PM117  COST-EFFECTIVENESS MODELING OF ANTIMICROBIAL DRESSINGS FOR PREVENTING CATHETER-RELATED BLOODSTREAM INFECTION: HOMOGENEOUS VERSUS NON-HOMOGENEOUS MARKOV APPROACHES  
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OBJECTIVES: To compare homogeneous (HMM) versus non-homogeneous Markov models (NHMM) for cost-effectiveness analysis (CEA) of routine use of transparent dressings containing a chlorhexidine gluconate gel versus standard transparent dressings. The antimicrobial dressing protects central vascular access reducing the risk of catheter-related bloodstream infections (CRBSIs) in intensive care units (ICU). The impact of the modeling approach on the decision of adopting antimicrobial dressings for critically ill patients is discussed. METHODS: Comparative clinical efficacy data from a multicentre randomised controlled trial (RCT) enrolling 1,879 patients and economical data from micro and macro-costing published studies with NHMM and HMM models were used. RESULTS: The HMM and NHMM models were conducted rationally using the same sources. The statistical unit was the ICU patient and the ICU perspective was chosen. Probabilistic sensitivity analyses (PSA) were conducted for both models for comparing the robustness of the CEA results. RESULTS: The difference between each dressing strategies was statistically significant with both models while cost differences were not. The PSA with the NHMM resulted in 11.8 infections avoided per 1,000 patients (95%CI: [3.85; 19.64]) and a mean extra cost of €141 per patient (95%CI: €[975; €258]) when using antimicrobial dressing. The PSA with the HMM resulted in 6.4 infections avoided per 1,000 patients (95%CI: [0.15; 12.75]) and the mean extra cost of €252 per patient (95%CI: €[924; €428]). CONCLUSIONS: The antimicrobial dressings are currently more efficacious in preventing CRBSIs whatever the model used. The HMM is less sensitive to simulate the real life of the ICU patients. Regardless the model chosen the antimicrobial strategy is more efficacious than the control strategy but its probability of being cost-effective is comparatively reduced with the HMM. Time dependent approach (NHMM) seems to be better adapted to model rare events as CRBSIs.

PM118  DEVELOPMENT OF A MODEL TO PREDICT DISEASE PROGRESSION IN AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE (ADPKD)  
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OBJECTIVES: To model the use of change in the cyst size as a proxy of cost for describing the cost of ADPKD progression. This study aimed to utilise a systematic literature review to characterising predictors of ADPKD progression to construct a natural history disease model for ADPKD. METHODS: A multi-perspective Markov model was developed using modelled data from the literature. A model of 45 health states was built simulating OS as reported in GOG218. In the base case a RCT. RESULTS: The model was developed to simulate OS of both crossover and non-crossover so that specific statistical methods for causal-inference can be applied to control the cross-over bias. The new legislation was researched and the new co-payment was produced in Spain in 2012 and to explore differences in patient and National Health Service (NHS) drug cost co-payments between the old and the new schemes, using an example in a modelled patient population with coronary heart disease (CHD). METHODS: The new legislation was researched and the new co-payment scheme was summarised in a flowchart. A published economic evaluation of drug-eluting versus bare metal stents for high-risk patients with CHD was used to calculate co-payments for the total cost of a prescribed drug (clodipogrel) from patients and from the NHS. The patient contribution was estimated from the income and expected work status of the model’s population. RESULTS: In the new co-payment scheme, pharmacy-dispensed drugs are divided into three categories, using the Anatomical, Therapeutic, and Chemical classification system: 1) reimbursed with reduced contribution (€26.4 per prescription in 2014), 2) reimbursed without reduced contribution (ranging from 40% to 65%, depending on declared incomes for active workers, and from 10% to 60% for retired people) and 3) not reimbursed. Monthly limits for retired people (in 2014 range from 8.26 € to 62 €, with a monthly limit of 0.426 € for long-term, chronic conditions. The current, monthly, over-the-counter price of clodipogrel is 22. Under the old co-payment scheme, the model estimated that the average NHS payment was 19.62 € per patient (86% of the cost). Under the new scheme, this amount was estimated at 16.55 € (72%) of the NHS contribution decreased by 14%. CONCLUSIONS: The new scheme results in a significant reduction of drug-related NHS co-payment contributions. This reduction could lead to significant increases in incremental cost-effectiveness ratio estimates. It is recommended that this adjustment be made in economic evaluations developed or adapted for Spain.

PM112  STRATIFIED COST-EFFECTIVENESS ANALYSIS TO GUIDE GENETIC SCREENING FOR CANCER RISK  
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OBJECTIVES: Genetic screening identifies candidates for intensified cancer screening and prevention. Due to the high cost of genetic testing, it is impor-