EQ-5D can be a valuable tool for studies on health outcomes and health inequalities in Polish population.

**IS THE EQ-5D QUESTIONNAIRE A PREDICTOR OF MORTALITY AND HOSPITALIZATION IN A GENERIC ELDERLY POPULATION?**

Paolini B1, Broccoli S1, Puccini A2, Cavrini G1

1 Health Authority of Bologna, Bologna, Italy; 2 University of Bologna, Bologna, Italy

**OBJECTIVES:** This study is aimed to evaluate the prognostic ability of EQ-5D questionnaire for hospitalization and mortality in an elderly Italian population. Although many studies show that Health-Related Quality of Life is a significant predictor of survival and morbidity, even after controlling for socio-demographic covariates and physical health status, to date there are few studies that prove the efficacy of EQ-5D questionnaire to predict mortality and hospitalization on general population.

**METHODS:** A retrospective cohort study on 5256 subjects aged 65 years or more, recruited in 2003 in Italy. EQ-5D Index and VAS, socio-demographics variables and some medical covariates (collected with a postal questionnaire) were used to predict hospitalization and mortality. Mortality and hospitalization data during the 12-months period after the completion of the questionnaire were obtained by record linkage with administrative mortality and discharge datasets. Hospitalization was defined as any hospital admission for natural causes (ICD-9 CM diagnosis codes: 0–799) that included at least one overnight stay in the hospital. Kaplan-Meier’s method in univariate analysis and Cox proportional hazards model with robust variance estimator to calculate the relative risks of mortality and first hospitalization were used. RESULTS: The EQ-5D questionnaire is a significant predictor of mortality. The curves estimated with Kaplan-Meier’s method show significant differences in survival time at one year (log rank test, p-value < 0.05) among individuals reporting different health status. The Cox proportional hazard model performed controlling for sex, age, BMI, physical activity and functional activity shows increasing risk for people perceiving worse health status. Hospitalization results are not yet available as the record linkage procedure between survey and discharge data is in progress. CONCLUSIONS: Evaluation of EQ-5D instrument as a mortality and morbidity predictor will make it a proxy variable of prognostic mortality score systems, including various laboratory parameters, seldom available in surveys not specifically designed for epidemiological study.

**PREDICTING HEALTH SERVICE UTILIZATION WITH THE PCS AND MCS OF THE SF-36**

Chen T1, Li L2

1 Zhejiang University, Hangzhou, China; 2 Zhejiang University, Hangzhou, Zhejiang, China

**OBJECTIVES:** We aim to predict outpatient consultation and inpatient consultation with two summary scores of the SF-36, physical component summary (PCS) and mental component summary (MCS).

**METHODS:** A retrospective cross-sectional design was carried out among primary care patients in mainland China. Health-related quality of life (HRQL) was measured by two summary score of the SF-36, PCS and MCS. Either the electronic or the paper version of validated Chinese SF-36 was used in the survey. Outpatient consultation was calculated by the monthly outpatient consultation rate and inpatient consultation was calculated by the annual hospitalization rate. Binary logistic regression for consultation and inpatient consultation was adopted in the analyses. A total of 733 valid subjects were eventually recruited in this study. RESULTS: For the monthly outpatient consultation rate, the odds ratio (OR) and 95% confidence interval (CI) were 0.919 (0.891, 0.947) for PCS and 0.995 (0.970, 1.021) for MCS. For the annual hospitalization rate, OR and 95% CI were 0.907 (0.884, 0.930) for PCS and 0.951 (0.927, 0.975) for MCS. CONCLUSIONS: PCS of the SF-36 can predict both outpatient consultation and inpatient consultation, whereas MCS of the SF-36 can predict inpatient consultation among primary care patients in mainland China.

