same size. As a first step, regression analysis in the full sample was performed, where VAS assessment (0–100) of actual health state constituted the dependent variable and dichotomized (some problem/considerable problem) answers on the five dimensions the independent. After excluding outliers, (standardized [z]- residuals <−2.5 or >2.5), ten pairs of analyses were performed, excluding one part of the sample at the time. From the first analysis in each pair, outliers were excluded and the second analysis was performed. The coefficients gained in the second analysis were used to calculate Jackknife estimates of “true” coefficients. RESULTS: The model estimated constant of 89.7 and coefficients for each dimension assessed as having “some problem” (self care: −15.89; mobility: −10.30; usual activities: −9.52; depression: −7.87; pain/discomfort: −7.49) and for having “considerable problem” with pain/discomfort: −6.00; usual activities: −8.09; depression: −33.66 and on any of dimensions: −20.18. Interactions did not increase explanatory value of the analysis. CONCLUSIONS: Based on this model, the most important determinant of health status value (utility) for the Swedish population is depression, followed by problems with mobility and self-care. Pain/discomfort is the least important, regardless of the magnitude of the problems were assessed.

**PEN4**

**GENERIC AND DISEASE—SENSITIVE INSTRUMENTS SEEM TO MEASURE QUALITY OF LIFE IN A SIMILAR WAY: RESULTS OF THE EQ-5D AND QOL-AGHDA SURVEY IN THE SWEDISH POPULATION**

Koltowska-Haggstrom M1, Jonsson B2, Jasczon D2, Bingefors K3
1Pfizer Health AB, Stockholm, Sweden; 2Department of Women's and Children's Health, Uppsala University, Uppsala, Sweden; 3Department of Pharmacy, Uppsala University, Uppsala, Sweden

OBJECTIVES: To assess to what extent QoL results obtained through a generic instrument (EQ-5D) correlate with those captured by a disease-sensitive measure (Qol-Assessment of Growth Hormone Deficiency in Adults). METHODS: Data were collected through a mailing survey to a random sample (n = 2990) of the Swedish population. The questionnaire comprised EQ-5D and Qol-AGHDA. Qol-AGHDA is a 25-item measure that elicits yes/no responses to personal statements describing problems that characterize aspects of HrQoL in growth hormone deficiency. A high Qol-AGHDA score denotes poor HrQoL. EQ-5D is a well-known and widely recognized generic instrument. (EuroQol Group, 1990). The response rate was 65% and complete data on EQ-5D and Qol-AGHDA were obtained from 1663 (48.2% males; mean age 49.5, range 18–85 years) respondents. RESULTS: For EQ-5D dimensions: 11% respondents reported problems with mobility, 2% with self care, 9% usual activities, 46% pain/discomfort and 30% anxiety/depression. All results were weighted to represent the Swedish population profile with respect to age and gender. The mean EQ-5D VAS score was 80 (SD 17.3) and the mean Qol-AGHDA score was 3.9 (SD 4.8). There was a significant correlation between Qol-AGHDA scores and EQ-5D VAS (r = −0.56, p < 0.001). CONCLUSIONS: These results show that there is strong correlation between results generated by a disease-sensitive and a generic measure, and thus suggest that using generic instruments for QoL assessments in specific conditions yield reliable results that could be employed for pharmacoeconomic evaluations.

**PEN5**

**ESTIMATING THE QUALITY OF LIFE DEFICIT IN ADULT GROWTH HORMONE DEFICIENCY USING AN EQ-5D CALIBRATED INDEX**

Kind P1, Koltowska-Haggstrom M2
1University of York, York, UK; 2University of Uppsala, Uppsala, Sweden

OBJECTIVES: Measuring the cost-effectiveness of interventions for adult growth hormone deficiency (AGHD) requires estimates of the benefits. For the purposes of cost-utility analysis those benefits should be expressed as QALYs. Where primary outcomes data are collected using condition-sensitive measures of health-related quality of life (HrQoL) then recalibration is necessary. This paper reports the use of EQ-5D as a mechanism for converting such data into a useable QALY metric. METHODS: Qol-AGHDA is a 25-item questionnaire designed for use in AGHD. Yes/no responses are used to compute a summary index with a high score denoting poor HrQoL. A total of 1000 individuals randomly selected from the UK Population Preference Panel were sent a copy of Qol-AGHDA together with EQ-5D, a widely used generic measure of HrQoL calibrated in terms of TTO preference weights. Corresponding Qol-AGHDA data on patients (n = 836) was made available from UK KIMS (Pfizer International Metabolic Database). RESULTS: Completed survey forms were received from 882 individuals (57% female, median age 55). There was a high degree of correlation between EQ-5D and Qol-AGHDA summary score (r = 0.529, p < 0.001). Age/gender standardised mean EQ-5D index scores were computed for different categories of Qol-AGHDA score in the general population survey. These were used as a lookup table to provide estimates of EQ-5D for each patient in the KIMS dataset according to their age/gender and Qol-AGHDA score. Within-year QALY losses between the EQ-5D index for KIMS patients and corresponding EQ-5D for the general population. Using age-specific prevalence data together with the relevant population life expectancy tables, it was also possible to estimate potential lifetime QALY losses for GHD. CONCLUSIONS: AGHD patients record lower levels of HrQoL than the general population. This difference equates to a 0.15 QALY “loss” per annum and a lifetime loss across all GHD patients of some 40,000 QALYs.

**PEN6**

**EVALUATION OF THE ASSOCIATION BETWEEN HEIGHT AND HEALTH-RELATED UTILITY (EQ5Dindex)**

Waelh A1, Davies S2, Scanlon MF2, Currie CJ3
1Kiel University, Kiel, Germany; 2Cardiff University School of Medicine, Cardiff, UK

There is conflicting evidence about whether reduced height results in ill health. OBJECTIVE: The objective of this study was to determine if there exists an association between height and health-related utility (EQ5Dindex). METHODS: This was a retrospective study of two large health data sources that recorded height and other anthropomorphic parameters along with the EQ5Dindex. The first a national survey in the general population (English Health Survey, 1996), the second an ongoing study to characterise outcome in hospital treated patients (the Health Outcomes Data Repository [HODaR]). Both of these sources had large numbers of observations, thus dealing with the wide variability in factors leading to ill health potentially confounding or masking any association. RESULTS: There was a direct association between height and the EQ5Dindex. This association was logarithmic; the gradient was more marked in shorter subjects. The association was significant. On average, a 10cm increase in height resulted in 0.01 more EQ5Dindex units in men and 0.02 in women (standardized for age and ethnicity). This association appeared to be independent of confounding factors such as body mass, where shorter people had in all BMI categories lower height utility than taller people. An increase in height from the ninth centile to the eighth equated to a utility gain of 0.021 in men and 0.025 in women. A shift from the third centile to the second equated to a utility gain of 0.007 in men.