priate anticoagulation are recognised, but full implementation can be difficult and costly. Therefore the development of models such as this can support the planning process allowing stakeholders to discuss how best they can reach the target of full implementation. The model is flexible and can be adapted to suit different payers.

PCV48 COST EFFECTIVENESS ANALYSIS OF MITRACLIP IN MITRAL REGURGITATION FOR HIGH RISK PATIENTS
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OBJECTIVES: Mitral Regurgitation (MR) is a cardiac disease resulting in backflow of blood from the left ventricle to the left atrium which could increase the risk of heart failure and mortality. Half of severe MR patients are not candidates to surgery (valve repair or replacement) and receive a medical treatment. MR patient management could benefit from usage of Mitracle, a transcatheter device, which could provide an edge-edge to-edge repair of the mitral leaflet. The cost-effectiveness model presented here compares Mitracle therapy versus medical standard care treatment. METHODS: A four-state Markov model (Death, MR grade 0, MR grade I/II, MR grade III/IV) has been developed. In each state patients could be hospitalized or not. Primary and secondary endpoints were respectively the number of deaths and of hospitalizations avoided. Data were obtained from the EVEREST II high-risk study and from french cost analysis. RESULTS: Within the time horizon analyzed, 276 further deaths could be avoided by using Mitracle strategy out of 1000 patients with MR, compared to medical treatment. The Incremental Cost Effectiveness Ratio (ICER) is estimated at €3,500 per death averted with cumulative cost on five years. Sensitivity analysis shows that the cost of the initial surgery and the cost of the device where the two most sensitive variables. Costs of managing MR are higher for the Mitracle option during the first year (€29,894 for Mitracle compared to €8,557 for medical treatment) option due to the cost of the device and surgery, whereas this is inverted from the second year onwards (€8,557 for the medical option vs. €3,122 for Mitracle). Therefore, an average ICER (2738€/death per death averted) has been calculated. CONCLUSIONS: Mitracle might represent a new economic and attractive treatment option for MR patients at high-risk, which increases survival.

PCV49 COST-EFFECTIVENESS AND BUDGET IMPACT ANALYSES OF RISK STRATIFICATION OF PATIENTS WITH MODERATE RISK OF CARDIOVASCULAR EVENTS USING LP-PLA2 TESTING
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OBJECTIVE: To decide the treatment strategy for patients with moderate risk for cardiovascular events is a challenge. They would usually not receive statin treatment in Germany. For further risk stratification there is a need to identify patients with vulnerable plaques. When an arterial plaque becomes unstable LP-PLA2 levels release. The aim of this study is to find that these patients could benefit from treatment to prevent future cardiovascular events. An integrated cost-effectiveness and budget impact model was constructed. LP-PLA2 increased the adjusted risk for CVD events in the 10-year predicted SUB group population in the German HEART trial (HR 2.23, 95% CI 1.15-4.32; P< 0.018). Efficacy of treatment relevant costs were obtained from literature. A range of sensitivity analyses were performed. Our results indicate that the incremental cost-effectiveness and the budget impact analyses used a theoretical population of 1 million, of which 14% were 50-70 years old with moderate risk cardiovascular event. The total 10-year discounted and adherence adjusted net cost savings from implementing the LP-PLA2 testing strategy was €19 million, or €156 per patient, these potential number of deaths averted by the LP-PLA2 testing strategy was 611, or 17 incremental discounted lives. 2.2 incremental discounted event-free life-months per LP-PLA2 tested patient. Projected to whole of Germany’s population aged 50-70 the potential annual discounted savings from the LP-PLA2 testing strategy would be €180 million. The potential number of deaths averted per year would be 5,500. CONCLUSIONS: Our results indicate that the LP-PLA2 testing strategy is both cost saving and provide reduction in morbidity and mortality. The implementation of LP-PLA2 testing strategy should be considered in Germany.

PCV50 COMPARING ACTUAL PATIENT LEVEL HOSPITAL COSTS TO THE CANADIAN CG+ COSTING ESTIMATES FOR ACUTE MYOCARDIAL INFARCTION
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OBJECTIVES: This study compares differences in actual hospital costs and Case Mix Index (CMI) (Canadian version of the Diagnosis Related Group). costs for patients with acute myocardial infarction (AMI) in Edmonton, Alberta. METHODS: New AMI (ICD-10 code I21) patients (no AMI hospitalization within one year) hospitalizations between March 2006 and March 2007 in Edmonton hospitals were segmented into CG+ categories by the Canadian Institute for Health Information. The differences between actual hospital cost and CG+ cost were analyzed by comparing the mean and median differences between costs for each patient and trimming a portion of the low and high cost patients and applying a lower than 90 days of hospitalization. 15 comorbidities were derived from secondary diagnostic codes and regression against CG+ costs and actual costs independently. The coefficients between these two separate regressions are then tested for statistical equivalence using the Wald test. RESULTS: The data included 4,734 new AMI patients and after excluding the outliers and longer than 90 days LOS, the data included 4,335 patients. The estimated mean difference using the average CG+ estimate for the whole hospital episode costs were about $500 higher than actual costs. The median CG+ cost were most accurate estimates for per diem costs, which was about $20 higher than actual cost. 2 comorbidities were dropped from the regression due to multicollinearity. Using average CG+ estimate for whole hospital episode costs, 10/13 comorbidity coefficients were found to be statistically equivalent to the coefficients in a separate regression using actual cost. CONCLUSIONS: This study shows the various derivations of case-mix units using CG+ methodology produce relatively accurate cost estimates for AMI patients when actual cost are not available. Based on the available patient data and the context of use of the cost estimates, different methods will be optimal.

