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 pharmacoeconomic 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%.

**METHODOLOGICAL ISSUES—Modeling**

**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,