

Objectives: There are increasing concerns about the use of a generic preference based measure to capture health benefits in the area of mental health. We present the preference weights for a new preference-based measure for mental health, the ReQoL-UI, derived from Recovering Quality of Life (ReQoL-10), a recovery measure developed with mental health service users. **Methods:** Item response theory analyses were undertaken using survey responses from a sample of mental health service users ($n = 4266$) to derive a health state classification system from ReQoL-10 and to select health states amenable to valuation. A valuation survey with 305 members of the UK general population representative in terms of age, gender and region was conducted using face-to-face interviewer administered time-trade-off (TTO) with props. To produce utility values for every health state described by the ReQoL-UI a series of regression models including random effects models were fitted to the data. **Results:** The ReQoL-UI health state classification system comprises six mental health themes (activity; belonging; choice, control and autonomy; hope; self-perception and well-being) and one physical health item, with 5 severity levels for each item. Sixty-four health states were valued. The selected model was a random effects model involving squared terms and interactions between mental health and the physical health item. The model had significant and consistent coefficients, RMSE of 0.07 and lowest Akaike and Bayesian Information Criterion. **Conclusions:** ReQoL-UI has been generated using a novel method to select health state values and widely accepted interviewer administered TTO to elicit preferences. The valuation of the ReQoL-UI produced a valid set of preference weights that can be used to generate QALYs for use in cost-utility analysis of interventions in the area of mental health.

PMH30 COST-UTILITY ANALYSIS OF VORTIOXETINE FOR THE TREATMENT OF MAJOR DEPRESSION DISORDERS IN CHINA

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Objectives: Vortioxetine is an innovative antidepressant with a new multimodal mechanism of action as well as the improved Health-related QOL of patients. The objective of this study is to evaluate the cost-utility of vortioxetine versus duloxetine for the treatment of major depression disorders in China. **Methods:** The cost-utility model was composed of a decision tree and Markov model. The decision tree was supplemented by a Markov model to estimate cost and quality-adjusted life years for subsequent treatment lines. The economic evaluation was carried out over a one-year time horizon from a societal perspective. Inputs include risk of suicide, effectiveness parameters, safety parameters, utilities, resource use, probabilities, which were sourced from published literature and clinical expert consultation. Outputs include disease management costs, quality-adjusted life-years and cost-utility. One way deterministic sensitivity analysis and probabilistic sensitivity analysis were conducted to assess the drivers of cost-utility and the robustness of the economic analysis. **Results:** Vortioxetine induced additional QALY gains (0.6888 vs. 0.6762) and cost (Societal: RMB11,668 vs. RMB10,571; Payer: RMB9,016 vs. RMB7,846) versus duloxetine. The incremental cost-effectiveness ratio was RMB87,164 from a societal perspective and RMB92,987 from a payer perspective, both of which were slightly higher than per capita GDP in China in 2018. One way deterministic sensitivity analysis showed that the cost of vortioxetine is one of the most sensitive factors, while the ICER would still remain lower than three-fold per capita GDP when the cost of vortioxetine was increased by 45%. According to probabilistic sensitivity analysis, there was a 60.6% probability for vortioxetine to be cost-effective over duloxetine at willingness to pay threshold considered to be as three-fold per capita GDP. **Conclusions:** Vortioxetine is more cost-effective in the treatment of major depression disorders due to the broad efficacy and well-tolerated profile compared to duloxetine in China.

PMH31 COST-EFFECTIVENESS OF GUIDED INTERNET-DELIVERED COGNITIVE BEHAVIORAL THERAPY IN COMPARISON WITH CARE-AS-USUAL FOR PATIENTS WITH INSOMNIA IN GENERAL PRACTICE

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Objectives: Insomnia is associated with significant economic consequences, mainly due to work absenteeism. Although cognitive behavioral therapy for insomnia (CBT-I) has been shown to be effective for insomnia, general practitioners (GPs) do not regularly subscribe CBT-I as first line of treatment. Internet-delivered CBT-I presents an alternative to bridge this gap while efficiently using scarce resources. The aim of this study was to estimate the cost-effectiveness of a guided, internet-delivered intervention compared to care-as-usual for insomnia patients in general practice from a societal perspective. **Methods:** An economic evaluation was conducted alongside a randomized clinical trial with 26 weeks follow-up. Primary outcomes were insomnia severity (score on and clinically relevant response measured by the Insomnia Severity Index, ISI) and Quality-Adjusted Life Years (QALYs). Societal costs were assessed at baseline, and at 8 and 26 weeks. Missing data was imputed using multiple imputation. Statistical uncertainty around cost and effect differences and incremental cost-effectiveness ratios (ICERs) were estimated using bootstrapping, and presented using cost-effectiveness acceptability curves. **Results:** Mean societal costs in the intervention group were statistically non-significantly lower than in the

