region. Figures for COPD prevalence vary from 3% among Finnish women to 57% of Italians older than 45 years. Epidemiological research indicates that COPD is an underdiagnosed and undertreated disease. The literature search for health economic articles generated 181 matching articles of which 26 analyses considered European health economics. Cost-of-illness and cost-effectiveness studies were mainly used as analytic strategies. Cost-of-illness studies indicate that hospital care and medication are the major cost drivers in the treatment of COPD. Annual direct expenditures per patient in Europe range from €530 in France to €3239 in Spain. In cost-effectiveness analyses, no uniformity in definition of outcomes exist. Disease severity was not always delineated, and the length of time horizon examined varied from 4 months to 2.5 years. CONCLUSION: Improvement of diagnostic techniques and enforcement of professionalism in diagnostic procedures as well as a uniform definition of COPD have to be accomplished in order to obtain reliable epidemiological data and to ensure the quality of health economics studies. These data could be used to carry out health economics studies according to each country’s guidelines or to develop them where no respective guidelines exist.

IDENTIFICATION OF UNIT COSTS IN RHEUMATOID ARTHRITIS—RESEARCH APPROACH AND RESULTS
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OBJECTIVE: To elaborate a useful level of detail according to measurement and valuation of costs associated with rheumatoid arthritis. METHODS: Unit costs—comprehended as multiplicative part of costs as product of amount and price—have a substantial impact on health economic evaluations. Performing an intensive Internet research we assessed country-specific unit costs for the 10 cost domains doctor visit, medication, diagnostic procedures, monitoring, hospitalization, rehabilitation, personal help, stoppage, traveling and other treatments. The most differentiated cost domains were rheumatic medications (65 cost items) and monitoring (25 cost items). We reported the type of cost item, country, total costs of one unit, name of data source, date of data, homepage address, date of review, calculation assumption and calculation method. The evaluation was performed for Australia, Canada, France, Germany, and Great Britain. All unit costs were given in national currency as well as US$ for comparative purpose. RESULTS: Significant differences in values of unit costs were identified with the Internet research. The country-specific values of comparative unit costs differed a lot. England and Australia show high differences of unit cost values per type of doctor visit. All five countries have high variances within the different diagnostic procedures, the kind of personal help and the type of traveling. The most differentiated references for the evaluation of medication costs were found in Germany. CONCLUSION: In general the identification of unit costs therefore has to adapt the specific payment systems of health care. It is non-permissible to transfer country-specific results to other countries. Because the amount of unit costs differs a lot, each health economic study report has to explain the used calculation approach. Otherwise the user is unable to prove the robustness of data. Additionally the performance of sensitivity analysis is aggravated.

FIRST EXPERIENCES WITH THE CONDUCTION OF RAPID HEALTH ECONOMIC HEALTH TECHNOLOGY ASSESSMENTS
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OBJECTIVES: The German Agency for Health Technology Assessment (DAHTA) at the German Institute for Medical Documentation and Information (DIMDI) commissions research projects for Health Technology Assessment (HTA). The authors were engaged to develop methodological guidelines for the conduction of rapid health economic HTA and simultaneously to conduct a rapid health economic HTA to assess the cost-effectiveness of Quantitative Ultrasound (QUS) as a technique for screening and diagnosing osteoporosis. This abstract describes first experiences of the feasibility of the developed methodological guidelines made by the assessment of cost-effectiveness of QUS. METHODS: Methodological recommendations for rapid health economic HTA were given to the following structural elements: study question, background information, perspective, decision analysis, searching and evaluation of information, discussion, conclusion, quality assurance and dissemination. Based on this recommendations we conducted the assessment of the cost-effectiveness of QUS. A detailed description of the guidelines as well as of the results of the assessment of cost-effectiveness of QUS are given elsewhere. RESULTS: Even though the methodological guidelines turned out to be a proper instrument for the conduction of rapid health economic HTA, two crucial points should be pointed out: 1) study question should be formulated precisely. We restricted the original study question commissioned by DAHTA regarding to the study population, number of compared technologies and clinical outcome parameters; 2) methodological recommendations clearly support the conduction of decision modeling. In the case of QUS strong limitations could be found, mainly due to the missing of effectiveness data. CONCLUSION: The conduction of a rapid health economic HTA demands careful considerations. In cooperation with the potential addressee the study question should be focused. In some cases, especially in the case a decision analysis is demanded rapid health economic...
HTA will not be the appropriate instrument for its own, but should be used in combination with comprehensive HTA.