**DO LIKERT-TYPE SCALE AND VISUAL ANALOGUE SCALE MEASURE THE SAME QUALITY OF LIFE?**

Hsiyo Y1, Yao G2

1 National Taiwan University, Taipei, Taiwan; 2 National Taiwan University, Taipei, Taiwan

**OBJECTIVES:** Likert-Type Scale and Visual Analogue Scale (VAS) are two common psychometric methodologies for measuring Quality of Life (QOL). However, these two scales are different from their constructions and rating methods. Besides, whether these different attributes will result in different psychometric properties for Likert-Type Scale and VAS on measuring QOL has not yet been examined. Thus in the present study, we compared Likert-Type Scale and VAS for measuring QOL in three aspects: 1) the degree of agreement between these two scales; 2) the evaluation of the Measurement Equivalence/Invariance (ME/I) over these two scales for the assessment of QOL; and 3) the investigation of construct validity of theoretical framework of QOL across these two scales.

**METHODS:** A total of 496 adult subjects were used in the current study (58.9% female, n = 292; 40.2% male, n = 200; mean age = 24.64 yrs). Each subject was asked to fill in the WHOQOL-BREF in two different visions, one was measured by Likert-type scale and the other was by VAS. Reliability analyses were applied by using Cronbach’s alpha coefficient and split-half coefficient. Besides, agreement analyses were applied by using Pearson’s r, Intraclass Correlation Coefficient (ICC), Lin’s Concordance Correlation Coefficient (CCC), and Bland-Altman Plot. Finally, a MTMM matrix and Confirmatory Factor Analysis (CFA) were used for examining the validity and ME/I across Likert-type Scale and VAS. RESULTS: The result indicated that both Likert-Type Scale and VAS were easy for subjects to answer, and possessed adequate reliability although reliability for VAS measures were consistently higher than Likert-Type measures. The agreements between these two scales were high, indicating adequate reproducibility of test scores across scales. In ME/I analyses, the result showed that VAS measures and Likert-Type measures did not reflect the same structure, furthermore, the VAS defined a better construct of QOL. CONCLUSIONS: VAS seemed to have better psychometric properties for measuring QOL over Likert-Type Scale. More discussion on the two measurement scales will be provided in our presentation.

**STATUS-QUO BIAS IN STATED-CHOICE STUDIES: IS IT REAL?**

Mohamed AF1, Hauber AB1, Johnson FR1, Meddis D1, Wagner S2

1 RTI Health Solutions, Research Triangle Park, NC, USA; 2 AstraZeneca, Wilmington, DE, USA

**OBJECTIVES:** Change is not costless. Thus, we conducted an experiment to determine if status-quo bias—bias toward current medication even when better alternatives are offered—exists in a stated-choice study among asthma patients who take
prescription combination maintenance medications.

METHODS: Asthma patients, 18 years and older, currently using combination maintenance therapy, completed an online survey instrument that included 10 stated-choice trade-off tasks. Subjects chose among pairs of constructed medication alternatives, each defined by level of agreement with five statements used to assess patient satisfaction with how quickly asthma maintenance medications begin to work plus monthly out-of-pocket cost, or their current medication. There were four choice questions with two alternatives (Medication A vs. Medication B) and six choice questions with three alternatives (Medication A vs. Medication B vs. Current Medication). Current medication was defined by each subject’s response to the five statements and $50 for monthly out-of-pocket cost. To test for bias introduced by including the current-medication alternative, two two-alternative choice questions were randomly repeated as three-alternative choice questions for each subject. RESULTS: A total of 509 subjects completed the survey. Responses demonstrated a high level of internal validity. On the three-alternative choice questions, subjects chose their current medication 55% of the time. Approximately 21% of subjects always chose their current medication on the three-alternative choice questions. On the two repeated choice questions, subjects switched from Medication A or Medication B to their current medication 56% of the time. In addition, the estimated importance of the current medication (status-quo) alternative was statistically significant. CONCLUSIONS: The results of this study indicate that the status quo bias may exist in stated-choice studies, especially with medications that patients have to take daily such as asthma maintenance medications. Stated-choice practitioners should include a current medication in choice surveys to control for this bias.

