switching to a combination therapy from monotherapy, regardless of medical conditions. Further research is required to evaluate the possible negative aspects of FDC drugs.

PCV47 PREDICTING LONG-TERM COSTS OF HEART VALVE REPLACEMENT: A COMPARATIVE經濟 ANALYSIS BETWEEN PROSTHESIS TYPES Cullers S1, Levitsky S1
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OBJECTIVES: This study reports the results of an economic model predicting differences in lifetime cost of heart care services consumed following heart valve surgery by prosthesis type. This model examines: Mechanical Valve (MV), Stentless Tissue Valve (TV), and the emerging Transcatheter Valve (replacement surgery only).

METHODS: The economic model assumes a 55-year-old valve disease patient requiring surgery with a 25 year post-surgery life expectancy. Peer reviewed journals provided estimates of complication event rates by prosthesis type. The model estimated costs for two possible types of valve replacement procedure at year 15 for patients receiving initial ST prosthesis: 1) a second ST surgery (ST), or 2) a transfemoral valve in valve (ViV) approach. Average annual inflation rate of 3% was used. Clinical events included: initial valve surgery, thrombotic events; bleeding events; warfarin and monitoring; echo monitoring; paravalvar leak; endocarditis; pacemaker insertion following valve surgery; re-operation due to structural valve deterioration; and clinical complications following transcatheter procedures. RESULTS: Cumulative costs were estimated to be $124,200 using MV during initial surgery; $183,600 using STs; and $478,048 using ViV. The MV resulted in lower expected health care costs in every version of the analysis. The TV initial surgery resulted in a lifetime cost saving of $59,400 and $353,882 compared to using STs and ViV, respectively. The ViV approach offers the majority of its savings after year 15.

CONCLUSIONS: Our model estimates changing initial prosthesis choice to the ST in the estimated 20,000 ST valve surgeries performed annually in the U.S. among patients below age 65 would result in approximately $1.2 billion lifetime reduction in direct health care expenditures over the next 25 years. The majority of savings occur when these patients would be Medicare Beneficiaries.

PCV48 A MODEL UTILIZING PREOPERATIVE MARKERS TO PREDICT PATIENTS ASSOCIATED WITH HIGH COST IN OPEN VERSUS ENDOVASCULAR REPAIR OF NON-RUPTURED ABDOMINAL AORTIC ANEURYSM Illes C2, Cullers P1, Spitsberg R1, DeSarno M2, Stanley A1
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OBJECTIVES: We examined predictors of high cost for abdominal aortic aneurysm (AAA) repair in order to identify patients who are likely to require more intensive treatments. In general, younger, healthier patients with unfavorable anatomy are good candidates for Open AAA repair while older patients with significant comorbidities and favorable anatomy have better results when treated with the less invasive endovascular aneurysm repair (EVAR) procedure. Indeed, a sizable number of patients present with AAA who could be treated using either modality. A dataset of almost 14,000 AAA repairs totaling 389 Fletcher Allen Health Care patients (230 EVAR, 159 OPEN) was analyzed retrospectively over the time period January 1, 2003 through December 31, 2011. Direct and indirect costs were obtained along with length of stay (LOS) and other clinical and behavioral parameters. Models to predict being in the upper quartile of cost were developed using logistic regression. RESULTS: Significant predictors of being in the upper quartile of costs for Open patients were old age (≥70), hypertension, weight >120 kg, and paraplegia, with area under ROC=0.767. Predictors for EVAR patients were presence of iliac aneurysm(s), CABC/PTCA within the past 5 years, ejection fraction ≤30%, on beta blocker, creatinine ≥1.5mg/dl, and current smoker, with area under ROC=0.784. For EVAR patients, who had an average LOS of only 1-2 days, total costs ranged from $21,904 to $47,511. For Open patients, who had an average LOS of 5-7 days, these figures ranged from $13,549 to $35,685 in constant dollars.

CONCLUSIONS: This wide range of total cost invites the introduction of resource utilization tools based on cost predictors that can optimize clinical outcomes and reduce costs at the individual patient level.

PCV49 ECONOMIC ANALYSIS OF STENT PLATFORMS: COST-EFFECTIVENESS OF THE PLATINUM CHROMIUM PROMUS ELEMENT COMPARED TO COBALT CHROMIUM PROMUS/XIENCE VERSUS EOLONUS-EVOLUS ELUTING STENTS Hale BC1, Stern S2, Kansal AR1, Aliocco D1, Dawkins K1, Stone G1
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OBJECTIVES: The economic model examined the performance of platinum chromium everolimus-eluting stents (PCr-EES) were compared to cobalt chromium everolimus-eluting stents (CrCo-EES) in the randomized controlled PLATINUM trial. Clinical outcomes including rates of target lesion revascularization (TLR), target vessel revascularization (TVR), myocardial infarction (MI), and death in patients with PCr-EES were reported for 2 years (n=1,507), with 3 year data to come. An economic analysis was performed to assess the cost-effectiveness of PCr-EES versus CrCo-EES accounting for stent reimbursement practice, in which payers reimbursed the hospital based on cost of stents 50%. The Markov model was used to compare costs from payer (Medicare) and hospital perspectives of PCr-EES versus CrCo-EES over two years, based on the model explicitly accounted for costs (2013) of differences in index procedure and long-term cardiac events. Payer costs for the index procedure were increased only for those bailout (unplanned) stents associated with major complicating conditions (MCC; aortic dissections or extended length of stay), while hospital costs remain all events using (bailout or planned) costs that were consistent with TVR and all stent thromboses were modeled as MCCs of the TVRs, not separate events. RESULTS: PCr-EES was cost saving versus CrCo-EES by $277/patient from a payer perspective, due to reduced costs for bailout stenting during TVR (91 vs. 749 USD; p=0.04) and overall TVR over 2 years (8.6% versus 4.4%). Probabilistic sensitivity analysis found PCr-EES was economically dominant (more effective and less costly) in 81% of replications. From a hospital perspective, PCr-EES saved an additional $151/patient in reduced stent acquisition costs. A detailed costing analysis would be required to determine how much of the $277/patient reduction in reimbursement reflects reduced hospital costs, and thus total societal savings.