**PMD25**

THE TIME INCONSISTENCY OF DECISIONS IN PHARMACOECONOMIC SEQUENTIAL DECISION PROBLEMS

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The time inconsistency of decisions (TID) is the phenomenon, studied in various domains of economics, when a decision is optimal from the perspective of one moment in time and ceases being so in a subsequent moment. **OBJECTIVES:** The aim of the study was to check for the feasibility of prevailing of the TID in the phar-macoeconomic sequential decision problems as well as to identify the impact of this phenomenon on the process of decision implementation and its outcomes. **METHODS:** A formal model of sequential decision problems, both with and without uncertainty, based on a graph theory, was provided. In such a framework the decision problem is represented by a graph and a set of functions over the vertices representing the costs, effects and the probability distributions; decision alternatives are subgraphs; alternatives are described by the expected values of costs and effects; the rule of choice is to minimize criterion function of the expected cost and effectiveness, representing the preferences of a decision maker. The flow of time can be modelled by analyzing subsequent decision problems, called reduced problems, being the subgraphs of the original problem obtained by cutting the original graph in a certain vertex. **RESULTS:** There exist criteria susceptible to TID phenomenon, in particular the cost-effectiveness criterion is susceptible to TID in problems both with and without uncertainty and cost-benefit criterion or incremental cost-effectiveness criterion are resistant to TID in these kinds of problems. TID can lead actual decision makers to behave differently than advised accordingly to the model solutions and can make them choose actions that lead to pareto-nonoptimal decisions. **CONCLUSIONS:** The TID is immanently present in pharmacoeconomic decision problems as the widely used cost-effectiveness criterion is susceptible to it. It causes ambiguities in decision problem solving as the actual decision maker(s) may not stick to the model solution in a real life. The effect of this phenomenon can be pareto-nonoptimal behaviour.

**PMD26**

COST-ASSESSMENT RE-CONSIDERED: THE CASE OF HIP FRACTURE

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OBJECTIVE: Hip fracture has long been associated with significantly increased morbidity as well as mortality. It is argued that the currently available methodological guidance on cost assessment falls short of distinguishing between costs associated with a hip fracture and costs associated with “old age”. **METHODS:** It is suggested that additional insight into this question can be gained by linking data on a patient’s resource consumption with his or her outcomes data: In order to establish that costs were directly attributable to the sustained hip fracture, they needed to be accompanied by corresponding changes in physical functioning, and changes in physical functioning which the patient might associate with the sustained hip fracture rather than “old age”. An analysis of the incremental health and social care costs associated with 449 hip fractures in Tayside, Scotland (UK) in the year following the fracture suggests that in only a minority of patients did long-term costs due to changes in accommodation needs coincide with a decline in physical functioning. **RESULTS:** Even fewer patients attributed any changes that did occur in this respect to the sustained fracture. Taking outcomes data into account thus reduced the costs, which can be directly attributed to a hip fracture by 40% in this patient group. **CONCLUSIONS:** The data of this patient group thus appears to suggest that cost estimates of hip fracture based on current methodologies of cost assessment are overestimating the real costs of the condition by 40%.

**PMD28**

CHALLENGES FOR MODEL-BASED ECONOMIC EVALUATIONS OF GLAUCOMA AND OCULAR HYPERTENSION TREATMENTS

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**OBJECTIVES:** The few decision analytic models of glaucoma treatment that exist have focused on absolute reduction (in mmHg) of intraocular pressure (IOP) rather than achievement of target IOP, which varies greatly by patient. We provide an overview of an innovative glaucoma model and highlight important modeling challenges. **METHODS:** A simulation model of the management of patients with open-angle glaucoma and/or ocular hypertension was developed in Microsoft Excel. The model examined competing strategies involving sequential use of up to six interventions with switches based on the monthly probability that a patient was “successfully maintained” on therapy. These probabilities were based on discontinuation data from actual clinical practice. Therapy discontinuation could be due to lack of IOP control, adverse events, or lack of compliance/persistence. Outputs of the model include months of treatment, switching frequency, days of IOP control,