P1458
TELEMOLD project: A telemonitoring system that combines oximetry and physical activity quantification to improve long term oxygen therapy
Carina Gusmão1, Inês Faria1, Manuela Zamith1, Isabel Matias1, Rui César das Neves1, Patima Rodrigues1, Cristina Bárbara1.
1Serviço de Pneumologia II, Hospital Pulido Valente - CHLN, Lisboa, Portugal; 2Software Development, CAST, Lisboa, Portugal

Background: Standard assessment to long term oxygen therapy (LTOT) prescription involves periodic clinical tests (arterial blood gas, 6-min walk test and nocturnal oximetry) carried out in several hospital visits. However, there is some evidence that oxygen demand during daily activities may not be correctly estimated by such tests, when compared to continuous ambulatory oximetry.

Aim: To evaluate the clinical usefulness of a home telemonitoring system in LTOT optimization.

Methods: Thirty five respiratory failure patients (29 with LTOT, 6 under evaluation for LTOT) followed in an University Hospital were real-time monitored with an oximeter sensor (Nonin Avan 4000 system) and an accelerometer (BioPlux motion). Signals were sent via Bluetooth to a mobile phone and then via 3G or GPRS to a server. Continuous and secure access to data through an Internet site was established.

Results: Each patient was monitored in average 7.6±4.5 (range 2-19) days, in a total of 83.0±66.9 (4.8-228) hours. Percentage of valid records was in average 65.4±24.1% (0-100%). Percentages of rest, activity and sleep records per patient were, in average, 28.4±21.3%, 6.5±5.5% and 59.3±24.6%, respectively. Significative desaturation during rest, activity and sleep was found on 2, 26 and 9 patients, respectively. Patient’s user-friendliness was fairly good (75.8% reported it as easy/very easy).

Conclusion: Our study suggests that a telemonitoring system combining oximetry and physical activity evaluation may improve LTOT through a more adequate oxygen flow prescription, namely during daily activities. This project was funded with a grant by Fundação Vodafone Portugal.
P1462
Self-efficacy and quality of life in COPD patients
Marinella Sommaruga1, Paola Greminzi1, Vincenzo Zagà2, Claudia Goti1,
Linda Rasse1, Pierachille Santus1,2
1Psychology Unit, Maugeri Foundation, Care and Research Institute, Milan, Italy; 2Department of Psychology, University of Bologna, Bologna, Italy; 3Pneumonology Unit, City of Bologna Health Unit, Bologna, Italy; 4Pulmonary Rehabilitation, University of Studi di Milano, Maugeri Foundation, Care and Research Institute, Milan, Italy

Background and purpose: Chronic obstructive pulmonary disease (COPD) is a complex chronic multi-component disease. Understanding the mechanisms of health related quality of life (HRQL) impairment should help identifying targets of pulmonary rehabilitation (PR). Research has shown positive correlations between effectiveness of PR and degree of outcome in patients with COPD (Kips M et al. Int Nurs Practice 2011; 17:1-8; Arnold R et al. Behav Med, 2005 31:107-15). This study sought to evaluate the relative role of self-efficacy and socio-demographic variables in the prediction of HRQL in COPD patients.

Methods: A total of 103 COPD patients (60% males, aged 70±14 years) before entering a PR program, completed dimensional rating scales on self-efficacy (Perceived Health Competence Scale) and HRQL (Airways Questionnaire 20). Regression analysis was performed to identify the impact of self-efficacy and demographic variables (gender, age, level of education, and marital status) on HRQL.

Results: Stepwise multiple regression analysis revealed that age and self-efficacy were correlated with HRQL (R² = 0.27). These findings suggest that the HRQL is negatively correlated with age (b = -0.30) and positively correlated with self-efficacy (b = 0.56), independent of gender, level of education, and marital status.

Conclusion: In a chronic disease such as COPD, it is important to work at improving confidence in the patient’s ability to follow a care regimen by increasing self-efficacy, especially in older patients, as it may positively affect quality of life. Therefore, clinicians should include careful assessment of self-efficacy in their routine evaluation of patients before entering a pulmonary rehabilitation program.

