month p = 0.022, 9th month p = 0.008). **CONCLUSIONS:** Each measure evaluates a different aspect of overall compliance. MPR methodology, which measures the degree of prescription-filling during treatment and does not factor in duration of treatment, may be considered a surrogate measure for adherence. ELPTs are a pure measure of persistence, useful even in sub-optimally adherent patients. PDCs are a composite measure of adherence and persistence where the degree of prescription-filling is reported quarterly in an attempt to describe patient behavior longitudinally.

MC2

CORRECTING FOR COMPENSATING MECHANISMS RELATED TO PRODUCTIVITY COSTS IN ECONOMIC EVALUATIONS OF HEALTH CARE PROGRAMS

Severens JL[1], Koopmanschap MA[2], Meerding W[2]
[1]Maastricht University, Maastricht, The Netherlands; [2]Erasmus Medical Centre, Rotterdam, The Netherlands

OBJECTIVES: In economic evaluation of health care programmes, productivity costs are often overestimated, because compensation of lost work is neglected. This study tested the conclusions of a small previous study (Severens et al. 1998) which indicated that short-term work absence often is compensated for during normal work hours, thereby leading to limited productivity costs. **METHODS:** We studied work absence and compensation of lost work in five different patient populations (psoriasis, low back pain, chronic fatigue syndrome, rheumatoid arthritis and persistent dyspepsia) and one employee population (workers of a pharmaceutical company). **RESULTS:** this study showed that only About 70–75% of lost work hours were compensated by the absentee or colleagues during normal working hours. Between 25–30% of the productivity costs as calculated by the classical method remained, if productivity costs were only calculated when extra efforts were needed. For 1 day absence only in 17–19% of the cases work absence resulted in productivity costs were relevant, while this was 35%–39% for absence of two weeks or longer. Measurement of the compensating mechanisms seemed to be valid, because of the large since the agreement between the opinion of supervisors and their employees whether compensation takes productivity costs. The measurement of compensating mechanisms, seemed to be valid. Also, for different occupations different compensating mechanisms were reported in the expected direction. In our study populations, Compensating mechanisms differed with occupational characteristics, like part-time work, managerial work and shift work. For example, higher educated workers more often compensate for lost work themselves. **CONCLUSIONS:** Including compensation reduces productivity costs due to absence from work to a considerable extent. Nevertheless, we advise researchers to take a broad range for correction, because for some compensation mechanisms the consequences for productivity costs may vary between settings.

MC3

QALYS LACK QUALITY IN PAEDIATRIC CARE: A CRITICAL REVIEW OF PUBLISHED COST-UTILITY STUDIES IN CHILD HEALTH

Griebsch I, Brown J
University of Bristol, Bristol, UK

OBJECTIVES: To critically appraise published cost-utility analyses of interventions in child and adolescent health care in terms of the methods used to estimate quality-adjusted life years (QALYs). **METHODS:** A comprehensive search of computerised databases (e.g. Medline, Embase) was undertaken to identify cost-utility studies published prior to April 2004. Studies were categorised according to the methods used to describe health status, the valuation technique and source of preferences. The methods were compared with the guidelines of the U.S. Panel on Cost-effectiveness in Health and Medicine and the National Institute for Clinical Excellence (NICE) in England and Wales which recommend the use of a generic health status classification system (e.g. HUI, EQ-5D), a choice-based valuation method (e.g. SG or TTO), and preferences of the general population. **RESULTS:** Fifty-four studies were reviewed, of which 34 (63%) were published in the latter 5 years. A generic health status classification instrument was used in 22 (35%) cases; the remainder developed study specific health state descriptions or elicited preferences directly from patients or proxies. In 7 cases (11%), sources were unclear. Utility values were elicited by using choice-based techniques in 28 cases (42%), either as tariffs for health status classification instruments (17 cases) or by directly valuing health state descriptions or patient health (11 cases). Community preferences were only used in 23 cases (37%). Four studies aggregated QALYs for mother/child or family/child pairs without giving any theoretical justification. **CONCLUSIONS:** Although the number of cost utility studies is increasing exponentially, the majority of studies did not adhere to standard recommendations with little improvement over time. Further research is warranted to develop appropriate methods to measure and value child health benefits within the QALY framework. In the interim, an expert panel is needed to provide guidance for cost-utility analysis of paediatric interventions to make studies more consistent.

