value generic HRQOL measures to utility scores. **OBJECTIVE:** The purpose of this study was to investigate the role of the SF-12 in predicting utility scores derived from Health Utility Index (HUI) and Visual Analogue. **METHOD:** Data were obtained from 6000 randomly selected managed care patients aged 25 to 95 years in the US. The SF-12, HUI-III and VAS were used in the survey to assess health status. The SF-12 items were used to predict HUI and VAS scores using least square regression, with disease and sociodemographic covariates. A second model entered each SF-12 item as categorized responses to avoid any arbitrary assumption about the differences in quality of life between different item response alternatives in the SF-12. Model heteroscedasticity was corrected by White variance-covariance matrix. A bounded 'Influence Estimation' procedure was also used to capture the effect of any extreme utility score. **RESULTS:** The SF-12 items and socio- demographic covariates accounted for 47% to 52% of the variations in the HUI-III and VAS. Age and items of the SF-12 were significantly ($P < 0.05$) associated with variations in utility scores. Model specification satisfied the RESET test and the linear model showed a favorable result compared to the log-log or semi-log model. **CONCLUSIONS:** This research provides support that an algorithm can be derived from the SF-12 to predict HUI and VAS, and thus utility scores. This is also consistent with the previous findings on predictive algorithms using the SF-36 and HUI to derive utility scores.

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AN ASSESSMENT OF COST-UTILITY OF PATIENTS FROM SF-36 SCORES USING THE BEAVER DAM HEALTH OUTCOMES STUDY METHOD

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Most studies in the area of quality of life have either a health profile such as the SF-36 scores or the Quality Adjusted Life Years (QALYs), as the outcome of interest. However in using one type of measure, valuable information that can be derived from the other type of measure is not available. **OBJECTIVES:** The purpose of this study was to derive QWB scores from the SF-36 scores and thereby calculate the QALY. **METHODS:** Patients with 3 specific medical conditions were selected from the Idaho Medicaid population. The subjects were randomly selected within each disease state and were sent a mail version of the SF-36 questionnaire. Using the regression equation developed in the Beaver Dam Health Outcomes Study, the QWB scores were calculated from the SF-36 scores. The QWB scores were then used in calculating the QALYs for the respondents. **RESULTS:** The response rate for the survey was 20%. Using an ANOVA analysis the study found the cost to produce one QALY was significantly different, with $P < 0.009$ for patients with different medical conditions. In the treatment of hypertensive patients, the cost to produce one QALY differed significantly ($P < 0.004$) for patients on different treatments. In the treatment of congestive heart failure patients, the cost to produce one QALY differed significantly ($P < 0.021$) for patients on different treatments. **CONCLUSIONS:** Patients with different medical conditions would need varying amounts of resources to achieve a comparable level of quality of life. This is also true for patients on different treatments. The findings would be an aid in allocation of resources between medical conditions and between treatments within a disease state.

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UTILITY ESTIMATION USING THE EQ-5D: EXPERT PANEL DATA AND ALTERNATIVE METHODS OF SYNTHESIS

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BACKGROUND: Expert panel data are often used to collect resource use, effectiveness, and quality of life data when alternative methods are impractical due to cost, timing, or for ethical reasons. **OBJECTIVE:** To compare several methods of deriving EQ-5D valuations from expert panel data. **METHODS:** A panel of 7 physicians provided EQ-5D valuations for 5 health states associated with atrial fibrillation: (State 1) Well in atrial fibrillation; (State 2) Minor disability in normal sinus rhythm; (State 3) Minor disability in atrial fibrillation; (State 4) Major disability in atrial fibrillation; (State 5) Major disability in normal sinus rhythm. Three methods of combination were used to estimate utilities: a) averaging calculated utility scores b) the modal dimension valuation c) the modal overall valuation. The resulting utility weights for each method were compared across health states, and on internal consistency (expected ordering of the health states as above). **RESULTS:** The valuations from the methods were similar within states for State 1 (0.85 to 0.86), State 3 (0.49 to 0.52) and State 5 (−0.07 to −0.09), but disparate utilities resulted for State 2 (0.52 to 0.66) and State 4 (−0.17 to 0.52). The averaging and modal dimension methods gave the expected ordering. The modal dimension method, however, estimated a very large step (i.e., 0.68) in utility between states of major disability. The averaging method gave results that were the most linear between states. **CONCLUSIONS:** Lack of a gold standard methodology makes synthesizing expert panel utility valuations problematic. In this instance, averaging gave results consistent with expected ordering and with no unexpected large drops in utility.