P1463
Validation of CAT as an independent assessment tool in pulmonary rehabilitation (PR) for chronic obstructive pulmonary disease (COPD)
Shakila Devi Perumal1,2,3, Cormic McCarthy2, Mary Frances O’Driscoll3
1Psychology Unit, Maugeri Foundation, Care and Research Institute, Milan, Italy; 2Department of Psychology, University of Bologna, Bologna, Italy; 3Pneumonology Unit, City of Bologna Health Unit, Bologna, Italy

The benefits of PR in COPD are well recognised but the practical assessment of patients before entering PR can be complex. The COPD assessment test (CAT) is a recently introduced simple, validated 8-item questionnaire designed to assess the impact of COPD symptoms on quality of life (QOL). We hypothesized that CAT could be used as a screening tool and outcome measure to assess QOL in COPD. 60 patients with COPD enrolled in 8 weeks outpatient PR between January 2011 and October 2011 were studied. Patients completed CAT score, chronic respiratory disease questionnaire (CRDQ), hospital anxiety and depression score (HAD) at baseline and at 8 weeks. Functional status (6 min walk test (SMWT) and incremental shuttle walk test (ISWT)), dyspnoea (MRCD) and body mass index (BMI) were measured.

52 COPD patients completed the 8 weeks PR and data were available for 37 patients with mean (SD) age 67.8 (9.2) yrs and FEV1 48.64 (20.79) % predicted. There was a significant difference in 6MWT (47.03m, ISWT (47.84m), MRCD (0.3 points), CRDQ (-3.02 points), anxiety (1.05 points), depression (0.6 points) and CAT (3.63 points) post PR. CAT correlated closely with CRDQ at baseline and following PR whereas there was good correlation only with ISWT, anxiety and depression post PR.

CAT is a simple and responsive measure that can also be utilized for screening patients with COPD for PR.

P1464
Developing a patient reported experience measure for COPD
Michael Roberts1, Sharon Andrew2, Susan Wall3, Matthew Hodson4, Robyn Hudson1,2,3
1Institute for Health Sciences Education, Barts and the London School of Medicine and Dentistry, Queen Mary University of London, United Kingdom; 2Department of Acute Care, Anglia Ruskin University, Chelmsford, United Kingdom; 3Department of Primary and Public Health, Anglia Ruskin University, Chelmsford, United Kingdom; 4Acute COPD Early Response Service, Homerton University Hospital NHS Foundation Trust, London, United Kingdom; 5North East London, North Central London & Essex (NCLES), Health Innovation Education Cluster (HEIC), London, United Kingdom

Introduction: The patient experience and patient outcomes are metrics for quality improvements in healthcare. There is currently available patient reported experience measure (PREM) for COPD.

Study Aim
The aim of the study is to create a valid and reliable PREM for patients with COPD.

Methods: Sixty four people with COPD across the community of North East London, North Central London and Essex and 19 with recent hospital experience were interviewed to capture their patient journey with COPD. Analysis of the interview data was by a two layer approach: content and then by affective (emotive or felt) responses.

Results: Eighteen different affective responses were described by patients and were grouped as positive, negative, or ambivalent. Positive responses included: hope, gratitude, comfort/reassured, acceptance, optimism, altruism, happy and respect. Negative responses included scared, anxiety, fear, frustration, worry, feeling depressed, denial and embarrassment. ‘Loss of motivation’ and control were contextual and could be either positive or negative. The community patient groups’ experience centred around five categories identified in the content analysis: 1) Journey to Diagnosis; 2) Smoking; 3) Usual Care; 4) exacerbation (‘flare-up’) and 5) ‘My Everyday Life’. The hospital patient experience was categorised as: 1) Going to Hospital; 2) On Arrival to Hospital; 3) On the Ward; 4) Discharge from hospital and 5) ‘Follow-up care’. Items on patients’ affective responses were generated from the categories to develop a PREM-COPD scale.

Conclusion: Completion of the testing of the PREM-COPD will result in a valid and reliable instrument to be used to measure self-defined important patient experiences when using healthcare services.

