effectiveness plane. The observed proportion of cost and effectiveness pairs were compared by a chi-square as would be generated for a 2 × 2 table. **CONCLUSIONS:** The cost-effectiveness plane can be considered a 2 × 2 table of expected and observed proportions and a chi-square statistic with one degree of freedom calculated to assess statistical difference of a bootstrapped distribution from an expected distribution if the data were generated by chance.

PCV74

COST-EFFECTIVENESS ANALYSIS IN CORONARY ARTERY DISEASE DIAGNOSIS: CHOOSING BETWEEN LABORATORY MARKERS

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OBJECTIVES: The use of lipids, lipoproteins, apolipoproteins and high sensitive CRP (hs-CRP) in coronary artery disease (CAD) diagnosis has been widely established, although cost-effectiveness of these laboratory tests is not completely established. **METHODS:** We constructed 4 models (models with low, middle, high and very high risk for CAD, according to ATP III recommendation). The diagnostic capabilities of laboratory test combinations differs in terms of included markers: total cholesterol (TC), triglycerides (TG), HDL-c, LDL-c, apolipoproteins B and A-I (apo B and apo A-I), lipoprotein (a) (Lp(a)), apo(a) isoforms and hs-CRP for establishing risk of CAD. The effectiveness of the laboratory test combinations, in number needed to diagnose (NND), was established on the random sample of 221 CAD patients who were undergoing coronary angiography and 297 healthy subjects with no history of CAD. The direct medical costs include price of test reagents and consumables specific to each test, disposables need for specimen collection and sample analysis, equipment amortization, and personal cost for laboratory technologist. ICER and two-way sensitivity analyses were also calculated and applied. **RESULTS:** The cost per additional successfully diagnosed patient for TC, HDL-c and LDL-c laboratory test combination, were 2.4 and 35.4 euro (respectively), lower than the cost of the TC, HDL-c, apoB in low and TC, HDL-c, hs-CRP in very high risk groups. In high risk group, TC, HDL-h, LDL-h had effectiveness 15% (100/NND) lower than TC, HDL-c, hs-CRP, but overall saving was 11.9 euro. In middle risk group TC, LDL-c, apo A-I was chosen as the best alternative. Such laboratory tests combination had effectiveness 17% lower then TC, LDL-h and hs-CRP, but savings was 6.2 euro. **CONCLUSION:** The cost-effectiveness analysis of different diagnostic test combinations allows better selection of risky patients at low cost for the society.

PCV75

DERIVING COST INPUT VALUES FOR USE IN A MARKOV MODEL FOR EXPLORING THE CLINICAL CONSEQUENCES OF RIMONABANT IN ADDITION TO DIET AND EXERCISE IN OVERWEIGHT OR OBESE SUBJECTS

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OBJECTIVES: SHAPE is a lifetime Markov model with monthly cycles that predicts long-term diabetes, cardiovascular disease and mortality upon treatment with rimonabant of overweight or obese subjects. It uses Framingham and UKPDS equations. The objective of this study was to derive cost estimates for the model outcomes. **METHODS:** Acute event costs were incorporated based on routine activity in Cardiff and the Vale during 1999 using data on all inpatient episodes with details of diagnosis and discharge utilised using HRGs (Health Research Groups). Post-acute care costs were restricted to oral therapy for prevention of secondary events using a rules-based approach from current UK best-practice guidelines assuming optimal care with prescription costs calculated from the net ingredient cost of drugs specified in Part VIII—Basic Prices of Drugs of the NHS Electronic Drug Tariff. **RESULTS:** Similar event related mean costs for fatal and non fatal myocardial infarctions (MI) were calculated (≤1354 versus ≤1377 respectively) and fatal and non-fatal stroke (≤2622 and ≤2514 respectively). Mean events costs associated with angina were estimated at ≤1183 and for TIA ≤952. The range of costs was substantial with minimum and maximum MI costs of ≤591 and ≤7025 respectively and for stroke ≤239 and ≤7902 respectively. Events costs associated with angina ranged from ≤320 to ≤8613 and for TIA ranged from ≤610 to ≤4689. The annual oral therapy management costs for long term chronic conditions were calculated at ≤158.11 for MI; ≤88.43 for angina; ≤254.45 for stroke; ≤241.68 for TIA and ≤380.39 for diabetes. **CONCLUSION:** Deriving HRG-based costs on routine activity data enabled differential costs for fatal and non fatal events to be estimated. The costs match typical clinical endpoints in models using Framingham or UKPDS risk equations.

PCV76

THE GERMAN CARDIOMETABOLIC COST DATABASE—A METHODOLOGICAL APPROACH TO ASSESS COST DATA FOR MODELLING COST-EFFECTIVENESS OF TREATMENT REGIMES FOR PATIENTS WITH MULTIPLE CARDIOMETABOLIC RISK FACTORS

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OBJECTIVES: Coronary heart disease, stroke and diabetes mellitus are among the leading causes of death in Germany and determine increasing costs for the health care system. Obesity, hypertension and dyslipidemia are known to increase the disease-specific risk of morbidity and mortality. For assessing the cost-effectiveness of treatment regimes for patients with obesity and additional cardiometabolic risk factors adequate costing is essential. A methodological approach was developed to create a database that decision analysts can use for various treatment options (German Cardiometabolic Cost Database). **METHODS:** Direct medical costs were considered for different treatment options and for costs of the risk factors obesity, hypertension and dyslipidemia, of diabetes mellitus type 2 including its micro- and macrovascular complications, and of the cardiovascular events coronary heart disease, myocardial infarction and stroke. Field and desk research was done to obtain data concerning resource utilisation and was reviewed by clinical experts. Prices have been taken of official catalogues. Resource utilisation and prices have been related in a cost database that enables to provide cost data for different treatment options and for diabetes mellitus type 2, coronary heart disease, myocardial infarction and stroke. **RESULTS:** The German Cardiometabolic Cost Database includes information of resource utilisation, prices and costs. It is constructed in a way that supports analyses from different perspectives and for different treatment regimes. **CONCLUSIONS:** The developed database enables the adaptation of cost data for future projects due to innovations in treatment of cardiometabolic risk factors.