PMC29

PATIENT REPORTED OUTCOMES RESEARCH IN A REAL TIME PRACTICE NETWORK
Barr JT1, Schumacher GE1, Myers E2, Snetselaar L1
1Northeastern University, Boston, MA, USA; 2American Dietetic Association, Chicago, IL, USA

OBJECTIVES: To examine logistics and feasibility of conducting Patient-Reported Outcomes (PRO) research in a real time practice network. METHODS: To conduct a Summer 2007 methodological pilot study of the psychometric development of Nutrition Quality of Life (NQOL—a PRO survey), the 600 registered dietitians (RDs) of the Dietetics Practice Based Research Network of the American Dietetic Association were contacted through the network’s coordinating center. If RDs had outpatient, adult, dietetics practices, they were invited to participate and asked to meet study site criteria: obtain approval of supervisor, determine availability of Institutional Review Board (IRB) office to perform June 2007 review, and attend 1.5-day training session. Between July 1–24, RDs asked patients presenting for 1st or 2nd medical nutrition therapy (MNT) visits to participate. During that visit, RDs collected informed consents/demographics and conducted their MNT session; patients completed the 50-item NQOL prior to the session. For reliability studies, 50% of the enrollees were asked to complete a 2nd NQOL two days before the next visit; immediately before that MNT session, they were asked to complete a 3rd administration in the office. Weekly telephone focus groups were conducted with RDs to monitor pilot’s progress and obtain qualitative evaluations. RESULTS: 40 RDs expressed interest and met criteria; 10 from geographically/ethnically diverse sites were selected and attended the training. Four IRB approvals were delayed limiting enrollment. Overall 86 patients (range: 3–18/site) were enrolled with 12 refusals; only 58% of enrollees had a return visit. Of 49 patients in the test/retest arm, 53% completed the reliability protocol. RDs indicated that they would have to modify patient’s initial visit logistics to accommodate informed consent processes. CONCLUSIONS: PRO research is feasible in a real-time practice network; however, three pressure points were identified: lead time for IRB approval, time for informed consent, and low MNT return visit rate.

PMC30

THE IMPACT OF INITIAL DISEASE SEVERITY: AN APPLICATION TO EXISTING HEALTH ECONOMICS MODELS
Taylor MJ, Whitehead S, Stelemekas M
University of York, York, UK

OBJECTIVES: Current economic evaluation methods use QALYs as a measure of health outcome. Under such methods, the value of a patient moving from a health state with utility 0.8 to full health (i.e. 1.0) is considered equivalent to a change from 0.3 to 0.5, since both show ‘improvements’ of 0.2. However, recent research has found that the initial state impacts on the patient’s own valuation of the health change, and based on this concept, alternative valuations of health changes have been elicited. This study applied these valuations to a range of existing economic models to determine the effect on the cost-effectiveness results. METHODS: Previous research has enabled utility weights to be derived which incorporate preferences towards patients’ initial state of health. A range of existing models/analyses were updated from the use of conventional utility weights, to the inclusion of the updated utility weights. The impact on the total quality of life benefits and, thus, on cost-effectiveness results, was investigated. RESULTS: When applying the updated utility weights, this study identified interventions that treated more severe diseases to be more cost-effective than when the conventional utility weights were used. Conversely, interventions that treated less severe diseases were found to be less cost-effective when the updated utility weights were used compared to conventional utility weights. CONCLUSIONS: The use of utility weights which take account of individuals’ preferences towards severity of initial health state impact on the cost-effectiveness of interventions; treatments for more severe illnesses indicated an improvement in terms of cost-effectiveness when such weights were used.

PMC31

VALUING EQ-5D WITH TIME TRADE-OFF FOR THE POLISH POPULATION
Golicki D1, Jakubczyk M1, Niewada M1, Wrona W1, Busschbach JJ2, Jablonska A1, Jawoszek A1, Mozewska O1, Kaminski B1, Hermanowski T1
1Medical University of Warsaw, Warsaw, Poland; 2Erasmus Medical Center, Rotterdam, The Netherlands

BACKGROUND: Currently there are no EQ-5D value set for Poland nor for any other Central or Eastern European country. OBJECTIVES: To elicit EQ-5D Polish value set using time trade-off (TTO) method. METHODS: Face-to-face interviews with visitors of patients in seven medical centers in Warsaw, Skirniwicze and Pulawy were performed by trained interviewers. Quota sampling was used to achieve a sample that was representative of the Polish population with regard to age and gender. Modified MVH protocol was used—each respondent ranking 10 states, valuing 4 states on VAS scale and 23 in TTO exercise. A