PCV9

PROPHYLAXIS AGAINST DEEP-VEIN THROMBOSIS AND FATAL PULMONARY EMBOLISM IN KNEE ARTHROPLASTIES: A COST-EFFECTIVENESS STUDY

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OBJECTIVE: This study seeks to determine the costs and effectiveness of warfarin, ardeparin, enoxaparin, and no-prophylaxis for patients undergoing knee arthroplasty. **METHODS:** A decision-analytic model was developed using TreeAge software to compare the three treatment strategies and a no-prophylaxis option. The effectiveness measure was deaths prevented for a simulated cohort of 10,000 patients undergoing knee arthroplasty. Costs were valued in U.S. dollars using a payer's perspective and costs and probabilities of events were obtained from the published literature. **RESULTS:** All three treatment strategies were cost saving and more effective than the no prophylaxis option. Enoxaparin had the lowest expected cost of $3,242 per patient and prevented 198 deaths for the cohort of 10,000 persons. Warfarin was dominated by enoxaparin and ardeparin was the most effective option and had a marginal cost-effectiveness ratio of $207,342 per death avoided. Results of the sensitivity analysis will be presented. **CONCLUSION:** All three treatments are cost saving and more effective than no prophylaxis indicating that prophylaxis is preferred to the do nothing strategy. Warfarin was dominated by enoxaparin and should not be considered a first line anticoagulant to prevent DVT in this patient population. Ardeparin was the most effective option that had a marginal cost-effectiveness ratio above many societal willingness to pay thresholds and may not be considered a desirable use of health care resources. The robustness of these findings will be explored using sensitivity analysis.

PCV10

RETROSPECTIVE MEDICAL RECORD REVIEW TO DETERMINE THE "AT GOAL" PATIENTS WITH HYPERTENSION AND/OR DYSLIPIDEMIA

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OBJECTIVE: To generate data about treatment patterns for patients with hypertension and/or dyslipidemia and to identify the number achieving a treatment goal according to international guidelines. The data collected will also be used to validate a new software program that the Outcomes Research department at Pfizer has developed. **METHODS:** Six clinics/doctors in three European countries (Belgium, Denmark, and Sweden) participated in this retrospective medical record review. For each patient visit, the available data from the previous 1–2 years was collected. Data collected included blood pressure measurements, lipid profiles, glucose levels, HbA1c, co-morbidities, and medications. Guidelines used in the analysis were: Hypertension—1999 WHO-ISH guidelines for the management of hypertension; Hyperlipidemia—Recommendations of the Second Joint Task Force of European and other Societies on Coronary Prevention. **RESULTS:** Reviewing each patient's last visit, 33 of 189 were at goal for hypertension or 17%. For lipids, 42 of 179 (32%) were at goal. 50% of patients diagnosed with diabetes had HbA1c below 7% at the last visit and 65% of them were at goal for lipids, but only 14% for hypertension. **CONCLUSION:** The number of patients found to be "at goal" in this study is far from being optimal, but it is similar to numbers seen in the literature. The software was found to function as expected by utilizing only the data that doctors routinely collect in their practice. The "at goal" information is valuable, because it allows health care providers to track over time one of the factor's that will be (and is being) used to measure the quality of the care they are providing. HMOs in the US can use the information gathered to create reports for NCQA and HEDIS and in the UK the new cardiovascular NSF standards have been incorporated into the software.

PCV11

DETERMINANTS OF COSTS AND RESOURCE UTILIZATION ASSOCIATED WITH OPEN HEART SURGERY

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OBJECTIVE: This study sought to determine the correlates of in-hospital costs for patients undergoing open-heart surgery at the 962 bed University Hospital in Zurich. **METHODS:** We performed a retrospective analysis of all heart surgery patients referred to University Hospital who were covered by a fixed fee (29 500 SFr) arrangement in 1998, except those who had heart transplantation. We analyzed the prospectively evaluated preoperative (age, BMI, clinical characteristics, preoperative scores, history of previous heart surgery), intraoperative (operation time, anesthesia time, extracorporal circulation time, intubation hours) respectively postoperative (APACHE II, SAPS II Scores, infection, rethoracotomy) factors. **RESULTS:** In total 242 patients were hospitalized in 1998 under this fixed fee arrangement. The treatment of 69 patients (29%) caused costs higher than 40 000 SFr. Median cost per pa-