P1465
Correlations between disease-specific and general health status questionnaires in patients with COPD
Sarah Wife1, Dany J.A. Janssen2, Emiel F.M. Wouters3,4, Jos M. G. A. Schols1,2, Fris M.E. F. Wouters1, Robyn Hudson5
1Institute for Health Sciences Education, Barts and the London School of Medicine and Dentistry, Queen Mary University of London, United Kingdom; 2Department of Acute Care, Anglia Ruskin University, Chelmsford, United Kingdom; 3Department of Primary and Public Health, Anglia Ruskin University, Chelmsford, United Kingdom; 4Program Development Centre, CIRO+, Centre of Expertise for Chronic Organ Failure, Horn, Netherlands; 5CAPHRI, Maastricht University, Maastricht, Netherlands; 6Department of Elderly Care Medicine, Prognosis Thuis, Horn, Netherlands; 7Department of Respiratory Medicine, Maastricht University Medical Centre (MUMC+), Maastricht, Netherlands; 8Department of General Practice and Department of Health Services Research, Faculty of Health, Medicine and Life Sciences, CAPHRI, Maastricht University, Maastricht, Netherlands.

Purpose: Aims of this longitudinal study were to determine whether and to what extent a disease-specific health status questionnaire correlates with generic health status questionnaires at 4 different time points in patients with advanced COPD; and to determine the correlation between the changes in these questionnaires during 1-year follow-up.

Methods: Demographic and clinical characteristics were assessed in 105 outpatients with advanced COPD. Disease-specific health status (Saint George’s Respiratory Questionnaire, SGRQ) and generic health status (EuroQol-5-Dimensions, EQ-SD; Assessment of Quality of Life instrument, AQoL) were assessed at baseline, 4, 8 and 12 months. Correlations were determined between SGRQ and EQ-SD, AQoL and SF-36 scores and changes in these scores.

Results: 84 patients (80.0%) were included for analysis (61.9% male, age 65.7 (9.2) yrs, FEV1 34.2 (13.7) pred). SGRQ total score and EQ-SD index score, AQoL total score and SF-36 PCS Component Summary measure (SF-36 PCS) score were moderately to strongly correlated (r = -0.69 to -0.74). The direction of changes in SGRQ agreed slightly with the direction of changes in EQ-SD, AQoL and SF-36 PCS score (r = 0.09 to 0.30). The direction of changes in SGRQ agreed slightly with the direction of changes in EQ-SD, AQoL and SF-36 PCS score (r = 0.09 to 0.30). The direction of changes in SGRQ agreed slightly with the direction of changes in EQ-SD, AQoL and SF-36 PCS score (r = 0.09 to 0.30).

Conclusions: Disease-specific health status questionnaires and generic health status questionnaires should be used together to gain complete insight in health status changes and health status over time in patients with advanced COPD.

P1466
Psychiatric comorbidity in COPD and its determinants
Mohamed Zidan1, Rasha Daabis1, Heba Essam2
1Chest Diseases Department, Alexandria Faculty of Medicine, Alexandria, Egypt; 2Psychiatry and Neurology Department, Alexandria Faculty of Medicine, Alexandria, Egypt

Background: Depression and anxiety are prevalent in patients with chronic obstructive pulmonary disease (COPD); however, their etiology and relationship to the clinical features of COPD are not well understood.

Objectives: To evaluate the prevalence of psychiatric comorbidity (depression and anxiety) in COPD patients and to examine possible associations with demographic and clinical characteristics as well as health-related quality of life of these patients.

Design and methods: A total of 100 clinically stable COPD patients answered the St. George’s Respiratory Questionnaire (SGRQ) (assessing HRQoL), the Hospital Anxiety and Depression Scale (HADS), and the Brief Symptom Inventory (BSI) (measuring global level of distress). The study was cross-sectional.

