

OBJECTIVES: To assess demographic and clinical factors associated with statin selection among patients in a large employer-based claims database. **METHODS:** This study examined predictors of statin selection among statin users who were 18 to 64 years old and initiated pravastatin (PS) vs. simvastatin (SS), atorvastatin (AS), or rosuvastatin (RS) between 1/1/2007 and 12/31/2007. Index statin use was defined as the first statin claim following at least 90 days of no statin access. Multiple logistic regression models were employed to assess predictive factors of PS initiation versus other statin initiations. **RESULTS:** Of the total 1,336,433 statin users identified, there were 14,122 PS initiators, 66,156 AS initiators, 27,062 RS initiators, and 77,180 SS initiators. Compared to other statin users, patients initiating PS were older (PS: 54.0, SS: 53.3, AS: 53.9, RS: 53.5, $P < 0.01$) and more likely to be female (PS: 52.3%, SS: 47.6%, AS: 45.4%, RS: 47.0%, $P < 0.01$). A higher percentage of PS initiators had diabetes (PS: 20.1%, SS: 17.9%, AS: 17.9%, RS: 18.3%, $P < 0.01$), liver disease (PS: 2.7%, SS: 1.9%, AS: 2.1%, RS: 2.4%, $P < 0.01$), human immunodeficiency virus infection (HIV) (PS: 0.7%, SS: 0.1%, AS: 0.3%, RS: 0.3%, $P < 0.01$), and hypertension (PS: 45.1%, SS: 40.8%, AS: 41.1%, RS: 43.9%, $P < 0.01$) in the baseline period. After controlling for demographic and clinical characteristics, older age, female gender, history of diabetes, liver disease, HIV, and hypertension were significant predictors of PS initiation. Other predictors of PS initiation included use of calcium channel blockers, ezetimibe, fenofibrates, and protease inhibitors over the 1-year pre-index period. Primary care physician (PCP) as the prescriber was positively associated with initiating PS compared to RS or SS. **CONCLUSIONS:** The analyses indicate that older age, female gender, presence of selected comorbidities, prior use of certain medications, and PCP as prescriber are predictors of PS initiation among working age, commercially insured patients.

PCV91

BETA BLOCKERS AND DIURETICS USAGE IN CROATIA AND SLOVENIA DURING A NINE-YEAR PERIOD

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OBJECTIVES: Cardiovascular diseases are the major health problem and adequate therapy, which includes usage of beta blockers (ATC, C07) and diuretics (ATC, C03), leads to reduction of cardiovascular morbidity and mortality. The aim of our study was to identify and analyze changes in the usage of these drugs in Croatia and Slovenia from 2000-2008 and to identify the rate of the generic drugs usage as well as the average price for 1 DDD. **METHODS:** The data concerning consumption have been obtained from the International Medical Statistics database for Croatia and they are presented in defined daily doses per 1000 inhabitants per day (DDD/1000). Financial expenditure data are presented in Euros and the average cost per DDD was calculated for each drug group. **RESULTS:** The total usage of diuretics is on average 19% higher in Croatia and continually increasing in both countries. Consumption rate of furosemid among diuretics is lower in Slovenia (43.96% in 2008), while in Croatia 67.28% (2008). The generic drugs usage is higher in Croatia during the whole investigated period, e.g. in 2008, 87.4% of all prescribed diuretics were generics in Croatia, and in Slovenia 59.4%. The average price per 1 DDD was more than twice lower in Croatia (0.08 EUR/DDD vs. 0.17 EUR/DDD in Slovenia). The beta blockers drugs usage is 13% higher in Slovenia, but generic drugs usage is higher in Croatia. **CONCLUSIONS:** Increased diuretics and beta blockers drug usage is comparable to worldwide trends, but drug prescribing patterns are different when comparing both countries. Although the generic drugs usage is relatively high in Croatia, it should be further supported and promoted. According to our investigation there is a possibility for further price reduction of diuretics and beta blockers in Slovenia. This is important as a tool to decrease costs of healthcare systems.

PCV92

CHANGES IN THE PREVALENCE, TREATMENT AND CONTROL OF HYPERTENSION IN GERMANY? A CLINICAL-EPIDEMIOLOGICAL EXAMINATION OF 50,000 PRIMARY CARE PATIENTS WITH THE DETECT STUDY

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OBJECTIVES: To estimate 2003 point prevalence, treatment and control rates of hypertension for different age groups of primary care attendees in Germany, to examine factors associated with pharmacotherapy and adequate blood pressure control and to examine whether changes have occurred in rates of treatment and control since 2001. **METHODS:** Using standardized clinical diagnostic and treatment appraisal forms, blood pressure levels and patient questionnaires for 55,518 participants from the DETECT study (2003) were analyzed. **RESULTS:** According to physician diagnosis overall prevalence was 35.5%, according to NHANES criteria 56.0%. Among those defined by NHANES criteria, treatment and control rates were 56.0% and 20.3%, respectively. Significant predictors for receiving antihypertensive medication were: increasing age, female sex, obesity, previous myocardial infarction and the prevalence of comorbid conditions such as CHD, dyslipidemia and diabetes mellitus. Significant positive predictors of adequate blood pressure control were CHD and antihypertensive medication. Inadequate control was associated with increasing age, male sex and obesity. As compared to findings from 2001, rates of treatment and control indicate some improvement across all age groups. **CONCLUSIONS:** Rates of treated and controlled hypertension according to NHANES criteria in DETECT remain considerably low as compared to the rates of 2001, despite consistent indications of some improvement. Hypertensive patients with risk factors such as obesity and associated comorbidities such as CHD, dyslipidemia and diabetes were more likely to receive antihypertensive drugs in accordance

with guidelines. Adequate blood pressure control was achieved in more patients with obesity and CHD, but not those with diabetes mellitus or dyslipidemia.

