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(33 MIs; 33 CABG/PTCAs; 11 strokes) with a total cost saving of £332,512 (MI = £105,237; CABG/PTCA = £195,551; stroke = £31,724). **CONCLUSIONS:** The estimated benefit of treating to an LDL-C target of <2.0 mmol/L rather than <3.0 mmol/L was an additional 26 CV events avoided per 1000 patients with an associated cost saving of £111,799.

PCV58

COSTS OF CORONARY ARTERY DISEASE (CAD) IN POLAND

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OBJECTIVES: A representative evaluation of CAD costs in Poland including General Practitioners (GPs) and Specialists' (S) settings. **METHODS:** A representative sample of 2593 Polish patients with confirmed CAD (1977 patients under GP's care, 616 patients under S care). A time horizon of the analysis was 12 month and a retrospective approach was applied. The study estimated both direct medical and indirect costs resulted from sick leaves, pensions and sickness benefits. Unit costs were obtained from available published data derived from the National Health Fund and the Polish Social Insurance Institution. A prevalence based method using National Statistical Office data was used to estimate economic burden of CAD. **RESULTS:** The distribution of total costs was similar in the GPs' and specialists' settings. Hospitalisation and invasive treatment constituted main direct medical costs' drivers in both conditions. The average direct medical cost per CAD patient reached annually €1079.09. The average societal cost €1437.19 when the merely indirect costs related to the absence from work (€358.10) was included. Average cost covering also indirect cost related to the patients' disability increased to the €2254.17. The total average costs were significantly (14.4%) higher in Ss' than in GPs' settings. In accordance with the lowest boundary estimate of CAD prevalence rate (2.9%), the total, societal burden of CAD in Poland in 2005 amounted to €2056.7 million. More than half of this cost (52.1%) was due to the indirect cost, 69.5% of which resulted from patients' disability. **CONCLUSIONS:** CAD imposes a high economic burden for the third party payer as well as for Polish society. Clearly, there is a need to develop and apply innovative, cost-effective treatment strategies that will reduce the need for hospitalisation and invasive treatment and may successfully be implemented in the GPs' practice.

PCV59

INPATIENT RESOURCE USE ASSOCIATED WITH THE TREATMENT OF SECONDARY ATRIAL FIBRILLATION

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OBJECTIVES: We estimated incremental inpatient costs and length of stay (LOS) attributable to secondary atrial fibrillation (AF) in patients with and without cardiac predisposing factors to document the economic burden of this disease. **METHODS:** We extracted 2004–2005 discharges from Premier Perspective(tm), the largest hospital database in the US, with a secondary AF diagnosis and matched controls that had neither a primary nor a secondary AF diagnosis. We matched on patient age, discharge date, facility type and primary diagnosis category. We used regression models to estimate the incremental inpatient costs and LOS due to secondary AF. We adjusted for comorbidities, demographic and hospital-specific factors. We repeated this analysis for patients without cardiac predisposing factors (i.e. mitral valve disease, heart failure, non-AF cardiac operation, chest pain and congestive artery disease). **RESULTS:** The estimated 5.4 million secondary AF discharges in the US during 2004 and 2005 had an adjusted average inpatient cost of $12,292. This cost was $3532 more than the adjusted average inpatient cost for controls without AF ($P < 0.0001$). Patients with secondary AF had an adjusted average LOS of 7.8 days or 1.9 additional days compared to controls without AF ($P < 0.0001$). The estimated 1.4 million secondary AF discharges without cardiac predisposing factors had an adjusted average inpatient cost of $8956, an increase of $1908 compared to controls without AF or cardiac predisposing factors ($P < 0.0001$). Secondary AF patients without cardiac predisposing factors had an adjusted average LOS of 6.2 days or one additional day compared to controls ($P < 0.0001$). **CONCLUSIONS:** Inpatient costs and LOS were significantly higher for patients with a secondary AF discharge diagnosis when compared to controls that did not have an AF diagnosis. These differences, although still significant, were less pronounced among patients without cardiac predisposing factors. Further research is warranted to investigate how secondary AF is most cost-effectively treated.