Results: The prevalence of depression (58%) and anxiety (62%) was high among COPD patients. Depression and anxiety were more prevalent in females (64% and 70%, respectively) than males (55% and 50%, respectively, p=0.01). The prevalence of depression and anxiety was higher in patients with lower quality of life (p<0.05). The prevalence of depression and anxiety was also higher in patients with lower FEV1 (p<0.05). The prevalence of depression and anxiety was higher in patients with higher dyspnea (p<0.05). The prevalence of depression and anxiety was higher in patients with higher levels of airflow obstruction (p<0.05). The prevalence of depression and anxiety was higher in patients with higher levels of disease-related distress (p<0.05). Multivariate logistic regression analysis showed that lower quality of life, lower FEV1, higher dyspnea, and higher levels of disease-related distress were independently associated with depression and anxiety.
Health status and coping skills of carers of patients receiving home oxygen therapy for respiratory diseases

P1467

Impact of a pulmonary rehabilitation program on psychopathology of patients diagnosed with COPD

Anastasios Tselis1,2, Dismissios Bratis1,2, Argyro Pachi1, Emiel F.M. Wouters1,2,1, Department of Respiratory Medicine, Maastricht University Medical Centre+ (MUMC+), Maastricht, Netherlands; 2Program Development Centre, CIRO+. Centre of Expertise for Chronic Organ Failure, Horn, Netherlands; 3CAPRHI, Maastricht University, Maastricht, Netherlands

Background: Pulmonary rehabilitation (PR) improves physical and psychological symptoms in COPD patients. To date, it remains unknown whether coping styles change following comprehensive PR. This study assessed retrospectively coping styles in COPD patients before and after PR programme.

Methods: Coping styles were assessed in 303 COPD patients (53.1% men) before and after 36 PR sessions using the Utrecht Coping List (UCL). Additionally, lung function, St. George’s Respiratory Questionnaire (SGRQ), Hospital Anxiety and Depression Scale (HADS-A and HADS-D) and six-minute walking distance (6mWD) were recorded.

Results: Mean age was 62.4±8.4 yrs; FEV1; 47.9±19.5% pred; SGRQ total score 56.2±15.4 pts; 6mWD 441.6±112.2 m; HADS-A 7.4±4.2 pts and HADS-D 7.1±4.1 pts. Mean change scores following PR were SGRQ total -6.3±12.9 pts; HADS-A -1.7±3.6 pts; HADS-D -1.6±3.7 pts (all p<0.001) and 6mWD 28.9±51.2 m (p<0.05). The level of active confronting coping style increased (p<0.05), while the levels of avoidance (p<0.05), passive reaction pattern and reassuring thoughts coping styles decreased following PR (both p<0.001). Palliative reaction, seeking social support and expressing emotions coping styles did not change (p>0.05).

Conclusions: Comprehensive PR results in significant change in coping styles of COPD patients. Further studies are needed to evaluate the outcome of interventions actively targeting coping style domains.

P1468

Health status and coping skills of carers of patients receiving home oxygen therapy for respiratory diseases

Peter Frith1, Ruth Sladek1, Mary Luszcz1, Paul Cafarella2, Richard Woodman1, Tanja Effting2, Tina Jones1, Debra Rowett1, Paddy Phillips1, 1Faculty of Health Sciences, Flinders University, Bedford Park, SA, Australia; 2Respiratory Medicine, Repatriation General Hospital, Daw Park, SA, Australia

Introduction: Carer burden is well-documented for a range of chronic diseases. Burdens for those who care for people with chronic respiratory diseases (CRD) requiring home oxygen therapy (HOT) have not been reported but would be expected to have a similarly high burden.

Methods: Consecutive patient-carer dyads were enrolled over three years from 3 metropolitan hospitals if the patient was receiving HOT for a CRD. Baseline demographic observations and validated questionnaires were collected for Carers: health-related quality of life with Short Form-36 (SF36); Self-Esteem (SE) and Mastery (MS) Scales; Anticipated & Received Social Support (ARSS) and Carer Overload (CO) Scales, and Experiences and Impacts of Fatigue Scale (ICFS).

Results: All measures were completed by all 197 carers enrolled.: Score results are expressed as mean. SD. Most (68.5%) were female and married (88.3%). Their mean age (67.12 yrs) was significantly lower than their patient (74.5±9 yrs) (p<0.001). Carer SF-36 dimension scores were similar to normative values for their role. A lack of inclusion in patient treatment plans (7.9% ± 4.1 pts) and experiencing emotional overload (7.9; 2.5) were not unduly fatigued.