care-as-usual group (-€318; 95% CI -1282 to 645). Cost-effectiveness analyses revealed a 95% probability of the intervention being cost-effective as compared to care-as-usual at ceiling ratios of €450/extra point of decrease in ISI and €7,000/ additional response to treatment, respectively. At a ceiling ratio of 30,000 €/extra QALY gained, the probability of the intervention being cost-effective was 69%. Sensitivity analyses gave similar results. **Conclusions:** The intervention was considered cost-effective in comparison with care-as-usual for patients with insomnia treated in general practice from the societal perspective. However, the probability of the intervention being cost-effective as compared to care-as-usual was lower for the QALY outcome. We conclude that internet-delivered CBT-I is a promising and efficient intervention to reduce the personal and societal burden associated with insomnia.

PMH32 THE ECONOMIC BURDEN OF ALCOHOL CONSUMPTION IN THE CZECH REPUBLIC

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Alcohol use is a serious social problem in the Czech Republic (CZ) as local alcohol consumption is among the highest in the world. Thus, the objective was to assess the societal cost of alcohol consumption in CZ in 2016. In order to quantify all costs that are associated with alcohol use, they were classified into two major classes, i) direct and ii) indirect (mainly productivity losses). In each of these categories, we identified main cost items and consequently searched for and collected local data from public sources. In case publicly available data were missing, we either requested non-public data sources or obtained estimates from published global peer-reviewed studies. We used one of two standard approaches to the cost estimation ("top-down" or "bottom-up"), considering the nature of data sources. Indirect costs of alcohol consumption were estimated using human capital approach. The total societal cost of alcohol consumption was calculated to be €2,203 million in 2016, i.e. 1.2% gross domestic product (GDP). Productivity loss (absenteeism, presenteeism) at the workplace was estimated to €948 million, reflecting 42.9% of the overall costs. Health-related costs attributable to alcohol were calculated to €500 million, driven mainly by liver disease and alcohol dependence syndrome but also by high blood pressure or breast cancer. Other significant costs were generated by premature deaths (€257 million), law enforcement (€246 million) and traffic accidents (€170 million). Other cost items included were fire losses (€38 million), prevention (€29 million) or injuries (€10 million). Alcohol consumption in CZ constitutes a significant burden to the whole society as the overall costs in 2016 were estimated to €2,203 million (1.2% GDP) which is in line with other published studies. Importantly, the study might serve as solid evidence for health policy making and contribute to the public discussion about the harmfulness of addictive substances.

PMH33 COST-UTILITY OF LURASIDONE VERSUS STANDARD OF CARE (SoC) IN PATIENTS WITH SCHIZOPHRENIA IN ITALY

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Objectives: Lurasidone is an atypical antipsychotic approved for the treatment of schizophrenia in adults with a lower risk of hospitalization in the antipsychotics setting. The objective of this study was to conduct a cost-utility analysis to compare lurasidone with the standard of care (SoC) in Italy. **Methods:** A decision tree with a 1-year follow-up was developed from the National Health Service (NHS) perspective. The hospitalization risks for each treatment were derived from clinical studies. The utilities were obtained from the literature. Hospitalization cost were estimated through the national Diagnosis Related Group (DRG) tariffs while drug costs were obtained by regional bargaining tenders for SoC and using the ex-factory price (net of non-transparent discounts) for lurasidone. A one-way sensitivity analysis and a Probabilistic Sensitivity Analysis (PSA) were conducted to take into account the variability of the results based on the parameters considered in the analysis. **Results:** Assuming to treat 200 schizophrenic patients, of which 50% with lurasidone, the model estimated a total annual cost equal to € 73,215 for patients treated with lurasidone (about 73% related to hospitalization cost) and a total annual cost equal to € 56,598 for patients treated with the SoC (about 88% related to hospitalization cost). The total QALYs gained were lower for patients treated with SoC than lurasidone (71,99 vs 73,78 respectively). The incremental cost-effectiveness ratio (ICER) was estimated equal to € 9,258.3 per QALY from a payer perspective. The simulations showed the robustness of the results. **Conclusions:** Our analyses show that lurasidone may be a cost-effective treatment option when compared with the SoC setting.