Apixaban (74.82±11.39 years) patients were older versus those who switched to dabigatran (72.46±10.89 years, p<0.0001) or rivaroxaban (73.50±11.27 years, p=0.0193). Apixaban users (45.4%) were more female compared to dabigatran (38.4%, p=0.0037) and rivaroxaban (40.4%, p=0.0499). The mean $CHADS_2$ score was higher for apixaban users (mean±SD 2.28±1.25) as compared to dabigatran (1.94±1.20, p<0.0001) and rivaroxaban (2.18±1.25, p=NS) users. Apixaban patients had significantly higher baseline rates for congestive heart failure (p=0.0111), hypertension (p=0.0002), renal disease (p=0.0017) and ischemic stroke/ transient ischemic attack (p=0.0004) as compared to dabigatran users. Apixaban users (2.34±2.12) also had higher mean charlson comorbidity index scores as compared to dabigatran users (1.98±1.96, p=0.0002). **CONCLUSIONS:** Patients who switch to apixaban are older and sicker as compared to those switching to dabigatran or rivaroxaban. A detailed evaluation of patient characteristics on the treatment outcomes in NVAF patients switching from warfarin to NOAC is warranted in future.

PCV162

TREATMENT PATTERNS IN HYPERLIPIDEMIA PATIENTS WITH NEW CARDIOVASCULAR EVENTS - ESTIMATES FROM POPULATION-BASED REGISTER DATA IN SWEDEN

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OBJECTIVES: To assess treatment patterns of lipid-lowering drugs in patients with hyperlipidemia or prior cardiovascular (CV) events (myocardial infarction, unstable angina, revascularization, ischemic stroke, transient ischemic attack or heart failure) who experience new CV events. **METHODS:** A retrospective population-based cohort study was conducted using Swedish electronic medical records and national registers. Patients were included in the study based on a prescription of lipid-lowering treatment between January 1, 2006 and December 31, 2006 or history of CV events (prior to 2006) and followed until December 31,2012 for identification of new CV events and assessment of treatment patterns. Patients were stratified into three cohorts based on CV risk level. The index was the date of first new CV event during follow-up. All outcomes were assessed during the year following index date. Adherence was defined as medical possession ratio (MPR) >0.80. Persistence was defined as no gaps >60 days in supply of drug used at index date. **RESULTS:** Of patients with CV event history (n=6881), 49% were not on treatment at index. Corresponding data for CV risk equivalent and low/unknown CV risk patients were 37% (n=3226) and 38% (n=2497), respectively. Mean MPR for patients on treatment at index was similar across cohorts (0.74–0.75). The proportions of adherent patients (60–63%) and persistent patients (56–57%) were also similar across cohorts. Dose escalation from the dose at index was seen within all cohorts, most notably for patients with low/unknown CV risk as 25% increased the dose after index. 2–3% of patients switched to a different drug after index while 5–6% of patients augmented treatment by adding another lipid-lowering drug. **CONCLUSIONS:** Almost 50% of secondary prevention patients were not on any hyperlipidemia treatment, indicating a potential therapeutic gap. Medication adherence and persistence among patients on hyperlipidemia treatment were suboptimal.

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DETERMINANTS OF HEALTH CARE UTILIZATION IN HYPERTENSIVE PATIENTS: A LONGITUDINAL ANALYSIS

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OBJECTIVES: DIMATCH-HTA is a cohort study conducted to identify determinants of blood pressure control among Portuguese-speaking African immigrants and Portuguese natives. The aim of this analysis is to study the determinants of health care utilization among hypertensive patients followed in Primary Health Care. **METHODS:** The sample comprises 1243 unbalanced observations from 513 patients. Data were collected through questionnaires administered face-to-face at baseline, 6 and 12 months, and by telephone at 3 and 9 months after enrolment. The variable used to capture health care utilization was the number of visits to the general practitioner related to hypertension, in the three months prior to each interview. The covariates were chosen based on Grossman's health capital model of demand for health (1972) and Andersen conceptual model (1968). Amongst socioeconomic covariates, gender, age, ethnicity, education, monthly equivalent income, living alone and domestic work were considered. Health status was captured by the presence of diabetes, time since hypertension diagnosis and number of medicines. Self-perception of hypertension and private health insurance were also included. A GLMM model for count data, with a random effect on intercept was estimated. Model adequacy was checked via residual analysis and comparison of observed and predicted values. The analysis was performed in R (version 3.0. 2) using lme4 package. **RESULTS:** Results of estimated model indicated that total number of medicines (beta=0.05, p-value=0.03) and diabetes (beta=0.40, p-value=0.01) have significant positive impact on health care consumption. Patients whose occupation is domestic work have higher health care utilization (beta=0.73, p-value=0.02). On the other hand, those who self-assess their hypertension as controlled (beta=-0.37, p-value=0.02) and patients with higher income (in log scale, beta=-0.26, p-value=0.01) have less visits to general practitioner related to hypertension. **CONCLUSIONS:** Based on the analysis it seems that not only variables related to health status, but also socioeconomic determinants impact health care utilization in hypertension.

