tional study was performed. Pts who met inclusion criteria were followed-up for 12 months, with 3 visits programmed at baseline, 6 and 12 months. Baseline characteristics and caregiver's information were registered for every pt. Once identified total hours, the replacement cost method was used. **RESULTS:** A total of 330 pt were included, 74.2% men, mean age was 62.9 years. 82.4% were in NYHA class II, 16.4% NYHA class III and 1.2% NYHA class IV. A 28.5% needed support for daily living. Ninety four informal caregivers were identified, mean age of 58yo, mostly women (85.1%). Main relationship with caregiver was spouse/couple (77.7%), followed by son/daughter (14.9%). Number of weekly hours of main caregiver was estimated at 44.3 hours (40.6 hours for patients NYHA class II and 53.3 hours for patients NYHA class III-IV) and shadow prices values from 8-13€/hour. Total costs associated to informal caregiving increased between €21,298-€34,609 per pt of which between €18,892-€30,049 are informal costs associated with the main caregivers. Likewise, focusing on main caregivers, using the proxy-good method and the shadow prices shown, the cost of replacing services by care giving a Class II patient (2,115 yearly hours) were between €16,919-€27,494 for pts in NYHA class II; and between €22,230-€36,123 for caregiving a Class III or IV pt (2,779 yearly hours). **CONCLUSIONS:** Almost a 30% of pts with chronic symptomatic HF in Spain required support from an informal caregiver, which represents a significant burden for society and often has not been accounted for in economic evaluations of treatments for heart failure. Costs for informal care are associated with disease severity as measured by NYHA class.

PCV54

FIRST-YEAR DIRECT MEDICAL COST OF NEWLY DIAGNOSED STABLE ANGINA IN HONG KONG

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OBJECTIVES: To evaluate the first-year direct medical cost for diagnosis and management of newly diagnosed SA, to identify SA-related resource consumption pattern in public hospitals in the New Territories East Cluster in Hong Kong and in patients with and without procedures, and with comorbidities of hypertension (HTN), diabetes mellitus (DM) and hyperlipidemia. **METHODS:** A retrospective non-randomized study was conducted including patients documented with new diagnosis of SA in the Clinical Management System during January 2007 to December 2009. Subjects were followed for 1 year after diagnosis. Cost items studied consisted of hospitalization, clinic visits, diagnostic tests, radiological examinations, laboratory tests, therapeutic operations and medications. For statistical analyses, Mann-Whitney Tests were performed to compare medians of costs in patients with and without procedures, and with different comorbidities of HTN, DM and hyperlipidemia. P-value <0.05 was regarded significant. **RESULTS:** 89 patients were recruited. The mean first-year total direct medical cost of SA per patient was HKD$89,518, with the cost for hospitalization being the most dominant, accounting for 29.2%. Increase in complexity of disease would increase the total from HKD$47,744 for patients without procedures to HKD$115,342 for patients with procedures ($p<0.001$). For the three comorbidities interested, SA patients co-morbid with hyperlipidemia required more resources for the management, HK$98,295 ($p<0.001$). **CONCLUSIONS:** This study revealed the huge expenses incurred by SA in the first year of initial diagnosis on local public healthcare system, which has a significant implication on future resources allocation. Strategies for cost saving and preventive measures should be implemented.

PCV55

CLINICAL AND ECONOMICAL BURDEN OF OROPHARYNGEAL DYSPHAGIA AMONG STROKE SURVIVORS IN EUROPE AND NORTH AMERICA

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OBJECTIVES: Dysphagia commonly occurs following stroke and contributes to subsequent morbidity and mortality in stroke survivors with related substantial economical implications. Literature on the burden of this medical condition is scarce. This study aimed to identify the reported burden of dysphagia among stroke patients. **METHODS:** Epidemiological data were collected from publications in stroke and/or dysphagic patients and included prevalence of dysphagia and pneumonia, as its main complication. Economical data mainly included hospital length of stay, and pneumonia treatment costs. **RESULTS:** The data demonstrate stroke mostly occurs in people older than 65 years age (>75%). Prevalence and epidemiological figures varied widely from one publication to another. Indeed, up to 81% of stroke patients were diagnosed as dysphagic, depending on the method and time after stroke episode in which dysphagia is identified. Thus reportedly, up to 19.6 million stroke patients suffer dysphagia in North America and Europe. Studies identified that 40% to 50% of dysphagic stroke patients aspirate. In addition, pneumonia occurs in up to 51% of dysphagic stroke patients. Of course, dysphagic stroke patients who aspirate are at higher risk of pneumonia: up to 11-fold more than non aspirators. In Europe and North America, up to more than 10 million dysphagic stroke patients develop pneumonia. Furthermore hospital length of stay ranges from 5.07 to 10.55 days for stroke patients with dysphagia versus 3.26 to 4.74 days without dysphagia. The average hospital cost for pneumonia is $919 per day, totaling up to $96.5 billion in Europe and North America. **CONCLUSIONS:** The overall dysphagia burden is substantial worldwide, especially in Europe and North America. It is probably underestimated since only direct medical costs were included. However, it will most probably increase given the growing elderly population, which is at higher risk of having stroke.

