

a clinically important QoL improvement and a significantly greater improvement than those treated with NIV. However, the average quality of life of those treated with NIV did not decline by a clinically important amount (table 1).

Conclusions On average, patients hospitalised with AECOPD not requiring NIV experience an improvement in QoL following discharge and in those treated with NIV, QoL does not appear to decline. Most patients can expect their quality of life to be no worse than that reported at hospital discharge.

Reference

1. BTS The Use of Non-Invasive Ventilation in the management of patients with chronic obstructive pulmonary disease admitted to hospital with acute type II respiratory failure, 2008.

Abstract P82 Table 1 Mean change in quality of life during follow-up

Mean change in QoL (mean (SD)),†	Total population, n=176	Ventilated, n=80	Not ventilated, n=96	p value*
SGRQ Symptoms	-8.65 (19.5)	-4.80 (19.4)	-11.8 (19.2)	0.017
SGRQ Activity	1.79 (12.0)	3.22 (10.2)	0.60 (13.3)	0.15
SGRQ Impacts	-2.98 (15.4)	-0.09 (15.5)	-5.36 (14.9)	0.024
SGRQ Total	-2.47 (13.0)	0.05 (12.5)	-4.55 (13.2)	0.019

* comparison between ventilated and not ventilated groups; † lower values indicate improved quality of life, minimally important clinical difference = ± 4

P83 RELATIONS OF DIFFERENT QUALITY OF LIFE TOOLS TO SUBSEQUENT MORTALITY AND READMISSION OF PATIENTS SURVIVING HOSPITALISATION FOR ACUTE EXACERBATIONS OF COPD

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Background In patients hospitalised with acute exacerbations of COPD (AECOPD), quality of life (QoL) scores have been associated with subsequent mortality and readmission. We have investigated which of several QoL indices are most closely related to subsequent outcome.

Methods 183 patients with AECOPD surviving to hospital discharge were identified prospectively. Baseline clinical information and subsequent mortality and readmission over 12 months were recorded. QoL was assessed at discharge using: the St. George's Respiratory Questionnaire (SGRQ); the Chronic Respiratory Questionnaire (CRQ); the Hospital Anxiety and Depression Scale (HADS); and the Nottingham Extended Activities of Daily Living Scale (NEADL) and relationships between QoL and each outcome were analysed.

Abstract P83 Table 1 Quality of life at discharge and subsequent outcome

Quality of life measurement	Died, n=33	Survived, n=150	p value	Readmitted, n=130	Not readmitted, n=53	p value
SGRQ, mean (SD)†						
Symptoms	63.3 (20.8)	66.7 (19.7)	0.38	66.3 (19.5)	65.6 (20.8)	0.85
Activity	85.0 (12.8)	77.9 (16.3)	0.021	81.1 (14.8)	74.6 (17.8)	0.012
Impacts	55.7 (19.1)	48.9 (19.8)	0.071	51.4 (20.5)	47.1 (17.6)	0.19
Total	65.6 (15.2)	60.7 (17.1)	0.13	62.6 (17.6)	59.1 (14.9)	0.21
CRQ, median (IQR)‡						
Dyspnoea	2.8 (1.7 to 4.1)	2.8 (2.15 to 3.8)	0.56	2.8 (2 to 4)	2.8 (2 to 3.6)	0.46
Emotional function	2.3 (1.5 to 3)	2.4 (1.5 to 3.3)	0.83	3.4 (2.4 to 4.9)	3.6 (2.4 to 4.8)	0.90
Fatigue	3.7 (2.65 to 4.4)	3.4 (2.38 to 4.9)	0.69	2.3 (1.5 to 3)	2 (1.3 to 3.2)	0.56
Mastery	3 (2.15 to 4.15)	3.3 (2.2 to 4.5)	0.60	3 (2.3 to 4.3)	3.3 (1.8 to 4.9)	0.92
HADS, median (IQR)†						
Anxiety	8 (5 to 12.5)	8 (4 to 14)	0.93	8 (4 to 14)	9 (4.5 to 13)	0.83
Depression	8 (5 to 10.5)	6 (3 to 9)	0.082	6 (3 to 10)	6 (3 to 8)	0.37
NEADL, median (IQR)‡						
	28 (14 to 37)	38 (28 to 45)	<0.001	34 (24 to 42)	42 (33 to 51)	0.001

†Lower values indicate improved quality of life; ‡Higher values indicate improved quality of life. SGRQ – St George's Respiratory Questionnaire; CRQ – Chronic Respiratory Disease Questionnaire; HADS – Hospital Anxiety and Depression Scale; NEADL – Nottingham Extended Activity of Daily Living Scale.

Results Mean (SD) age was 69.0 (9.0) years and most patients: were female (58.5%); had severe airflow obstruction (mean (SD) FEV₁ 40.2 (17.3) % predicted); and were of normal weight (mean (SD) BMI 26.2 (7.0) kgm⁻²).

130 (71%) patients were readmitted during the year following discharge, with a median number of readmissions of 1 (IQR 0 to 3; range 0 to 15). The mortality rates at 3, 6 and 12 months following discharge were 6.6%, 10.4% and 18.0% respectively.

Self-reported measures of activity (SGRQ Activity and NEADL) were the only QoL indices significantly associated with both mortality and readmission. The relations of SGRQ Impacts and HADS Depression to mortality showed nonsignificant trends, but no other QoL domains were associated with readmission (table 1).

Conclusion Measures of self-reported activity at discharge were the most closely associated with both subsequent mortality and readmission and are likely to be the most useful of the QoL indices studied for predicting clinical outcome.

P84 UTILITY VALUES FOR COPD PATIENTS BASED ON THE EQ-5D QUESTIONNAIRE FROM THREE INDACATEROL PHASE III STUDIES

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Introduction and Objectives Chronic obstructive pulmonary disease (COPD) is characterised by airflow limitation that is not fully reversible and disabling symptoms such as breathlessness and COPD exacerbations, which have a negative impact on health-related quality of life (HRQoL). The indacaterol clinical trial programme (INVOLVE, INHANCE and INLIGHT-2 trials) collected HRQoL using the EuroQoL (EQ-5D) instrument, a commonly used tool to generate preference-based utilities involving five dimensions of a health state. As part of the clinical trial programme, the EQ-5D scores were converted to a utility index score using the UK National Health Survey (1) preference weights. The aim of this analysis was to report mean utilities of COPD patients by disease severity.

Methods A total of 11,066 observations from three trials were included in the analysis. Utility index scores were summarised by disease severity (GOLD 2008 FEV1-based) to yield a mean utility weight for each disease severity class. Disease severity was determined by using all available FEV1 readings. Since some trials had a longer duration contributing more records of EQ-5D and spirometry than others, it was necessary to correct for multiple observations; utility values that might have been derived from the shorter-duration trials were considered as 'missing' data. To impute