Conclusions: In this population, patients receiving HOT have carers (mostly marital partners) who generally perceive little undue burden, either physically or emotionally. Funded by an Australian NHMRC Project Grant.

P1469

Coping styles in patients with COPD before and after pulmonary rehabilitation

Ana Stanisikova1, Daisy J.A. Janssen1,2, Frits M.E. Franssen2, Martijn A. Spruit2, Emiel F.M. Wouters1,2,1, Department of Respiratory Medicine, Maastricht University Medical Centre+ (MUMC+), Maastricht, Netherlands; 2Program Development Centre, CIRO+. Centre of Expertise for Chronic Organ Failure, Horn, Netherlands; 3CAPRHI, Maastricht University, Maastricht, Netherlands

Methods: Coping styles were assessed in 303 COPD patients (53.1% men) before and after 36 PR sessions using the Utrecht Coping List (UCL). Additionally, lung function, St. George’s Respiratory Questionnaire (SGRQ), Hospital Anxiety and Depression Scale (HADS-A and HADS-D) and six-minute walking distance (6mWD) were recorded.

Results: Mean age was 62.4±8.4 yrs; FEV1; 47.9±19.5% pred; SGRQ total score 56.2±15.4 pts; 6mWD 441.6±112.2 m; HADS-A 7.4±4.2 pts and HADS-D 7.1±4.1 pts. Mean change scores following PR were SGRQ total -6.3±12.9 pts; HADS-A -1.7±3.6 pts; HADS-D -1.6±3.7 pts (all p<0.001) and 6mWD 28.9±51.2 m (p<0.05). The level of active confronting coping style increased (p<0.05), while the levels of avoidance (p<0.05), passive reaction pattern and reassuring thoughts coping styles decreased following PR (both p<0.001). Palliative reaction, seeking social support and expressing emotions coping styles did not change (p>0.05).

Conclusions: Comprehensive PR results in significant change in coping styles of COPD patients. Further studies are needed to evaluate the outcome of interventions actively targeting coping style domains.
P1471 A self-management programme of activity coping and education (SPACE) for COPD: patients' perspectives
Lindsay Angus1, Sarah Harrison1, Jo Williams1, Mick Steiner1, Mike Morgan2, Sally Singh1,2, NHR CLAHRC-LNR Pulmonary Rehabilitation Research Group, University Hospitals of Leicester NHS Trust, Leicester, United Kingdom; 1Health & Life Sciences, Coventry University, Coventry, United Kingdom

Introduction: We have developed a self-management programme ‘SPACE for COPD’ and as part of it's wider evaluation a nested qualitative study was conducted exploring patient’s perspectives of self-management before and after completing the programme.

Method: Semi-structured interviews were carried out with participants randomised to ‘SPACE for COPD’ prior to starting SPACE and 6 weeks later. Interviews were transcribed verbatim and thematic analysis was performed supported by NVivo (Version 8). A third researcher analysed a sub-group of interviews to ensure agreement over themes.

Results: Four main themes describe patient’s beliefs and expectations prior to starting ‘SPACE for COPD’ - role of self-management, barriers to exercise, facilitators to exercise, role of healthcare professionals. Patients had differing perspectives of self-management and were focussed on maintaining current activity levels. All desired more knowledge about COPD.

Analysis of follow-up interviews identified themes - changing perceptions, the impact of SPACE for COPD, barriers to exercise, facilitators to exercise, the manual as a motivator. The experience of using SPACE was positive and many described the motivating effect of the manual. Education was an important component of the intervention and self-management skills were demonstrated. At baseline pa-

patients anticipating positive results had been encouraged to initiate exercise and at follow-up interviews, active patients had almost doubled their exercise. The SPACE programme enabled patients to move from a more passive to an active lifestyle. Barriers to exercise identified at baseline remained at follow-up.

Conclusion: ‘SPACE for COPD’ has enabled patients to learn more about their condition and become more active.