PCV60

TWO-YEAR HOSPITALIZATION RATES AND ASSOCIATED COSTS IN PATIENTS FROM GERMANY WITH PERIPHERAL ARTERIAL DISEASE: RESULTS FROM THE REDUCTION OF ATHEROTHROMBOSIS FOR CONTINUED HEALTH (REACH) REGISTRY

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OBJECTIVES: Atherothrombosis is the leading cause of death worldwide with huge economic burden. Peripheral arterial disease (PAD), a marker of disseminated vascular disease, puts patients at a high risk of atherothrombotic events. The REACH Registry is an international prospective registry of 67,888 patients from 44 countries at risk of atherothrombosis due to coronary artery disease (CAD), cerebrovascular disease (CVD) and/or PAD, or the presence of ≥3 atherothrombotic risk factors. PAD at enrollment was identified on the basis of current intermittent claudication with either ankle brachial index (ABI) < 0.9, or history of lower limb revascularization (angioplasty/stenting, peripheral bypass graft) or amputation. **METHODS:** We examined 2-year rates of vascular-related hospitalizations and associated costs in 1303 REACH patients from Germany with established PAD at baseline. Poisson regression was used to identify independent predictors of vascular hospitalizations. The costs per DRG for vascular hospitalizations were derived from the German 2004 Case Fees Catalogue. **RESULTS:** At baseline, mean age was 68 years, 29% female, 46% diabetes, 76% had ABI < 0.9, 56% had prior lower limb revascularization, 13% prior amputation, 63% had other involved vascular territories (479 CAD + PAD; 136 CVD + PAD; 205 CAD + CVD + PAD). There were 360 (28%) patients who had ≥1 vascular hospitalizations at 2 years. Significant ($p < 0.05$) independent baseline predictors of an increased hospitalization rate included diabetes, female, ABI < 0.9, prior peripheral revascularization, prior amputation, CAD, hypertension, decreasing age and prior smoking. Mean vascular hospitalization costs per patient were: €2595 overall; €3052 female/€2423 male; €3351/€1973 with/without diabetes; €2773/€2394 with/without prior lower limb revascularization; €2787/€2578 with/without prior amputation.

Vascular interventions account for 61% of hospitalization costs, overall. **CONCLUSIONS:** Rates and costs of vascular events/interventions are high in patients with PAD, and increase with identifiable risk factors. Risk factor modification and prevention efforts are needed to lessen the burden of atherothrombotic disease for PAD patients, and society.

PCV61

INFLUENCE THE CO-MORBIDITY AND DIRECT COSTS OF STROKE TO POPULATION SETTING AND IN CLINICAL PRACTICE

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OBJECTIVES: To determinate the co-morbidity and direct costs of stroke among Spanish population in daily medical practice. **METHODS:** A retrospective study was performed based on data from patients attended for stroke, aged >30 years, from five Spanish primary care centres (PCC) and two hospitals in 2006. Main analysed variables were: age, sex, general or specific (cardiovascular and others) events/co-morbidities, use of drugs, clinical parameters (according to NCEP-ATPIII) and direct costs (pharmacy, derivations, visits, emergencies, procurement, and hospitalisation). An ANCOVA analysis and logistic regression were used to fit the model. **RESULTS:** Of 57.026 patients included in the analysis, 4.5% (n = 2.585, CI95%: 4.3–4.7%) suffered stroke. The incidence of stroke was 220 new cases/100.000 populations. Main differences between patients suffering stroke and control group were: age (72.5 vs. 53.5), men (58.2% vs. 44.6%), events/year (7.9 vs. 4.8), visits/year (15.8 vs. 8.1), poli-pharmacy (91.5% vs. 53.6%), use of statins (85.0% vs. 32.2%), antiagregants and/or anticoagulants (78.9% vs. 28.0%), $p < 0.001$ for all differences. Stroke had an independent relation with age (odds ratio, [OR] = 1.4), male gender (OR = 2.3), diabetes (OR = 1.6), hypertension (OR = 1.5), smoking (OR = 1.5), alcohol abuse (OR = 1.4), depression (OR = 1.4), dyslipidemia (OR = 1.3) and dementia (OR = 1.2). Some of the results were: systolic pressure (134.1 vs. 127.6 mmHg), body mass index (28.9 vs. 27.9 kg/m2) and LDL-cholesterol (116.4 vs. 126.2 mg/dl), in presence/absence of stroke, $p < 0.001$. The average of annual costs of stroke was €2590.36 vs. €985.26, $p < 0.001$. After the correction of the logistic model results did not change: €1774.33 (IC: 1720.10-€1.828.55) vs. €1021.98 (IC: 1010.92-€1033.03€, $p < 0.001$. All components of costs were higher in the stroke group. **CONCLUSIONS:** Prevalence and incidence are similar to that published in the literature. Patients that demanded assistance for stroke had a higher number of co-morbidities and a higher total cost/patient/year. Therapeutic objectives could be improved, mainly in primary prevention of cardiovascular risk factors.

