

the direct medical expenditures on the final outputs. **CONCLUSIONS:** The treatment of disabled superficial femoral artery was compared from chosen clinical outputs, economic expenditures and cost-effectiveness. On this basis, the recommendation was set for choosing the most effective treatment.

PCV59

INTEREST OF A HOSPITAL DATABASE TO ANALYZE THE COST FOR ACUTE STROKE: THE EXAMPLE OF VERSAILLES HOSPITAL

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OBJECTIVES: Stroke generates an important socioeconomic burden and heavy hospital expenses. The objective of this study was to evaluate the impact of delay to manage stroke for patients transported by Mobile Intensive Care Units (MICU) in outcomes and early hospital costs. Cost of management and NHSS (National Institute of Health Stroke Score) score regression at patient discharge have been described for three different stroke management time groups. **METHODS:** A retrospective study was conducted from a database containing records of 427 patients diagnosed with stroke. Patients were classified as “short delay” (stroke managed within 45 minutes), “medium delay” (45 minutes to 2 hours) and “long delay” (above 2 hours). 3 homogenous groups of 100 patients were established, adjusted on age, gender, stroke mechanism (ischemic or hemorrhagic), NIHSS score and comorbidity. Hospital Database (PMSI - French National Hospital Information Systems Program) recorded information between 2004 and 2013. Results: The number of deaths was respectively 17 for « short delay », 25 for « medium delay » and 42 for « long delay ». The average cost for one hospital stay for stroke was €15,812 for the « short delay » group, €20,639 for « medium delay » and €20,184 for « long delay ». “Short delay” treated patients retrieve an average of 8.41 points compared to 1.87 for “long delay” patients. **CONCLUSIONS:** These results show a correlation between the delay in managing stroke and early hospital costs and improvement of NIHSS scores. These results are part of a study performed through the PMSI database aiming at calculating the average cost of retrieving one-point NIHSS impairment. They underline the importance of an early treatment of stroke.

PCV60

BURDEN OF CARDIOVASCULAR COMPLICATIONS IN PATIENTS WITH ATRIAL FIBRILLATION IN FRANCE

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OBJECTIVES: Atrial fibrillation (AF) is associated with numerous cardiovascular (CV) complications. The objective of this study was to estimate the national annual burden of CV complications in patients with AF in hospitals. **METHODS:** All patients hospitalized in 2012 with a diagnosis of AF were identified from the French National public/private hospital database (PMSI). Comorbidities and medical data were collected during a 5-year look-back period and used to calculate stroke risk score (CHA2DS2-VASc). Reasons for CV-related hospitalization, emergency admission, rehabilitation and death at discharge were described. Costs of acute care were determined using Diagnosis Related Groups and corresponding tariffs (2012 Euros). **RESULTS:** In total, 533,044 AF patients were hospitalized for any reason. Mean age was 78.0(±11.4) years, 53% were males and mean CHA2DS2-VASc score was 4.0(±1.8). CV-related hospitalizations occurred in 267,681 patients: 34% for AF management care, 28% for heart failure, 8% for strokes, 7% for other ischemic heart diseases, 5% for vascular diseases, 4% for transient ischemic attacks and systemic embolisms, 2% for bleedings and 12% for other CV reasons. In CV-related hospitalizations, 45% of patients required emergency admission, especially patients hospitalized for strokes (75%) and for bleedings (67%). Death at hospital occurred in 6% of patients with a CV-related hospitalization: 17% in patients with strokes and 10% in patients with bleedings. Rehabilitation was needed for 34% patients with non-fatal strokes with a mean length of 48 days. The annual total cost (acute care and rehabilitation) for all hospitalized CV events during the year 2012 was €1.94 billion. Among this, heart failure represented €518m, AF management €306m, strokes €291m and hemorrhages €48m. **CONCLUSIONS:** A half-million AF patients were hospitalized in 2012 in France. CV-related hospitalizations involved over a quarter-million AF patients for a global burden of almost €2 billion.

PCV61

COST OF BLEEDING IN COMPLEX CARDIAC SURGERY

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OBJECTIVES: In complex cardiac surgery there is a high demand for blood/blood products. Their administration can be costly. Our goal was to assess the cost of care and outcomes for complex cardiac surgery patients based on bleeding status. **METHODS:** Patients > 18 years, discharged between January 2010 and December 2012, were identified in the Premier Hospital Database based on ICD9 codes and categorized as having received blood/blood products or not. Patients who received blood products prior to the day of surgery were excluded. Differences in treatment costs and outcomes were assessed using univariate analysis and multivariate modeling. **RESULTS:** A total of 463,734 patients (82,832 Bleeding; 380,902 Non-Bleeding) were included. Patients who received blood were older (>65 years: 62.3% vs. 49.8%), sicker (Charlson Comorbidity Index >3: 22.5% vs. 15.4%), with greater rates of cerebrovascular disease (10.2% vs. 4.3%), PVD (18.2% vs. 9.4%), CHF (33.0% vs. 18.6%), renal dx (20.9% vs. 13.5%) and CPD (25.3% vs. 18.7%) than those who did not. Models adjusting for patient factors showed that patients who received blood were 4.54 times as likely to be admitted to the ICU, 3.40 times as likely to die and 4.59 times as likely to be readmitted for bleeding within 30 days (all p<0.001). They also had 49.1%

greater LOS and 32.3% greater ICU LOS (both p<0.001) than patients not receiving blood. In patients who received blood, total cost of hospital stay was 22.7% greater including blood product cost and 21.7% greater excluding blood product cost (both p<0.001). **CONCLUSIONS:** Preventing or rapidly controlling bleeding in patients undergoing complex cardiac surgery would likely reduce patient risk and avoid elevated costs of hospitalization.