CONCLUSIONS: PCr-EES was cost saving versus CrCo-EES from payer perspectives, primarily due to reduced TVR over 2 years. Total societal savings may be up to $428/patient.

PCV50 EVALUATING THE AVERAGE REINTERVENTIONS, REINTERVENTION COSTS AND TOTAL COSTS FOR A HEPARIN-BONDED EPFTE STENT-GRAFT IN PATIENTS WITH ATHEROSCLEROTIC DISEASE OF THE SFA Mohl BA1, Martelini MJ2, Sheen AL1

OBJECTIVES: We examined the average number of reinterventions, average treatment costs (ARC, $1,314 vs. $1,434, P<0.01), lower ARC ($1,588 vs. $4,346, P=0.05), which was statistically significant, and lower ATC $14,524 vs. $14,987, (P=0.78) versus the BMS. CONCLUSIONS: Based on the comparison of one-year follow up data, the Stent-Graft trended toward reducing reinterventions and ARC for all patients being treated for atherosclerotic SFA disease compared to BMS. When oversize ≥20% at the proximal edge, the Stent-Graft reduced ARC (statistically significant finding) and trended toward reducing reinterventions and ATC. Long-term follow up will be needed to measure the benefits beyond one year for all patients.

PCV51 ECONOMIC IMPACT OF SWITCHING FROM METOPROLOL TO NEBIVOLOL FOR HYPERTENSION TREATMENT: A RETROSPECTIVE DATABASE ANALYSIS Tournikides S1, Lukic N1, Mohan M1, Forstl R1, Kurz A1, Mohr BA1, Martinell MJ2, Sheen AL1

OBJECTIVES: Estimate the real-world economic impact of switching from metoprolol, the most commonly prescribed β-blocker for hypertension in the US, to nebivolol, a novel well-tolerated β-blocker with high selectivity and vasodilatory properties, for hypertension treatment. METHODS: Retrospective database analysis with a pre and post study design was conducted using MarketScan database (2007-2011). Hypertensive patients continuously treated from the Centers for Medicare and Medicaid Services was used to estimate ARC and for all patients, and secondarily, for patients oversized ≥20% at the proximal edge of the Stent-Graft (instructions for use recommend 5-20% oversizing). RESULTS: The Stent-Graft group trended toward fewer reinterventions per patient than the BMS group (0.36 vs. 0.63, P=0.15), lower ARC ($1,314 vs. $4,346, P=0.08), and higher ATC ($16,482 vs. $14,987, P=0.06) during one year follow-up. Patients oversized ≥20% trended toward fewer reinterventions per patient (0.21 vs. 0.63, P=0.08), lower ARC ($1,588 vs. $4,346, P=0.05), which was statistically significant, and lower ATC $14,524 vs. $14,987, (P=0.78) versus the BMS. CONCLUSIONS: Based on the comparison of one-year follow up data, the Stent-Graft trended toward reducing reinterventions and ARC for all patients being treated for atherosclerotic SFA disease compared to BMS. When oversized ≥20% at the proximal edge, the Stent-Graft reduced ARC (statistically significant finding) and trended toward reducing reinterventions and ATC. Long-term follow up will be needed to measure the benefits beyond one year for all patients.

PCV52 ECONOMIC BURDEN OF ACUTE CORONARY SYNDROME IN A GEOGRAPHICALLY DISTRIBUTED POPULATION FROM 2006 TO 2011 IN THE UNITED STATES
OBJECTIVES: To examine the impact of total versus marginal cost reporting on overall US stroke burden of illness estimates and cost effectiveness comparisons. The magnitude of the over-estimation is not known. The objective of this study is to estimate the direct total health care cost, not compared to an equally ill, non-stroke, control group. An increasing proportion of coronary artery bypass grafting (CABG) surgery is performed with concomitant valve repair or replacement surgery, and complications related to these procedures can have significant impact on patient outcomes and hospital care system of the US. The clinical and economic burden of complications associated with CABG, valve and combined (CABG and valve) surgery in the US. OBJECTIVES: To evaluate health care costs following acute coronary syndromes (ACS) in patients with/without recurrent cardiovascular events (CVEs). A cost-of-illness (COI) approach was used to evaluate the spectrum of local clinical practices that are producing an average cost per patient per year. Mid-2012 USD currency rate was used. The cost of acute management of stroke was $10,336; p<0.001). Inpatient hospitalization costs were the major driver of total cost.