lated for paired observations between IBDQ and EQ-5D ($n = 3320$) and IBDQ and SF-6D ($n = 3230$). Least square regression models were investigated. RESULTS: The decile analysis demonstrated a consistent positive relationship with both utility scores. The correlations between the IBDQ and both the EQ-5D and SF-6D were statistically highly significant ($p < 0.0001$). The correlation coefficients for IBDQ with SF-6D and with EQ-5D were 0.85 and 0.76 respectively. A simple linear least square regression model of the relationship between EQ-5D and IBDQ explained 46% of the variance. A visual inspection of the residuals plot for the IBDQ/SF-6D model suggested some non-linearity and an improved non-linear model explained 72% of the variance. The comparison of the two sets of values demonstrated the commonly observed ceiling effect for the EQ-5D and floor effect for the SF-6D and provided added face validity for the transformations. CONCLUSIONS: Given the strength, consistency, and predictable characteristics of the relationships, the algorithms appear to provide valuable and valid methods to estimate utilities from IBDQ scores in trials of Crohn’s disease patients that have collected IBDQ scores but not utilities. The generalisability of this relationship to other groups of patients, for which the IBDQ is appropriate, should be investigated.

**UB2**

**QUANTIFYING THE RELATIONSHIP BETWEEN DISEASE SEVERITY, UTILITY AND HEALTH CARE RESOURCE USE IN CROHN’S DISEASE**

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**OBJECTIVES:** To assess the relationship between (i) disease severity and quality of life and (ii) disease severity and health care resource use, in patients with Crohn’s disease. **METHODS:** A prospective, cross-sectional, pharmacoeconomics study was conducted in five centres in Australia, with patients recruited by specialist gastroenterologists. Each patient completed questionnaires comprising demographic, disease and health care utilisation questions, together with the disease-specific Inflammatory Bowel Disease Questionnaire (IBDQ) and the Assessment of Quality of Life (AQoL) multi-attribute utility instrument. Disease severity was assessed by the gastroenterologist, using the Crohn’s Disease Activity Index (CDAI). **RESULTS:** Of the 154 patients recruited, 11 were excluded due to incomplete datasets or significant co-morbidity. The 143 patients analysed had a broad range of disease severity (CDAI 36-446), and included 23% with enterocutaneous fistulae. Stepwise regression analyses showed a negative relationship between disease severity and quality of life—irrespective of whether the latter was measured by the IBDQ ($p < 0.0001$) or the AQoL utility instrument ($p < 0.0001$). Age, gender and years since diagnosis did not significantly impact upon either of the quality of life outcomes. Health care resource utilisation increased with increasing CDAI ($p < 0.001$), with hospital admissions being the largest component cost. Even when patients with fistulae were excluded, the mean treatment cost for the most severe group (CDAI $> 220$) was AUD$7852 annually, excluding medications. Finally, despite their young age (mean = 38 yrs), 27% of patients received a Government benefit; with the majority of these stating that this was primarily due to their Crohn’s disease. **CONCLUSIONS:** More severe Crohn’s disease is associated with poor quality of life for patients and places considerable burden upon health care and social welfare resources.