which exclusion or inclusion of cost data beyond trial has on estimates of incremental costs: £2,640 and £7,130 respectively. The impact on the CEAC is shown to be profound e.g. for a critical ICER of £500, the probability that the treatment is cost-effective is increased by 0.732 if beyond-trial costs are included.

CONCLUSIONS: Producers and consumers of cost-effectiveness evidence need to be aware of the potential problem of asymmetry observed in our study since these results may have significant consequences on decision-making. Economic theory would suggest that the beyond-trial component should be excluded from our base case analysis since it will have had no bearing on the observed number of STPs.

PM16

ESTIMATING AND COMPARING RESOURCE USE AND COST OF G-CSF USE IN CHEMOTHERAPY WITH THE ACTIVITY-BASED COSTING (ABC) METHOD IN THREE SETTINGS

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OBJECTIVES: to develop a standard methodology which describes, inventories and compares the activities associated with the management of neutropenia with G-CSF in chemo-treated cancer patients in three different settings: inpatient care, outpatient care and home care; to collect cost information associated with these activities for calculating a cost per administration of G-CSF from the hospital and home-care perspectives.

METHODS: The case study was conducted in Belgium where the three different settings are permanently active. Structured interviews of key personnel working in each setting were taken first to obtain a detailed overview of the activities, the frequencies, the resources used and related links to other departments involved when G-CSF is administered. Activities that had a high frequency of performance (at least weekly) were then selected. Time measurements of these frequent tasks, each with a fixed start- and end-point, were then determined. Unit costs for each resource used and labor costs were obtained from the administrative units.

RESULTS: Detailed activities in G-CSF management were identified and a “map” for the product use in each setting was established. Time measurements provided the basic information for labor costing. Belgian estimates for the cost per G-CSF administration, excluding the drug cost, was estimated at 7.4 Euro for inpatient care, 4.4 Euro for outpatient care and 4.2 Euro for the home-care setting. The main cost driver was found to be the cost of taking and analyzing blood samples in the inpatient setting where the cost of monitoring neutropenia is high compared to the other settings. Excluding these costs may favor the cost of hospital administration of G-CSF.

CONCLUSION: The methodology developed using the ABC-method of investigation helps to compare the same activities performed in administering G-CSF in different settings. It clearly identifies where potential improvements are possible so as to ensure efficient management of G-CSF administration.

PM17

PROBABILISTIC SENSITIVITY ANALYSIS FOR EVALUATING COST-UTILITY OF ENTACAPONE TREATMENT FOR PARKINSON’S DISEASE

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OBJECTIVES: To assess uncertainty in a cost-utility analysis (CUA) of adjunct entacapone treatment with levodopa among patients with Parkinson’s disease (PD). The purpose of the study was to apply probabilistic sensitivity analysis in the comparison of alternative treatment strategies using second-order simulation methods.

METHODS: Two treatment alternatives of PD, i.e. levodopa with or without entacapone, were compared in a cost-utility analysis. A Markov model was constructed based on data from phase III clinical trials of entacapone and a naturalistic health economic study of PD. Second order simulation and bootstrap methods were employed to provide information about the uncertainty due to sampling variation. Cost and utility parameters were drawn from empirical distributions. Parametric distributions were used in the generation of transition probabilities.

RESULTS: Using a bootstrap sample size of 200 and 1000 patients, joint distributions of the mean incremental costs and mean incremental utilities were calculated and displayed in the cost-utility plane. The results for a bootstrap sample of 1000 patients were all clustered in the quadrant IV that includes situations in which entacapone treatment yields gain in QALYs and cost savings. However, there was more variation with the sample of 200 patients. 85.4% of the bootstrap replications were in the quadrant IV. 12.1% of the joint distribution fell into quadrant III indicating cost savings at the expense of loss in QALYs. Gain in QALYs at extra costs resulted in 2.1% of the observations. Only 0.4% of the simulated results indicated less QALYs and increased costs.

CONCLUSIONS: The simulation methods used provided valuable information on the sensitivity of the results of the CUA. The probabilistic sensitivity analysis used in this study strengthened confidence in the conclusions that entacapone as an adjunctive treatment to levodopa is both cost saving and increases the quality of life of PD patients.

PM18

DO HEALTH CARE PURCHASERS PREFER PAYING FOR LIFE EXTENSION OR QUALITY OF LIFE IMPROVEMENT?

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OBJECTIVES: To stimulate debate on the willingness of purchasers to fund interventions with varying impact on life years gained (LYG) and quality of life.

METHODS: The authors’ hypothesis is that, for two health-care interventions (HCIs) with equal cost per quality-adjusted life year (QALY) ratios, purchasers favour the intervention that extends life, rather than the one that improves quality of life.

RESULT: The list describes a conceptual framework for assessing the relative benefit of a HCI according to its ability to extend life or improve quality of life. Low LYG, Low QALY = Limited Intervention, Low LYG, High QALY = Life Extending Intervention, High LYG, Low QALY = Optimal Intervention. If this hypothesis is correct it means that there is a need for a new measure of health gain that distinguishes between ‘life extending’ and ‘quality of life improving’ HCIs and that builds on the QALY. As an interim step, the authors suggest that both QALYs and LYG values be cited in future studies and a new ratio be adopted. New Ratio = QALY / LYG As this ratio tends towards 0, the HCl tends towards a ‘life extending intervention.’ As this ratio tends towards infinity, the HCl tends towards a ‘lifestyle intervention.’ Factors other than QALYs and LYG influence purchasers and results of this new ratio should be interpreted with caution.

CONCLUSIONS: LYG and QALYs are widely recognized and respected measures of HCI effect and are frequently used in economic evaluation. Viewed in isolation the measures do not inform purchasers as to the nature of the HCI effect, and a ratio of the two would help improve this understanding. The authors would welcome feedback from purchasers as to how useful this new measure would be in informing health-care resource allocation decisions.

THE ‘NICE’ APPROACH TO PHARMACOECONOMICS: AN ECONOMICS PERSPECTIVE

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OBJECTIVE: The National Institute for Clinical Excellence (NICE) is a UK government-funded body that responds to requests for guidance from the Department for Health on the use of selected new and established technologies in the NHS in England and Wales. In March 2001 NICE published its “guidance to manufacturers” for these submissions, essentially economic evaluation guidelines for publicly-funded health-care services including, but not restricted to, pharmaceuticals. This presentation analyzes the extent to which the NICE guidelines use economics to contribute to the goals articulated in the NICE documentation for health maximization and to rework unfairness in the availability of technologies under a fixed NHS resource constraint.

METHODS: We analyze from an economics perspective the problems giving rise to the need for guidelines, the theoretical basis of the guidelines, and the implications of the guidelines for health maximization and rectifying unfair availability.

RESULTS: The NICE guidelines fail to reflect important economic aspects concerned with constrained health maximization and unfair availability. The guidelines cannot be expected to lead to maximization of health gain from NHS resources and hence may fail to serve the needs of NHS decision-makers. In addition, use of the guidelines could result in continued expansion of expenditures as predicted by economic analysis.

CONCLUSIONS: The guidelines aim to provide system wide solutions, based on standardized methods, to what are essentially locally-based, non-standardized problems. Although guidelines might be helpful in dealing with matters of administrative process, the need for or ability of such an approach to accommodate the intellectual