# A504

### VALUE IN HEALTH 17 (2014) A323-A686

reduction. A predefined questionnaire was delivered to physicians' and primary care payers' (namely members of the regional health authorities) to survey their opinions about the value of this tool. **RESULTS:** Overall opinion from 30 physicians and 11 primary care deciders (geographically distributed) was positive, averaging 3.9 in a likert scale from 1 (strongly disagree) to 5 (strongly agree). Physicians averaged 4 while primary care payers' was 3.7. 71% of respondents ranked 4 to 5 in this overall assessment of the tool. Regarding more specific topics using the same likert scale, global, physicians' and primary care deciders' responses averaged as following, respectively: Utility of the tool: 3.6, 3.6 and 3.6; Relevance of the tool: 3.9, 3.9 and 3.9; Value of the tool to understand LDL-C treatment targets: 4.0, 4.2 and 3.6. CONCLUSIONS: This approach is useful to understand user's opinions about a tool which aims primarily to raise awareness on the importance of the LDL-C reduction. Available evidence demonstrates that health care stakeholders in Portugal still need to understand the public health potential of LDL reduction. This tool might be of great value to address this need.

### PCV179

## TREATMENT PATTERNS AMONG HEART FAILURE PATIENTS WITHIN 30 DAYS POST DIAGNOSIS: RESULTS FROM A US CLAIMS DATABASE ANALYSIS

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OBJECTIVES: Clinical guidelines recommend ACEIs (angiotensin converting enzyme inhibitors), ARBs (angiotensin receptor II blockers) for patients intolerant to ACEI, beta blockers (BBs), aldosterone antagonists (AAs) and diuretics as the pharmacological treatment for heart failure (HF). This study assesses the treatments prescribed within30 days post diagnosis among HF patients in a real world setting based on an administrative claims database in the US. **METHODS:** This was a retrospective cohort study conducted using MarketScan database. Adult patients having ≥2 HF-related medical claims or 1 hospitalisation with primary HF diagnosis between April 2009 and March 2012, and with a minimum of 12 months pre- and post-index continuous medical and pharmacy eligibility were included. Index date was defined as the first HF-related medical claim between April 2009 and March 2012. Patients with HF diagnosis in the 12 months pre-index period were excluded. Demographics, clinical characteristics and index treatment (defined as a 30 days window period after HF diagnosis) were analysed. RESULTS: Among 121,904 patients included in the analysis, 48.3% were >75 years of age and 35.0% were 18-64 years of age. Diabetes (27.0%), CV related conditions (26%) and COPD (16.3%) were the most prevalent comorbidities. Overall, 37.6% patients were not prescribed any treatment related to HF within the first 30 days after HF diagnosis (no HF severity available). Among those prescribed treatment, the following treatment breakdown was observed: ACEIs, 29.3% of patients; ARBs, 8.5%; BBs, 46.6%; AAs, 7.4%; and diuretics, 45.7%. Prescription of fixed dose combination of ACEIs with diuretics or ARBs with diuretics was very limited. **CONCLUSIONS:** Findings suggest that a substantial proportion of patients do not receive HF specific medications following the month of diagnosis. Further research is necessary to explore the reasons for lower than expected HF medication claims in these patients considering their high risk for morbidity and mortality.

## PATTERN OF BENZODIAZEPINES UTILIZATION IN OUTPATIENTS WITH HYPERTENSION IN SERBIA

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OBJECTIVES: Benzodiazepines (BZD) are often administered to patients with arterial hypertension in addition to antihypertensive agents. The aim of this study was to analyze patterns of BSD usage among hypertensive outpatients in Serbia according to sex and age. METHODS: Data on BZD issued on prescription for the International classification of diseases (ICD) code I10 (essential arterial hypertension) were collected from all state-owned pharmacies in Novi Sad (population 350,000) from September 2011 to February 2012. Consumption was calculated using the ATC/ DDD methodology. RESULTS: BZD accounted for 2% of all drugs issued in treatment of hypertension. The total amount of BZD issued was 2.27 DDD/1000inh/day. Bromazepam (51.38 %) and diazepam (37.56 %) were the most commonly used BSD and accounted for almost 90% of all BSD utilized. Lorazepam accounted for 8.36%of total consumption. Other agents (alprazolam, nitrazepam, midazolam, klonazepam) accounted for less than 3% altogether. The BZD consumption increased with patient's age – 91% being prescribed to the patients over the age of 50. Consumption was highest in age group 70-80 years. BZD were more often prescribed to female (68.63%) than to male outpatients (31.37%). CONCLUSIONS: This study confirmed consumption of BZD among outpatients with hypertension. It is most common in hypertensive female and elderly population. However, since the benefits of BZD administration in hypertension control remain unclear, the adequacy of this practice is questionable. This work was supported by the Ministry of Science and Technological Development, Republic of Serbia, project No. 41012.