PCV93

HEALTH EXPENDITURE COMPARISON OF METOPROLOL SUCCINATE VS METOPROLOL TARTARATE

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OBJECTIVES: To compare health care expenditures of hypertensive patients on metoprolol tartarate (MT) and metoprolol succinate (MS). Metoprolol, a selective β -1 blocker, is available in two different salt forms in the market- metoprolol succinate (MS) and metoprolol tartarate (MT). Both of these salts are FDA approved for the treatment of hypertension. Several studies have shown similar efficacies between the two salts; however they are priced at different levels because of their pharmacokinetic properties. MT is the short acting salt and is given twice daily, whereas MS is the long acting salt and is given once daily. **METHODS:** Two cohorts of patients using MT and MS were selected from 2008 Medical Expenditure Panel Survey (MEPS). Propensity score (PS) matching technique was used to balance the cohorts on various parameters such as demographic information, insurance status and comorbidity score. Patients using MT were matched to patients using MS on the logit of propensity score using calipers of width equal to 0.2 of the standard deviation of the logit of the propensity score. To estimate mean expenditure costs and 95% confidence intervals, non parametric bootstrap sampling method was used. **RESULTS:** A total of 742 patients were found to use metoprolol (MT-388, MS- 354). After PS matching, a total of 594 patients were left in the sample for final analysis (298 patients in each cohort). The average annual expenditure in two groups did not differ significantly. After carrying out non parametric bootstrap sampling using 1,000 samples, MT cohort had \$10,779 (95% CI: \$10,682- \$10,875) average annual expenditure while MS cohort had \$9,810 (95% CI: \$9,810-\$10,003). **CONCLUSIONS:** Both the salts of Metoprolol were found have similar average annual total healthcare expenditure, however once a daily salt (MS) has higher out of pocket cost.

PCV94

ANTICOAGULANT USE, THE PREVALENCE OF BRIDGING AND RELATION TO LENGTH OF STAY AMONG HOSPITALIZED PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION

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OBJECTIVES: ASA/AHA guidelines for stroke prevention in patients with non-valvular atrial fibrillation (NVAF) recommend anticoagulant (AC) therapy with a vitamin K antagonist (e.g., warfarin) for patients without hemorrhagic contraindication. Bridging with low molecular weight heparin (LMWH) was recently added to these guidelines (Class IIa), but with little supportive evidence (Level of Evidence C). Little is known about the use of AC therapy in the inpatient setting and how it relates to hospital length of stay (LOS). **METHODS:** Patients with an NVAF discharge diagnosis between 7/1/04-9/30/09 were identified from administrative claims data representing over a hundred US hospitals. Inpatient AC use by drug type was reported to identify patients receiving warfarin alone and in combination with LMWH/pentasaccharide (PS) or unfractionated heparin (UFH), indicative of bridging. LOS was measured and reported by AC combinations. Non-parametric statistical tests were used to compare LOS among patients receiving warfarin only to those with bridge therapy. **RESULTS:** Of 6340 NVAF patients, 76% received inpatient AC therapy, with 3037 (48%) receiving warfarin. Of patients receiving warfarin, 64% were bridged with another AC. LMWH/PS was the most common bridge agent (45% of all bridged patients), followed by UFH (36%), and by LMWH/PS and UFH combined (18%). The mean LOS for patients receiving bridge therapies was 6.3 days (SD=6.1) compared to 4.2 days (SD= 3.1) for warfarin alone, $p < .0001$. By bridging drug type, mean LOS was 5.6 days (SD=5.3) for LMWH/PS; 6.0 days (SD=4.9) for UFH, and 8.4 days (SD=8.4) for LMWH/PS and UFH. **CONCLUSIONS:** Less than half of all NVAF patients received warfarin while hospitalized. Among those taking warfarin, bridging with other anticoagulants was common and was associated with longer LOS than patients receiving warfarin alone.

PCV95

USING COMPUTERIZED PHYSICIAN ORDER ENTRY OF ANTI-HYPERTENSIVE MEDICATIONS TO CONNECT INDICATIONS WITH PRESCRIBING AND IMPROVE PROBLEM LIST DOCUMENTATION

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OBJECTIVES: Electronic Medical Records often lack accurate problem lists. The objectives of this study were to examine if alerts requesting indication information during order entry of medications used to treat a common disease, hypertension, can improve problem lists. **METHODS:** Inpatient orders generated by previously implemented clinical decision support (CDS) in an academic hospital using CPOE were reviewed. CDS was developed for classes of antihypertensive and 3 additional diagnoses: CHF, benign prostatic hypertrophy and nephropathy. Five logical medication groups were developed. A random sample of 250 charts were collected for each medication group and reviewed by physicians to determine alert yield and added problem accuracy. The accuracy and yield (problems added per order) were analyzed across the medication groups, clinician types, and clinical venues. **RESULTS:** Preliminary results obtained from the group of medications that only treat HTN and no other diagnoses (HTN group) showed an accuracy of additions to the problem list of 92% and the yield, was 76%. For the group of medications which treated HTN and CHF (CHF group), the accuracy and yield were lower, 81% and 62% respectively. Looking at the HTN group alone, the accuracy was 100% for attending