age was 72.8 ± 8.9 yrs, 65.1% were male and 78.7% had a history of hypertension. LTB was calculated as the proportion of patients receiving antihypertensive therapy who were not attaining guideline BP control targets. A hypothetical intervention to lower blood pressure to the normal range was applied to those individuals identified with LTB, to estimate the number of cardiovascular disease events which could be prevented. Logistic regression was used to find the predictors of LTB and event rates were compared using Chi squared tests. **RESULTS:** Among the 2856 Australian REACH participants, 70.1% (n = 2002) had uncontrolled blood pressure (>130/80 mmHg) and 88.3% (2522) had been taking anti-hypertensive medication. LTB was 70.7% (1784). The major univariate predictors of LTB were gender, age, diabetes, hypertension, carotid plaque, cholesterol, BMI and congestive heart failure. Assuming a hypothetical blood pressure intervention is applied to the LTB group resulting in controlled blood pressure (≤130/80 mmHg), 8 cardiac events per 1000 people and 21 cardiovascular disease events including coronary heart disease intervention per 1000 people could be prevented. **CONCLUSIONS:** Improving BP control in patients receiving antihypertensive medication may prevent 8 cardiac events per 1000 people and 21 CVD events per 1000 people within this study group. At a population level, this would represent a major cardiovascular event reduction strategy.

PCV83

RELATIONSHIP BETWEEN THE COST AND HOSPITAL QUALITY

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OBJECTIVES: Inpatient surgery is a major component of overall health care spending. We examined variation in outlier payment across US hospitals and the extent to which variation is explained by quality of care. **METHODS:** We used the 2006 Medicare Provider Analysis and Review (MEDPAR) file. We identified coronary artery bypass grafting (CABG).We first describe the incidence of outlier payments for CABG, average outlier payment amount and their contribution to overall inpatient payments. We then explore how outlier payments vary according to patient characteristics and across hospitals. Multiple logistic regression is used to examine to extent to which different factors serve as independent predictors of outlier payments. Standard errors are adjusted for the effect of clustering of outlier payments within hospitals. In assessing variation in outlier payments across hospitals, we described the distribution of outlier payment prevalence (proportion of patients associated with outlier payments) by hospital. We, then assessed hospital variation using fixed-efects logistic regression models. **RESULTS:** The proportion of patients associated with outlier payment was 11%. Average outlier payments were considerable: $26,064. Outlier payment for CABG cost CMS approximately $480 million in 2006. Outlier payments were major contributors to the overall inpatient cost: 12.9%. Approximately 20% of hospitals had outlier rates below 5% for coronary artery bypass surgery, while 25% had outlier rates exceed 20%. Although, there were patient level risk factors that determine patient level otulier payment rates, this did not explain hospital level variation. Higher volume hospitals were less likely to have patients with outlier payments. **CONCLUSIONS:** Aiming to accelerate the quality improvements, payers are increasingly applying value-based purchasing strategies to surgical care. We showed that the variation in outlier payments across US hospitals is substantial for CABG and patient level risk factors can not explain hospital level variation. Hospital and surgical volume as a quality indicator is negatively related with outlier payments.

PCV84

AN ASSESSMENT OF THE COST OF PERCUTANEOUS PULMONARY VALVE IMPLANTATION USING MELODY VERSUS SURGICAL VALVE REPLACEMENT IN PATIENTS WITH RIGHT VENTRICULAR OUTFLOW TRACT DYSFUNCTION

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OBJECTIVES: To assess the cost of percutaneous pulmonary valve implantation (PPVI), **a new procedure introduced in 2000 as a less invasive treatment for right** ventricular outflow tract (RVOT) dysfunction, **and the cost of surgical valve replace**ment in patients with right ventricular outflow tract dysfunction using a cohort simulation model. **METHODS:** A cost analysis was performed from the perspective of the purchaser (the UK NHS). The cost of PPVI was estimated using data based on a total of 141 patients who had undergone PPVI from 2000 to 2008. The cost of surgical valve replacement in a similar group of patients was estimated using a cohort simulation model populated with data drawn from the literature and expert opinion, given that PPVI has supplanted this procedure in the clinical setting analysed. **The model is** a cohort simulation model and assesses the cost of surgery using a hypothetical population of 1000 individuals **with right ventricular outflow tract dysfunction starting when** their first valved biological conduit was surgically placed and following them for a period of 25 years assuming that 1) PPVI is not available as an option, and 2) that PPVI is available for those eligible for it. **RESULTS:** The model resulted in an estimate of mean cost per patient of £5276 in the absence of PPVI and in an estimate of mean cost per patient of £7958 in the presence of PPVI over the 25 years period of analysis. **CONCLUSIONS:** PPVI although more costly than the surgical alternative, it appears to delay surgery thus having a significant impact on the health and the quality of life of this patient population. More research is needed to quantify the magnitude of the impact on the quality of life and to assess the role of modelling generally in assessing costs and effects in medical devices.

