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 (1.33, 2.23); p < 0.0001], be hospitalized [OR = 1.43; 95% CI (1.11, 1.84); p < 0.003] and had more physician visits in the last six months (r = 0.57, 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 SEIQoL, 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 II: UTILIZATION MEASUREMENT STUDIES

UT1

VALUING EQ-5D USING TIME TRADE-OFF IN FRANCE
Chevalier J1, De Pouvourville G 2
Institut Gustave Roussy, Villejuif Cedex, France, 1ESSEC Business School, Cergy Pontoise Cedex, France

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 chosen 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 [0,1]. Exclusion criteria used were the same as in other valuation studies. We also investigated logical inconsistencies. Several alternative model specifications were investigated to estimate the values of the remaining non directly valued EuroQol health states. The analysis was conducted at an individual level to make the maximum use of the data and to estimate random models with normally distributed coefficients. 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 values. RESULTS: After exclusion, 443 respondents take part in the study. Fifty three respondents (12%) present more than 10 missing data points and we estimated them with a multiple imputation method. The results indicate a significant decrease in utility as the number of dimensions with problems increases. Conclusions: A new utility function was estimated for France. 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 seizures 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 method validate the EuroQol 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 morbidities or longevity reductions. The results can be used for cost-effectiveness analysis in place of conventional time-equivalents.

UT2

PARADIGM LOST: A CONCEPTUAL AND EMPIRICAL OBITUARY CHRONICLING THE DEMISE OF CARDINAL UTILITY MEASUREMENT
Kind P
University of York, York, UK

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 which demonstrates the use of conjoint analysis with a discrete-choice experimental design to obtain estimates of health-related quality-of-life (HQL) 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-based questionnaire in France, Spain and Denmark with a high proportion of oncology.

CNS COSTS OFF QALYS GAINED IN A PALLIATIVE CARE UNIT (PCU) IN GERMANY
Schulzer U1, Schubert BT2, Haag C
1University of Dresden, Dresden, Saxony, Germany, 2St. Joseph Stift Hospital, Dresden, Saxony, Germany

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.

UT3

HEALTHY-DAYS TIME EQUIVALENTS FOR OUTCOMES OF ACUTE ROTAVIRUS INFECTIONS
Mudhar AA1, Johnson FK1, Cook JK2, Mohamed AF3, Goncalves JF4, Walter E1
1Wright Health Solutions, Research Triangle Park, NC, USA, 2Merck and Co Inc, North Wales, PA, USA, 3Duke University, Durham, NC, USA

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 morbidity 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-based questionnaire in France, Spain and Denmark with a high proportion of oncology.

UT4

DEVELOPING AND PRELIMINARY TESTING OF AN OFFICIAL FIVE-LEVEL VERSION OF EQ-5D
Herdman M1, Gudex C2, Lloyd A3, Jansen B4, Kind P5, Parkin D6, Bonsel GJ7, Badia X8
1Health Consultancy & Research, Mataró, Barcelona, Spain, 2Odense University Hospital, Odense, Denmark, 3Oxford Outcomes Ltd, Oxford, Oxfordshire, UK, 4EuroQol Group Executive Office, Rotterdam, The Netherlands, 5University of York, York, UK, 6City University, London, UK, 7Euraema Medical Centre, Rotterdam, n/a, The Netherlands, 8IMS Health, Barcelona, Spain

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 severities 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.