

HRQoL should rely on country-level rather than pan-European studies of disease burden where feasible.

PHP200

DEVELOPMENT OF DAY SURGERY IN HUNGARY BETWEEN 2004-2014

Gresz M¹, Endrei D², Csákvári T³, Danku N², Sebestyén A⁴, Horváth L², Boncz I²

¹National Healthcare Service Center, Budapest, Hungary, ²University of Pécs, Pécs, Hungary,

³University of Pécs, Zalaegerszeg, Hungary, ⁴National Health Insurance Fund Administration, Pécs, Hungary

OBJECTIVES: In Hungary, day surgery procedures have been performed since 2003 within a special social insurance reimbursement framework. Our aim was to analyse the rates of day surgery interventions in Hungary during the past decade. **METHODS:** Data analysed were taken from financing database of the National Health Insurance Fund Administration. The period analysed included the years between 2004-2014. Medical procedures we defined as day surgery procedures, were those listed among interventions which can be carried out on a day surgery basis in Appendix 9. of the Ministerial Decree 9/1993. (IV.02.) on social insurance financing. **RESULTS:** Results of our analysis show, that the number of procedures that can theoretically be performed on an outpatient basis according to the law, did not change significantly in the past decade. It was around 600 000 cases annually. Out of these, 14.6% in 2004 and 43% in 2014 were actually, carried out on a day surgery basis. Examining the speciality areas, while gynaecology and ophthalmology show a continuously increasing tendency with respect to day surgery procedures, its rate reaching nearly 50%, surgery and orthopaedic surgery show a considerably low rate, under 25%. Twenty-nine per cent of the patients admitted were discharged within the first 12 hours. Nineteen per cent of patients stayed in hospital for 12-24 hours. In 52% of the cases, hospital stay exceeded 24 hours. **CONCLUSIONS:** The 10-year period investigated saw a significant increase in the number of procedures carried out on a day surgery basis in Hungary. Nevertheless, this is still far behind the rate of 60-70% cited by international literature. Speciality areas of medicine also show marked differences in their tendencies to perform day surgeries.

PHP201

THE PROBABILISTIC EFFICIENCY FRONTIER: A VALUE ASSESSMENT OF TREATMENT OPTIONS IN HEPATITIS C

Mühlbacher A, Sadler A

Hochschule Neubrandenburg, Neubrandenburg, Germany

OBJECTIVES: German Institute for Quality and Efficiency in Health Care (IQWiG) recommends efficiency frontier (EF) to assess the efficiency and adequacy of health care interventions. EF is designed to support decisions on reimbursement prices for appropriate allocations of health care resources. EF has so far only been applied for individual patient-relevant endpoints due to methodological questions. This contradicts reality of multi-dimensional patient benefits and does therefore not allow for deriving appropriate reimbursement prices. Study objective was to operationalize EF for treatment options for chronic hepatitis C virus (HCV) infection based on a single, multi-dimensional benefit considering uncertainty in clinical and preference data. It shows how methodological challenges could be overcome in order to use EF for economic analysis and health care decision making. **METHODS:** Eight endpoints like sustained virological response (SVR) as identified via discrete choice experiment (DCE) were considered. Preference data and clinical data were used for aggregation to a single overall benefit score. Probabilistic EF was constructed in a Monte Carlo simulation with 10,000 random draws. Patient-relevant endpoints were modeled with beta and preference data with normal distribution. Parameter uncertainty was illustrated by price-acceptability-curve and net monetary benefit. **RESULTS:** Based on clinical and preference data in Germany, interferon-free treatments proved to be efficient for current prices. Therapies of latest generations, Harvoni®/8-weeks (mean benefit score: 2137.46, standard deviation (SD): 60.21) for therapy-naive patients, Harvoni®/12-weeks (mean: 2184.97, SD: 72.92), and Viekirax/Exviera®/12-weeks (mean: 2077.18, SD: 82.37) for the therapy-experienced patients, achieved positive net cost-benefits. These therapies showed a nearly maximum overall benefit. Due to additional benefits and approved prices therapies lie above of the extrapolated EF which suggests efficient reimbursement prices. Considering uncertainty, even higher prices would have been efficient. **CONCLUSIONS:** This study demonstrates that probabilistic EF, price-acceptability-curve and net monetary benefit can contribute essential information for reimbursement decisions and price negotiations.