PCV85

COST CONSEQUENCES OF REDUCED CVD RISK THROUGH IMPROVED SBP CONTROL: A COMPARATIVE ANALYSIS OF VALSARTAN VERSUS LOSARTAN

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OBJECTIVES: The effect of hypertension on increased risk of cardiovascular disease events has been demonstrated through population based studies, and the predictive value of SBP has been repeatedly demonstrated in risk prediction models derived from such studies. A recent meta-analysis of evidence regarding SBP reduction by ARB antihypertensives has demonstrated a significant difference in the SBP reduction observed in patients treated with valsartan, compared to those treated with losartan. An economic model has been constructed to evaluate the effect of this difference on the risk of a first CVD event, and the resulting costs. **METHODS:** Inputs for the model are drawn from published sources and publically available datasets. CVD risk prediction was performed using equations derived from the Framingham Offspring Study cohort. The model evaluated an untreated group, and groups treated with valsartan, and losartan. Each treatment group was stratified into those with mild hypertension or moderate hypertension. **RESULTS:** Basecase analyses represent outcomes over 20 years from baseline moderate HTN classification in a US population of age 18 and over. Valsartan was associated with a marginal cost of $1,983 vs. the untreated arm, and a marginal cost of $466 in comparison to losartan. These costs resulted in estimates of $33,540 per event avoided vs. untreated and $37,484 vs. losartan. Incremental costs per QALY were $7,067 vs. no treatment and $8,067 vs. losartan. **CONCLUSIONS:** Analysis results indicate that reduction in SBP from baseline is associated with small reductions in primary CVD rates, and overall CVD treatment costs. Valsartan performed better than losartan because it was associated with a greater decrease in SBP from baseline (according to meta-analysis results). Overall, the calculated cost effectiveness ratios for treatment with valsartan indicate that valsartan is likely to be cost-effective when compared to no treatment or treatment with losartan in control of SBP.

PCV86

COST-EFFECTIVENESS OF TRANSCATHETER AORTIC VALVE IMPLANTATION IN HIGH-RISK PATIENTS WITH SYMPTOMATIC AORTIC VALVE STENOSIS IN FRANCE

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OBJECTIVES: To investigate the efficiency of minimally-invasive Transcatheter Aortic Valve Implantation (TAVI) delivered through the transfemoral or transapical approach compared with open-heart conventional aortic valve replacement or medical management alone in high risk patients with aortic stenosis in France. **METHODS:** A longitudinal cohort model was developed to predict clinical and economic outcomes over three years in four cohorts of patients treated by either: transfemoral (TF) or transapical (TA) aortic valve implantation, surgical aortic valve replacement (AVR) or medical management (MED). Clinical outcomes included early perioperative complications (30 days) and late events (stroke, MI, endocarditis, valve reoperation, pacemaker implantation, hospitalization for acute heart failure, and death). In the absence of head-to-head clinical trials, efficacy data for the alternative approaches were extracted from various sources including clinical studies, registries, national health statistics and expert opinion. QALYs were assessed by mapping health utilities to NYHA class distribution. Direct medical costs were assessed by multiplying the number of resource items consumed with French unit costs (2008 values). **RESULTS:** In terms of predicted mean life years and QALYs per patient after 3 years, TAVI appears to be superior to the other approaches; 2.42 years or 1.76 QALYs for TF, 2.16 years or 1.61 QALYs for TA, versus 2.06 years or 1.50 QALYs for AVR, and 1.73 years or 0.98 QALYs for MED. Modeled average discounted (3%) cumulative direct medical costs per patient amount to €46,677 (TF), €45,468 (TA), €50,630 (AVR), and €78,208 (MED). These findings imply that both transcatheter approaches appear to be dominant versus conventional high-risk AVR as well as medical management. Probabilistic sensitivity analyses confirmed the robustness of these model results. **CONCLUSIONS:** TAVI appears to be an economically promising technology. However, additional data from on-going clinical studies and registries need to be awaited to confirm these preliminary results.

PCV87

COST-EFFECTIVENESS OF PRASUGREL VERSUS CLOPIDOGREL IN PATIENTS WITH ACUTE CORONARY SYNDROMES AND PLANNED PCI: RESULTS FROM THE TRITON-TIMI 38 TRIAL FROM THE GERMAN PERSPECTIVE

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OBJECTIVES: In patients with acute coronary syndromes (ACS) and planned PCI, the TRITON-TIMI 38 trial demonstrated that treatment with prasugrel compared with clopidogrel was associated with a reduced rate of cardiovascular death/MI/stroke and an increased risk of major bleeding. We evaluated the cost-effectiveness of treatment with prasugrel vs. clopidogrel for the duration of the trial, from the perspective of the German health care system, based on data from TRITON-TIMI 38. **METHODS:**