive disease. Two participants used continuous tracheostomy ventilation; the others used HMV predominantly at night. Five denied that they had taken part in a professional led end-of-life conversation. Four participants have since died. The key findings indicate that for constructive dialogue to take place most individuals required a prompt or cue from a care professional. Not all had one. Once received most patients would engage in conversations as long as the timing, conditions and professional were appropriate. The need to remain positive and to receive adequate information were strong themes throughout the interviews. The presence of relatives or significant others was a barrier to productive conversations in those with more stable disease but a facilitator to those with MND.

**Conclusion** Despite the need for individuals to remain positive, useful discussions can take place if patients are approached to do so by a knowledgeable professional with the correct skills at an appropriate place in the disease trajectory. If such discussions do take place then patients can find these rewarding and they can have a positive effect on their lives.

**P231 CPR AND VENTILATION PREFERENCES IN COPD PATIENTS USING HOME NIV: STILL UNEXPLORED AFTER TEN YEARS**

doi:10.1136/thoraxjnl-2012-202678.292

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**Introduction** The GMC, NCEPOD and Resuscitation council UK have clear guidelines suggesting early decision making when considering appropriateness of CPR and invasive ventilation (ETV) in acute admissions. Furthermore patient preferences should be identified in advance of acute deterioration where they have an existing condition that makes cardiac or respiratory arrest likely. It is currently unclear how closely this advice is followed in practise. Since COPD patients requiring home ventilation have higher than average risk of acute respiratory failure and death<sup>1</sup> we reasoned that CPR/ETV should have been discussed in all cases, but in 2002 a prior audit found that such discussion was infrequent.