PCV62

THE COST BURDEN OF SYNCOPE AT A HOSPITAL LEVEL IN SPAIN

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OBJECTIVES: Syncope, defined as a transient loss of consciousness that leads to a spontaneous recovery without consequences, is very prevalent. It is known that syncope related admissions (principal diagnosis) are associated with a high cost burden for the Spanish National Health System, but little is known about the number of hospitalisations due to injuries caused by the fall (secondary diagnosis). The objective of this study was to estimate the burden and cost of syncope from the Spanish Health Care System perspective. **METHODS:** Admissions with a primary diagnosis of syncope and admissions for injuries and pacemaker/defibrillator implantations where syncope was coded as a secondary diagnosis were analysed. The source of data was the Spanish Basic Minimum Data Set and the period 2001-2010. **RESULTS:** The annual incidence of syncope-related admission was 4.22 cases/10,000 inhab. The annual average number of admissions was 15,703, including 77.5% syncope as a primary diagnosis. The total annual cost of syncope related admissions was €46mill, from which a 46.4% was associated to injuries where syncope was coded as a secondary diagnosis. The average cost of a patient admitted with syncope as a primary and secondary diagnosis was €2,062 (min €1,556 – max €28,772) and €5,996 (min €719 – max €26,940) respectively. The average length of stay for patients with syncope as a primary and secondary diagnosis was 5.17 and 9.33 days respectively. **CONCLUSIONS:** Syncope has an important cost burden resulted from the high number of hospitalisations and the length of stay associated. The cost of a patient admitted with syncope as a secondary diagnosis was nearly 3 times higher than a patient with a primary diagnosis of syncope. It is important to implement health strategies to diagnose these patients in order to assure an efficient management of the available resources.

PCV63

CLINICAL MANAGEMENT OF NON-VALVULAR ATRIAL FIBRILLATION IN HONG KONG

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OBJECTIVES: The present study aimed to investigate the cost of non-valvular atrial fibrillation (NVAF) management in Hong Kong. **METHODS:** We analyzed consecutive patients with documented NVAF enrolled in the Prince of Wales Hospital Atrial Fibrillation Registry between February 2013 and February 2014. Patient clinical characteristics, prescribed therapies and adverse clinical events were extracted from the hospital electronic Clinical Management System. One-year direct health care costs including costs of medications, accident and emergency admissions, hospitalizations, clinical visits, coagulation tests and computed tomography of brain scans were estimated from a health care provider perspective. **RESULTS:** Of 534 NVAF patients, 45.9% were male with a mean age of 75.8±10.2 years. The average CHADS₂, CHA₂DS₂-VASc and HASBLED scores were 2.44±1.39, 4.12±1.77 and 3.26±1.09, respectively. 66.7% of patients were taking rate control medications only. Patients taking both rate and rhythm control medications were associated with the highest rate of hospitalizations due to poor AF control (28.2%) when compared to using neither rate or rhythm control drugs, rate control or rhythm control groups (p < 0.0005). The overall use of anticoagulants including both warfarin and new oral anticoagulants was 66.9%. The main reason for patients with CHADS₂ score ≥ 2 not receiving anticoagulant was patient refusal (20%) and physicians' opinion (40%). The one-year median cost of managing patients with stroke was higher than those without stroke (Euro\$ 5521.2 versus Euro\$ 1075.2) from the health care provider perspectives during the study period. **CONCLUSIONS:** Majority of NVAF patients in Hong Kong were prescribed rate control medications only. The clinical use of antithrombotic therapy for stroke prevention was more conservative than guideline recommendations. It was more costly (5 times more) to manage patients with stroke than patients without stroke.

PCV64

THE ECONOMIC IMPACT OF CARDIOVASCULAR EVENTS IN PATIENTS POST MYOCARDIAL INFARCTION: UK HEALTH CARE PERSPECTIVE

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OBJECTIVES: There is a high risk of recurring cardiovascular (CV) events in patients post myocardial infarction (MI) despite the current standard of care (SoC). The aim of this study was to estimate the current economic burden of CV events for patients after having an MI event. **METHODS:** A lifetime markov model was developed from a UK health care perspective to capture progression post-MI. Recurrent MI, stroke and CV deaths were the major CV events captured. A comparison of cost (2012 UK£) and outcomes in terms of QALYs and life years (LYs) was made between the current scenario of patients receiving SOC and a hypothetical scenario where post-MI patients had no subsequent CV events. All cost and outcomes were discounted at 3.5% per annum. **RESULTS:** The current cumulative lifetime event rate of non-fatal MI, non-fatal stroke and CV death post-MI was estimated to be 0.432, 0.06 and 0.42/patient respectively. The total lifetime cost was estimated to be £6,926/post-MI patient without CV events, which was 31% lower than the current estimated cost of £9,959/post-MI patient. At current rates of CV events there was an incremental lifetime loss of 4.3 LYs/patient and 3.5 QALYs/patient when compared to the hypothetical scenario where patients had no CV events. Considering the prevalence of MI to be 1.5 million, the economic burden posed by MI patients over lifetime if they