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patients with T2DM in the UK had significantly lower ($p < 0.0001$) physical summary scores than other EU countries. Patients experiencing depression symptoms were more likely to visit the ER [OR = 1.74; 95% CI:(1.35, 2.23); $p < 0.0001$], be hospitalized [OR = 1.43; 95% CI:(1.11, 1.84); $p < 0.005$] and had more physician visits in the last six months ($\beta = 5.37$, $p < 0.0001$). Patients in Spain had significantly more provider visits ($p < 0.05$) and ER visits ($p < 0.0001$) than UK patients, while patients in France were hospitalized more often than UK patients ($p < 0.05$). **CONCLUSIONS:** Comorbid depression in patients with T2DM greatly decreases physical and mental summary scores of the SF-12, and increases resource use. Further research is needed to clarify associations between the two conditions, including geographical and cultural influences on health outcomes in this cohort.

PODIUM SESSION I: UTILITY MEASUREMENTS STUDIES

UT1

VALUING EQ-5D USING TIME TRADE-OFF IN FRANCE

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OBJECTIVES: The EQ-5D questionnaire has been developed and validated in France but the utility function has not been elicited. The main objective of the present study is to provide a French value-set for the EQ-5D health states using the Time Trade-Off (TTO) method. **METHODS:** A total of 452 respondents aged over 18 were recruited for a French valuation study. They were chose to be representative of the French population with regard to age, gender and socio-professional group. Twenty four EQ-5D health states were selected to be directly valued. Three groups of 300 respondents were set up and each group valued 17 of 24 EQ-5D health states using the time trade-off (TTO) method. The TTO valuations were linearly transformed to lie on the interval [–1;1]. Exclusion criteria used were the same as in other valuation studies. We also investigated logical inconsistencies. Several alternative models specifications were investigated to estimate the values of the remaining non direct valuated EuroQol health states. The analysis was conducted at an individual level to make the maximum use of the available data and we estimated mixed models with random intercept. Models were compared using different goodness of fit measures: the Akaike's information criterion (AIC), the Mean Absolute Error (MAE) and the Pearson correlation between the observed and the predicted value. **RESULTS:** After exclusion, 443 respondents take part in the study. Fifty three respondents (12%) present more than 10 logical inconsistencies in their responses. The model presenting the smaller Akaike's information criterion include the same variables as the N3-model used in UK. This model yield a good fit for the TTO data with a mean absolute error of 0.04 and a Pearson correlation coefficient of 0.99. **CONCLUSIONS:** This study will provide the first EQ-5D value set for France.

UT2

PARADIGM LOST: A CONCEPTUAL AND EMPIRICAL OBITUARY CHRONICLING THE DEMISE OF CARDINAL UTILITY MEASUREMENTNT

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OBJECTIVES: The choice of quality-adjustment factor, as stipulated by health economics and as required by regulatory agencies, dictates that the "Q" in QALY should be a utility (choice-based preference) measure. This requirement has led to a state of chaos in which multiple utility elicitation methods are permitted and in which no test of their relative performance has been documented. This paper reflects the current status of utility measurement as applied in QALY calculations and conclusively demonstrates its fallibility. **METHODS:** The paper is divided into two parts, the first of which rehearses the basic measurement requirements for any viable metric used as a quality-adjustment scalar and deals with the impossibility of permitting mutually incompatible utility elicitation procedures. It concludes with a novel test of uniqueness that can be applied to competing sets of utility weights. The second part is based on empirical evidence generated in the MVH study in which both TTO and VAS ratings were used to calibrate EQ-5D for use in economic evaluation conducted in the UK (n = 3395). Analysis compares the within-respondent ordinal preferences captured through VAS rating with those inferred by TTO utilities. **RESULTS:** Nearly 50% of respondents had a Spearmans rho below 0.8, corresponding to a mean difference in rank of around 4 between VAS and TTO scores. Twenty-six percent of respondents assigned a utility of 1.0 (full health) to 3 or more health states with differing degrees of dysfunction. More than 40% of respondents fail to distinguish between full health and the 5 mildest health states. **CONCLUSIONS:** The demonstrable frailty of utility elicitation methods is well-known. Research scientists in general and health economists in particular should be wary of encouraging others to accept QALY metrics of this type. The continued requirement for utility measures in social decision-making compromises both the science and the scientists who tolerate its misuse.