PCV62

THE BURDEN OF ACUTE CORONARY SYNDROMES IN AUSTRALIA

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OBJECTIVES: Clopidogrel (in addition to aspirin) for the treatment of all patients with acute coronary syndromes (ACS) was recently approved for additional reimbursement under the Australian Pharmaceutical Benefits Scheme. We sought to estimate the implications of this approval for the Australian health care system. **METHODS:** A Markov model to determine cost-effectiveness was constructed by extrapolation of data from the Australian Acute Coronary Syndromes Prospective Audit (ACACIA) registry (n = 2553) in the first model cycle, and the Reduction in Atherothrombosis for Continued Health (REACH) registry (n = 2567) in subsequent model cycles. Efficacy data were drawn from the Clopidogrel in Unstable Angina to Prevent Recurrent Events (CURE) trial. Drug, cardiovascular disease and hospitalisation costs were sourced from the literature and health care reimbursement fees. These were updated as required using Australian health price indices. An annual discount rate of 5% was applied to all costs and effects beyond one year in accordance with reimbursement guidelines. Data regarding the prevalence of ACS was estimated from published national Australian epidemiological and demographic data. As clopidogrel is already reimbursed for patients who have taken aspirin prior to their event, or who cannot take aspirin due to allergy or intolerance, literature was reviewed to estimate this population. **RESULTS:** The estimated number of newly eligible patients ranged annually from 48,100 to 62,700 over five years. The expanded treatment coverage was estimated to prevent an additional 12,400 major cardiovascular events (comprising myocardial infarctions, strokes and deaths) in the first five years, leading to a saving of A$175 million in health care costs arising from avoided hospitalisation, procedures and medications. This has major resource implications for the Australian health system in terms of staffing, bed availability and emergency admissions. **CONCLUSIONS:** The imminent implementation of unrestricted access to clopidogrel plus aspirin for all ACS patients is likely to lead to significant health and cost-savings for Australia.

PCV63

CO-MORBIDITY AND DIRECT COSTS ACCORDING THE CARDIOVASCULAR RISK LEVEL IN A SPANISH POPULATION SETTING

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OBJECTIVES: To determine the co-morbidity influence and the direct cost according to cardiovascular risk levels (CRL) in patients older than 55 years appertaining to population setting and in clinical practice. **METHODS:** Multicentric design, realized beginning from registers of subjects ≥55 years appertaining to a seven centres of primary care (year 2006). The calculation of the CRL was effected using Framingham-Wilson equation: low risk (<10), moderate (10–19), high (20–29) and very high (≥30). Main measures: general (age, gender, etc.), cardiovascular co-morbidities (CIAP-2), cardiovascular events-CVE (criteria: NCEP-ATP III), Charlson-index (patient severity) and cost model. The general morbidity charge was measured beginning from Adjusted-Clinical Groups (http://www.acg.jhph.edu). Fixed/semifixed costs were considered (structure, salary, services) and variable ones (diagnostics/therapeutics requests, referrals, drugs). An analysis of logistical regression and the covariance (ANCOVA) was affected for the correction of the models (procedure: Bonferroni), according to the recommendations of Thompson-Barber. Program SPSSWIN; $p < 0.05$. **RESULTS:** From 24,441 subjects older than 55 years, were attended 12,828. The 30.1% (IC 95%: 29.3–30.9%) showed a high/very high CRL. All studied variables in bivariant relation were related to CRL. Increase of CRL was associated as an independent way to man (OR = 7.1), diabetes (OR = 6.8), smoking (OR = 5.8), hypertension (OR = 2.3), dislipemia (OR = 1.9), obesity (OR = 1.4), CVE (OR = 1.3) and age (OR = 1.2), $p < 0.001$). The