PCV56

THE ECONOMIC BURDEN OF ATHEROTHROMBOSIS IN GREECE: RESULTS FROM THE THESIS STUDY

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OBJECTIVES: The aim of the present study is to estimate the annual direct and indirect costs in patients with a history of or at risk for atherothrombosis in Greece, using a bottom-up approach. **METHODS:** A multicentre, prospective, cost-of-illness study was conducted between January 2007 and December 2009. In this study, 800 patients with coronary artery disease (CAD) or cerebrovascular disease (CD) or peripheral artery disease (PAD) or multiple cardiovascular risk factors (MRF) were recruited from 11 major hospitals in Greece. All patients were followed up for 12 months. Resources used for the care of patients within the healthcare system and productivity losses during the follow-up period were recorded. The annual direct and indirect costs were calculated by combining these data with unit costs. **RESULTS:** The mean annual total cost was €5,940/patient (€5,416–€6,522). This cost ranges from €9,963/patient (€8,515–€11,868) for PAD group to €1,761/patient (€1,462–€2,232) for MRF group. The mean annual direct healthcare cost was €5,056 /patient (€4,653–€5,507). This cost escalates from €1,623 /patient (€1,319– €2,073) for MRF group to € 8,697 /patient (€7,648– €9,695) for PAD group. The annual direct healthcare costs was mainly driven by vascular intervention costs among CAD and PAD patients, (50.6% and 46.5%, respectively) and by the simple hospitalization cost among CD and MRF patients (67.7% and 35.7%, respectively). The mean annual indirect cost was €979 (€386– €1,395), €441 (€142- €835), €525 (€148 – €1,137) and €29 (€1- €87) per patient in the CD, CAD, PAD and MRF groups, respectively. The total annual expenditures related to atherothrombosis, in Greece, are estimated to be 7.5 billion € at a national level. **CONCLUSIONS:** The findings of the THESIS study indicate, for the first time, the high economic burden of atherothrombosis in Greece, since the direct healthcare cost related to atherothrombosis management accounts for almost 25% of annual healthcare expenditures.

PCV57

EPIDEMIOLOGICAL STRUCTURE, SOCIOECONOMIC EFFECTS AND BURDEN OF DISEASE IN PATIENTS WITH ORAL ANTICOAGULATION AND ATRIAL FIBRILLATION IN AUSTRIA

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OBJECTIVES: Atrial fibrillation (AF) is the most common arrhythmia in clinical practice and associated with a high risk of stroke. In Austria, about 130,000 people are affected by AF. The first aim was to create a patient flow with epidemiological data to close the research gap for Austria and further to estimate the total cost of patients (direct and indirect costs) with AF and recommended oral anticoagulation. **METHODS:** The model is based on these detected AF patients. The approach used is prevalence-based, which is usually forgone within the time horizon of one year. For 68% of these patients oral anticoagulation is recommended, but only 54% of patients in the high-risk group received an OAC therapy. The remaining patients get Aspirin (31%), other medication (5%) or no therapy (10%). Clinical-data and costs of the adverse events stroke and major bleeding were considered. Direct costs comprise all direct medical costs like consultation, lab test, inpatient costs, medication and treatment costs. Indirect costs represents costs for AF patients after stroke like care allowance and costs of nursing homes. The resource use was determined by literature and experts. All costs represent data from 2011. The burden of disease study is conducted from a societal perspective. **RESULTS:** The direct costs of AF patients amount to 51,972,668€ and the total costs inclusive indirect costs are 93,915,299€ for the time horizon of one year. **CONCLUSIONS:** With rising life expectancy the number of patients with AF and the prevalence of strokes will increase. Therefore the time has come to give greater attention to the epidemiological and socioeconomic burden of AF.

PCV58

THE IMPACT OF COMORBID MENTAL ILLNESS ON COSTS OF HEALTH CARE FOR INPATIENTS WITH HEART FAILURE

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OBJECTIVES: Interactions of mental illnesses and heart failure have been indicated. Mental illness has been shown to be a risk factor of heart failure. In addition, it may worsen the symptoms as well as compliance to the therapy of patients with heart failure. A recent study has showed that comorbid depression may be associated with higher medical costs. The purpose of this study was to assess the impact of comorbid mental illness on costs of health care for inpatients with heart failure. **METHODS:** A retrospective cohort study of inpatients with heart failure. Data were collected between July 1, 2008, and December 31, 2008 from 855 acute care hospitals in Japan. In total, 38,446 admissions of patients with heart failure in 855 hospitals were included in the analysis. We compared health care costs of 5 groups: 1) no mental illness; 2) antidepressant prescription only; 3) co-prescription of antidepressant and other psychotropic drugs; 4) antidepressant prescription and depression diagnosis recorded; and 5) anxiolytic or hypnotic prescription only. Statistical analyses were performed using JMP 8.0. **RESULTS:** Psychotropic drugs were used in 19,839 (51.6%) patients with heart failure. The average number of psychotropic drugs was 3.69 per hospitalization in heart failure inpatients. After adjustment for covariates, patients prescribed with psychotropic drugs had significantly higher costs than patients not prescribed. **CONCLUSIONS:** This study suggested that comorbid mental illness is associated with higher medical costs.