PCV51 COST ESTIMATION OF HOME BLOOD PRESSURE MONITORING VERSUS COMBINED OFFICE AND AMBULATORY MEASUREMENTS IN HYPERTENSION MANAGEMENT
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OBJECTIVE: Hypertension is a chronic condition, directly linked to cardiovascular diseases. Therefore, the monitoring of blood pressure (BP) is of utmost importance in order to avoid BP-related adverse clinical outcomes. This study aimed at comparing the health resources consumed and the subsequent costs for hypertension management using home blood pressure monitoring alone (HBPM) vs combined office and ambulatory blood pressure monitoring (OABPM). A total of 116 previously untreated, hypertensive subjects were randomized to use either HBPM or C/ABPM for antihypertensive treatment initiation and titration. The analysis included all health resources (BP measurements/outpatient visits, laboratory and other tests, pharmaceutical therapy) utilized within 12-months follow up, their respective costs, and efficacy (Hypertension control). A 5-year projection was performed (a) continuous, (b) single ABPM/ year in C/ABPM group, (c) 2 visits/year in HBPM group, total cost was €1,336/ patient in HBPM arm and €1,473/ patient in C/ABPM arm (p<0.001). Findings suggested that the cost of treatment did not differ between the two groups (€29,894 for Mitracle strategy vs €8,557 for medical treatment) option due to the cost of the device and surgery, whereas this is inverted from the second year onwards (€8,557 for the medical option vs. €3,122 for Mitracle). Therefore, an average ICER (2738€/death per death averted) has been calculated. CONCLUSIONS: Mitracle might represent a new economic and attractive treatment option for MR patients at high-risk, which increases survival.

PCV52 THE COST COMPARISON OF DRUG-ELUTING STENTS (DES) AND BARE-METAL STENTS (BMS) - A RETROSPECTIVE COHORT MATCHED STUDY
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OBJECTIVES: Literature has failed to demonstrate the clear superiority of Drug-Eluting Stents (DES) over bare metal stents (BMS). This study aimed to compare the health care utilization and the costs between drug-eluting stenting (DES) and bare-metal stenting (BMS). We also examined factors that influenced cumulative costs of these two groups. METHODS: We conducted a retrospective cohort study based on the NHIS program. Patients who had coronary stenting between Jan. 2007 and Dec. 2008 were recruited and followed through the end of 2010. Both groups were matched on 2:1 by propensity score which adjusted sex, age, stent number and Charlson comorbidity index (CCI). We examined cumulative medical cost for these two matched group by conducting the Kaplan-Meier Sample Average (KMSA) estimates. Regression analysis was used to explore the predictors of cost. RESULTS: The mean age in both groups was around 66 years. After propensity score matching, we had a total of 996 patients; 644 in BMS group and 352 in DES group. KMSA estimates (discounted 3.5%) showed that DES group had a higher 3-year cumulative total outpatient cost at US$ 6,867 and heart related outpatient cost at US$ 2,548 as compared to BMS group, which were US$706 and US$ 1,326 respectively (US$= 30 NTID). The heart related Inpatient cost was similar between two groups. The significant predictors of heart-related outpatient costs were stent type, premium and CCI. The predictors of heart-related Inpatient costs were stent type, stent number, CCI and procedure for an acute coronary syndrome (ACS). CONCLUSIONS: In Taiwan, NHRI reimburses DES and BMS at the same price, and hospitals can balance billing for the DES. We found that even after adding the extra national average out-of-pocket payment to DES, DES still was a cost-effective procedure.

PCV53 DIRECTED PERfusion (DGF) - A DifferEnt COST AnalYsis in UK anD US
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OBJECTIVES: High oxygen delivery (DO2) during cardiopulmonary bypass (CPB) is associated with better renal outcome in cardiac surgery. Traditional perfusion (T) techniques, targeted on body surface area and CPB temperature, achieves high DO2 in about 50% of the cases while a goal directed perfusion (GDP) approach can lead to more than 90% of cases achieving high DO2 with a consequent reduction.