## LOGISTICS OF MONITORING OF VITAMIN K ANTAGONISTS IN WESTERN EUROPEAN COUNTRIES: PREFER IN VTE REGISTRY

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OBJECTIVES: In patients with acute deep venous thrombosis (DVT) or pulmonary embolism (PE) there is a lack of comparative data on the logistics of international

normalized ratio (INR) monitoring in patients on vitamin K antagonists (VKA) on maintenance anticoagulation. METHODS: This interim analysis is based on data of 2863 patients enrolled in the PREFER in VTE registry in 7 Western European countries (France, Germany, Italy, Spain, UK, Austria and Switzerland). 1689 had DVT (only) and 1174 had PE (±DVT). RESULTS: At 6-month follow-up, 51.5% of the patients were treated with VKA. INR measurements at 6-month follow-up (UK: 3 month) were performed in the hospital setting for 13.1% of these patients (most frequently in Spain 42.9%, UK 32.7%,, Italy 18.0%), in the anticoagulation center in 23.6% (in Spain 40.0%, Italy 37.0%, UK 16.4%), in the physician's office in 16.8% (Germany 90.7%, UK 41.8%), by the patient self-measured in 4.9% (Spain 8.6%), or at biology labs or other institutions in 36.9% (France 92.4%). The patient's mean travel distance to the INR site was 5.8 ±9.16 km overall, the range was 0-90 km (mean varied across countries from 2.4 to 7.7 km). Mean travel time was 14.3 ±18.4 min (across countries 5.7 to 18.2 min). Patients most frequently used their private car/motorbike (50.8 %) or walked (16.4%). The mean number of INR measurements over the 6-month period was 16.8, the number of INR measurements per month was 2.8  $\pm$ 1.2 overall (across countries 1.8 to 3.2). CONCLUSIONS: In the various countries, different institutions are responsible for routine INR measurements. While biology labs are almost exclusively used in France, there is no equivalent for such institutions in other countries. INR self-measurement plays a minor role. Patients usually have the INR sites in their vicinity, and the average number of measurements shows little variation between countries.

### TREATMENT PATTERNS AND HEALTH RESOURCE UTILIZATION AMONG ATRIAL FIBRILLATION PATIENTS IN UNITED ARAB EMIRATES AND SAUDI ARABIA Johnston K1, Osenenko KM1, Donato BMK2, Qatami L3, Alawi AA4, Binbrek AS5, Hersi AS6, Mould JF7, Levy AR1

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OBJECTIVES: Atrial fibrillation (AF) is the most common cardiac arrhythmia, and accounts for one-third of hospitalizations for cardiac disturbances. The majority of descriptive data on management of AF patients are from western countries, with limited information available from the Middle East region. The objective of this study was to characterize treatment patterns and health resource utilization among AF patients in the Kingdom of Saudi Arabia (KSA) and United Arab Emirates (UAE). METHODS: A retrospective chart review was undertaken at three hospitals in UAE and three in KSA, to identify AF patients diagnosed between January 2005 and June 2010. Patient charts were sampled consecutively backwards by diagnosis date, from June 2010 until the target sample was reached. AF was identified based on ICD-9 code (427.31), from a sample of patients defined by any history of anticoagulant use. Data on demographic and disease-related characteristics, treatment patterns, health resource utilization, and international normalized ratio (INR) control were abstracted from diagnosis until June 2012. **RESULTS:** Among eligible AF patients (UAE, n=157, KSA, n=152), the majority were diagnosed with chronic AF (80.9% in UAE, 63.7% in KSA) as opposed to paroxysmal AF. Treatments prescribed to AF patients differed between countries: warfarin monotherapy was widely used in UAE (59.9%), while a variety of warfarin- and aspirin-based combination therapies were used in KSA, with no single dominant regimen. Warfarin + bisoprolol (12.5%) and aspirin + bisoprolol (10.5%) combination therapies were the most common regimens in KSA. Patterns of health care utilization also varied, with hospitalization and emergency room visits more common in KSA, and outpatient visits more common in UAE. CONCLUSIONS: Treatments and health resources used by AF patients varied between KSA and UAE. While some differences may result from differences in patient and disease characteristics, they likely also reflect variation in management strategies across the regions.

## LDL-C LOWERING EFFICACY OF EVOLOCUMAB (AMG 145) COULD REDUCE APHERESIS IN PATIENTS AT HIGH RISK FOR CARDIOVASCULAR EVENTS IN GERMANY

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OBJECTIVES: Individuals at high risk for cardiovascular events who fail to achieve treatment goal (LDL-C<100 mg/dL) despite being on maximal lipid lowering treatment qualify for apheresis, a procedure that costs approximately 40,000€ per patient per year in Germany. The current model aims to assess the ability of evolocumab (AMG 145), an investigational medication that is being evaluated in clinical trials, to reduce the proportion of patients requiring apheresis in Germany. METHODS: Data on secondary prevention patients eligible for apheresis, excluding homozygous familial hypercholesterolemia patients, were extracted from the German IMS Disease Analyzer 2011-2013 database (n=8,262) and included in the analysis. The calculated mean LDL-C reductions observed in the DESCARTES and LAPLACE-2 evolocumab trials, ranging from 59.3% (95% CI [54.9%, 63.8%]) to 72.3% (95% CI [69.1%, 75.4%]), were applied to baseline LDL-C levels of the identified patient-profiles, following a probabilistic approach. The goal for such patients was LDL-C<100 mg/dL, as defined in the German lipid association (DGFF) guideline. RESULTS: The mean  $\pm$  standard deviation LDL-C levels of the sample decreased from 150.2  $\pm$  32.9 mg/dL at baseline to 61.1  $\pm$ 13.8 mg/dL (DESCARTES) and to 41.7  $\pm$  9.5 mg/dL (LAPLACE-2) after evolocumab treatment. From an initial proportion of 100% of patients eligible for apheresis at baseline, evolocumab treatment led to a proportion of 1% (DESCARTES) and 0% (LAPLACE-2) of patients requiring apheresis. Thus, in the analyzed population, apheresis-related costs could be largely reduced. **CONCLUSIONS:** The use of evolocumab in the treatment algorithm of high-risk patients not at LDL-C goal could allow reducing the invasive, time-consuming, burdensome and costly weekly apheresis treatments. As a result, significant savings of apheresis-related costs could be achieved by the German Health Care System.