

We anticipate the number of novel agents approved by the FDA will increase in the near future, fostering more competition in HCV. Therefore, as these products enter the market and as more information becomes publicly available regarding rebates and discounts to benchmark prices, we encourage authors of previously published models to consider updating their estimates with drug cost data that reflect current net pricing, and publish results that reflect these marketplace realities.

PRM38

INDIRECT COSTS CALCULATION METHOD IN MEDIUM-SIZED REGIONAL HOSPITAL

Kamensky V, Svoboda V, Simackova J, Rogalewicz V

Czech Technical University in Prague, Kladno, Czech Republic

OBJECTIVES: The objective was to suggest a solution to indirect costs calculation in outpatient and inpatient care to be used in HTA studies. Model scenarios were computed based on real operational data from a medium-sized regional hospital. Several cost allocation methods were used. Results were statistically analysed and compared. **METHODS:** For the purpose of indirect cost value determination, methods are suggested taking account of (i) number of inpatient days, (ii) rate per hour, and (iii) marginal mark-up allocation. (The considered method of weighted service allocation was eliminated due to incomplete economic and medical data and its complexity in terms of time and demands on staff collaboration). All methods were applied to the diagnosis of essential hypertension, cerebral infarction, colorectal cancer and hip joint arthrosis. **RESULTS:** Resulting indirect costs (expressed as a percentage of total costs) were significantly different for individual diagnoses, and these differences were significantly influenced also by the particular therapeutic intervention and the choice of cost allocation method. The method based on the inpatient day calculation leads to an underestimation of indirect costs of hospital services for short-term hospitalizations. The allocation method based on the rate per hour is insufficient for assessing indirect costs of long-term hospitalizations. The problem with marginal mark-up allocation is a difficult quantification of direct costs of the diagnosis and intervention. There is a need for a thorough analysis of the input data that were poorly accessible and very poorly recorded in our case. **CONCLUSIONS:** Generally, the inpatient day method should be used to support budgetary decisions, where the average price for one day of hospitalization is important. The method based on the rate per hour is useful in determining indirect costs for an individual patient. The marginal mark-up method may not be precise enough, but can be used for comparisons with other methods.

PRM39

ARE CURRENT COST-UTILITY THRESHOLDS IN CHINA USEFUL?

Sun J, Sun L

Shenyang Pharmaceutical University, Shenyang, China

OBJECTIVES: Estimate the cost-utility threshold in China using social willingness-to-pay method based on contingent valuation. And comparing the threshold with the 1 to 3 times of per capita GDP recommended by WHO to explore the applicability of threshold-based GDP in China. **METHODS:** Two widely used preference-based health-related quality of life instruments were used to elicit utility. Firstly, with the instrument of VAS, the respondents were requested to evaluate five health states, including the perfect health state, death, subject's own health state, 11131 and 22222. Using the other, EQ-5D, the respondents were requested to evaluate their own health state. Secondly, collect the respondents' WTP for avoiding a decline in health from the better health state to the worse, using a payment scale. The social-demographic characteristics of the respondents were also collected. **RESULTS:** We randomly sampled 250 respondents from an online panel in Beijing in Oct 2015. 205 respondents correctly completed the questionnaires. The utility-based VAS of subject's own health, 11131 and 22222 were 0.86, 0.70 and 0.37. The utility-based EQ-5D were 0.93, 0.70 and 0.51. The average values of WTP were 4,139RMB (205 respondents) and 4,586RMB (185 respondents excluding the unwilling to pay respondents). The average of WTP/QALY obtained by VAS was 25,586RMB and 20,904RMB by EQ-5D, respectively. They were significantly lower than the per capita GDP of China in 2014. The multiple regression model showed that participants with higher income tends to have higher WTP/QALY. **CONCLUSIONS:** Individual WTP for QALY values elicited in this study were significantly lower than the 1 to 3 times of GDP recommended by WHO even in Beijing, a city with a high economic development. Our results shows that the threshold recommended by WHO may have limited applicability in China and it is important for China to establish a local threshold.

PRM40

EVIDENCE GAPS IN ECONOMIC EVALUATIONS FOR NON-DRUG TECHNOLOGIES: A CANADIAN COST PERSPECTIVE

Budden AL, Tsoi B, Lee K

CADTH, Ottawa, ON, Canada

OBJECTIVES: To assist decision-makers with reimbursement decisions, model-based cost-effectiveness analyses provide an approach whereby costs and clinical effects from multiple sources can be combined. The CADTH Cost Guidance document highlights some of the current challenges associated with identifying appropriate costing information for non-drug technologies. The objective of this study is to highlight challenges in identifying and measuring costs from recently conducted economic evaluations of non-drug technologies in the Canadian setting. **METHODS:** The authors reviewed economic evaluations of non-drug technologies recently undertaken by CADTH. Issues with identification and measurement of costs used in the economic evaluations were noted. Common themes and how they impact decisions making are discussed. **RESULTS:** Between 2014 and 2016, CADTH conducted economic evaluations on diagnostic and investigational services in a broad range of clinical areas including: monitoring end-tidal CO₂; molecular diagnostics for colon cancer screening; genetic test for routine factor V Leiden and prothrombin mutation; and, laboratory diagnostic tests for inflammatory conditions. From these evaluations, common themes emerged regarding the challenges in conducting analyses of non-drug technologies: i) paucity of publicly available information on pricing and resource

utilization; ii) large variability in prices and availability of data across jurisdictions; iii) rapidly evolving costs in parallel with technological developments; iv) broader impact of medical device beyond clinical effectiveness; v) multiple application across different clinical areas; vi) differences between the published price and actual cost of testing/diagnostics; vii) differences in procurement and reimbursement mechanisms across jurisdictions; viii) reduced confidence in results of the economic evaluation. **CONCLUSIONS:** This case study highlights key challenges in determining and measuring appropriate cost information when conducting economic evaluations of non-drug technologies in Canada, although this may not be unique to Canada. In the absence of good cost information, following appropriate guidance and exploring the parameter values in sensitivity analyses is required.

