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STANDARD COSTS AND RESOURCES ALLOCATION IN ATTAINMENT OF TARGET LIPID LEVELS AMONG EXPERIENCED STATIN USERS: RESULTS FROM THE STAR STUDY (STATINS TARGET ASSESSMENT IN REAL PRACTICE)

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OBJECTIVES: The absolute Cardiovascular Disease (CVD) risk is a leading cause of death. Guidelines recommend treatment with lipid-modifying drugs for patients with an elevated CVD risk, since cholesterol target attainment allows a reduction of events. Our aim was to analyze the economic impact (drugs and hospitalizations) of LDL target attainment. **METHODS:** A multicenter, retrospective observational study using administrative and laboratory databases (1.1 million health-assisted individuals) was conducted. The enrolment date for a given patient was the last date in year 2009 in which the patient reached its LDL therapeutic target, accordingly to its CVD profile. Patients without statins prescriptions within the 18 months preceding the enrolment date were excluded. **RESULTS:** A total of 17,243 patients were enrolled (54.6% males, age 69,3±10,0). The annual standard cost for statins and cardiovascular hospitalizations to achieve the therapeutic target, obtained from a multivariable regression model, was €698. The standard annual requirements for welfare benefits, calculated on the basis of this approach, had a value of 14% lower (€2,914,807) than the current value of expenditure. This resource saving was attributable to a reduced spending in hospital admissions, likely due to a correct prevention. The standard requirements, however, showed a different items composition of expenditure; particularly, we observed an increase of the pharmaceutical expenditure by 13% (€1,022,825) compared to the current value. 42% of patients did not reach target (13% adherents, 29% non-adherents), 33% reached target (although non-adherents), consuming 28% of the total expenditure, suggesting an over-consumption of resources (27% used high dosages statins); this expenditure could be reallocated within the non-target groups, increasing the adherence and switching to other statins and/or dosages. **CONCLUSIONS:** The applicability of this approach and the cost-saving achievement, needs the adoption of a reimbursement system that rewards the care pathway not only in its individual parts (ie, drug treatments).

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ANALYSIS OF HOSPITAL-SPECIFIC DRG PAYMENTS FOR STROKE ACCORDING TO UNITED STATES MEDICARE PERSPECTIVE

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OBJECTIVES: To calculate US-hospital specific DRGs payments for in-patient stays with a primary diagnosis of stroke and assess its variability according to Medicare inpatient prospective payment system (IPPS). **METHODS:** The ICD 9-CM diagnosis codes related to stroke were selected. The coding rules and algorithms of the Medicare severity DRG Grouper (version V29) were analyzed to identify the distinct stroke related Diagnosis Related Groups (DRG) depending on co-morbidities and concomitant diagnosis. According to IPPS rules, inpatient hospital services are paid at a predetermined rate. This latter is calculated by multiplying a DRG-relative weight with operating and capital base payments rates. These rates are adjusted on several hospital features such as geographical area, share of low-income patients served, and involvement in medical education. These hospital specific DRG base payments were implemented for each Medicare provider listed in the Federal register, based on their information found in the 2012 PPS Impact files. Weighted average tariffs across DRG, based on discharges rates reported in the Health Care Cost and Utilization Project (HCUP) statistics were generated and the variability of DRG payments was also assessed through descriptive statistics. **RESULTS:** Distinct DRGs are assigned during inpatient stay for stroke and their average payments to Medicare providers ranging from \$4,288 to \$18,296. Overall weighted mean (median) payments for stroke were \$7,193 (\$6,728) across all DRGs and Medicare providers. DRG-tariffs distributions by region as well as other hospital characteristics (size, urban versus rural location, teaching status) highlighted the disparities related to each of these factors and their relative impact. These findings were compared with HCUP aggregated statistics related to costs and hospital charges. **CONCLUSIONS:** Calculating hospital specific DRGs according to the US-Medicare prospective payment system enable to get reliable cost inputs for health-economic models and relevant for adaptation to US-local settings (regional or even hospital based).

CARDIOVASCULAR DISORDERS - Patient-Reported Outcomes & Patient Preference Studies

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COMPLIANCE WITH WARFARIN THERAPY BY AUSTRALIAN PATIENTS WITH ATRIAL FIBRILLATION

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OBJECTIVES: To study warfarin compliance by Australian patients with Atrial Fibrillation (AF). **METHODS:** Longitudinal assessment of Pharmaceutical Benefit Scheme (PBS) claim records provided by Medicare Australia. We analysed a 10% random sample of all Australian long-term health concession card holders who had taken an anti-arrhythmic medication for AF prior to a new initiation of warfarin (time window October 2006 to September 2007), and for whom warfarin had not been dispensed in the 12 months prior to the initiation. Regimen complexity was assessed using the number of strengths of warfarin taken in a 90-day period. Treatment compliance was assessed using: the proportion failing to fill a second prescription; median persistence time with medication: long term persistence at 30 months. Treatment cessation was defined as 6 months without a warfarin prescription. **RESULTS:** The PBS Claims database yielded information on 1,108 con-

