# A216

hospital mortality, length of stay, resource use and the TISS 28, a tool developed to assess workload of hospital staff for intensive care patients. Economic aspects were assessed using published average daily costs as approximation of item costs. **RESULTS:** A total of 62% of ARDS patients were male, median age of 55 years, and most patients with socioeconomic data were either working or in retirement. The main predisposing events for ARDS were sepsis (51%), pneumonia (35%) and trauma or surgery (28%). During the initial hospitalization 70 patients (36%) died. Overall length of hospital stay was  $31 \pm 41$  (mean  $\pm$  SD) days, with most days spent in the Intensive Care Unit (ICU;  $20 \pm 21$  days) and General Ward (8  $\pm$  22 days). On average patients were artificially ventilated for  $16 \pm 14$  days and intubated for  $16 \pm 15$  days. As assessed by the TISS 28, the average daily TISS score was  $33 \pm 10$ , which corresponds to a nursing time of 5.9 hours per day, and mainly related to basic activities  $(12 \pm 3)$ , ventilatory support  $(6 \pm 2)$  and cardio-vascular support  $(10 \pm 5)$ . Average overall hospital costs amount to 38,263 USD per patient. CONCLUSIONS: ARDS is a severe condition with a high mortality during inpatient treatment. Patients are treated mainly in the ICU requiring intensive artificial ventilation and high nursing workload, thereby resulting in high treatment cost.

PRS16

### CHRONIC OBSTRUCTIVE PULMONARY DISEASE: A COMPARISON OF ESTIMATES OF HEALTH-RELATED UTILITY (EQ5D) FROM SF36 DATA ALONE, THE SF36 PLUS LUNG FUNCTION DATA, AND THE SF36 PLUS THE ST. GEORGE'S RESPIRATORY QUESTIONNAIRE PLUS LUNG FUNCTION DATA

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**OBJECTIVES:** Chronic obstructive pulmonary disease (COPD) is a debilitating disease. The purpose of this study was to characterise the association between various clinical and quality of life outcome parameters typically used to characterise respiratory illnesses, and utility, as measured by the EQ5D<sub>index</sub>. METHODS: Data were abstracted from the Health Outcomes Data Repository (HODaR), an ongoing survey of patients in a UK region that included the EQ5D and the SF36 and the St. George's Respiratory Questionnaire (StGRQ). Detailed lung function data (LFD) were also available on the same patients for the 12-year period. Generalised linear models were used to estimate utility from predictor variables and goodness of fit was ascertained by the proportion of predictions lying within 0.03 utility units. RESULTS: Complete data were available on 444 subjects. A multinomial regression model mapped the clinical data from 315 (71%) of these subjects to EQ5D<sub>index</sub> and the resulting model was then applied to an independent set of 129 (29%) subjects. In the 315 subjects, 40%, 41% and 52% of predictions were within 0.03 units when using i) the SF36 alone, ii) the SF36 with LFD and iii) the SF36 with LFD and St. George's data, respectively. The same models applied to the test data set resulted in 33%, 33% and 29% of predictions within 0.03 units, respectively. For subjects with moderate to severe COPD (based on the GOLD classification) 49%, 53% and 79% of predictions were within 0.03 units, respectively. The corresponding figures for none or mild COPD (GOLD classification) were 47%, 49% and 86%, respectively. CONCLUSIONS: It was possible to reliably model the EQ5D<sub>index</sub> from the SF36 in respiratory disease; however, models that included the lung function data provided a marginal improvement, and the availability of the StGRQ conferred further improvement within the construction data set.