UT3

HEALTHY-DAYS TIME EQUIVALENTS FOR OUTCOMES OF ACUTE ROTAVIRUS INFECTIONS

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Conventional standard-gamble and time-tradeoff methods may be inappropriate for eliciting preferences for acute, nonfatal health states because both require subjects to evaluate tradeoffs between a morbid health state and death. **OBJECTIVES:** This study demonstrates the use of conjoint analysis with a discrete-choice experimental design to obtain estimates of healthy-days equivalents (HDEs) for clinically relevant durations and severities for rotavirus gastroenteritis, an acute diarrheal illness common in young children. **METHODS:** Parents of children ≤5 years of age completed a web-enabled survey instrument that presented a series of trade-off questions to elicit judgments about the relative seriousness of pairs of hypothetical gastrointestinal illnesses. Each illness was defined by seven attributes: diarrhea, vomiting, fever, seizure, behavioral changes, dehydration, and illness duration. A random-parameters ordered-probit model was developed to estimate the preference weights for each symptom-severity level. **RESULTS:** A total of 229 parents completed the survey. Subjects judged seizure to be the worst rotavirus symptom, followed by dehydration, vomiting, fever, and diarrhea. Parents rated behavioral changes as the least bothersome symptom of rotavirus. Estimated preference weights indicate improvements in each symptom relative to its worst level. As the duration of the illness increases, so does the decrement in HDEs. The decreases in time equivalents for 3-day and 7-day illnesses with seizure are 0.7 and 2.3 HDEs, respectively, while the corresponding decreases for illnesses with diarrhea are 0.3 and 1.0 HDE, respectively. These results imply that seizure is subjectively about 2.3 times more important than nine loose bowel movements per day. **CONCLUSIONS:** Results indicate that the trade-off data support valid estimates of HDEs for acute conditions ranging in duration from one day to two weeks without requiring subjects to make implausible comparisons between acute, self-limiting conditions and mortality risks or longevity reductions.The results can be used for cost-effectiveness analysis in place of conventional time-equivalents.

UT4

DEVELOPING AND PRELIMINARY TESTING OF AN OFFICIAL FIVE-LEVEL VERSION OF EQ-5D

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OBJECTIVES: To select and test severity labels for a new, five-level version of the EQ-5D. **METHODS:** The EQ-5D is a generic instrument for describing and valuing health. Each dimension (Mobility, Self-Care, Usual activities, Pain/discomfort, Anxiety/depression) is currently measured on 3 levels of health (no problems, some problems, extreme problems). A EuroQol Group task force was established to find ways of improving the instrument's sensitivity to small and medium changes in health and reducing the ceiling effect. The study used a two-stage approach: i) response scaling was performed in the UK and Spain to explore the severity represented by potential new labels that could be used as additional or replacement levels within each dimension. Labels as close as possible to the 25th, 50th and 75th centiles were selected for further testing; ii) the face and content validity of alternative 5-level versions were investigated in 8 focus groups of healthy participants and patients in each country. Hypothetical health states based on a revised labeling system were also reviewed. **RESULTS:** Rank ordering of severity labels was similar across dimensions and countries. Selecting labels at approximately the 25th, 50th and 75th centiles produced two alternative 5-level versions. Focus group work showed a slight preference for the wording 'slight-moderate-severe' problems, with anchors of 'no problems' and 'unable to do' in the EQ-5D functional dimensions. Similar wording was used in the Pain/discomfort and Anxiety/depression dimensions. Focus group comments indicated that, although not always colloquial, the magnitude of problems represented by the new labels was well understood. Comments on hypothetical health states referred more to their internal consistency than to the labels, which were again well understood. **CONCLUSIONS:** This study represents the first step towards developing an official 5-level version of the EQ-5D. Testing in patient settings and development of the corresponding health state valuations is required.

PODIUM SESSION II: CANCER STUDIES II

CN5

COSTS OFT QALYS GAINED IN A PALLIATIVE CARE UNIT (PCU) IN GERMANY

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The concept of QALYs has been introduced to compare therapies in widely separated areas of medicine. Many of the more recent developments in oncology are considered too costly in terms of prices for an additional QALY gained. Here we try to apply the concept to PCU-care in Germany, an area, with a high proportion of oncology