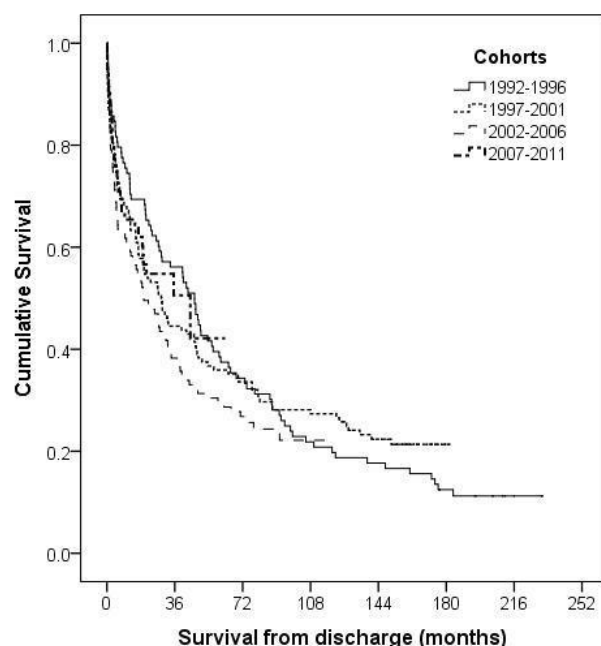


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Abstract P228 Figure 1

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

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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_{max} & PE_{max}) 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_{max} & SNIP after nocturnal NIV support in patients with COPD with respiratory failure (38.87 ± 18.2 cmH₂O vs 42.07 ± 16.3 cmH₂O & 29.2 ± 18.26 cmH₂O vs 32.47 ± 17.25 cmH₂O; $p = 0.05$ & $p = 0.048$ respectively), but increase in PE_{max} (66.4 ± 18.63 cmH₂O vs 68.53 ± 22.0 cmH₂O) was statically insignificant ($p = 0.37$). However significant decrease in PI_{max} & SNIP was observed in the subset of patients who were not given nocturnal NIV (53.14 ± 20.56 cmH₂O vs 50.9 ± 21.6 cmH₂O, 76.3 ± 20.1 cmH₂O vs 71.9 ± 21.8 cmH₂O & 38.6 ± 11.7 cmH₂O vs 33.7 ± 10.4 cmH₂O; $p = 0.156$, 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

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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

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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 death¹ we reasoned that CPR/ETV should have been discussed in all cases, but in 2002 a prior audit found that such discussion was infrequent.

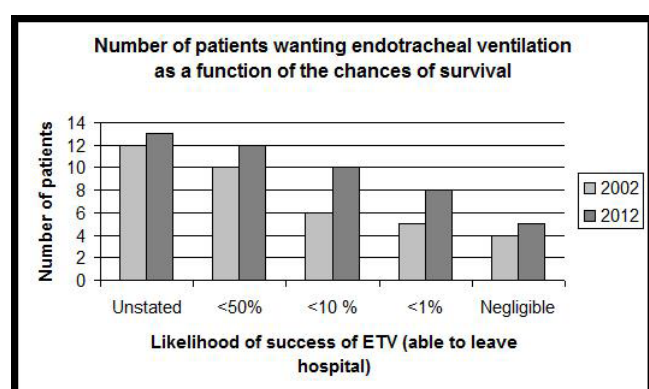
Aim Re-audit, ten year interval using the same survey to assess whether there had been improvement in practise and also re-evaluate patients' preferences.

Method Eight question survey in our home ventilation clinic selecting 20 patients with severe COPD on domiciliary non-invasive ventilation. Results were compared to those of 19 similar patients from 2002. Statistical differences were explored with the fishers-exact test.

Results The proportion of patients who had been asked about CPR/ETV preferences had not improved between 2002 and 2012; 4/19 (21.1%) in 2002 and 7/20 (35%) in 2012 ($p=0.54$) and remained unacceptably high. The majority of patients wanted more opportunity to discuss their preferences; 17/19 (89.5%) in 2002 and 11/20 (55.0%) in 2012 ($p=0.038$). In both 2002 and 2012, patients' preferences for CPR/ETV were influenced by the likelihood of survival but a significant minority wished to receive these therapies even with a quoted chance of survival $<1\%$ or negligible (figure 1).