PHP202

ESTIMATION OF VALUE OF LIFE WITH A MODEL APPROACH DEPENDING ON NET PRESENT VALUE FOR FRANCE, GERMANY, ITALY, SPAIN AND UNITED KINGDOM

Tuna F¹, Yenilmez FB², Kockaya G³

¹Polar Health Economics and Policy Consultancy, Ankara, Turkey, ²Hacettepe University, Ankara,

Turkey, ³Health Economics and Policy Association, Ankara, Turkey

OBJECTIVES: Value of life is a marginal benefit of preventing death in a given lifetime. Human life is priceless. However, under limited supply of resources or infrastructure, it is important to estimate value of life. The Human Capital Theory (HCT) based on investments to human's health which can reduce morbidity and mortality, but also improve macro and micro economic outcomes of societies. The aim of this analysis is to conduct a model for estimating value of life of countries depending on HCT for France, Germany, Italy, Spain and United Kingdom. **METHODS:** Net present value (NPV) of the taxes and spending of governments were calculated depending on population demographics and economic data as population distribution by age, employment compliance by age, age of school enrollment, schooling years, year of retirement, unemployment rate, entry annual wage, healthcare spending, education spending, etc. The estimated produced economic value for a life time term for each country was assumed as value of life. The economic data for the model was taken from World Bank, UNESCO, OECD and WHO. **RESULTS:** Estimated produced economic value for a life time for France, Germany, Italy, Spain and United Kingdom

were found to be US\$ 467,388, US\$ 377,675, US\$ 151,797, US\$ 178,968, US\$ 358,766, respectively. The estimated values for France, Germany, Italy, Spain and United Kingdom were 10.98, 8.12, 4.22, 5.99 and 8.58 times of each countries GDP per capita, respectively. **CONCLUSIONS:** The value of life is estimated by a hypothetical model based on NPV with taxes and spending of government for each individual for a life-term. Model approaches included value of life for each decades of age, which can guide for marginal benefit of preventing pre-mature deaths. This may be a guide for health policy authorities to make prioritization for treatment options for different decades.

PHP203

THE REDUCTION OF CEILING WITH THE EQ-5D-5L INCREASES WITH AGE IN THE GENERAL ADULT POPULATION

Scalone L¹, Ciampichini R¹, Cesana G¹, Cortesi PA¹, Janssen B², Mantovani LG¹

¹University of Milano-Bicocca, Monza, Italy, ²EuroQoL Group, Rotterdam, The Netherlands

OBJECTIVES: To assess the relationship with individuals' age of the reduction of ceiling of the EQ-5D-3L compared with the EQ-5D-5L in the general population. **METHODS:** We used data from the survey conducted on 6,800 subjects to assess the EQ-5D norm levels of the Italian general population [Scalone et al, 2015] based on 5L and 3L, socio-demographic information, and the EQ-VAS. We focused our analyses on respondents who changed their answer from 1 in each domain (N=3,971 in pain/discomfort to 6,535 in self-care) or from 11111 (N=2,984) on 3L, to any other level with 5L, in each age range: 18-35, 36-55, 56-65, 66-74, >75. The reduction of ceiling was calculated as a percentage of individuals changing their answers on 5L, out of all those answering 1 on 3L. We compared the mean and median EQ-VAS of who reported 11111 with both the descriptive systems with those who changed their answer on 5L. **RESULTS:** the reduction of ceiling per age group in mobility was: 1.2%, 2.7%, 4.7%, 7.7%, 11.8%; in self-care: 0.5%, 1.5%, 2.9%, 3.9%, 8.3%; in usual activities: 2.1%, 4.6%, 6.9%, 7.2%, 15.6%; in pain/discomfort: 9.8%, 13.8%, 16.9%, 18.4%, 26.2%; in anxiety/depression: 12.3%, 9.9%, 8.1%, 8.6%, 10.5%, and with the full profile on 576 subjects: 17.3%, 17.5%, 16.7%, 20.3%, 23.5%. The mean (median) EQ-VAS among the respondents reporting 11111 with both the versions was: 90.3(90), 86.8(90), 84.3(90), 81.7(90), 82.8(90); among respondents changing from 11111 to other levels with the 5L was 88.7(90), 85.4(90), 77.0(80), 73.6(80), 73.1(80), showing a difference of the mean EQ-VAS scores from 1.6 to 9.7 for younger and older respondents, respectively. **CONCLUSIONS:** the reduction of ceiling increases with the respondents' age in all domains but anxiety/depression, and in the full health state, suggesting that the 5L is more suitable to detect reduced levels of QoL in older populations