PCV164

THE DETERMINANTS OF UPTAKE AND DIFFUSION OF INNOVATIVE HEALTH TECHNOLOGIES. AN EMPIRICAL ANALYSIS

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OBJECTIVES: The aim of the research is to explore the main determinants driving the diffusion of new medical technologies. **METHODS:** We investigated the diffusion two medical technologies: cardiac ablation for atrial fibrillation (CA-AF) and left atriage appendage closure (LAAC). Our sample consists of all Italian hospitals that adopted the two focal technologies in the period 2009-2012. We classified the hospitals according to ownership, type, teaching status and urban location. In the first regression we investigate the diffusion, i.e. yearly number of procedures performed by each hospital, in the second one the average frequency of use, measured as the average number of days between two subsequent procedures in each hospital. **RESULTS:** Different types of hospitals show different baseline trends of diffusion. Public hospitals, both teaching and non-teaching, use less CA-AF compared to private non-teaching ones. Among hospital-level variables, the use of DRG-based reimbursement has a positive effect on CA-AT diffusion, not significant for LAAC. The rank in adoption is an important factor only for CA-AF. The impact of the number of other hospitals contemporaneously adopting the technology is negative for both technologies, but significant only for CA-AF. The average time between two subsequent uses is negatively correlated with the diffusion for both technologies. Regional contextual variables, including type of funding and socio-economic variables do not show significant impacts, with the exception of per capita public health expenditure, that enhances the diffusion of both technologies, and the ratio between public health expenditure and GDP in the case of CA-AF. The average frequency of use decreases over time for both technologies. Neither hospital-level variables nor regional-level ones do not show significant effects. The only variable with a significant and negative impact on the frequency of use of CA-AF is the number of competitors. **CONCLUSIONS:** These results are consistent with previous literature.

PCV165

CHALLENGES AND OPPORTUNITIES IN THE MANAGEMENT OF CHRONIC DISEASES DURING THE ECONOMIC CRISIS IN GREECE: A QUALITATIVE APPROACH

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OBJECTIVES: There is evidence that in Greece, economic crisis has substantially affected chronic patients' access to health care services. The aim of the study was to depict the current situation and identify the challenges and opportunities regarding the management of chronic diseases, in times of economic crisis and austerity from the aspect of both providers and patients. **METHODS:** Representatives of chronic patients and medical associations were invited to participate in a focus group session. Four diseases (Type 2 Diabetes, Hypertension, COPD, and Alzheimer) were selected based on their epidemiology and socioeconomic impact on the Greek health care system. Fifteen representatives participated and their statements were recorded, analyzed and categorized into 4 categories. **RESULTS:** Common issues in the management of chronic diseases under study appear to be the low quality of health services, fragmented primary care system and absence of specialized centers for the management of chronic diseases. These problems of the Greek health system were found to be magnified because of the recession. Furthermore, the increased numbers of unemployed, uninsured and patients at risk of poverty, puts additional pressure to the health system and futher undermines the quality of the health services. Economic and geographic barriers in access were reported, strengthening of the primary health system, development of patient registries, patient education regarding self-management and involvement of their associations in decision making was considered critical to the improvement of disease management. **CONCLUSIONS:** The management of chronic diseases was challenging even before the economic crisis in Greece, but the current economic framework poses additional threats for the health care system jeopardizing patients' health and its sustainability due to an increased risk for future costs. Investment in patients and physicians education regarding chronic diseases management was thought to be the key for improving this situation.

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CATASTROPHIC HEALTH EXPENDITURES AND CHRONIC CONDITION PATIENTS IN GREECE

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OBJECTIVES: Aim of the study was to investigate chronic patients' out-of-pocket expenditures and the percent of the households subjected to catastrophic health expenditures (CHE) during the economic crisis. **METHODS:** A cross-sectional study was conducted among 1600 chronic patients suffering from diabetes, hypertension, COPD and Alzheimer. Patients were asked to indicate the amount they spent for primary and secondary health care services and for pharmaceuticals. Current household income and income decrease since 2010 were also measured. CHE was defined as any amount spent for health which accounts for more than 20% of the total household income. **RESULTS:** 1594 patients responded to the survey (99.6%). In 2013, 7.8% of all households with at least one chronic condition patient were subjected to CHE, compared to 3.6% in 2010. The analysis by disease showed that 11.4% in 2013 vs 6.2% in 2010 of the Alzheimer patients faced CHE, while the respective figures was 8.7% vs 2.9% for the COPD patients, 7.1% vs 3.4% for diabetic patients, and 4.2 vs 1.7% for the hypertensive patients. Pharmaceutical expenditures alone were deemed catastrophic for 4.6% of all the above patients in 2013 vs 1.6% before the introduction of the austerity measures and the health care reforms. Of the Alzheimer patients, 6.2% in 2013 vs 2.8% in 2010 faced CHE due to out-of-pocket payments for drugs, while the respective figures were found to be 3.4% vs 1.8% for the diabetic patients, 2.9% vs 0.9% for COPD patients and 1.7% vs 0.9% for the hypertensive patients. **CONCLUSIONS:** After the introduction of austerity measures