P1472 Do illness beliefs predict depression and quality of life after pulmonary rehabilitation?
Natalie Zickler1, Winfried Rief1, Nikolai Stenzel1, Kerstin Kuhl1, Klaus Kern2, 1Department of Clinical Psychology, Philips University of Marburg, Germany; 2Department of Pneumology, Schön-Klinikum Berchtesgadener Land, Schönau am Königsee, Germany

Introduction: Several studies have demonstrated the relevance of illness beliefs for health-related outcomes in chronic diseases. Patients form beliefs about possible causes, controllability and consequences. These illness beliefs are linked to anxiety, distress and coping strategies.

Aim: Aim of this study was to examine the role of subjective illness beliefs in chronic obstructive pulmonary disease (COPD) patients on later depression and health-related quality of life after pulmonary rehabilitation (PR).

Methods: 96 COPD inpatients (GOLD III/IV; 56 female; M:61.3 yrs±8.7) were tested for measures such as exercise capacity (6MWD) and forced expiratory volume in one second (FEV1 % pred.) before and after PR. Additionally, assessment of illness beliefs (Illness Perception Questionnaire-Revised (IPQ-R)), health-related quality of life (HRQL-SF36) and depressive symptoms (Hospital Anxiety and Depression Scale) was included.

Results: Biomedical variables showed a significant improvement after PR: 6MWD 66.6±56m; p<0.01 (admission 294±163m) and FEV1 4.67±8.43% pred.; p<0.05 (baseline FEV1 33.52±12.53% pred.). Results of hierarchical multiple regression analyses, after controlling for demographic variables and illness severity, indicated that COPD patients’ beliefs about their illness before PR predicted depressive symptoms (β=0.46; p<0.001) and health-related quality of life (β=0.29; p<0.05) after treatment.

Conclusion: Patients’ illness beliefs before PR strongly influence later health-related quality of life and depression. COPD patients may benefit from interventions aimed at changing maladaptive illness beliefs to improve outcome of treatment.

P1473 Evolution of functional capacity and health status 2 years after a pulmonary rehabilitation programme
Vassilis Alexiou1, Dalila Ferreira1, Ana Martins1, Isabel Matias2, Flávia Santos1, Patrícia Rodrigues1, 1Unidade de Reabilitação Respiratória, Hospital Pulido Valente-Centro Hospitalar Lisboa Norte, Lisboa, Portugal; 2Serviço de Pneumologia, Hospital de Faro, EPE, Faro, Portugal

Background: Pulmonary rehabilitation programs (PRP) have been shown to improve exercise capacity and health status and to reduce dyspnoea and healthcare resource use, in patients (pts) with chronic lung disease. These benefits have been shown to last for up to 9 months, however appear to decline by 12 months.

Aim: Evaluate functional exercise capacity and health status after PRP in pts followed in "respiratory failure day hospital".

Methods: Retrospective study of pts integrated in a PRP. After completion of PRP, pts who kept a physically active lifestyle (at least 3 walks of 30 minutes/week) were included in the active group (AG). The others were considered as control group (CG). Were analyzed demographic characteristics, pulmonary pathology, six-minute walk test (6MWT) and St. George’s respiratory questionnaire (SGRQ).

Results: Thirty-two pts were included. 24 in the AG and 8 in the CG. 81% of the pts had chronic obstructive pulmonary disease, with mean FEV1 of 42%. Immediately after PRP, there was a significant improvement in the 6MWD and SGRQ global score, in both groups. After completion PRP, there was a decline in the mean 6MWD when evaluated at 6 months, 1 and 2 years as well as in SGRQ score. However, after 2 years, the AG continued to show an average improvement of 15 m in the 6MWD and at least 4 points in SGRQ. Comparing with pre-PR, although in the CG, there was a clinically significant decline in 6MWD (-34m) and SGRQ score (13 points).

Conclusion: Despite the progressive decrease of benefits after completing PRP in the AG, these are still significantly positive 2 years after training, which does not happen in the CG. Active lifestyle seems to contribute to maintain the benefits of PRP.