MC4

FLEXIBILITY AND TRANSPARENCY OF BAYESIAN NETWORKS: MODELING THE ECONOMIC IMPACT OF DRUG-ELUTING CORONARY STENTS

Marchetti M, Barosi G
IRCCS Policlinico San Matteo, Pavia, Italy

OBJECTIVE: Drug-eluting stents (DES) elute drugs that prevent coronary restenosis after a percutaneous revascularization. The cost of DES is quite high therefore imposing a relevant burden to hospital and NHS budgets. Patients selection and reimbursement policies need to be settled according to a large amount of clinical (number and anatomy of revascularized vessels, diabetes, unstable angina), economic (local cost of devices and procedures) and organizational variables (adoption rate of different types of DES and BMS, number of stent/procedure, shift from surgical to DES revascularization). The resulting decision models are usually blamed for high complexity but poor completeness and low transparency. **METHODS:** Bayesian networks (BN) are close acyclic graphs displaying value nodes, probability nodes and, possibly, decision nodes (influence diagrams). We explored the application of BN to policy selection for DES use, in both the NHS and the hospital perspective. Three commercial softwares were compared: Netica, TreeAgePro, HuginLite. Beta and gamma distributions were used to represent the probability of conditions/events and unit costs, respectively. Log-normal distributions were used to model relative risks. **RESULTS:** BN modeling of the DES problem was feasible with the three softwares and required 35–40 nodes. We tested five types of restriction policies to DES use, anchored to: 1) the presence of diabetes; 2) the number of vessels to be revascularized; 3) the overall risk of restenosis; 4) a cutoff adoption rate of DES; and 5) a cutoff budget. We could verify that flexibility, directness and transparency varied among the softwares. Also software modalities to manage uncertainty and to report the results had different appeal. **CONCLUSIONS:** BN allows rapid and transparent estimations of the local/specific economic impact of several differ-

ent cost-containment policies, i.e. restriction for use of DES, along with the uncertainty surrounding the estimate.

QUALITY OF LIFE I

AGREEMENT BETWEEN PATIENTS' AND CLINICIANS'-REPORTED OUTCOMES IN LIPODYSTROPHY (HIV/AIDS)

Duracinsky M[1], Acquadro C[2], Wu A[3], Chassany O[4]
[1]Hopital de Bicetre, Le Kremlin-Bicetre, France; [2]MAPI Research Institute, Lyon, France; [3]Johns Hopkins University, Baltimore, MD, USA; [4]Assistance Publique—Hopitaux de Paris, Paris, France

OBJECTIVES: Lipodystrophy may greatly impairs quality of life (QoL). Nevertheless, the recognition of the scientific value of QoL and more broadly the patient's perspective in evaluating therapies is questioned. It may be useful to quantify the added value of the patient's perspective, using correlations between patient-reported outcomes (PRO's) and clinician-reported and biological outcomes. **METHODS:** We performed a cross-sectional survey in 143 HIV French outpatients with lipodystrophy. Clinical and demographic data were collected. Patients completed a new specific lipodystrophy questionnaire "Assessment of Body Change and Distress" (ABCD), consisting of three parts: signs of lipodystrophy (six items), global satisfaction (n = 1) and 20 items evaluating QoL. An HIV specific (MOS-HIV) and generic (SF-12) QoL questionnaires were also filled-in. **RESULTS:** Mean age was 43 ± 10 yrs (71% of men), and mean duration of HAART was 4.5 ± 1.7 yrs. ABCD QoL score is weakly or no associated with viral load (r = 0.03), CD4 count (r = 0.13) and CDC classification (p = NS). Its correlation with the clinician's report of number of sites of lipodystrophy is weak (r = 0.17). Correlations between different PRO's are logically higher. ABCD QoL score is more correlated with the patient's report of number of sites of lipodystrophy (r = 0.39) and with satisfaction (r = 0.58). ABCD QoL score is correlated with health distress and social dimensions of the MOS-HIV (r > 0.6) and with mental component of the SF-12 (r = 0.65), but not with physical dimensions of these questionnaires (r < 0.2). **CONCLUSIONS:** PRO's are weakly correlated with biological markers, and although overlapping, each one of PRO's measures a distinct concept. Clinicians cannot infer the QoL of their patients neither from a viral load nor from a clinical exam. The patient's perspective is essential in medical decision making and so it is with lipodystrophy.