PRM41

DEVELOPING CONSISTENT MEASURES FOR COST ANALYSES OF DEMENTIA BEHAVIORAL TRIALS: A REVIEW OF FOUR STUDY PROTOCOLS

Varga S¹, Prioli K¹, Gitlin LN², Jutkowitz E³, Pizzi LT¹

¹Thomas Jefferson University, Philadelphia, PA, USA, ²Johns Hopkins School of Medicine, Baltimore, MD, USA, ³University of Minnesota, Minneapolis, MN, USA

OBJECTIVES: There is a need to standardize the collection of health economic measures in clinical trials evaluating non-pharmacologic interventions for dementia patients. We developed the Dementia Behavioral Intervention Cost and Outcomes Planner (DBI-COP), a tool to guide investigators in collecting health economic data when evaluating dementia behavioral interventions. **METHODS:** DBI-COP was developed based on the review of the study protocols of four dementia behavioral intervention trials that included an economic evaluation: 1) Customized Activity Program (CAP); 2) Maximizing Independence (MIND) at Home; 3) Care of Persons with Dementia in their Environments (COPE); and 4) Adult Day Plus. For each protocol, study type, perspective, cost and outcome measures were catalogued in an Excel database and incorporated into DBI-COP. Each measure was analyzed for frequency of use among studies and summarized in a table. They were then classified into the following groups: direct costs, indirect costs and effectiveness measures. **RESULTS:** DBI-COP, as a comprehensive list of measures, includes human and nonhuman aspects of intervention costs, social services cost, cost of caregiver involvement and utility measures. The cost measures consistently present across the four studies comprise both direct and indirect costs and include the cost of staff training, intervention delivery, and staff work outside of intervention delivery. In respect to health-care service utilization, the cost of inpatient and outpatient services, emergency department visits and nursing home admissions were evaluated in all four studies. However, communication between team members and the costs of caregiver time and travel was only evaluated in one study. **CONCLUSIONS:** The DBI-COP tool can guide health economic analyses of non-pharmacologic interventions for dementia and could potentially also be applied to pharmacologic interventions. Utilizing the standardized set of measures identified in DBI-COP will lead to consistency in the conduct of economic analyses for dementia and will help foster evidence-based decision-making.

PRM42

GUIDELINES FOR BUDGET IMPACT ANALYSIS: A LITERATURE REVIEW

Luna LC¹, Costa MG¹, Tura BR², Correia MG², Santos M²

¹INC, Rio de Janeiro, Brazil, ²Instituto Nacional de Cardiologia, Rio de Janeiro, Brazil

OBJECTIVES: This study aims to review official guidance and critical articles on budget impact analysis (BIA) methodology and to conduct a comparative analysis of the most relevant topics. **METHODS:** A research was carried out to identify official guidelines and critical articles published in English, Portuguese or Spanish. We consulted the Brazilian official documents, the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) guidelines about BIA, the Health Technology Assessment agencies of the International Network of Agencies for Health Technology Assessment (INAHTA) and Pubmed and Lilacs databases. **RESULTS:** 10 guidelines and 13 articles were reviewed. A poor methodological quality in BIA published studies was noticed. From the direct comparison of the methods adopted in countries. In order to calculate the target population for BIA study, there is a general preference for data obtained by epidemiological methods. The direct costs must be taken into consideration; there is a consensus about this topic on the international HTA agencies. Regarding the "Market Share", there are few guidelines about this subject with poor quality in almost all official documents; Canadian guideline is the exception and suggests recommendations. In relation to perspective, there are small variations due to the heterogeneity of the various health care systems involved. The time horizon in almost all guidelines provides projection between 1 and 5 years, the exception is the Polish document, which suggests a longer time that is sufficient to achieve the real benefit of the new technology. In all the documents, the data sources are superficially discussed. The economic guidelines suggest that the discount rate is not applicable on BIA. The practical results on BIA should be presented in an easily understood spreadsheet model. **CONCLUSIONS:** A gold standard methodology for economic evaluations based on scientific evidence will certainly contribute to better allocation of resources and decisions to society.

PRM43

COMPARATIVE ASSESSMENT OF COST EFFECTIVENESS OF OPERATIVE METHODS FOR SPINAL DISC HERNIATION TREATMENT

Sassyskova A¹, Kulhan T¹, Gurtskaya G², Mauneynova D¹, Saduakassova L¹, Yermakhanova G¹

¹Republican Center for Health Development, Astana, Kazakhstan, ²JSC "Astana Medical University" Astana, Republic of Kazakhstan, Astana, Kazakhstan

OBJECTIVES: The high degree of spine disorder incidence defines problem of treatment of patients with spinal disc herniations (SDH) as one of the most pressing issues of modern age. Currently, the pure intradiscal technique (PIDT) for SDH is the most modern and attractive. The main PIDT advantage, in comparison with traditional "open" surgery, is minimally-invasive procedures, which reduce complications