P1474 Health-related quality of life in hypercapnic COPD patients during an admission for acute exacerbation
Franzien Strulik1,2, Hubert Kersten1,2, Gerrie Bladder1, Nicolle Cobben1, Marianne Zijpen1, Jerryl Aan2, Peter Wijkstra1,2, 1Department of Pulmonary Diseases/Home Mechanical Ventilation, University of Groningen, University Medical Center Groningen, Netherlands; 2Department of Pulmonary Diseases/Home Mechanical Ventilation, Maastricht University Medical Center, Maastricht, Netherlands; 3Department of Intensive Care/Home Mechanical Ventilation, Erasmus MC, University Medical Center, Rotterdam, Netherlands; 4Department of Pulmonary Diseases, Amphia Hospital, Breda, Netherlands; 5GRIAC Research Institute, University of Groningen, University Medical Center Groningen, Netherlands

Introduction: Little is known about Health Related Quality of Life (HR-QoL) during an admission in COPD patients with chronic hypercapnic respiratory failure (CHRF) after an episode of ventilation for acute exacerbation. The Maugeri Respiratory Failure (MRF-28) and Severe Respiratory Insufficiency (SRI) questionnaires were specifically developed for patients with stable CHRF.

Methods: Hospitalized patients still hypercapnic > 48 hours after ending mechanical (invasive or non invasive) ventilation filled in the SRI, MRF-28 and Chronic Respiratory Questionnaire (CRQ), Groninger Activity Restriction Scale (GARS) and Hospital Anxiety and Depression Scale (HADS). Concurrent validity was evaluated by comparing both questionnaires with the CRQ. Construct validity was determined by assessing correlations between the different domains of the MRF-28, SRI, CRQ and both generic physical and psychological questionnaires measured during admission.

Results: N= 163 COPD patients (67 men; age 63 yrs; FEV1 0.67L±0.26). Total scores and all domains of MRF-28 and SRI correlated (p<0.01) with the CRQ and with its respective domains. Physical domains of all 3 questionnaires correlated strongly with the GARS (r=0.77, 0.74 and 0.52, respectively) and psychological domains of the SRI and CRQ with the HADS (r=0.79 and 0.76).

Conclusions: This study shows that SRI and MRF-28 are valid questionnaires in hospitalized patients with CHRF who are still hypercapnic 48 hours after ending mechanical ventilation for an acute COPD exacerbation. As the SRI is more elaborate with also a psychological domain we recommend this questionnaire in this specific group of severe COPD patients.

P1475 Health related quality of life and family burden in ALS patients. Differences over time
Eleni Periantoni1, Dimitra Siopi1, Kalliopi Christoforatou, Andreas Kosmas, Evaggelia Serasli, Vasileios Michailidis, Venetia Tsara. 2nd Pulmonary Clinic, GH G Papamikou, Thessaloniki, Greece

The aim of this study was to investigate the health related Quality of Life (HRQOL) in ALS patients and the burden on their families over time.

Methods/Patients: The SF-36 was used for HRQOL estimation in 15 ALS patients and the Family Burden Questionnaire for assessment of objective and subjective burden as well as adaptation strategies in 15 caregivers, with a 6 months interval.

Demographic characteristics of all subjects and patients ALSFES were recorded.

Results: Patients were aged (64±11.4 years) with ALSFES 27.6±8.4. All SF-36 domains had low scores except for pain and no statistical difference was observed after 6 months. Moderate/severe burden was objectively recognized by 42.9% of caregivers in employment, 60% in social activities, 40% in financial and 64.3% in household management, although the subjective burden was lower in most domains. After 6 months the objective and subjective burden was almost constant. A significant negative correlation was observed between caregivers’ subjective burden in social activities, employment, patient’s physical function (r=0.596, p=0.019) and social function=r=0.905, p=0.013) respectively. Caregivers’ adaptation strategies changed over time in passivity (50% vs. 33.3%), ambivalence (66.7% vs. 60%), guilt (66.7% vs. 80%), resignation (16.7% vs. 26.7%), hopefulness (33.3% vs. 53.3%) and in reorientation of their life (33% vs. 26.7%). Hopefulness was significantly correlated with patients’ social function (r=0.648, p<0.009).

Conclusion: ALS patients had low QoL. Families experienced a considerable
amount of burden in all examined domains but also rather negative feelings which seem to relinquish over time and re-organize their life to support the patient.