Discussion Despite ten years awareness of the issue, our institution had failed to significantly improve CPR/ETV discussions in COPD patients attending the home ventilation clinic. We found that people frequently had their own views regarding CPR/ETV and most people would like the opportunity of further discussion. The trust wide use of DNAR forms has not sufficiently improved practise. We believe that the use of a trust wide resuscitation status form might improve this outcome.

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Abstract P231 Figure 1

P232 COMMUNICATION AND END OF LIFE CARE (EOLC) IN PEOPLE WITH RESPIRATORY DISEASE

doi:10.1136/thoraxjnl-2012-202678.293

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Background Leeds Teaching Hospitals Trust (LTHT) is a flagship trust for the National End of Life Care (EoLC) strategy. Key areas of improvement in EoLC have been identified, including identification of people approaching end of life and communication of this to the individual, family and primary care colleagues.

The Gold Standards Framework is a national systematic evidence based approach to optimising EoLC. This retrospective study reviewed all deaths during in-patient stay and within 28 days of discharge from respiratory medicine.

Methods All in-patient deaths or deaths within 28 days of discharge from hospital under the care of a respiratory physician at LTHT between April and September 2011 were reviewed. All communication with primary care in the preceding 12 months was reviewed.

Results 144 individuals died on respiratory wards, median (range) age of 76 (18–96) years with the majority having a length of stay over 8 days. 42 individuals died within 28 days of discharge from a respiratory ward, median (range) age of 71 (42–87) years. The commonest cause of death was pneumonia and lung malignancy for in-patient and post-discharge deaths respectively. 23.8% and 83% of in-patient and post-discharge deaths respectively had documented communication with primary care about a palliative intent to care, the majority of these had a diagnosis of thoracic malignancy. Within the 12 months pre-death all patients had evidence that EoLC may have been appropriate to consider.

Conclusions Palliative communication with primary care was made for some individuals, mostly with lung malignancy. This probably reflects more predictable disease trajectory and MDT decisions of "best supportive care". Lack of confidence around predicting terminal disease in other respiratory conditions, particularly those such as COPD which are prone to exacerbations, may account for the differences in rates of communication of palliative care approaches in these disease groups.

A key driver for the implementation of high quality EoLC for patients with respiratory disease is recognition of patients approaching the end of life and communication with the individual, family and primary care to ensure that the patient's wishes for EoLC are identified and supported.

P233 DEATH AND THE RESPIRATORY PHYSICIAN: CHALLENGES TO PROVIDING OPTIMAL END-OF-LIFE CARE BY GENERALISTS

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Background Surveys show most patients want to die at home. However 53% of all UK deaths occur in hospital. Patients with chronic respiratory disease are more likely to die in hospital (66% of COPD deaths) yet hospital end of life care is often poor. Clinicians are advised to use the 'surprise question' to identify patients that need advance care planning (ACP). Do not attempt resuscitation (DNAR) orders (evidence of ACP) are often not completed. Barriers previously identified include: lack of training, time, appropriate opportunity and experience; personal discomfort; and perceived lack of patients'/carers' understanding.

Objective We investigated experiences, beliefs and attitudes of doctors in a district general hospital towards end of life care, focusing on issues relevant to Respiratory patients.

Methods Clinicians of varying grades were invited to complete a multiple-choice questionnaire during 'Dying Matters Awareness Week 2012'.

Results Amongst the 73 doctors (49% male) there was a high degree of confidence (eg 76% agreed or strongly agreed that they were comfortable talking to patients/relatives about death and dying). However this did not correlate with familiarity with the 'surprise question' (23% said they were familiar but only 3% gave a correct response), or knowledge of the most distressing end of life symptom (only 18% identified shortness of breath correctly), or knowledge of the patient group with the highest unmet palliative care needs (only 23% identified patients with Respiratory diseases). 40% believed "palliative care is a specialist skill that should be delivered by specialists".

Discussion There is a pressing need for greater expertise in general palliative care amongst hospital doctors. Patients with COPD and other progressive respiratory conditions have extensive palliative care needs. Accurate prognostication is challenging; the surprise question is useful in prompting ACP. DNAR decisions and ACP should not be left to the last days of life. We identified a mismatch