cessional AF patients newly initiated on warfarin. These AF patients were initiated on 2.4 different strengths of warfarin in the first 3 months and the regimen complexity was 2.0 strengths 12 months later. Australian PBS claims data showed that 13% stopped warfarin after the first script. Median persistence to warfarin was 22 months, while long term persistence (30 months) was around 42%. Decreasing the cessation criteria from 6 to 3 months revealed large treatment gaps in 16% of warfarin patients at 2 years. **CONCLUSIONS:** There is a significant problem with complex dosing regimens and poor persistence in AF patients taking warfarin. Warfarin regimens tend to be complex with AF patients averaging 2 or more strengths of warfarin. Not only do the majority of AF patients stop warfarin within 2 years, a further one in six had large treatment gaps. If AF patients fail to take their anticoagulation therapy regularly, then this will substantially increase the risk of adverse outcomes including stroke.

PCV80

A RETROSPECTIVE STUDY OF COMPARING COMPLIANCE AND PERSISTENCE OF FREE COMBINATION ANTIHYPERTENSIVE THERAPY VERSUS SINGLE-PILL COMBINATION: KOREAN CASE

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OBJECTIVES: Antihypertensive single-pill combination (SPC) therapy is known to be associated with better compliance and persistence compared to free-drug combinations (FC). However, due to differences in blood pressure, occurrence of hypertension-related diseases, diet, and lifestyle, applying the existing results from a Western population to a Korean population may not be acceptable. In this study, we compared the compliance and persistence of SPC versus FC using the 2009 data of the Health Insurance Review Agency National Patient Sample. **METHODS:** Among a total of 65,477,122 prescription claims, patients who were prescribed at least one SPC or FC in 2009, were more than 40 years old and had no history of hospitalization, surgery, or cancer numbered 9,822 and 7,494, respectively. Compliance was measured using the proportion of days covered (PDC) and calculated as the proportion of days a patient took the index drug within the 12-month follow-up period in 2009. Persistence with therapy was measured as the number of days from the index date to the therapy discontinuation date, which was defined as a gap in therapy of 30 or more days. **RESULTS:** The overall average PDC was 0.58 for SPC and 0.59 for FC, which was not significantly different. However, compliance varied by comorbidity status: patients who prescribed SPC showed greater PDC than those who were prescribed FC. Notably, among patients with dyslipidemia, diabetes, and chronic heart disease, compliance was significantly higher for SPC than for FC: 0.64 vs. 0.61 for dyslipidemia (p=0.0159), 0.63 vs. 0.60 for diabetes (p=0.0062), and 0.69 vs. 0.66 for chronic heart disease (p=0.0441). However, persistence was not significantly different in either the overall cohort or the cohort stratified by comorbidity. **CONCLUSIONS:** Our study suggests that use of SPC in hypertensive patients with comorbidities may provide clinical benefits by improving better compliance compared with patients taking FC.

PCV81

AWARENESS OF SERIOUS CONSEQUENCES OF NON-COMPLIANCE AND SELF-REPORTED ADHERENCE TO ANTIPALTELET THERAPY AFTER PERCUTANEOUS CORONARY INTERVENTION

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OBJECTIVES: Premature discontinuation of antiplatelet therapy after percutaneous coronary intervention (PCI) is a main predictor of late stent thrombosis which can lead to serious consequences such as death and acute myocardial infarction. We aim to assess the impact of patients' awareness of consequences of non-compliance on self-reported adherence with antiplatelet therapy after PCI. **METHODS:** We retrospectively analyzed 393 patients who underwent PCI with stent implantation from the Care For Your Heart database in Hong Kong. Patients were asked about their awareness of the risk of adverse cardiac events or death from non-compliance with anti-platelet therapy after PCI. Patients who were non-compliant (defined as self-reported missing more than 1 tablet per month) were compared to those who were compliant. **RESULTS:** Of the 393 patients, 35.6% (n=140) were unaware that non-compliance with anti-platelet therapy was associated with any risk, 50.9% (n=235) was aware of risk of adverse cardiac events or death, and 5.9% (n=23) were considered non-compliant with prescribed antiplatelet therapy after PCI. Non-compliant patients were predominantly male (91.3%) with an average age of 67.0±0.9 years, of whom 43.5% were not aware that non-compliance was associated with any risk compared to 35.9% (p=0.03) of compliant patients. Patients who were aware of the cardiac risks of non-compliance were more likely to adhere to their anti-platelet regimen (48.2% vs. 28.1%; p=0.03). More patients received their information on cardiovascular health from health talks (60.3%) and printed media (51.1%) than from their cardiologists (33.0%). **CONCLUSIONS:** Increased awareness of the dire consequences of non-compliance with anti-platelet therapy is needed among patients undergoing PCI. Health care providers are encouraged to better educate patients to optimize adherence to medication.

PCV82

OBSERVATIONAL STUDY EVALUATING THE LEVEL OF COMPLIANCE WITH ANTIHYPERTENSIVE DRUGS IN THE GREEK POPULATION

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