### Abstracts

## QUALITY OF LIFE IN COPD: HOW CAN WE MEASURE IT?

<u>Leiva  $F^1$ </u>, Garcia  $A^2$ , Prados  $D^1$ , Martos  $F^3$ , Sanchez de la Cuesta  $F^3$ <sup>1</sup>Servicio Andaluz de Salud, Málaga, Spain, Spain; <sup>2</sup>Universidad de Málaga, Málaga, Spain; <sup>3</sup>Universidad de Málaga, Málaga, Málaga, Spain **OBJECTIVES:** Analize the correlation among different questionnaires of quality of life and FEV1 in patients with COPD. METHODS: Cross-sectional study of 126 patients with COPD controlled in a primary care setting. Non-random sample. Patients were asked to fill in five questionnaires of quality of life (Euroquol, Coop-Wonca vignettes -CW-, Nottingham Health Profile -- NHP-, Saint George Respiratory Questionnaire -- SGRQand de Basal Dyspnoea Index -BDI-) and they also performed a forced spirometry. Other variables measured were: age, sex, study level, marital status, comorbidity, and prescribed treatment. RESULTS: A total of 88.9% males, age (mean + std) 68.5 + 8.5 years, 32% illiterates, 87% married; 70% received bronchodilator treatment; 74% had at least another comorbid condition; FEV 1 57.2% + 19.5%. Quality of life was moderately affected: Euroquol visual scale (6.2 + 2.1), C-W physical activity (3.6 + 0.9), C-W feelings (2.1 + 1.1), C-W daily activities (2.2 + 0.1), C-W social activities (1.8 + 1.3), C-W change in health status (2.5 + 0.8), C-W health status (3.5 + 0.9), C-W pain (2.5+ 1.3), C-W social support (2.0 + 1.0), C-W quality of life (2.4 + 0.7), NHP total (31.5.2 + 22.8), SGRQ (36.4 + 21.6), BDIfunctional impairment (2.9 + 0.9), BDI-magnitude of work (2.9)+ 0.9), BDI-magnitude of effort (2.9 + 0.9). Spearman correlation coefficient was statistically significant among all the QOL questionnaires excepted between Eurogol and BDI-magnitude of work. This correlation was mild-moderate (r < 0.5). FEV1 correlated with BDI, SGRQ, C-W physical activity, C-W daily activities, C-W health status (r = 0.41; r = 0.38, r = -0.19, r = -0.27, r = -0-21, respectively). Correlation was moderate-high among BDI, NHP, SGRQ, and COOP-Wonca Vignetes (r > 0.5). CON-CLUSIONS: Quality of life in patients with COPD is slightly correlated with functional status (specially specific respiratory questionnaires and several vignettes of COOP-WONCA questionnaire). There is a good correlation between generic and specific QOL questionnaires in patients with COPD.

PRS18

### DOES QUALITY OF LIFE OF COPD PATIENTS AS MEASURED BY THE GENERIC EQ-5D DIFFERENTIATE BETWEEN COPD SEVERITY STAGES?

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OBJECTIVE: To assess the discriminative properties of the EQ-5D with respect to COPD severity according to GOLD in a large multinational study. METHODS: Baseline EQ-5D Visual Analogue Scale (VAS) scores, EQ-5D utilities and SGRQ scores were obtained from a subset of patients in the UPLIFT trial, a 4-yr placebo-controlled trial of tiotropium in COPD patients aged ≥ 40, FEV1% pred < 70, FEV1/FVC ≤ 70% and ≥10 pack years of smoking to assess the rate of decline in FEV1. RESULTS: 1,235 patients (mean post bronchodilator FEV1% pred 48.77) from 13 countries completed the EQ-5D. EQ-5D VAS and utility scores differed significantly between GOLD stages 2, 3 and 4, also after correction for age, sex, smoking, BMI and comorbidity (p < 0.001). Mean (SD) EQ-5D VAS scores in GOLD stages 2, 3 and 4 were 68 (16), 62 (17) and 58 (16), respectively. Mean (SD) utilities were 0.79 (0.20) in GOLD 2, 0.75 (0.21) in GOLD 3 and 0.65 (0.23) in GOLD 4. Effect sizes for the difference in utilities between GOLD 3 and 4 were more than twice as high as for the difference between 2 and 3. Gender, post-