THE HEALTH RELATED QUALITY OF LIFE IN PARKINSON'S DISEASE IN GERMANY

Spottke EA[1], Peter H[2], Reuther M[1], Campenhausen S[1], Berger K[3], Machat O[4], Koehne-Volland R[4], Oertel WH[2], Dodel R[1]
[1]Friedrich-Wilhelms-University, Bonn, Germany; [2]Philipps University, Marburg, Germany; [3]MERG Medical Economics Research Group, München, Germany; [4]Metronomia, Munich, Germany

OBJECTIVES: To prospectively evaluate the health-related quality of life of patients with Parkinson's disease (PD) in Germany over a 12 months observation period. **METHODS:** The study included 145 patients with PD (mean age: 67.3 ± 9.6 years) in Germany. Patients were asked to complete the EQ-5D, Par-kinson's Disease Quality of life questionnaire (PDQL). and the Par-kinson's Disease questionnaire-39 (PDQ-39). In addition, the occurrence of depression and dementia were investigated using the Beck's Depression Inventory (BDI) and the Mini-Mental-State-Examination (MMSE). Evaluations were performed at baseline, three, six and 12 months. Disease severity was documented by the Unified Parkinson's Disease Rating Scale (UPDRS) and the Hoehn & Yahr (HY) scale. **RESULTS:** At baseline mean VAS-value was 59.9 ± 18.0 and mean EQ-5D index was 0.74 ± 0.25. HRQoL of patients suffering from dyskinesias (47.5) were lower than in patients without dyskinesias (61.7). In HY-stage I mean VAS was 72.8 ± 16.9 vs. HY V 45.7 ± 10.6. At 12 months the overall PDQ-39 score declined slightly from baseline 29.4 ± 17.4 (n = 137) to 25.6 ± 16.2 (n = 128). Similar results were found for the PDQL overall score (118.6 ± 27.5 (n = 87) compared to 122.8 ± 26.1 (n = 72)) and the EQ-5D index (0.74 ± 0.25 (n = 115) compared to 0.74 ± 0.25 (n = 115). No significant changes were found for the clinical scores (UPDRS and Hoehn & Yahr scale) and the psychometric questionnaires (MMSE and BDI). **CONCLUSIONS:** The PDQ-39, PDQL and the EQ-5D are instruments delivering stable test results for PD patients. There is no significant change during the 12-months abservation period in all used instruments. As this study will have a follow-up up to three years a more detailed analysis of time-dependent changes of HRQoL will be possible. Depression and motor complications are the factors with the highest impact on health-related quality of life in PD patients.

QUALITY OF LIFE OF GASTROESOPHAGEL REFLUX DISEASE PATIENTS

Di Stasi F, Mantovani LG
University of Milan, Milan, Italy

OBJECTIVES: Gastroesophageal Reflux Disease is a chronic condition whose symptoms cause great impairment on a patient's quality of life. Our aim was to evaluate GERD patients Health Related Quality of Life (HRQoL) and its association to clinical status. **METHODS:** A cross-sectional observational multicentre cost of illness study was conducted in the urban area of Milan. The study involved 317 patients (mean age 59 years, 58% female) sequentially enrolled by 47 General Practitioners. Information was collected investigating demographic, clinical, economic and quality of life variables. To assess QoL in GERD patients we used a generic (EuroQol) and a specific (Quality of Life in Reflux and Dyspepsia, QOLRAD heartburn version) questionnaire. We report on QoL data. **RESULTS:** A strong impairment in the HRQoL was documented both with EQ-5D and QOLRAD instruments. Patients reported an average value of 64.4 in the EQ-VAS, significantly lower compared to general population. The EQ-profile indicated that "pain/discomfort" and "anxiety/depression" were the most impaired domains. We converted the EQ-profile in economic utility score by means of values from UK and Catalonia. Using the UK conversion values we had a utility mean score of 0.70 (± 0.23), using the Catalonia conversion values the mean score was 0.79 (± 0.21). The EQ-VAS value significantly decreased with age, heartburn, epigastric pain, odynophagia, globus sensation, relapse of symptoms and with all the QOLRAD domains. The most impaired QOLRAD domain was "food/drink problems", the less one was "physical/social functioning" with a mean value of 4.95 and 5.74 respectively (one worst, seven best imaginable health state). The internal consistency tested with Cronbach's alpha was >0.8 for all domains. Results with QOLRAD were confirmed by those with EQ-5D. **CONCLUSIONS:** This is the first Italian study on quality of life of GERD patients visited by GP's, highlighting that this disease significantly impairs global patients' HRQoL.

PATIENT-RATED UTILITIES IN POSTMENOPAUSAL EARLY BREAST CANCER (EBC): A CROSS-COUNTRY COMPARISON

Sorensen SV[1], Brown R[2], Benedict A[2], Flood E[1], Revicki D[1]
[1]MEDTAP International Inc, Bethesda, MD, USA; [2]MEDTAP International Inc, London, UK