PHP204

JOB BURNOUT PREDICTORS IN COMMUNITY PHARMACISTS IN SERBIA

Jocic DD¹, Krajnovic DM², Lakić DM²

¹BENU, Belgrade, Serbia, ²Faculty of Pharmacy - University of Belgrade, Belgrade, Serbia

OBJECTIVES: A number of socio-demographic factors influence the occurrence of job burnout in community pharmacists. Aim is determine the relationship between community pharmacist burnout degree with professional stress and socio-demographic factors. **METHODS:** This is a cross-sectional survey with the convenient sample of 386 community pharmacists coming from all the regions from the country. The questionnaire was administered to them at their pharmacies or during a branch's pharmacy meetings, following the drop-off/pick up survey technique. The instrument was a five-point Likert type scale of 25 items. Descriptive statistics, Analysis of variance (ANOVA) and correlation analysis were used for data analysis. **RESULTS:** More than half of the respondents stressed (62%), and 42% of pharmacists is at burnout risk. There is a high degree of correlation between occupational stress and job burnout ($r = 0.724$, $p < 0.01$). Job burnout risk is correlated with the following socio-demographic factors: the age pharmacist ($r = 0.127$, $p < 0.01$), pharmacists work experience ($r = 0.138$, $p < 0.01$), and the organization of shift work in pharmacies ($r = -0.312$, $p < 0.01$). ANOVA showed that, depending on whether they work alone in the shift, with the one pharmacist in shift, with more pharmacists in shift, with pharmaceutical technician in shift, pharmacists differ significantly according to the risk of job burnout ($F(3,382) = 61.013$, $p = 0.01$). Burnout risk increases with age ($F(4,381) = 2.575$, $p = 0.01$), and work experience ($F(3,382) = 6.080$, $p = 0.01$). **CONCLUSIONS:** Job burnout risk is correlated with the degree of exposure to professional stress, and increases with pharmacists age and work experience. The greatest job burnout risk are pharmacists working alone in a shift and pharmacists working with a pharmaceutical technician. The results indicate that socio-demographic factors and exposure to professional stress lead to job burnout.

PHP205

THE USE OF PHARMACOECONOMIC EVIDENCE TO ENCOURAGE GENERIC

MEDICINES USE IN JORDAN: A COST MINIMIZATION ANALYSIS

El-Dahiyat F

The Hashemite University, Zarqa, Jordan

OBJECTIVES: The objective of this study to encourage policy makers and health care providers to use generic medicines instead of originator medicines in Jordan by providing a pharmacoeconomic evidence for the expected savings. **METHODS:** 37 Active ingredients from different therapeutic classes targeted different body systems were included according to predefined inclusion/exclusion criteria; drugs used for chronic diseases were included whereas controlled drugs or sustained release or combination or parenteral drugs were excluded. The percentage differences in prices between average generic medicines prices and originator medicines prices were calculated for each active ingredients using a standardized unit (Daily Defined Dose DDD). **RESULTS:** The majority of generic drugs in the sample studied were priced less than their originator (73%). The range of price differences between